Diameter Signaling Router

Measurements

Release 8.2

E89016

January 2018

ORACLE

Diameter Signaling Router Measurements, Release 8.2

E89016

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1

Introduction

This section contains an overview of the available information for the DSR MAP-Diameter Interworking application.

Revision History

Date	Description
July 2016	Measurements added for new features: DCA and U-SBR

Overview

The *DSR Measurements* documentation provides information about DSR measurements; and provides corrective maintenance procedures and other information used in maintaining the system.

- Information relevant to understanding measurements in the application
- Measurement report elements and procedures for viewing, printing, and exporting measurements
- Lists of measurements by function

Scope and Audience

This manual does not describe how to install or replace software or hardware.

This manual is intended for personnel who must maintain operation of the DSR. The manual provides lists of measurements along with preventive and corrective procedures that will aid personnel in maintaining the DSR.

The corrective maintenance procedures are those used in response to an output message. These procedures are used to help detect, isolate, and repair faults.

Manual Organization

Information in this manual is organized into the following sections:

- Introduction contains general information about this document, how to contact My Oracle Support (MOS), and how to Locate Product Documentation on the Oracle Help Center Site.
- User Interface Introduction provides basic information about the DSR user interface.

- Measurements Overview provides general information about the application's measurements.
- Measurements provides detailed measurement information, organized alphabetically by measurement category.
- Policy DRA Error Resolution Procedures provides information regarding various error codes associated with Policy DRA.

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 1-1 Admonishments

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

Locate Product Documentation on the Oracle Help Center Site

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

1. Access the Oracle Help Center site at http://docs.oracle.com.
2. Click **Industries**.
3. Under the Oracle Communications subheading, click **Oracle Communications documentation** link.

   The Communications Documentation page displays. Most products covered by these documentation sets display under the headings Network Session Delivery and Control Infrastructure and Platforms.
4. Click on your product and then the release number.

   A list of the documentation set for the selected product and release displays.
5. To download a file to your location, right-click the **PDF** link, select **Save target as** (or similar command based on your browser), and save to a local folder.

Customer Training

Oracle University offers training for service providers and enterprises. Visit our web site to view, and register for, Oracle Communications training at http://education.oracle.com/communication

To obtain contact phone numbers for countries or regions, visit the Oracle University Education web site at www.oracle.com/education/contacts

My Oracle Support

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

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

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

You are connected to a live agent who can assist you with My Oracle Support registration and opening a support ticket.

My Oracle Support is available 24 hours a day, 7 days a week, 365 days a year.

Emergency Response

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

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

- A total system failure that results in loss of all transaction processing capability
- Significant reduction in system capacity or traffic handling capability
- Loss of the system's ability to perform automatic system reconfiguration
- Inability to restart a processor or the system

- Corruption of system databases that requires service affecting corrective actions
- Loss of access for maintenance or recovery operations
- Loss of the system ability to provide any required critical or major trouble notification

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

2

User Interface Introduction

This section describes the organization and usage of the application's user interface. In it you can find information about how the interface options are organized, how to use widgets and buttons, and how filtering and other page display options work.

User Interface Organization

The user interface is the central point of user interaction within an application. It is a Web-based graphical user interface (GUI) that enables remote user access over the network to an application and its functions.

The core framework presents a common set of Main Menu options that serve various applications. The common Main Menu options are:

- Administration
- Configuration
- Alarms and Events
- Security Log
- Status and Manage
- Measurements
- Help
- Legal Notices
- Logout

Applications build upon this framework to present features and functions. Depending on your application, some or all of the following Main Menu options may appear on the Network Operation, Administration, and Maintenance (**NOAM**) GUI:

- Communication Agent
- Diameter Common
- Diameter
- **UDR** (User Data Repository)
- MAP-Diameter IWF
- **RADIUS** (Remote Authentication Dial-In User Service)
- **SBR** (Session Binding Repository)

- Policy and Charging
- **DCA** (DOIC Capabilities Announcement) Framework

The DSR System OAM GUI may present even more Main Menu options as listed below. The end result is a flexible menu structure that changes according to the application needs and features activated.

- Transport Manager
- SS7/Sigtran
- RBAR (Range Based Address Resolution)
- FABR (Full Address Based Resolution)
- **GLA** (Gateway Location Application)
- MAP-Diameter IWF
- RADIUS
- SBR
- Mediation
- Policy and Charging
- DCA Framework
- IPFE (IP Front End)

Note that the System OAM (SOAM) Main Menu options differ from the Network OAM (NOAM) options. Some Main Menu options are configurable from the NOAM server and view-only from the SOAM (**SOAM**) server. This remains true for other applications.

User Interface Elements

Table 2-1 describes elements of the user interface.

Table 2-1 User Interface Elements

Element	Location	Function
Identification Banner	Top bar across the web page	The left side of the banner provides the following information: • Displays the company name, • Oracle product name and version, and • the alarm panel. The right side of the banner: • Allows you to pause any software updates. • Links to the online help for all software. • Shows the user name of the currently logged-in user. • Provides a link to log out of the GUI.
Main Menu	Left side of screen, under banners	A tree-structured menu of all operations that can be performed through the user interface. The plus character (+) indicates a menu item contains subfolders. • To display submenu items, click the plus character, the folder, or anywhere on the same line. • To select a menu item that does not have submenu items, click on the menu item text or its associated symbol.

Table 2-1 (Cont.) User Interface Elements

Element	Location	Function
Work Area	Right side of panel under status	Consists of three sections: Page Title Area, Page Control Area (optional), and Page Area. • Page Title Area: Occupies the top of the work area. It displays the title of the current page being displayed, date and time, and includes a link to context-sensitive help. • Page Control Area: Located below the Page Title Area, this area shows controls for the Page Area (this area is optional). When available as an option, filter controls display in this area. The Page Control Area contains the optional layout element toolbar, which displays different elements depending on which GUI page is selected. For more information, see Optional Layout Element Toolbar. • Page Area: Occupies the bottom of the work area. This area is used for all types of operations. It displays all options, status, data, file, and query screens. Information or error messages are displayed in a message box at the top of this section. A horizontal and/or vertical scroll bar is provided when the displayed information exceeds the page area of the screen. When a user first logs in, this area displays the application

Table 2-1 (Cont.) User Interface Elements

Element	Location	Function
		user interface page. The page displays a user-defined welcome message. To customize the message, see Customizing the Login Message.
Session Banner	Across the bottom of the web page	The left side of the banner provides the following session information: • The name of the machine to which the user is connected, and whether the user is connected via the VIP or directly to the machine. • The HA state of the machine to which the user is connected. • The role of the machine to which the user is connected. The right side of the banner shows the alarm panel.

Main Menu Options

Table 2-2 describes all main menu user interface options.

Note: The menu options can differ according to the permissions assigned to a user's log-in account. For example, the Administration menu options do not appear on the screen of a user who does not have administrative privileges.

Note: Some menu items are configurable only on the Network OAM and view-only on the System OAM; and some menu options are configurable only on the System OAM.

Note: Some features do not appear in the main menu until the features are activated.

Table 2-2 Main Menu Options

Menu Item	Function
Administration	The Administration menu allows the user to: • General Options. Configure options such as password history and expiration, login message, welcome message, and the number of failed login attempts before an account is disabled • Set up and manage user accounts • Configure group permissions • View session information • Manage sign-on certificates • Authorize IP addresses to access the user interface • Configure SFTP user information • View the software versions report • Upgrade management including backup and reporting • Authenticate LDAP servers • Configure SNMP trapping services • Configure an export server • Configure DNS elements
Configuration	On the NOAM, allows the user to configure: • Network Elements • Network Devices • Network Routes • Services • Servers • Server Groups • Resource Domains • Places • Place Associations • Interface and Port DSCP
Alarms and Events	Allows the user to view: • Active alarms and events • Alarm and event history • Trap log
Security Log	Allows the user to view, export, and generate reports from security log history.
Status and Manage	Allows the user to monitor the individual and collective status of Network Elements, Servers, HA functions, Databases, KPIs, system Processes, and Tasks. The user can perform actions required for server maintenance, database management, data, and ISO file management.
Measurements	Allows the user to view and export measurement data.

Table 2-2 (Cont.) Main Menu Options

Menu Item	Function
Transport Manager (optional)	On the SOAM, allows the user to configure adjacent nodes, configuration sets, or transports. A maintenance option allows the user to perform enable, disable, and block actions on the transport entries. This option only appears with the DSR application.
Communication Agent (optional)	Allows the user to configure Remote Servers, Connection Groups, and Routed Services. The user can perform actions to enable, disable, and block connections. Also allows the user to monitor the status of Connections, Routed Services, and HA Services.
SS7/Sigtran (optional)	On the SOAM, allows the user to configure various users, groups, remote signaling points, links, and other items associated with SS7/Sigtran; perform maintenance and troubleshooting activities; and provides a command line interface for bulk loading SS7 configuration data. This option only appears with the DSR application.
Diameter Common (optional)	Allows the user to view or configure: • Dashboard, configure on the NOAM; view on both OAMs • Network Identifiers on the SOAM - MCC Ranges • Network Identifiers on the NOAM - MCCMNC and MCCMNC Mapping • MPs (on the SOAM) - editable Profile parameters and Profile Assignments The DSR Bulk Import and Export functions are available on both OAMs for the data configured on that OAM.
Diameter (optional)	Allows the user to configure, modify, and monitor Diameter routing: • On the NOAMP, Diameter Topology Hiding and Egress Throttle List configuration • On the SOAM, Diameter Configuration, Maintenance, Reports, Troubleshooting with IDIH, AVP Dictionary, and Diameter Mediation configuration
UDR (User Data Repository) (optional)	Allows the user to add, edit, store, and manage subscriber and pool data. The user can also monitor the import, export, and subscribing client status. This option only appears with the UDR application.

Table 2-2 (Cont.) Main Menu Options

Menu Item	Function
RBAR (Range-Based Address Resolution) (optional)	Allows the user to configure the following Range-Based Address Resolution (RBAR) settings: • Applications • Exceptions • Destinations • Address Tables • Addresses • Address Resolutions • System Options This is accessible from the SOAM only. This option only appears with the DSR application.
FABR (Full Address Based Resolution) (optional)	Allows the user to configure the following Full Address Based Resolution (FABR) settings: • Applications • Exceptions • Default Destinations • Address Resolutions • System Options This is accessible from the SOAM only. This option is only available with the DSR application.
Gateway Location Application (optional)	On the SOAM, allows the user to perform configuration tasks, edit options, and view elements for: • Exceptions • Options GLA can deploy with Policy DRA (in the same DA-MP or a separate DA-MP). This option only appears with the DSR application.
MAP-Diameter Interworking (optional)	On the SOAM, allows the user to perform configuration tasks, edit options, and view elements for the DM-IWF DSR Application: • DM-IWF Options • Diameter Exception On the NOAMP, allows the user to perform configuration tasks, edit options, and view elements for the MD-IWF SS7 Application: • MD-IWF Options • Diameter Realm • Diameter Identity GTA • GTA Range to PC • MAP Exception • CCNDC Mapping This option only appears with the DSR application.

Table 2-2 (Cont.) Main Menu Options

Menu Item	Function
RADIUS (Remote Authentication Dial-In User Service) (optional)	Allows the user to perform configuration tasks, edit system options, and view elements for: • Network Options • Message Authenticator Configuration Sets • Shared Secret Configuration Sets • Ingress Status Server Configuration Sets • Message Conversion Configuration Sets • NAS Node This option only appears with the DSR application.
SBR (Session Binding Repository) (optional)	Allows the user to perform configuration tasks, edit system options, and view elements for: • SBR Databases • SBR Database Resizing Plans • SBR Data Migration Plans • Database Options Additionally, on the NOAMP, users are allowed to perform maintenance tasks, edit options, and view elements for: • Maintenance – SBR Database Status – SBR Status – SBR Database Reconfiguration Status This option only appears with the DSR application.
Mediation	Allows the user to make routable decisions to end the reply, drop the message, or set the destination realm.

Table 2-2 (Cont.) Main Menu Options

Menu Item	Function
Policy and Charging (optional)	On the NOAMP, allows the user to perform configuration tasks, edit options, and view elements for: • General Options • Access Point Names • Policy DRA – PCRF Pools – PCRF Sub-Pool Selection Rules – Network-Wide Options • Online Charging DRA – OCS Session State – Realms – Network-Wide Options • Alarm Settings • Congestion Options Additionally on the NOAMP, users are allowed to perform maintenance tasks, edit options, and view elements for: • Maintenance – SBR Database Status – SBR Status – SBR Database Reconfiguration Status – Policy Database Query On the SOAM, allows the user to perform configuration tasks, edit options, and view elements for: • General Options • Access Point Names • Policy DRA – PCRFs – Binding Key Priority – PCRF Pools – PCRF Pool to PRT Mapping – PCRF Sub-Pool Selection Rules – Policy Clients – Suspect Binding Removal Rules – Site Options • Online Charging DRA – OCSs – CTFs – OCS Session State – Realms • Error Codes • Alarm Settings • Congestion Options This option only appears with the DSR application.

Table 2-2 (Cont.) Main Menu Options

Menu Item	Function
DCA Framework (optional)	Allows the user to perform configuration tasks, edit system options, and view elements for DCA applications: • Custom MEALs (Measurements, Events, Alarms, and Logs) • General Options • Trial MPs assignment • Application Control • System Options
IPFE (optional)	Allows the user to configure IP Front End (IPFE) options and IP List TSAs. This is accessible from the SOAM server only. This option only appears with the DSR application.
Help	Launches the Help system for the user interface
Legal Notices	Product Disclaimers and Notices
Logout	Allows the user to log out of the user interface

Missing Main Menu options

Permissions determine which Main Menu options are visible to users. Permissions are defined through the Group Administration page. The default group, admin, is permitted access to all GUI options and functionality. Additionally, members of the admin group set permissions for other users.

Main Menu options vary according to the group permissions assigned to a user's account. Depending on your user permissions, some menu options may be missing from the Main Menu. For example, Administration menu options do not appear on your screen if you do not have administrative permissions. For more information about user permissions, see *Group Administration* in the OAM section of the online help, or contact your system administrator.

Common Graphical User Interface Widgets

Common controls allow you to easily navigate through the system. The location of the controls remains static for all pages that use the controls. For example, after you become familiar with the location of the display filter, you no longer need to search for the control on subsequent pages because the location is static.

Supported Browsers

This application supports the use of Microsoft® Internet Explorer 8.0, 9.0, or 10.0.

is designed to work with most modern HTML5 compliant browsers and uses both JavaScript and cookies. Please refer to the Oracle Software Web Browser Support Policy for details

System Login Page

Access to the user interface begins at the System Login page. The System Login page allows users to log in with a username and password and provides the option of changing the password upon login. The System Login page also features a date and time stamp reflecting the time the page was last refreshed. Additionally, a customizable login message appears just below the **Log In** button.

The user interface is accessed via HTTPS, a secure form of the HTTP protocol. When accessing a server for the first time, HTTPS examines a web certificate to verify the identity of the server. The configuration of the user interface uses a self-signed web certificate to verify the identity of the server. When the server is first accessed, the supported browser warns the user that the server is using a self-signed certificate. The browser requests confirmation that the server can be trusted. The user is required to confirm the browser request to gain access.

Customizing the Login Message

Before logging in, the System Login page appears. You can create a login message that appears just below the **Log In** button on the System Login page.

Figure 2-1 Oracle System Login

1. From the **Main Menu**, click **Administration** > **General Options**.

   The General Options Administration page appears.

2. Locate **LoginMessage** in the **Variable** column.

3. Enter the login message text in the **Value** column.
4. Click **OK** or **Apply** to submit the information.

   A status message appears at the top of the Configuration Administration page to inform you if the operation was successful.

The next time you log in to the user interface, the login message text displays.

Accessing the DSR Graphical User Interface

In DSR, some configuration is done at the **NOAM** server, while some is done at the **SOAM** server. Because of this, you need to access the DSR graphical user interface (GUI) from two servers. Certificate Management (Single Sign-On) can be configured to simplify accessing the DSR GUI on the NOAM and the SOAM.

For information on configuring Single Sign-On certificates, see **OAM** > **Administration** > **Access Control** > **Certificate Management** in the DSR online help.

After the certificates have been configured, you can log into the DSR GUI on any NOAM or SOAM, and access the DSR GUI on other servers (NOAM or other SOAMs) without having to re-enter your login credentials.

1. In the browser URL field, enter the fully qualified hostname of the NOAM server, for example https://dsr-no.yourcompany.com.

   When using Single Sign-On, you cannot use the IP address of the server.
2. When prompted by the browser, confirm that the server can be trusted.

   The System Login page appears.
3. Enter the Username and Password for your account.

   The DSR GUI for the NOAM appears.
4. To access the DSR GUI for the SOAM, open another browser window and enter the fully qualified hostname of the SOAM.

   The DSR GUI for the SOAM appears

You can toggle between the DSR GUI on the NOAM and the DSR GUI on the SOAM as you perform configuration tasks.

Main Menu Icons

This table describes the icons used in the Main Menu.

Table 2-3 Main Menu Icons

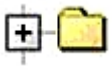
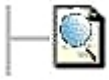
Icon	Name	Description
	Folder	Contains a group of operations. If the folder is expanded by clicking the plus (+) sign, all available operations and sub-folders are displayed. Clicking the minus (-) collapses the folder.

Table 2-3 (Cont.) Main Menu Icons

Icon	Name	Description
	Config File	Contains operations in an Options page.
	File with Magnifying Glass	Contains operations in a Status View page.
	File	Contains operations in a Data View page.
	Multiple Files	Contains operations in a File View page.
	File with Question Mark	Contains operations in a Query page.
	User	Contains operations related to users.
	Group	Contains operations related to groups.
	Task	Contains operations related to Tasks
	Help	Launches the Online Help.
	Logout	Logs the user out of the user interface.

Work Area Displays

In the user interface, tables, forms, tabbed pages, and reports are the most common formats.

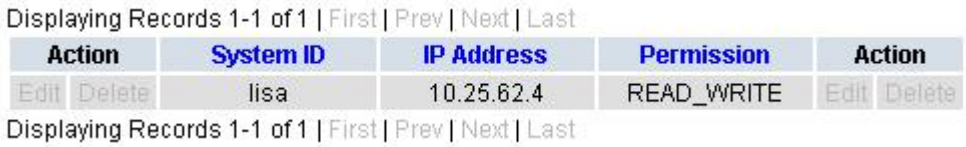
Note: Screen shots are provided for reference only and may not exactly match a specific application's GUI.

Tables

Paginated tables describe the total number of records being displayed at the beginning and end of the table. They provide optional pagination with **First | Prev | Next | Last** links at both the beginning and end of this table type. Paginated tables also contain

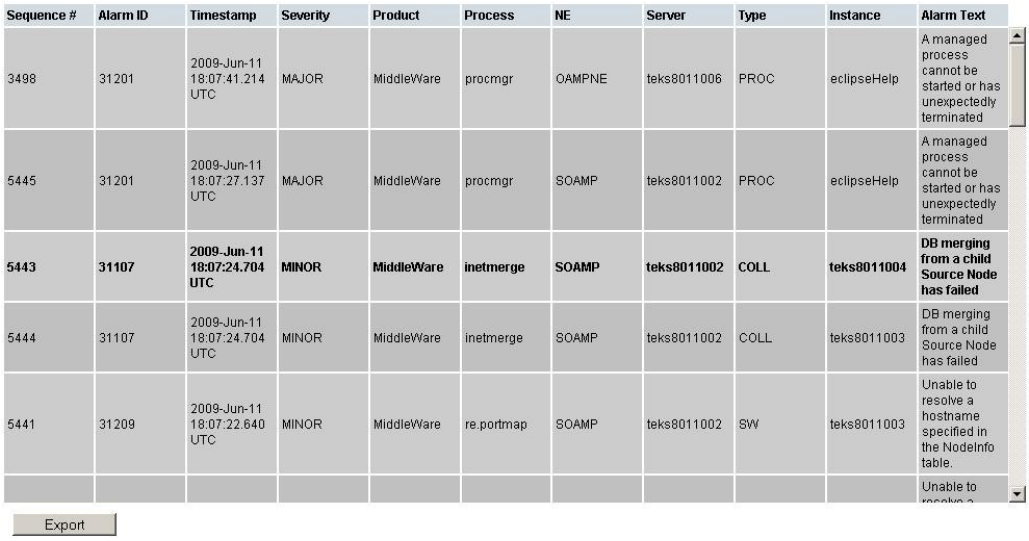
action links on the beginning and end of each row. For more information on action links and other page controls, see Page Controls.

Figure 2-2 Paginated Table



Scrollable tables display all of the records on a single page. The scroll bar, located on the right side of the table, allows you to view all records in the table. Scrollable tables also provide action buttons that operate on selected rows. For more information on buttons and other page controls, see Page Controls.

Figure 2-3 Scrollable Table

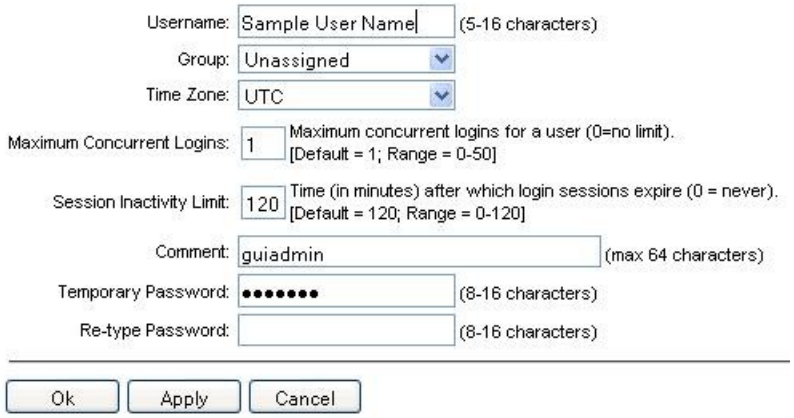


Note: Multiple rows can be selected in a scrollable table. Add rows one at a time using CTRL-click. Add a span of rows using SHIFT-click.

Forms

Forms are pages on which data can be entered. Forms are typically used for configuration. Forms contain fields and may also contain a combination of lists, buttons, and links.

Figure 2-4 Form Page



Tabbed pages

Tabbed pages provide collections of data in selectable tabs. Click on a tab to see the relevant data on that tab. Tabbed pages also group Retrieve, Add, Update, and Delete options on one page. Click on the relevant tab for the task you want to perform and the appropriate fields populate on the page. Retrieve is always the default for tabbed pages.

Figure 2-5 Tabbed Pages

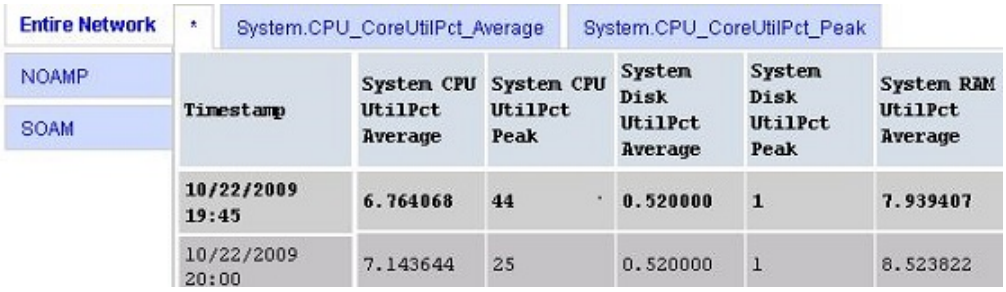
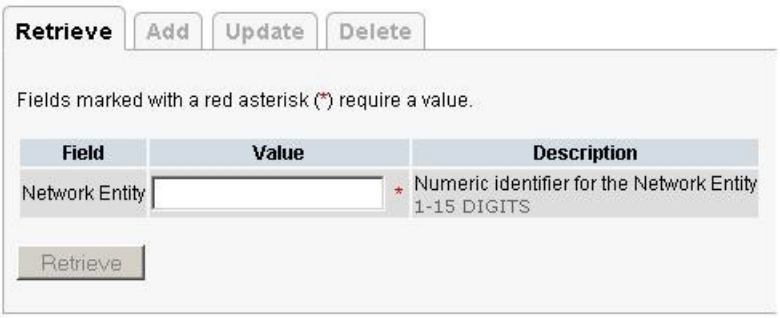


Figure 2-6 Tabbed Pages



Reports

Reports provide a formatted display of information. Reports are generated from data tables by clicking **Report**. Reports can be viewed directly on the user interface, or they can be printed. Reports can also be saved to a text file.

Figure 2-7 Report Output

```
================================================================================

User Account Usage Report

================================================================================

Report Generated: Fri Jun 19 19:30:55 2009 UTC
From: Unknown Network OAM&P on host teks5001701
Report Version: 1.0
User: guiadmin

--------------------------------------------------------------------------------

Username          Date of Last Login    Days Since Last Login   Account Status
----------------  --------------------  ----------------------  ---------------
guiadmin          2009-06-19 19:00:17   0                       enabled

--------------------------------------------------------------------------------

End of User Account Usage Report

================================================================================
```

Customizing the Splash Page Welcome Message

When you first log in to the user interface, the splash page appears. Located in the center of the main work area is a customizable welcome message. Use this procedure to create a message suitable for your needs.

1. From the **Main Menu**, click **Administration** > **General Options**.
2. Locate **Welcome Message** in the **Variable** column.
3. Enter the desired welcome message text in the **Value** column.
4. Click **OK** to save the change or **Cancel** to undo the change and return the field to the previously saved value.

   A status message appears at the top of the page to inform you if the operation was successful.

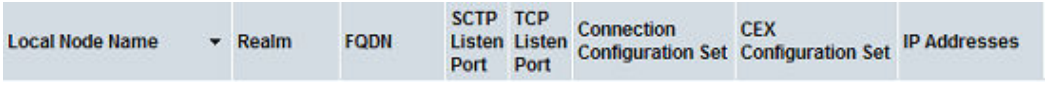
The next time you log in to the user interface, the new welcome message text is displayed.

Column Headers (Sorting)

You can sort a table by a column by clicking the column header. However, sorting is not necessarily available on every column. Sorting does not affect filtering.

When you click the header of a column that the table can be sorted by, an indicator appears in the column header showing the direction of the sort. See Figure 2-8. Clicking the column header again reverses the direction of the sort.

Figure 2-8 Sorting a Table by Column Header



Page Controls

User interface pages contain controls, such as buttons and links, that perform specified functions. The functions are described by the text of the links and buttons.

Note: Disabled buttons are grayed out. Buttons that are irrelevant to the selection or current system state, or which represent unauthorized actions as defined in Group Administration, are disabled. For example, **Delete** is disabled for users without Global Data Delete permission. Buttons are also disabled if, for example, multiple servers are selected for an action that can only be performed on a single server at a time.

Table 2-4 contains examples of Action buttons.

Table 2-4 Example Action Buttons

Action Button	Function
Insert	Inserts data into a table.
Edit	Edits data within a table.
Delete	Deletes data from table.
Change	Changes the status of a managed object.

Some Action buttons take you to another page.

Submit buttons, described in Table 2-5, are used to submit information to the server. The buttons are located in the page area and accompanied by a table in which you can enter information. The Submit buttons, except for **Cancel**, are disabled until you enter some data or select a value for all mandatory fields.

Table 2-5 Submit Buttons

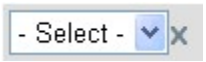
Submit Button	Function
OK	Submits the information to the server, and if successful, returns to the View page for that table.
Apply	Submits the information to the server, and if successful, remains on the current page so that you can enter additional data.
Cancel	Returns to the View page for the table without submitting any information to the server.

Clear Field Control

The clear field control allows you to clear the value from a list. The clear field control is available only on some lists.

Click the **X** next to a list to clear the field.

Figure 2-9 Clear Field Control X



Optional Layout Element Toolbar

The optional layout element toolbar appears in the Page Control Area of the GUI.

Figure 2-10 Optional Layout Element Toolbar

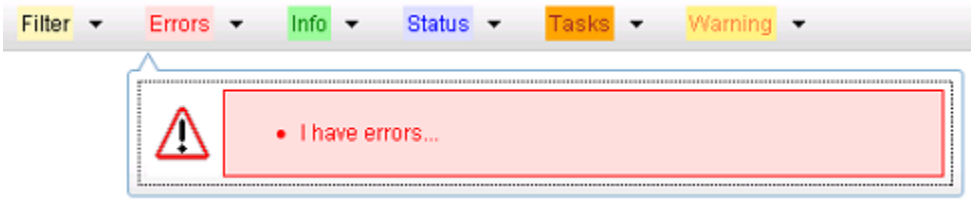
The toolbar displays different elements depending on which GUI page is selected. The elements of the toolbar that can appear include:

- Filter – Allows you to filter data in a table.
- Errors – Displays errors associated with the work area.
- Info – Displays information messages associated with the work area.
- Status – Displays short status updates associated with the main work area.
- Warning – Displays warnings associated with the work area.

Notifications

Some messages require immediate attention, such as errors and status items. When new errors occur, the Errors element opens automatically with information about the error. Similarly, when new status items are added, the Status element opens. If you close an automatically opened element, the element stays closed until a new, unacknowledged item is added.

Figure 2-11 Automatic Error Notification



Note: Viewing and closing an error does not clear the Errors element. If you reopen the Errors element, previously viewed errors are still in the list.

When new messages are added to Warning or Info, the styling of the element changes to indicate new messages are available. The styling of the Task element changes when a task changes state (such as, a task begins or ends).

Opening an Element in the Toolbar

Use this procedure to open an element in the optional layout element toolbar.

1. Click the text of the element or the triangle icon to open an element.

   The selected element opens and overlays the work area.

2. Click **X** to close the element display.

Filters

Filters are part of the optional layout element toolbar and appear throughout the GUI in the Page Control Area. For more information about optional layout element toolbar functionality, see Optional Layout Element Toolbar.

Filters allow you to limit the data presented in a table and can specify multiple filter criteria. By default, table rows appear unfiltered. Three types of filters are supported, however, not all filtering options are available on every page. The types of filters supported include:

- Network Element – When enabled, the Network Element filter limits the data viewed to a single Network Element.

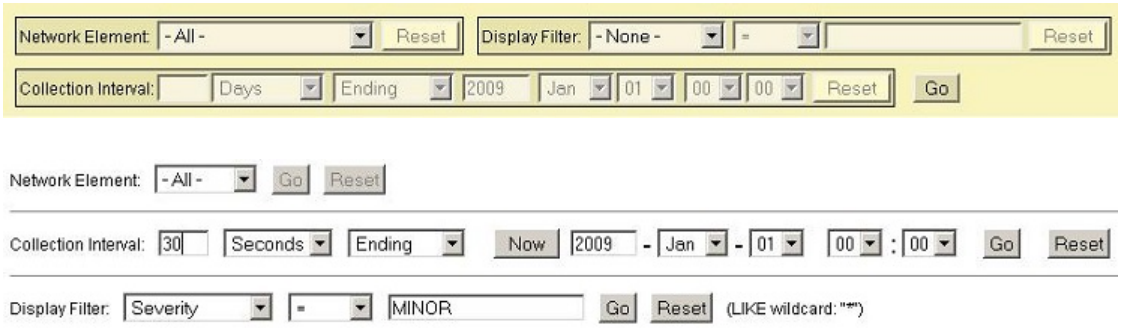
  Note: Once enabled, the Network Element filter affect all pages that list or display data relating to the Network Element.

- Collection Interval – When enabled, the collection interval filter limits the data to entries collected in a specified time range.
- Display Filter – The display filter limits the data viewed to data matching the specified criteria.

Once a field is selected, it cannot be selected again. All specified criteria must be met in order for a row to be displayed.

The style or format of filters may vary depending on which GUI pages the filters are displayed. Regardless of appearance, filters of the same type function the same.

Figure 2-12 Examples of Filter Styles



Filter Control Elements

This table describes filter control elements of the user interface.

Table 2-6 Filter Control Elements

Operator	Description
=	Displays an exact match.
!=	Displays all records that do not match the specified filter parameter value.
>	Displays all records with a parameter value that is greater than the specified value.
>=	Displays all records with a parameter value that is greater than or equal to the specified value.
<	Displays all records with a parameter value that is less than the specified value.

Table 2-6 (Cont.) Filter Control Elements

Operator	Description
<=	Displays all records with a parameter value that is less than or equal to the specified value.
Like	Enables you to use an asterisk (*) as a wildcard as part of the filter parameter value.
Is Null	Displays all records that have a value of **Is Null** in the specified field.

Note: Not all filterable fields support all operators. Only the supported operators are available for you to select.

Filtering on the Network Element

The global Network Element filter is a special filter that is enabled on a per-user basis. The global Network Element filter allows a user to limit the data viewed to a single Network Element. Once enabled, the global Network Element filter affects all sub-screens that display data related to Network Elements. This filtering option may not be available on all pages.

1. Click **Filter** in the optional layout element toolbar.
2. Select a Network Element from the **Network Element** list.
3. Click **Go** to filter on the selection or click **Reset** to clear the selection.
4. For data tables that support compound filtering, click **Add** to add another filter condition and repeat steps 2 through 4.

   Multiple filter conditions are joined by an AND operator.

Records are displayed according to the specified criteria.

Filtering on Collection Interval

The Collection Interval filter allows a user to limit the data viewed to a specified time interval. This filtering option may not be available on all pages.

1. Click **Filter** in the optional layout element toolbar.
2. Enter a duration for the **Collection Interval** filter.

   The duration must be a numeric value.
3. Select a unit of time from the list.

   The unit of time can be seconds, minutes, hours, or days.
4. Select **Beginning** or **Ending** from the list.
5. Click **Go** to filter on the selection, or click **Reset** to clear the selection.

Records are displayed according to the specified criteria.

Filtering Using the Display Filter

Use this procedure to perform a filtering operation. This procedure assumes you have a data table displayed on your screen with the Display Filter field. This process is the same for all data tables. However, all filtering operations are not available for all tables.

Note: Display Filter does not support compound filtering. For example, you cannot filter on both severity and a server name. Try to filter on a single filter criteria, such as the server hostname for server-scoped metric cells; or the application name for St- and NE-scoped metric cells. You can also sort by congestion level (descending) to help improve your filter.

1. Click **Filter** in the optional layout element toolbar.
2. Select a field name from the **Display Filter** list.

   This selection specifies the field in the table that you want to filter on. The default is **None**, which indicates that you want all available data displayed.
3. Select an operator from the operation selector list.
4. Enter a value in the value field.

   This value specifies the data that you want to filter on. For example, if you specify Filter=Severity with the equals (=) operator and a value of MINOR, the table would show only records where Severity=MINOR.
5. Click **Go** to filter on the selection, or click **Reset** to clear the selection.

Records are displayed according to the specified criteria.

Note: PCA was known as PDRA and may still be seen in some filtering.

Pause Updates

Some pages refresh automatically. Updates to these pages can be paused by selecting the **Pause updates** checkbox. Uncheck the **Pause updates** checkbox to resume automatic updates. The **Pause updates** checkbox is available only on some pages.

Max Records Per Page Controls

Max Records Per Page is used to control the maximum number of records displayed in the page area. If a page uses pagination, the value of Max Records Per Page is used. Use this procedure to change the Max Records Per Page.

1. From the **Main Menu**, click **Administration** > **General Options**.
2. Change the value of the **MaxRecordsPerPage** variable.

Note: **Maximum Records Per Page** has a range of values from 10 to 100 records. The default value is 20.

3. Click **OK** or **Apply**.

   OK saves the change and returns to the previous page.

   Apply saves the change and remains on the same page.

The maximum number of records displayed is changed.

3

Measurements Overview

This section provides general information about the application's measurements.

Help Organization

Information in this document is organized into the following sections:

- Measurements Overview provides general information about the application's measurements.
- Measurements provides detailed measurement information, organized alphabetically by measurement category.

Measurements Warning

Note: For the most up-to-date information, refer to the MIB document posted with each software release on the Oracle Software Delivery Cloud (OSDC) site.

Viewing the file list

Use this procedure to view the list of files located in the file management storage area of a server. The amount of storage space currently in use can also be viewed on the Files page.

1. From the Main menu, select **Status & Manage** > **Files**.
2. Select a server.

   All files stored on the selected server are displayed.

Opening a file

Use this procedure to open a file stored in the file management storage area.

1. Select **Status & Manage** > **Files**.
2. Select an **NE Name**.
3. Click **List Files**.

   The Status & Manage Files list page for the selected network element displays all files stored in its file management storage area.
4. Click the **Filename** of the file to be opened.

5. Click **Open** to open the file.

Data Export

From the Data Export page you can set an export target to receive exported performance data for measurements, which can be filtered and exported using this feature. For more information about how to create data export tasks for measurements, see:

- Exporting measurements reports

From the Data Export page you can manage file compression strategy and schedule the frequency with which data files are exported.

Data Export elements

This table describes the elements on the **Administration** > **Remote Servers** > **Data Export** page.

Table 3-1 Data Export Elements

Element	Description	Data Input Notes
Hostname	Name of export server	Must be a valid hostname or a valid IP address. Range: Maximum length is 255 characters; alphanumeric characters (a-z, A-Z, and 0-9) and minus sign. Hostname must start and end with an alphanumeric. To clear the current export server and remove the file transfer task, specify an empty hostname and username. Default: None
Username	Username used to access the export server	Format: Textbox Range: Maximum length is 32 characters; alphanumeric characters (a-z, A-Z, and 0-9). To clear the current export server and remove the file transfer task, specify an empty hostname and username. Default: None
Directory on Export Server	Directory path on the export server where the exported data files are to be transferred	Format: Textbox Range: Maximum length is 255 characters; valid value is any UNIX string. Default: None

Table 3-1 (Cont.) Data Export Elements

Element	Description	Data Input Notes
Path to rsync on Export Server	Optional path to the rsync binary on the export server	Format: Textbox Range: Maximum length is 4096 characters; alphanumeric characters (a-z, A-Z, and 0-9),dash, underscore, period, and forward slash. Default: If no path is specified, the username's home directory on the export server is used
Backup File Copy Enabled	Enables or disables the transfer of the backup files	Format: Checkbox Default: Disabled (unchecked)
File Compression	Compression algorithm used when exported data files are initially created on the local host	Format: Option Range: gzip, bzip2, or none Default: gzip
Upload Frequency	Frequency at which the export occurs	Format: Option Range: fifteen minutes, hourly, daily or weekly Default: weekly
Minute	If The Upload Frequency is Hourly, this is the minute of each hour when the transfer is set to begin	Format: Scrolling list Range: 0 to 59 Default: zero
Time of Day	If the Upload Frequency is Daily of Weekly, this is the time of day the export occurs	Format: Time textbox Range: HH:MM AM/PM in 15-minute increments Default: 12:00 AM
Day of Week	If Upload Frequency is Weekly, this is the day of the week when exported data files will be transferred to the export server	Format: Option Range: Sunday through Saturday Default: Sunday
SSH Key Exchange	This button initiates an SSH key exchange between the OAM server and the data export server currently defined on the page. A password must be entered before the exchange can complete.	Format: Button

Table 3-1 (Cont.) Data Export Elements

Element	Description	Data Input Notes
Transfer Now	This button initiates an immediate attempt to transfer any data files in the export directory to the export server	Format: Button
Test Transfer	This button initiates an immediate test transfer to the data export server currently defined on the page.	Format: Button
Keys Report	This button generates an SSH Keys Report for all OAM servers.	Format: Button

Configuring data export

The Data Export page enables you to configure a server to receive exported performance and configuration data. Use this procedure to configure data export.

1. Select **Administration** > **Remote Servers** > **Data Export**.
2. Enter a **Hostname**.

   See Data Export elements for details about the **Hostname** field and other fields that appear on this page.
3. Enter a **Username**.
4. Enter a **Directory Path** on the Export server.
5. (Optional) Enter the **Path to Rsync** on the Export server.

   Note: Depending on the OS and implementation of the remote server, it may be required to define the path to the rsync binary on the export server but this is not common. If no path is specified, the username's home directory on the export server is used.
6. Select whether to enable the transfer of the backup file. To leave the backup disabled, do not check the box.
7. Select the **File Compression** type.
8. Select the **Upload Frequency**.
9. If you selected hourly for the upload frequency, select the **Minute** intervals.
10. If you selected daily or weekly for the upload frequency, select the **Time of Day**.
11. If you selected weekly for the upload frequency, select the **Day of the Week**.
12. If public keys were manually placed on the Export server, skip to step 14. Otherwise, click **Exchange SSH Key** to transfer the SSH keys to the Export server.

13. Enter the password.

    The server attempts to exchange keys with the export server currently defined on the page. After the SSH keys are successfully exchanged, continue with the next step.

14. Click **OK** to apply the changes or **Cancel** to discard the changes.

    The export server is now configured and available to receive performance and configuration data.

15. You may optionally click **Test Transfer** to confirm the ability to export to the server currently defined on the page.

    The user can monitor the progress of the task by selecting the **Tasks** drop down list in the page control area.

Tasks

The Tasks pages display the active, long running tasks and scheduled tasks on a selected server. The Active Tasks page provides information such as status, start time, progress, and results for long running tasks, while the Scheduled Tasks page provides a location to view, edit, and delete tasks that are scheduled to occur.

Active Tasks

The Active Tasks page displays the long running tasks on a selected server. The Active Tasks page provides information such as status, start time, progress, and results, all of which can be generated into a report. Additionally, you can pause, restart, or delete tasks from this page.

Active Tasks elements

The Active Tasks page displays information in a tabular format where each tab represents a unique server. By default, the current server's tab is selected when the page is loaded. Table 3-2 describes elements on the Active Tasks page.

Table 3-2 Active Tasks Elements

Active Tasks Element	Description
ID	Task ID
Name	Task name
Status	Current status of the task. Status values include: running, paused, completed, exception, and trapped.
Start Time	Time and date when the task was started
Update Time	Time and date the task's status was last updated
Result	Integer return code of the task. Values other than 0 (zero) indicate abnormal termination of the task. Each value has a task-specific meaning.

Table 3-2 (Cont.) Active Tasks Elements

Active Tasks Element	Description
Result Details	Details about the result of the task
Progress	Current progress of the task

Deleting a task

Use this procedure to delete one or more tasks.

1. Click **Status & Manage** > **Tasks** > **Active Tasks**.
2. Select a server.

   Note: Hovering the cursor over any tab displays the name of the server.

   All active tasks on the selected server are displayed.
3. Select one or more tasks.

   Note: To delete a single task or multiple tasks, the status of each task selected must be one of the following: completed, exception, or trapped.

   Note: You can select multiple rows to delete at one time. To select multiple rows, press and hold Ctrl as you click to select specific rows.
4. Click **Delete**.
5. Click **OK** to delete the selected task(s).

Deleting all completed tasks

Use this procedure to delete all completed tasks.

1. Click **Status & Manage** > **Tasks** > **Active Tasks**.
2. Select a server.

   Note: Hovering the cursor over any tab displays the name of the server.

   All active tasks on the selected server are displayed.
3. Click **Delete all Completed**.
4. Click **OK** to delete all completed tasks.

Cancelling a running or paused task

Use this procedure to cancel a task that is running or paused.

1. Click **Status & Manage** > **Tasks** > **Active Tasks**.
2. Select a server.

   Note: Hovering the cursor over any tab displays the name of the server.

   All active tasks on the selected server are displayed.
3. Select a task.
4. Click **Cancel**.
5. Click **OK** to cancel the selected task.

Pausing a task

Use this procedure to pause a task.

1. Click **Status & Manage** > **Tasks** > **Active Tasks**.
2. Select a server.

   Note: Hovering the mouse over any tab displays the name of the server.

   All active tasks on the selected server are displayed.
3. Select a task.

   Note: A task may be paused only if the status of the task is running.
4. Click **Pause**.

   A confirmation box appears.
5. Click **OK** to pause the selected task.

   For information about restarting a paused task, see Restarting a task.

Restarting a task

Use this procedure to restart a task.

1. Click **Status & Manage** > **Tasks** > **Active Tasks**.
2. Select a server.

   Note: Hovering the mouse over any tab displays the name of the server.

   All active tasks on the selected server are displayed.
3. Select a paused task.

   Note: A task may be restarted only if the status of the task is paused.

4. Click **Restart**.

   A confirmation box appears.

5. Click **OK** to restart the selected task.

   The selected task is restarted.

Active Tasks report elements

The Active Tasks [Report] page displays report data for selected tasks. Table 3-3 describes elements on the Active Tasks [Report] page.

Table 3-3 Active Tasks Report Elements

Active Tasks Report Element	Description
Task ID	Task ID
Display Name	Task name
Task State	Current status of the task. Status values include: running, paused, completed, exception, and trapped.
Admin State	Confirms task status
Start Time	Time and date when the task was started
Last Update Time	Time and date the task's status was last updated
Elapsed Time	Time to complete the task
Result	Integer return code of the task. Values other than 0 (zero) indicate abnormal termination of the task. Each value has a task-specific meaning.
Result Details	Details about the result of the task

Generating an active task report

Use this procedure to generate an active task report.

1. Click **Status & Manage** > **Tasks** > **Active Tasks**.
2. Select a server.

   Note: Hovering the mouse over any tab displays the name of the server.

   All active tasks on the selected server are displayed.

3. Select one or more tasks.

   Note: If no tasks are selected, all tasks matching the current filter criteria is included in the report.

4. Click **Report**.
5. Click **Print** to print the report.
6. Click **Save** to save the report.

Scheduled Tasks

The periodic export of measurement data can be scheduled through the GUI. The Scheduled Tasks page provides you with a location to view, edit, delete and generate reports of these scheduled tasks. For more information about the measurement data that can be exported, see:

- Exporting measurements reports

Scheduled Tasks elements

The Scheduled Tasks page displays information in a tabular format where each tab represents a unique server. By default, the current server's tab is selected when the page is loaded. Table 3-4 describes elements on the Scheduled Tasks page.

Table 3-4 Scheduled Tasks Elements

Scheduled Tasks Element	Description
Task Name	Name given at the time of task creation
Description	Description of the task
Time of Day	The hour and minute the task is scheduled to run
Day-of-Week	Day of the week the task is scheduled to run
Network Elem	The Network Element associated with the task

Editing a scheduled task

Use this procedure to edit a scheduled task.

1. Click **Status & Manage** > **Tasks** > **Scheduled Tasks**.

   All scheduled tasks are displayed on the Scheduled Tasks page.
2. Select a task.
3. Click **Edit**.

   The Data Export page for the selected task appears.
4. Edit the available fields as necessary.

   See Scheduled Tasks elements for details about the fields that appear on this page.
5. Click **OK** or **Apply** to submit the changes and return to the Scheduled Tasks page.

Deleting a scheduled task

Use this procedure to delete one or more scheduled tasks.

1. Click **Status & Manage** > **Tasks** > **Scheduled Tasks**.

   All scheduled tasks are displayed on the Scheduled Tasks page.

2. Select one or more tasks.

3. Click **Delete**.

4. Click **OK** to delete the selected task(s).

Generating a scheduled task report

Use this procedure to generate a scheduled task report.

1. Click **Status & Manage** > **Tasks** > **Scheduled Tasks**.

   All scheduled tasks are displayed on the Scheduled Tasks page.

2. Select one or more tasks.

   Note: If no tasks are selected, all tasks matching the current filter criteria is included in the report.

3. Click **Report**.

4. Click **Print** to print the report.

5. Click **Save** to save the report.

My Oracle Support (MOS)

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

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

1. Select 2 for New Service Request

2. Select 3 for Hardware, Networking and Solaris Operating System Support

3. Select one of the following options:

   - For Technical issues such as creating a new Service Request (SR), Select 1
   - For Non-technical issues such as registration or assistance with MOS, Select 2

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

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

4

Measurements

This section provides general information about measurements (including measurement procedures) and lists the measurements that display on measurement reports.

General measurements information

This section provides general information about measurements, measurement-related GUI elements, and measurement report procedures.

Measurements

The measurements framework allows applications to define, update, and produce reports for various measurements.

- Measurements are ordinary counters that count occurrences of different events within the system, for example, the number of messages received. Measurement counters are also called pegs. Additional measurement types provided by the Platform framework are not used in this release.
- Applications simply peg (increment) measurements upon the occurrence of the event that needs to be measured.
- Measurements are collected and merged at the SOAM and NOAM servers as appropriate.
- The GUI allows reports to be generated from measurements.

Measurements that are being pegged locally are collected from shared memory and stored in a disk-backed database table every 5 minutes on all servers in the network. Measurements are collected every 5 minutes on a 5 minute boundary; for example, at HH:00, HH:05, HH:10, HH:15, and so on. The collection frequency is set to 5 minutes to minimize the loss of measurement data in case of a server failure, and also to minimize the impact of measurements collection on system performance.

All servers in the network (NOAM, SOAM, and **MP** servers) store a minimum of 8 hours of local measurements data. More than 5 minutes of local measurements data is retained on each server to minimize loss of measurements data in case of a network connection failure to the server merging measurements.

Measurements data older than the required retention period are deleted by the measurements framework.

Measurements are reported in groups. A measurements report group is a collection of measurement IDs. Each measurement report contains one measurement group. A measurement can be assigned to one or more existing or new measurement groups so that it is included in a measurement report. Assigning a measurement ID to a report

group ensures that when you select a report group the same set of measurements is always included in the measurements report.

Some measurements display as blank (or non-value) and some display as 0. A blank measurement indicates a counter has not been created in the selected reporting interval. A zero measurement indicates the counter was created, but never pegged. The report may also leave a measurement or sub-measurement out entirely if this item was not created/pegged at all in the reporting interval.

Note: Measurements from a server may be missing in a report if the server is down; the server is in overload; something in the Platform merging framework is not working; or the report is generated before data is available from the last collection period (there is a 25 to 30 second lag time in availability).

Measurement elements

Table 4-1 describes the elements on the **Measurements** > **Report** page.

Table 4-1 Measurements Elements

Element	Description	Data Input Notes
Scope	Network Elements, Server Groups, Resource Domains, Places and Place Associations for which the measurements report can be run. **Note:** Measurements for SOAM network elements are not available in systems that do not support SOAMs.	Format: List Range: Network Elements in the topology; Server Groups in the topology; Resource Domains in the topology; Places in the topology; Place Associations in the topology **Note:** If no selection is made, the default scope is Entire Network. Default: Entire Network
Report	A selection of reports	Format: List Range: Varies depending on application Default: Group
Column Filter	The characteristics for filtering the column display	Format: List Range: Sub-measurement Sub-measurement Ranges: • Like: A pattern-matching distinction for sub-measurement name, for example, 123* matches any sub-measurement that begins with 123. • In: A list-matching distinction for sub-measurement ID, for example, 3,4,6-10 matches only sub-measurements 3, 4, and 6 through 10. Default: None

Table 4-1 (Cont.) Measurements Elements

Element	Description	Data Input Notes
Time Range	The interval of time for which the data is being reported, beginning or ending on a specified date.	Format: List Range: Days, Hours, Minutes, Seconds Interval Reference Point: Ending, Beginning Default: Days

Generating a measurements report

Use this procedure to generate and view a measurements report.

1. Click **Measurements** > **Report**.
2. Select the **Scope**.

   For details about this field, or any field on the **Measurements** > **Report** page, see Measurement elements.
3. Select the **Report**.
4. Click **Interval**.
5. Click **Time Range**.
6. Select **Beginning** or **Ending** as the **Time Range** interval reference point.
7. Select the **Beginning** or **Ending** date.
8. Click **Go**.

> **Note:** Data for the selected scope is displayed in the primary report page. Data for any available sub-scopes are displayed in tabs. For example, if the selected scope is Entire Network, report data for the entire network appears in the primary report page. The individual network entities within the entire network are considered sub-scopes.

9. To view report data for a specific sub-scope, click on the tab for that sub-scope.

Measurements data export elements

This table describes the elements on the **Measurements** > **Report [Export]** page.

Table 4-2 Schedule Measurement Data Export Elements

Element	Description	Data Input Notes
Task Name	Name of the scheduled task	Format: Textbox Range: Maximum length is 40 characters; alphanumeric (a-z, A-Z, and 0-9) and minus sign (-). Task Name must begin and end with an alphanumeric character.

Table 4-2 (Cont.) Schedule Measurement Data Export Elements

Element	Description	Data Input Notes
Description	Description of the scheduled task	Format: Textbox Range: Maximum length is 255 characters; alphanumeric (a-z, A-Z, and 0-9) and minus sign (-). Description must begin with an alphanumeric character.
Export Frequency	Frequency at which the export occurs	Format: Radio button Range: Fifteen Minutes, Hourly, Once, Weekly, or Daily Default: Once
Minute	If hourly or fifteen minutes is selected for Upload Frequency, this is the minute of each hour when the data will be written to the export directory.	Format: Scrolling list Range: 0 to 59 Default: 0
Time of Day	Time of day the export occurs	Format: Time textbox Range: 15-minute increments Default: 12:00 AM
Day of Week	Day of week on which the export occurs	Format: Radio button Range: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, or Saturday Default: Sunday

Exporting measurements reports

You can schedule periodic exports of data from the **Measurements Report** page. Measurements data can be exported immediately, or you can schedule exports to occur daily or weekly. If filtering has been applied on the **Measurements Report** page, only filtered data is exported.

During data export, the system automatically creates a CSV file of the filtered data. The file will be available in the file management area until you manually delete it, or until the file is transferred to an alternate location using the Export server feature. For more information about using **Export Server**, see Data Export.

Use this procedure to save a measurements report to the file management storage area.Use this procedure to schedule a data export task.

1. Select **Measurements** > **Report**.

   The **Measurements Report** page appears. For a description of each field, see Measurement elements.

2. Generate a measurements report.

For information about how to generate a measurements report, see Generating a measurements report.

3. Click to select the scope or sub-scope measurement report that you want to export.
4. Click **Export**.

   The measurement report is exported to a CSV file. Click the link at the top of the page to go directly to the **Status & Manage** > **Files** page. From the **Status & Manage** page, you can view a list of files available for download, including the measurements report you exported during this procedure. The **Schedule Measurement Log Data Export** page appears.

5. Check the **Report Groups** boxes corresponding to any additional measurement reports to be exported.

   Note: This step is optional, but is available to allow the export of multiple measurement group reports simultaneously.

6. Select the **Export Frequency**.

   Note: If the selected **Export Frequency** is **Fifteen Minutes** or **Hourly**, specify the **Minutes**.

7. Enter the **Task Name**.

   For more information about Task Name, or any field on this page, see Measurements data export elements.

   Note: **Task Name** is not an option if **Export Frequency** equals **Once**.

8. Select the **Time of Day**.

   Note: **Time of Day** is only an option if **Export Frequency** equals **Daily** or **Weekly**.

9. Select the **Day of Week**.

   Note: **Day of Week** is only an option if **Export Frequency** equals **Weekly**.

10. Click **OK** or **Apply** to initiate the data export task.

    The data export task is scheduled. From the **Status & Manage** > **Tasks** page, you can view a list of files available for download, including the file you exported during this procedure. For more information, see Viewing the file list.

    Scheduled tasks can be viewed, edited, and deleted, and reports of scheduled tasks can be generated from **Status & Manage** > **Tasks**. For more information see:

    - Editing a scheduled task
    - Deleting a scheduled task

- Generating a scheduled task report

Address Resolution Exception measurements

The Address Resolution Exception measurement group is a set of measurements that provide information about exceptions and unexpected messages and events that are specific to the **RBAR** Application.

RxRbarDecodeFailureResol

Measurement ID
10309

Measurement Group
Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Request messages rejected due to a message decoding error.

Collection Interval
5 min

Peg Condition
When RBAR receives a Request message and does not decode an AVP which extends beyond the length of the message indicated by the `Message Length` parameter in the message header.

Measurement Scope
Server Group

Recovery

1. While parsing the message, the message content was inconsistent with the Message Length in the message header. These protocol violations can be caused by the originator of the message (identified by the Origin-Host AVP in the message) or the peer who forwarded the message to this node.

RxRbarInvalidImsiMcc

Measurement ID
10352

Measurement Group
Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of times an **AVP** instance present in Diameter request message is rejected due to the MCC contained in the decoded **IMSI** falls within one of the configured Reserved MCC Ranges.

Collection Interval
5 min

Peg Condition
Each time Diameter request message is rejected due to the MCC contained in the decoded IMSI falls within one of the configured Reserved MCC Ranges.

Measurement Scope
Server Group

Recovery

1. Validate the ranges configured in the Reserved MCC Ranges table.
2. Verify that the MCC portion of the decodable IMSI received by RBAR do not fall within the configured Reserved MCC Ranges.
3. If the problem persists, it is recommended to contact My Oracle Support (MOS).

RxRbarNgnPsDrop

Measurement ID
10356

Measurement Group
Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of NGN-PS Diameter messages dropped by RBAR.

Collection Interval
5 min

Peg Condition
This measurement is incremented each time an NGN-PS Diameter message is dropped due to these conditions:

- Address resolution is unsuccessful and the configured action is abandon
- Event sending failure to DRL

Measurement Scope
Server Group

Recovery

1. No action required.

RxRbarResolFailAll

Measurement ID
10330

Measurement Group
Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Request messages received which did not resolve to a provisioned address or address range.

Collection Interval
5 min

Peg Condition
When RBAR receives a Request message and, using the provisioned individual addresses or address ranges, does not successfully resolve to a Destination.

Measurement Scope
Server Group

Recovery

1. An individual address or address range associated with the Application ID, Command Code and Routing Entity Type may be missing from the RBAR configuration. Validate which address and address range tables are associated with the Application ID, Command Code and Routing Entity Type. View the currently provisioned Application IDs, Command Codes, and Routing Entity Types by selecting **RBAR** > **Configuration** > **Address Resolutions**.

RxRbarResolFailCmdcode

Measurement ID
10331

Measurement Group
Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Request messages received with an unknown Command Code.

Collection Interval
5 min

Peg Condition
When RBAR receives a Request message and, after attempting to validate the ordered pair (Application ID and Command Code), the Command Code is unknown. RBAR invokes the routing exception handling procedure assigned to this Application ID and Routing Exception Type.

Measurement Scope
Server Group

Recovery

1. The order pair (Application ID and Command Code) is not provisioned in the Address Resolutions routing configuration. View the currently provisioned Application IDs and Command Codes by selecting **RBAR** > **Configuration** > **Address Resolutions**.

RxRbarResolFailDbFail

Measurement ID
10341

Measurement Group
Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of routing attempt failures due to internal database inconsistency failure.

Collection Interval
5 min

Peg Condition
When RBAR receives a Request message and encounters a run-time database inconsistency.

Measurement Scope
Server Group

Recovery

1. If this problem occurs, it is recommended to contact My Oracle Support (MOS).

RxRbarResolFailImpiMatch

Measurement ID
10336

Measurement Group
Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Request messages received with a valid IMPI that did not match a provisioned address or address range.

Collection Interval
5 min

Peg Condition
When RBAR receives a Request message with a Routing Entity type of IMPI and, using the provisioned individual addresses or address ranges, does not successfully resolve to a Destination.

Measurement Scope
Server Group

Recovery

1. An individual address or address range associated with the Application ID, Command Code and Routing Entity Type may be missing from the RBAR configuration. Validate which address and address range tables are associated with the Application ID, Command Code and Routing Entity Type.
2. View the currently provisioned Application IDs, Command Codes, and Routing Entity Types by selecting **RBAR** > **Configuration** > **Address Resolutions**.

RxRbarResolFailImpuMatch

Measurement ID
10337

Measurement Group
Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Request messages received with a valid IMPU that did not match a provisioned address or address range.

Collection Interval
5 min

Peg Condition
When RBAR receives a Request message with a Routing Entity type of IMPU and, using the provisioned individual addresses or address ranges, does not successfully resolve to a Destination.

Measurement Scope
Server Group

Recovery

1. An individual address or address range associated with the Application ID, Command Code and Routing Entity Type may be missing from the RBAR configuration. Validate which address and address range tables are associated with the Application ID, Command Code and Routing Entity Type.
2. View the currently provisioned Application IDs, Command Codes, and Routing Entity Types by selecting **RBAR** > **Configuration** > **Address Resolutions**.

RxRbarResolFailImsiMatch

Measurement ID
10334

Measurement Group
Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Request messages received with a valid IMSI that did not match a provisioned address or address range.

Collection Interval
5 min

Peg Condition
When RBAR receives a Request message with a Routing Entity type of IMSI and, using the provisioned individual addresses or address ranges, does not successfully resolve to a Destination.

Measurement Scope
Server Group

Recovery

1. An individual address or address range associated with the Application ID, Command Code and Routing Entity Type may be missing from the RBAR configuration. Validate which address and address range tables are associated with the Application ID, Command Code and Routing Entity Type.
2. View the currently provisioned Application IDs, Command Codes, and Routing Entity Types by selecting **RBAR** > **Configuration** > **Address Resolutions**.

RxRbarResolFailIpv4Match

Measurement ID
10338

Measurement Group
Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Request messages received with an IPv4 Address that did not match a provisioned address or address range

Collection Interval
5 min

Peg Condition
When RBAR receives a Request message with a Routing Entity type of IPv4 Address and, using the provisioned individual addresses or address ranges, does not successfully resolve to a Destination.

Measurement Scope
Server Group

Recovery

1. An individual address or address range associated with the Application ID, Command Code and Routing Entity Type may be missing from the RBAR configuration. Validate which address and address range tables are associated with the Application ID, Command Code and Routing Entity Type.
2. View the currently provisioned Application IDs, Command Codes, and Routing Entity Types by selecting **RBAR** > **Configuration** > **Address Resolutions**.

RxRbarResolFailIpv6prefixMatch

Measurement ID
10339

Measurement Group
Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Request messages received with an IPv6-Prefix Address that did not match a provisioned address or address range

Collection Interval
5 min

Peg Condition
When RBAR receives a Request message with a Routing Entity type of IPv6-Prefix Address and, using the provisioned individual addresses or address ranges, does not successfully resolve to a Destination.

Measurement Scope
Server Group

Recovery

1. An individual address or address range associated with the Application ID, Command Code and Routing Entity Type may be missing from the RBAR configuration. Validate which address and address range tables are associated with the Application ID, Command Code and Routing Entity Type.
2. View the currently provisioned Application IDs, Command Codes, and Routing Entity Types by selecting **RBAR** > **Configuration** > **Address Resolutions**.

RxRbarResolFailMsisdnMatch

Measurement ID
10335

Measurement Group
Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Request messages received with a valid MSISDN that did not match a provisioned address or address range

Collection Interval
5 min

Peg Condition
When RBAR receives a Request message with a Routing Entity type of MSISDN and, using the provisioned individual addresses or address ranges, does not successfully resolve to a Destination.

Measurement Scope
Server Group

Recovery

1. An individual address or address range associated with the Application ID, Command Code and Routing Entity Type may be missing from the RBAR configuration. Validate which address and address range tables are associated with the Application ID, Command Code and Routing Entity Type.
2. View the currently provisioned Application IDs, Command Codes, and Routing Entity Types by selecting **RBAR** > **Configuration** > **Address Resolutions**.

RxRbarResolFailNoAddrAvps

Measurement ID
10332

Measurement Group
Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Request messages received without a Routing Entity Address AVP.

Collection Interval
5 min

Peg Condition
When RBAR receives a Request message, with the number of AVPs searched–as defined by measurement RxRbarAvgAddrAvps for the message–as `0` and hence, a valid Routing Entity address cannot be found using any of the Routing Entity Types assigned to the ordered pair (Application ID and Command Code).

Measurement Scope
Server Group

Recovery

1. This may be a normal event or an event associated with misprovisioned address resolution configuration. If this event is considered abnormal, validate which AVPs are configured for routing with the Application ID and Command Code.
2. View the currently provisioned Application IDs and Command Codes by selecting **RBAR** > **Configuration** > **Address Resolutions**.

RxRbarResolFailNoValidAddr

Measurement ID
10333

Measurement Group
Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Request messages received with at least Routing Entity Address AVP but no valid Routing Entity Addresses were found.

Collection Interval
5 min

Peg Condition
When RBAR receives a Request message, with the number of AVPs searched–as defined by measurement RxRbarAvgAddrAvps for the message–as `> 0` but, a valid Routing Entity address cannot be found using any of the Routing Entity Types assigned to the ordered pair (Application ID and Command Code).

Measurement Scope
Server Group

Recovery

1. This may be a normal event or an event associated with misprovisioned address resolution configuration. If this event is considered abnormal, validate which AVPs are configured for routing with the Application ID and Command Code.
2. View the currently provisioned Application IDs and Command Codes by selecting **RBAR** > **Configuration** > **Address Resolutions**.

RxRbarResolFailUnsigned16Match

Measurement ID
10343

Measurement Group
Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Request messages received with an UNSIGNED16 value that did not match a provisioned address or address range.

Collection Interval
5 min

Peg Condition
When RBAR receives a Request message with a Routing Entity type of UNSIGNED16 and, using the provisioned individual addresses or address ranges, does not successfully resolve to a Destination.

Measurement Scope
Server Group

Recovery

1. An individual address or address range associated with the Application ID, Command Code and Routing Entity Type may be missing from the **RBAR** configuration. Validate which address and address range tables are associated with the Application ID, Command Code and Routing Entity Type.
2. View the currently provisioned Application IDs, Command Codes, and Routing Entity Types by selecting **RBAR** > **Configuration** > **Address Resolutions**.

RxRbarTransactionsRejected

Measurement ID
10354

Measurement Group
Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of transactions rejected by RBAR.

Collection Interval
5 min

Peg Condition
Each time the RBAR application sends an answer response with Result-Code/ Experimental-Code or abandons an ingress request message.

Measurement Scope
Server Group

Recovery

1. When non-zero, examine other failure measurements (TxRbarAbandonRequest, RxRbarInvalidImsiMcc, RxRbarResolFailUnsigned16Match,

RxRbarResolFailImpuMatch, RxRbarResolFailImpiMatch, RxRbarResolFailMsisdnMatch, RxRbarResolFailImsiMatch, RxRbarResolFailNoAddrAvps, RxRbarResolFailCmdcode, RxRbarResolFailAll, RxRbarDecodeFailureResol, RxRbarUnkApplId) to isolate reasons for failures.

2. If the problem persists, it is recommended to contact My Oracle Support (MOS).

RxRbarUnkApplId

Measurement ID
10308

Measurement Group
Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Request messages rejected due to an unknown Application ID.

Note: The **DSR Relay Agent** forwarded a Request message to the address resolution application which contained an unrecognized Diameter Application ID in the header. Either a DSR **Relay Agent** application routing rule is misprovisioned or the Application ID is not provisioned in the RBAR routing configuration.

Collection Interval
5 min

Peg Condition
When a Request message received and the Application ID is not present in the RBAR configuration.

Measurement Scope
Server Group

Recovery

1. View the currently provisioned Diameter Application IDs by selecting **RBAR** > **Configuration** > **Applications**.
2. View the currently provisioned Application Routing Rules by selecting **Diameter** > **Configuration** > **Application Routing Rules**.

TxRbarAbandonRequest

Measurement ID
10353

Measurement Group
Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Request messages that are abandoned

Collection Interval
5 min

Peg Condition
Each time the Routing Exception `Abandon Request` is invoked

Measurement Scope
Server Group

Recovery

1. No action required.

Address Resolution Performance measurements

The Address Resolution Performance measurement group is a set of measurements that provide performance information that is specific to a **RBAR** Application. These measurements allow you to determine how many messages are successfully forwarded and received to/from each RBAR Application.

RxRbarAvgMsgSize

Measurement ID
10323

Measurement Group
Address Resolution Performance

Measurement Type
Average

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Average size of Request message received.

Collection Interval
5 min

Peg Condition
Average calculated for each Request message received as defined by measurement RxRbarMsgs.

Measurement Scope
Server Group

Recovery

1. No action required.

RxRbarMsgs

Measurement ID
10310

Measurement Group
Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Request messages received by **RBAR**.

Collection Interval
5 min

Peg Condition
When RBAR receives a Request message and determines that the Application ID in the message header is defined in the routing configuration and valid.

Measurement Scope
Server Group

Recovery

1. No action required.

RxRbarNgnPs

Measurement ID
10355

Measurement Group
Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of NGN-PS Diameter messages received by RBAR.

Collection Interval
5 min

Peg Condition
This measurement is incremented each time an NGN-PS Diameter message is received.

Measurement Scope
Server Group

Recovery

1. No action required.

RxRbarResolAll

Measurement ID
10311

Measurement Group
Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Addresses Successful Resolved to a Destination.

Collection Interval
5 min

Peg Condition
When RBAR receives a Request message and successfully resolves its Application ID, Command Code and Routing Entity to a Destination and forwards the message to the DSR **Relay Agent**.

Measurement Scope
Server Group

Recovery

1. No action required.

RxRbarResolAllMp

Measurement ID
10351

Measurement Group
Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Addresses Successful Resolved to a Destination by the MP.

Collection Interval
5 min

Peg Condition
When RBAR receives a Request message and successfully resolves its Application ID, Command Code and Routing Entity to a Destination.

Measurement Scope
Server Group

Recovery

1. No action required.

RxRbarResolImpi

Measurement ID
10315

Measurement Group
Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Addresses Successful Resolved with Routing Entity type IMPI.

Collection Interval
5 min

Peg Condition
When RBAR receives a Request message with a Routing Entity type of IMPI and successfully resolves its Application ID, Command Code and Routing Entity to a Destination and forwards the message to the DSR **Relay Agent**.

Measurement Scope
Server Group

Recovery

1. No action required.

RxRbarResolImpu

Measurement ID
10316

Measurement Group
Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Addresses Successful Resolved with Routing Entity type IMPU.

Collection Interval
5 min

Peg Condition
When RBAR receives a Request message with a Routing Entity type of IMPU and successfully resolves its Application ID, Command Code and Routing Entity to a Destination and forwards the message to the DSR **Relay Agent**.

Measurement Scope
Server Group

Recovery

1. No action required.

RxRbarResolImsi

Measurement ID
10313

Measurement Group
Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Addresses Successful Resolved with Routing Entity type IMSI.

Collection Interval
5 min

Peg Condition
When RBAR receives a Request message with a Routing Entity type of IMSI and successfully resolves its Application ID, Command Code and Routing Entity to a Destination and forwards the message to the DSR **Relay Agent**.

Measurement Scope
Server Group

Recovery

1. No action required.

RxRbarResolIpv4

Measurement ID
10317

Measurement Group
Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Addresses Successful Resolved with Routing Entity type IPv4 Address.

Collection Interval
5 min

Peg Condition
When RBAR receives a Request message with a Routing Entity type of IPv4 Address and successfully resolves its Application ID, Command Code and Routing Entity to a Destination and forwards the message to the DSR **Relay Agent**.

Measurement Scope
Server Group

Recovery

1. No action required.

RxRbarResolIpv6prefix

Measurement ID
10318

Measurement Group
Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Addresses Successful Resolved with Routing Entity type IPv6-Prefix Address.

Collection Interval
5 min

Peg Condition
When RBAR receives a Request message with a Routing Entity type of IPv6-Prefix Address and successfully resolves its Application ID, Command Code and Routing Entity to a Destination and forwards the message to the DSR **Relay Agent**.

Measurement Scope
Server Group

Recovery

1. No action required.

RxRbarResolMsisdn

Measurement ID
10314

Measurement Group
Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Addresses Successful Resolved with Routing Entity type MSISDN.

Collection Interval
5 min

Peg Condition
When RBAR receives a Request message with a Routing Entity type of MSISDN and successfully resolves its Application ID, Command Code and Routing Entity to a Destination and forwards the message to the DSR **Relay Agent**.

Measurement Scope
Server Group

Recovery

1. No action required.

RxRbarResolRateAvg

Measurement ID
10306

Measurement Group
Address Resolution Performance

Measurement Type
Average

Measurement Dimension
Single

Description
Average Addresses Successfully Resolved per second.

Collection Interval
5 min

Peg Condition
The average per second is periodically calculated based on the total number of addresses successfully resolved as defined by measurement RxRbarResolAllMp.

Measurement Scope
Server Group

Recovery

1. No action required.

RxRbarResolRatePeak

Measurement ID
10307

Measurement Group
Address Resolution Performance

Measurement Type
Max

Measurement Dimension
Single

Description
Peak Addresses Successfully Resolved per second

Collection Interval
5 min

Peg Condition
At the end of each sample period associated with average successfully resolved message rate, as defined by measurement RxRbarResolRateAvg, if the value exceeds

the current value for this measurement, then the measurement will be updated with the current sample periods value.

Measurement Scope
Server Group

Recovery

1. No action required.

RxRbarResolSingleAddr

Measurement ID
10312

Measurement Group
Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Addresses Successful Resolved with an Individual Address.

Collection Interval
5 min

Peg Condition
When RBAR receives a Request message and uses the Address Exceptions to successfully resolve its Application ID, Command Code and Routing Entity to a Destination and forwards the message to the DSR **Relay Agent**.

Measurement Scope
Server Group

Recovery

1. No action required.

RxRbarResolUnsigned16

Measurement ID
10342

Measurement Group
Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Addresses Successful Resolved with Routing Entity type UNSIGNED16.

Collection Interval
5 min

Peg Condition
When RBAR receives a Request message with a Routing Entity type of UNSIGNED16 and successfully resolves its Application ID, Command Code and Routing Entity to a Destination and forwards the message to the DSR **Relay Agent.**

Measurement Scope
Server Group

Recovery

1. No action required.

TxRbarFwdDefaultDest

Measurement ID
10321

Measurement Group
Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Request message forwarding attempts using a Default Destination.

Collection Interval
5 min

Peg Condition
Each time the Routing Exception `Forward route the message with a user-configurable Default Destination` is invoked.

Measurement Scope
Server Group

Recovery

1. No action required

TxRbarFwdNochange

Measurement ID
10320

Measurement Group
Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Request message forwarding attempts without changing the message.

Collection Interval
5 min

Peg Condition
Each time the Routing Exception `Forward route the message unchanged` is invoked.

Measurement Scope
Server Group

Recovery

1. No action required.

TxRbarFwdSuccess

Measurement ID
10322

Measurement Group
Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Request messages successfully forwarded (all reasons).

Collection Interval
5 min

Peg Condition
Each time the application successfully enqueues a Request message on the DSR **Relay Agent**'s Request Message Queue.

Measurement Scope
Server Group

Recovery

1. If this value is less than measurement TxRbarMsgAttempt, then an internal resource error is occurring. It is recommended to contact My Oracle Support (MOS). if needed.

TxRbarMsgAttempt

Measurement ID
10319

Measurement Group
Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Request message forwarding attempts (all reasons).

Collection Interval
5 min

Peg Condition
Each time the application attempts to enqueue a Request message on the DSR **Relay Agent**'s Request Message Queue.

Measurement Scope
Server Group

Recovery

1. No action required.

Application Routing Rules measurements

The Application Routing Rules measurement group is a set of measurements associated with the usage of Application Routing Rules. These measurements will allow the user to determine which Application Routing Rules are most commonly used and the percentage of times that messages were successfully (or unsuccessfully) routed.

RxApplRuleSelected

Measurement ID
10085

Measurement Group
Application Routing Rules

Measurement Type
Simple

Measurement Dimension
Arrayed (by Application Routing Rule ID)

Description
Number of times that the application routing rule was selected for routing a Request message.

Collection Interval
5 min

Peg Condition
When DRL selects an application routing rule for routing a message.

Measurement Scope
Server Group

Recovery

1. No action required.

RxApplRuleFwdFailAll

Measurement ID
10086

Measurement Group
Application Routing Rules

Measurement Type
Simple

Measurement Dimension
Arrayed (by Application Routing Rule ID)

Description
Number of times that the application routing rule was selected for routing a Request message and the message was not successfully routed for any reason.

Collection Interval
5 min

Peg Condition
When DRL selects an application routing rule to route a Request message and one of the following conditions is met:

- The DSR Application's Operational Status is "Unavailable".
- The DSR Application's Operational Status is not "Unavailable" but the attempt to enqueue the message to the DSR Application failed.

Measurement Scope
Server Group

Recovery

1. No action required.

RxApplRuleFwdFailUnavail

Measurement ID
10087

Measurement Group
Application Routing Rules

Measurement Type
Simple

Measurement Dimension
Arrayed (by Application Routing Rule ID)

Description
Number of times that the application routing rule was selected for routing a Request message and the message was not successfully routed because DSR Application's Operational Status was "Unavailable".

Collection Interval
5 min

Peg Condition
When DRL selects an application routing rule to route a Request message and the DSR Application's Operational Status is "Unavailable".

Measurement Scope
Server Group

Recovery

1. No action required.

RxApplRuleDuplicatePriority

Measurement ID
10088

Measurement Group
Application Routing Rules

Measurement Type
Simple

Measurement Dimension
Arrayed (by Application Routing Rule ID)

Description
Number of times that the application routing rule was selected for routing a message but another application routing rule had the same priority and was ignored.

Collection Interval
5 min

Peg Condition
When DRL searches the ART and finds more than one highest priority application routing rule with the same priority that matches the search criteria. The measurement is associated with the application routing rule that is selected for routing.

Measurement Scope
Server Group

Recovery

1. Use GUI screen: **Main Menu** > **Diameter** > **Configuration** > **Application Routing Rules** to modify peer routing rule priorities.

   At least two application routing rules with the same priority matched an ingress Request message. The system selected the first application routing rule found. Application routing rules must be unique for the same type of messages to avoid unexpected routing results.

RxArtSelected

Measurement ID
10074

Measurement Group
Application Routing Rules

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of times that an application routing rule from ART-X was selected for routing a Request message

Collection Interval
5 min

Peg Condition
When DRL selects an application routing rule from ART-X for routing a message

Measurement Scope
Server Group

Recovery

1. No action required.

Association Exception measurements

The Association Exception measurement report contains measurements that provide information that is specific to associations configured for the MP server.

RxAsnFarEndClose

Measurement ID
9128

Measurement Group
Association Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (per association)

Description
Number of times the far end closed the **SCTP** connection

Collection Interval
30 min

Peg Condition
This measurement is incremented by one each time the far-end of the association closes the association by sending either SHUTDOWN or ABORT.

Measurement Scope
NE, Server

Recovery

1. If the closing of the association was expected, no further action is necessary, the association will be recovered as soon as the far-end is ready to connect again. If the closing of the association was not expected. You can view Association status from the GUI main menu under **SS7/Sigtran** > **Maintenance** > **Associations**.
2. Look in the event history from the GUI main menu under **Alarms & Events** > **View History** for Event ID 19224 to determine exactly when the far-end closed the association.
3. Look for other events for the association or MP server in the event history.
4. Verify that IP connectivity still exists between the MP server and the SG.
5. Verify whether the far-end of the association is undergoing maintenance.
6. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

EvAsnManClose

Measurement ID
9129

Measurement Group
Association Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (per association)

Description
The number of times the association was manually closed. This includes manual changes of the association administrative state that cause the association to transition from ASP-UP to either ASP-DOWN or **Disabled**.

Collection Interval
30 min

Peg Condition
This measurement is incremented by one each time a manual change is made to the association administrative state from **Enabled** to **Blocked** or from **Enabled** to **Disabled**, causing the association to transition out of ASP-UP protocol state.

Measurement Scope
NE, Server

Recovery

1. If the association is known to be under maintenance no further action is necessary. If the association was not known to be under maintenance, you can view the Association status from the GUI main menu under **SS7/Sigtran** > **Maintenance** > **Associations**.
2. View the event history from the GUI main menu under **Alarms & Events** > **View History** and look for Event ID 19228. Event ID 19228 shows the manual association state transitions and contains a time-stamp of when the change occurred.
3. View the security logs from the GUI main menu under **Security** > **Logs**. You can search the logs using the time-stamp from the event history log to determine which login performed the manual state change on the association.
4. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

EvAsnNoRespClose

Measurement ID
9130

Measurement Group
Association Exception

Measurement Type
Simple

Measurement Dimension

Description
The number of times the association was closed due to lack of response from the far end. This includes lack of response to any signaling sent on the association or to SCTP heartbeating if enabled.

Collection Interval
30 min

Peg Condition
This measurement is incremented by one each time an established SCTP association is closed by the MP server due to lack of response at the SCTP level from the far-end of the association.

Measurement Scope
NE, Server

Recovery

1. This measurement should have a zero value. If it has a non-zero value, the association has been closed due to the lack of response from the far-end. The MP server will begin periodic attempts to reconnect to the Signaling Gateway. You can view the Association status from the GUI main menu under **SS7/Sigtran** > **Maintenance** > **Associations**.
2. Look in the event history from the GUI main menu under **Alarms & Events** > **View History** for Event ID 19225.
3. Verify IP connectivity between the MP server and the Signaling Gateway.
4. Determine if the far-end of the association is congested, possibly causing slow response times on the association.
5. Check the IP network between the MP server and the Signaling Gateway for excessive retransmissions.
6. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

EvTrCnxFail

Measurement ID
9404

Measurement Group
Association Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (per Transport)

Description
The number of times the SCTP connection attempt failed on the association. This includes only unsuccessful attempts to connect to the Signaling Gateway. It does not include failure of established connections.

Collection Interval
30 min

Peg Condition
This measurement is incremented by one each time an SCTP connect attempt fails.

Measurement Scope
NE, Server

Recovery

1. This measurement should have a zero value. A non-zero value indicates that the MP server has attempted to connect to the Signaling Gateway at least once and failed to establish the SCTP connection.You can view Association status from the GUI main menu under **SS7/Sigtran** > **Maintenance** > **Associations**.
2. Check the event history log from the GUI main menu under **Alarms & Events** > **View History**, looking for Event ID 19222. Event ID 19222 provides details about the cause of the failure.
3. Verify that the Adjacent server that represents the far-end of the association is configured with the correct IP address. You can view the Adjacent servers from the GUI main menu under **SS7/Sigtran** > **Configuration** > **Adjacent Servers**.
4. Verify that the remote port configured for the association correctly identifies the port that the Signaling Gateway is listening on for SCTP connections. You can view the configured port from the GUI main menu under **SS7/Sigtran** > **Configuration** > **Associations** > **Configure**.
5. Verify the IP network connectivity between the MP server and the Signaling Gateway.
6. If the Signaling Gateway must be configured to connect to the MP server's IP address and port, verify that the signaling gateway configuration matches the association configuration. You can view association data from the GUI main menu under **SS7/Sigtran** > **Configuration** > **Associations** > **Configure**.
7. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

TxAsnSendFail

Measurement ID
9133

Measurement Group
Association Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (per association)

Description
The number of times the SCTP Send failed for non-DATA M3UA signaling on the association. The number includes the sending of any non-DATA messages on an established association.

Collection Interval
30 min

Peg Condition
This measurement is incremented by one each time an attempt to send M3UA signaling fails for any reason and the information being sent cannot be mapped to a specific link

Measurement Scope
NE, Server

Recovery

1. This measurement should have a zero value. A non-zero value indicates that an attempt to send a message to the far-end on this association using SCTP has failed. Normally this happens if the far-end cannot keep up with the rate of messages being sent from all links on the association. You can view Association status from the GUI main menu under **SS7/Sigtran** > **Maintenance** > **Associations**.
2. Look in the GUI main menu under **Alarms & Events** > **View History** in the event history log for Event ID 19233 - Failed to send non-DATA message. Refer to the *DSR Alarms and KPIs Reference* for details about this event and the cause of the failure to send.
3. Verify that the IP network between the MP server and the SG is functioning as expected.
4. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

RxAsnRecvFailed

Measurement ID
9134

Measurement Group
Association Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (per association)

Description
The number of times an SCTP/UDP receive attempt failed on the transport. Failure to receive message via SCTP may result in a message being discarded.

Collection Interval
30 min

Peg Condition
This measurement is incremented by one each time an SCTP receive fails when the far-end attempted to send data, but the data cannot be received due to an invalid message length.

Measurement Scope
NE, Server

Recovery

1. This measurement should have a zero value. A non-zero value indicates that the far-end is sending data that is malformed. You can view Association status from the GUI main menu under **SS7/Sigtran** > **Maintenance** > **Associations**.
2. Look in the event history log from the GUI main menu under **Alarms & Events** > **View History** for Event ID 19223. Event ID 19223 gives more information about what caused the failure.
3. Try to bring the sockets back into alignment by manually **Disabling** and **Enabling** the association.
4. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

EvTrSockInitFail

Measurement ID
9407

Measurement Group
Transport Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (per Transport)

Description
The number of times the socket initialization failed. Socket initialization includes configuring the association according to the settings in the GUI under **SS7/Sigtran** > **Configuration** > **Associations** > **Configuration Sets**.

Collection Interval
30 min

Peg Condition
This measurement is incremented by one each time one or more socket options cannot be set according to the settings in the association's configuration set.

Measurement Scope
NE, Server

Recovery

1. This measurement should have a zero value. A non-zero value indicates a problem with the association setup prior to attempting to connect the association. If this occurs, look for Event ID 19221 in the GUI under **Alarms & Events** > **View History**. Event 19221 provides details about the configuration failure.
2. It is recommended to contact My Oracle Support (MOS) for further assistance.

RxAsnM3uaERROR

Measurement ID
9140

Measurement Group
Association Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (per association)

Description
The number of M3UA ERROR messages received on the association. An M3UA ERROR message is sent by the far-end to complain about an invalid M3UA message that it received.

Collection Interval
30 min

Peg Condition
This measurement is incremented by one each time an M3UA ERROR message is received that cannot be mapped to a specific link.

Measurement Scope
NE, Server

Recovery

1. This measurement will have a value of zero. A non-zero value indicates a problem with M3UA signaling sent by the MP server.
2. Look for Event ID 19235 from the GUI main menu under **Alarms & Events** > **View History**. Event ID19235 provides more information about the receipt of the ERROR message.
3. If the ERROR reason in Event ID 19235 indicates a problem with the routing context (i.e., error code 0x19), verify that the MP server link set and the SG are configured to agree on the routing context values that each M3UA signaling link uses.
4. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

EvAsnUpAckTO

Measurement ID
9141

Measurement Group
Association Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (per association)

Description
The number of times the association timed out waiting for ASP-UP-ACK. ASP-UP-ACK is sent by the far-end in response to an ASP-UP message during the association start-up (when the association is in the **Enabled** administrative state).

Collection Interval
30 min

Peg Condition
This measurement is incremented by one each time an ASP-UP has been sent and the M3UA State Management ACK Timer expires, but no ASP-UP-ACK has been received for the association.

Measurement Scope
NE, Server

Recovery

1. This measurement should have a zero value. If the value is not zero, the association cannot be brought into the state necessary for M3UA ASPTM traffic because the far-end of the association is not responding by sending an ASP-UP-ACK prior to the timeout defined in the GUI under **SS7/Sigtran** > **Configuration** > **Options** > **M3UA**. The field that defines the timeout is the **State Management ACK Timer**.
2. You can view Association status from the GUI main menu under **SS7/Sigtran** > **Maintenance** > **Associations**.
3. Check the event history from the GUI main menu under **Alarms & Events** > **View History**, looking for Event ID 19226. Event ID 19226 will show when the timeout occurred.
4. Verify that the far-end of the association on the SG is not undergoing maintenance.
5. Verify that the **State Management ACK Timer** value is not set too short. This should not occur if the IP network is functioning correctly.
6. Verify that the IP network between the MP server and the SG is performing up to expectations.
7. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

RxAsnUnsolDownAck

Measurement ID
9142

Measurement Group
Association Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (per association)

Description
The number of unsolicited M3UA **ASP-DOWN-ACK** messages received on the association. Unsolicited **ASP**-DOWN-**ACK** messages can be sent by the **SG** to indicate that the SG cannot process traffic on the association.

Collection Interval
30 min

Peg Condition
This measurement is incremented by one each time an unsolicited ASP-DOWN-ACK is received on the association.

Measurement Scope
NE, Server

Recovery

1. This measurement should have a zero value. A non-zero value means that the far-end of the association has stopped processing M3UA signaling. You can view Association status from the GUI main menu under **SS7/Sigtran** > **Maintenance** > **Associations**.
2. Check the event history from the GUI main menu under **Alarms & Events** > **View History**, looking for Event ID 19227. **Event ID 19227** will show exactly when the unsolicited ASP-DOWN-ACK was received.
3. Verify whether the far-end of the association is undergoing maintenance.
4. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

RxAsnInvalidM3ua

Measurement ID
9143

Measurement Group
Association Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (per association)

Description
The number invalid M3UA messages received on this association. An invalid M3UA message is a message that violates the M3UA protocol.

Collection Interval
30 min

Peg Condition
This measurement is incremented by one each time an M3UA message is received on the association that is invalid due to any syntactic or semantic reason.

Measurement Scope
NE, Server

Recovery

1. This measurement should have a zero value. In case of a non-zero value in this measurement, review the event history from the GUI main menu under **Alarms & Events** > **View History**, looking for Event 19231.
2. Event 19231 provides details about the reason for rejecting the M3UA message. If the error reason indicates a problem with routing context, verify that the routing context used for the association specified in Event 19231 is configured to match between the ASP and the SG.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

TmSingleTransQueueFull

Measurement ID
9415

Measurement Group
Transport Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (per Transport)

Description
The number of egress messages that were discarded because the single Transport Writer Queue was full.

Collection Interval
30 min

Peg Condition
Check whether the single peers transmit data queue limit has reached its max limit (1000). If maximum limit is reached or exceeded, then peg the measurement and discard the low priority events.

Measurement Scope
NE, Server

Recovery

1. This measurement indicates that the Transport is backed up and messages might be discarded. If the value is above the defined critical threshold, an alarm (19408) is generated. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvSctpAdjPToDwn

Measurement ID
9424

Measurement Group
Transport Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (per Transport)

Description
Number of times configured IP Address of an Adjacent Node goes from Available to Unavailable.

Collection Interval
30 min

Peg Condition
This measurement shall be incremented by one each time reachability to a configured IP address of an Adjacent Node is lost, indicating a fault in the path to that address was detected. If all is well, the measurement will have a zero value. A non-zero value indicates that a path fault to that address was detected.

Measurement Scope
NE, Server

Recovery

1. Check the event history log at **Main Menu** > **Alarms & Events** > **View History**; look for event ID 19410. Event ID 19410 provides more details about the actual cause of the failure.
2. Verify that the Adjacent Node that represents the far-end of the association is configured with the correct IP address at **Main Menu** > **Transport Manager** > **Configuration** > **Adjacent Node**.
3. Verify IP network connectivity between the MP server and the Adjacent Nodes IP address using a ping or traceroute command.
4. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvSctpTransRej

Measurement ID
9425

Measurement Group
Transport Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (per Transport)

Description
Number of times SCTP Transport has been rejected due to remote IP addresses validation failure based on SCTP Multihoming mode. This is valid only for SCTP Transports.

Collection Interval
30 min

Peg Condition
This measurement shall be incremented by one each time the association has been rejected due to IP address validation in the SCTP INITs/INIT-ACKs transmitted by the Adjacent Node. If all is well, the measurement has a zero value. A non-zero value indicates that an Adjacent Node has attempted to connect to the Peer IP Address at least once, but the connection attempt was rejected because the IP address advertised by the Adjacent Node failed validation.

Measurement Scope
NE, Server

Recovery

1. Check the Transport history at **Main Menu** > **Transport Manager** > **Maintenance**.
2. Verify IP network connectivity between the MP server and the Adjacent Nodes IP address using a ping or traceroute command.
3. Verify that the SCTP validation mode is the one that is needed.
4. Verify that the Adjacent Node that represents the far-end of the association is configured with the correct IP address at **Main Menu** > **Transport Manager** > **Configuration** > **Adjacent Node**.
5. Verify that the remote port configured at **Main Menu** > **Transport Manager** > **Configuration** > **Transport** for the association correctly identifies the port that the Adjacent Node is listening on for SCTP connections.
6. If the problem persists, it is recommended to contact My Oracle Support (MOS).

Association Performance measurements

TxTrOctets

Measurement ID
9408

Measurement Group
Association Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (per Transport)

Description
The number of octets sent on the association. This includes **octets** for both DATA and non-DATA M3UA signaling. It does not include SCTP, **IP**, or **Ethernet** headers.

Collection Interval
30 min

Peg Condition
This measurement is incremented by the number of octets in the message each time a DATA/non-DATA message is successfully sent on the transport.

Measurement Scope
NE, **Server**

Recovery

1. No action required.

RxTrOctets

Measurement ID
9409

Measurement Group
Association Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (per Transport)

Description
The number of octets received on the SCTP/UDP Transport. It does not include SCTP, UDP, IP, or Ethernet headers.

Collection Interval
30 min

Peg Condition
This measurement shall be incremented by the number of octets in the message each time a DATA/non-DATA message is successfully received on the transport.

Measurement Scope
NE, Server

Recovery

1. No action required.

SCTPAssocQueuePeak

Measurement ID
9169

Measurement Group
Association Performance

Measurement Type
Max

Measurement Dimension
Arrayed

Description
The peak SCTP Single Association Writer Queue utilization (0-100%) measured during the collection interval.

Collection Interval
30 min

Peg Condition
Transport's queue is registered as a Stack Resource. The StackResourceManager thread monitors and updates the maximum Transport Queue utilization sample taken during the collection interval for affected Transport.

Measurement Scope
NE, Server

Recovery

1. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum capacity of an MP over several collection intervals, then the number of MPs in the Network Element might need to be increased.
2. If the peak and average for an individual MP is significantly different than other MPs in the same Network Element, then a MP-specific hardware, software, or configuration problem might exist.
3. See Alarm 19408 - Single Transport Egress-Queue Utilization (refer to the *DSR Alarms and KPIs Reference* for details about this alarm).
4. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

SCTPAssocQueueAvg

Measurement ID
9170

Measurement Group
Association Performance

Measurement Type
Average

Measurement Dimension
Arrayed

Description
The average SCTP Single Association Writer Queue utilization (0-100%) measured during the collection interval.

Collection Interval
30 min

Peg Condition
The average of all SCTP Single Association Writer Queue utilization samples taken during the collection interval.

Measurement Scope
NE, Server

Recovery

1. This measurement is a measure of how fast the Transport queue is processed and indicates the Average depth of queue over the monitored interval.
2. It is primarily intended to assist in evaluating the need for additional MP processing capacity at a Network Element.
3. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum capacity of an MP over several collection intervals, then the number of MPs in the Network Element might need to be increased.
4. If the peak and average for an individual MP is significantly different than other MPs in the same Network Element, then a MP-specific hardware, software, or configuration problem might exist.
5. If the problem persists, it is recommended to contact My Oracle Support (MOS).

Association Usage measurements

EvAsnCnxSuccess

Measurement ID
9131

Measurement Group
Association Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (per association)

Description
The number of times the SCTP connection was successfully established on the association.

Collection Interval
30 min

Peg Condition
This measurement shall be incremented by one each time the SCTP association reaches the ASP-DOWN protocol state (for example, the connection is successfully established).

Measurement Scope
NE, Server

Recovery

1. If the association is expected to have connected during the measurement reporting interval, no action is necessary. Otherwise, preform the following steps:
2. You can view the transport status can be viewed from the GUI main menu under **Transport Manager** > **Maintenance** > **Transport**.
3. Look in the event history from the GUI main menu under **Alarms & Events** > **View History**. Look for events related to the association or the MP server to determine what might have caused the association to fail.
4. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

TmAsnBlkNotDown

Measurement ID
9138

Measurement Group
Association Usage

Measurement Type
Duration

Measurement Dimension
Arrayed (per association)

Description
The number of seconds during the reporting interval during which the association was in the **Blocked** administrative state but was not in ASP-DOWN state. When the association is **Blocked**, the desired protocol state is ASP-DOWN. This measurement indicates the amount of time during the reporting interval for which the association was not in the desired protocol state.

Collection Interval
30 min

Peg Condition
Time is accumulated for this measurement during the collection interval when all of the following are true:

- The association is in the **Blocked** administrative state.
- The association is not in the ASP-DOWN protocol state.

Measurement Scope
NE, Server

Recovery

1. The value of this measurement should be zero. A non-zero value indicates that the association was set to the **Blocked** administrative state, but was not able to reach the desired protocol state due to some problem. You can view the Association status from the GUI main menu under **SS7/Sigtran** > **Maintenance** > **Associations**.
2. Verify the Adjacent server that represents the far-end of the association is configured with the correct IP address. You can check the configuration from the GUI main menu under **SS7/Sigtran** > **Configuration** > **Adjacent Servers**.
3. Verify he remote port configured for the association correctly identifies the port that the SG is listening on for SCTP connections. You can check the configuration from the GUI main menu under **SS7/Sigtran** > **Configuration** > **Associations** > **Configure**.
4. Verify the IP network connectivity between the MP server and the SG.
5. If the SG must be configured to connect to the MP server's IP address and port, verify that the SG configuration matches the association configuration. You can check the configuration from the GUI main menu under **SS7/Sigtran** > **Configuration** > **Associations** > **Configure**.
6. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

TmAsnEnaNotUp

Measurement ID
9139

Measurement Group
Association Usage

Measurement Type
Duration

Measurement Dimension
Arrayed (per association)

Description
The time that the association was enabled, but not in the ASP-UP state

Collection Interval
30 min

Peg Condition
Time shall be accumulated for this measurement during the collection interval when all of the following are true:

- the association is in the Enabled administrative state
- the association is not in the ASP-UP protocol state for any reason

Measurement Scope
NE, Server

Recovery

1. No action is required.

Communication Agent (ComAgent) Exception measurements

The **Communication Agent** Exception measurement group is a set of measurements that provide information about exceptions and unexpected messages and events that are specific to the **Communication Agent** protocol.

CADataFIFOQueueFul

Measurement ID
9971

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
StackEvents discarded due to ComAgent DataFIFO queue full condition. This value provides a measure of how many messages are discarded by ComAgent due to ComAgent User Data FIFO Queue full condition.

Collection Interval
30 min

Peg Condition
For each User Data StackEvent that is discarded by ComAgent Stack, due to failure in attempting to put the messages in ComAgent User Data FIFO queue.

Measurement Scope
NE, Server

Recovery

1. This measurement is primarily intended to assist in evaluating the need for additional queue depth tuning or increase in processing capacity at a Network Element.

   If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP over several collection intervals, then the queue depth may need to be tuned.

   If the peak and average for an individual MP is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist.

2. It is recommended to contact My Oracle Support (MOS) for assistance.

CADSTxDscrdCong

Measurement ID
9841

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of egress stack events discarded because the congestion level of the connection exceeded the stack events' priority level.

Collection Interval
30 min

Peg Condition
When **ComAgent** receives a stack event from a local User Layer to be transferred via the direct service and the selected connection has a congestion level greater than the priority level of the stack event.

Measurement Scope
Server

Recovery

1. When this measurement is increasing, it is an indication that the product is experiencing overload. Use **Main Menu** > **Communication Agent** > **Maintenance** > **Routed Services Status** and **Main Menu** > **Communication Agent** > **Maintenance** > **Connection Status** to determine if the offered load is expected and exceeds the product's capacity.

   If the load is expected and exceeds the product's capacity, then the capacity should be increased so that the overload condition does not persist or reoccur.

2. It is recommended to contact My Oracle Support (MOS) for assistance.

CAHSRsrcErr

Measurement ID
9875

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Resource ID)

Description
Number of times that **ComAgent** receives in a heartbeat stack event status concerning a known Resource but an unknown Sub-Resource.

Collection Interval
30 min

Peg Condition
When **ComAgent** stores an unexpected Sub-Resource entry in the local Resource Provider Table. An unexpected Sub-Resource involves a known Resource but an unknown Sub-Resource ID (SRID). This condition is associated with Alarm-ID 19848, and only the first instance of an unexpected Sub-Resource is counted, not the repeats caused by multiple unknown Sub-Resources and the periodic heartbeats containing the same information.

Measurement Scope
Server

Recovery

1. Use **Main Menu** > **Communication Agent** > **Maintenance** to determine configuration problems.
2. It is recommended to contact My Oracle Support (MOS) for assistance.

CAHSTxDscrdCongSR

Measurement ID
9872

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Resource ID)

Description
Number of stack events discarded due to HA Service Sub-Resource congestion. During normal operation, this measurement should not be increasing. When this measurement is increasing, it is an indication that the product is experiencing overload.

Collection Interval
30 min

Peg Condition
Stack event submitted to **ComAgent** by a local User Layer, and the stack event references an HA Service Sub-Resource that has a congestion level greater than the priority level of the stack event.

Measurement Scope
Server

Recovery

1. Use **Main Menu** > **Communication Agent** > **Maintenance** > **Routed Services Status** and **Main Menu** > **Communication Agent** > **Maintenance** > **Connection Status** to determine if the offered load is expected and exceeds the product's capacity.

   If the load is expected and exceeds the product's capacity, then the capacity should be increased so that the overload condition does not persist or reoccur. If the load does not exceed the pproduct's capacity, then check the status of the servers hosting the Resource Providers to trouble-shoot the cause of the overload.

   This measurement may not indicate an error if the discarded stack event was a reliable request, the Reliable Transfer Function was able to re-attempt, and the subsequent attempt got through.

2. It is recommended to contact My Oracle Support (MOS) for assistance.

CAHSTxDscrdIntErrSR

Measurement ID
9874

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Resource ID)

Description
Number of egress stack events destined to a known Sub-Resource that were discarded due to a ComAgent internal error.

Collection Interval
30 min

Peg Condition
User Layer submits to ComAgent an egress stack event destined to a known Sub-Resource and that is discarded due to a ComAgent internal error

Measurement Scope
Server

Recovery

1. Check other ComAgent measurements, alarms, and events to determine the source of the abnormality causing this measurement to arise.

2. If the problem persists, it is recommended to contact My Oracle Support (MOS).

CAHSTxDscrdUnavailSR

Measurement ID
9871

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Resource ID)

Description
Number of stack events discarded because they were submitted to an Unavailable Sub-Resource of a given Resource. During normal operation, this measurement should not be increasing. Each count of this measurement indicates that a local application attempted to send a stack event to another server using an HA Service Sub-Resource, but the event was discarded due to the Sub-Resource being unavailable.

Collection Interval
30 min

Peg Condition
Stack event submitted to **ComAgent** by a local User Layer, and the stack event references an Unavailable Sub-Resource.

Measurement Scope
Server

Recovery

1. Use **Main Menu** > **Communication Agent** > **Maintenance** > **HA Services Status** to diagnose the cause of routing failures.

   If a discarded stack event was a request from a reliable transaction and the routing failure was due to a temporary condition, then it is possible that the transaction completed successfully using one or more retransmit attempts.

   This measurement may not indicate an error if the discarded stack event was a reliable request, the Reliable Transfer Function was able to re-attempt, and the subsequent attempt got through.

2. It is recommended to contact My Oracle Support (MOS) for assistance.

CAHSTxDscrdUnknownSR

Measurement ID
9870

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Resource ID)

Description
Number of egress stack events discarded because they referred to a known Resource and an unknown Sub-Resource. During normal operation this measurement should be 0. A non-zero value for this measurement indicates that **ComAgent** is improperly configured to support a local application.

Collection Interval
30 min

Peg Condition
User Layer submits to **ComAgent** an egress stack event that refers to an unknown Sub-Resource.

Measurement Scope
Server

Recovery

1. Use **Main Menu** > **Communication Agent** > **Maintenance** > **HA Services Status** to verify that all HA Service Sub-Resources expected by local applications are present and operating.
2. It is recommended to contact My Oracle Support (MOS) for assistance.

CAHSTxDscrdUnkwnRsrc

Measurement ID
9873

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of egress stack events discarded because they referred to an unknown Resource.

Collection Interval
30 min

Peg Condition
User Layer submits to **ComAgent** an egress stack event that refers to an unknown Resource.

Measurement Scope
Server

Recovery

1.

2. Use **Main Menu** > **Communication Agent** > **Maintenance** > **HA Services Status** to verify that all HA Service Sub-Resources expected by local applications are present and operating.

3. It is recommended to contact My Oracle Support (MOS) for assistance.

CAHSTxRsrc

Measurement ID
9876

Measurement Group
ComAgent Performance, **ComAgent** Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Resource ID)

Description
Number of egress stack events that were routed to a known Resource.

Collection Interval
30 min

Peg Condition
User Layer submits to **ComAgent** an egress stack event destined to a known Resource.

Measurement Scope
Server

Recovery

1. No action required.

CAMxFIFOQueueFul

Measurement ID
9970

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
StackEvents discarded due to ComAgent MxFIFO queue full condition. This value provides a measure of how many messages are discarded by ComAgent due to ComAgent internal connection MxFIFO Queue full condition.

Collection Interval
30 min

Peg Condition
For each User Data StackEvent that is discarded by ComAgent Stack, due to failure in attempting to put the messages in ComAgent internal connection MxFIFO queue.

Measurement Scope
NE, Server

Recovery

1. This measurement is primarily intended to assist in evaluating the need for additional queue depth tuning or increase in processing capacity at a Network Element.

   If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP over several collection intervals, then the queue depth may need to be tuned.

   If the peak and average for an individual MP is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist.

2. It is recommended to contact My Oracle Support (MOS) for assistance.

CAPSTxDscrdUnkwnGrp

Measurement ID
8013

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of egress stack events discarded because they referred to a Peer Group which was unknown

Collection Interval
30 min

Peg Condition
For each stack event submitted to ComAgent by a local User Layer and the stack event reference an Unknown Peer Group

Measurement Scope
Server

Recovery

1. A non-zero value of this measurement indicates that a local User Layer is malfunctioning and is attempting to use a Peer Group which it has not configured.
2. It is recommended to contact My Oracle Support (MOS) for assistance.

CAPSTxDscrdUnavailGrp

Measurement ID
8014

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Peer Group ID)

Description
The number of egress stack events discarded because they referred to a Peer Group which was unavailable

Collection Interval
30 min

Peg Condition
For each stack event submitted to ComAgent by a local User Layer and the stack event reference an Unavailable Peer Group

Measurement Scope
Server

Recovery

1. Each count of this measurement indicates that a local User Layer attempted to send a stack event to a remote server using ComAgent Peer Group Service, but the event was discarded due to the specified Peer Group being unavailable. The Peer Group may become unavailable due to:
   - Local User Layer performed maintenance action on the Peer Group that result in a loss of communication between servers.
   - Network problems that result in a loss of communication between servers.
2. It is recommended to contact My Oracle Support (MOS) for assistance.

CAPSTxDscrdCongPeer

Measurement ID
8017

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Peer Group ID)

Description
The number of egress stack events discarded because of Peer congestion.

Collection Interval
30 min

Peg Condition
For each stack event submitted to ComAgent by a local User Layer and the active Peer in the Peer Group has a congestion level greater than the priority level of the stack event.

Measurement Scope
Server

Recovery

1. Check the **Main Menu** > **Communication Agent** > **Maintenance** > **Routed Services Status** and **Main Menu** > **Communication Agent** > **Maintenance** > **Connection Status** screens to determine if the offered load is expected and exceeds the product's capacity.

   If the load is expected and exceeds the product's capacity, then the capacity should be increased so that the overload condition does not persist or reoccur.

2. It is recommended to contact My Oracle Support (MOS) for assistance.

CARsrcPoolFul

Measurement ID
9859

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
ComAgent internal resource pool exhaustion condition.

Collection Interval
30 min

Peg Condition
This is to track the measure of the internal resource (Ex: CommMessage Resource pool) exhaustion condition for a given interval. For each resource allocation/access attempt that result in resource pool manager returning an indication that the maximum resources reserved are allocated and are in-use. When this condition occurs **ComAgent** tries to allocate a new resource from heap and relists it after its life cycle (Ex: CommMessage objects required for user data traffic for MxEndpoint interface).

Measurement Scope
NE, Server

Recovery

1. This value provides a measure of how many times pre-allocated resources are exhausted in **ComAgent** interfaces.

   This measurement is primarily intended for performance analysis and to assist in evaluating the need for any additional engineering processing capacity or tuning.

CARSTxDscrdCong

Measurement ID
9843

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Service ID)

Description
Number of stack events discarded due to Routed Service congestion.

Collection Interval
30 min

Peg Condition
Stack event submitted to **ComAgent** by a local User Layer, and the stack event references a Routed Service that has a congestion level greater than the priority level of the stack event.

Measurement Scope
Server

Recovery

1. Check the **Main Menu** > **Communication Agent** > **Maintenance** > **Routed Services Status** and **Main Menu** > **Communication Agent** > **Maintenance** > **Connection Status** screens to determine if the offered load is expected and exceeds the product's capacity.

   If the load is expected and exceeds the product's capacity, then the capacity should be increased so that the overload condition does not persist or reoccur.

2. It is recommended to contact My Oracle Support (MOS) for assistance.

CARSTxDscrdInternalErr

Measurement ID
9867

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Service ID)

Description
Number of egress events discarded because of another Routed Service internal error

Collection Interval
30 min

Peg Condition
Each time an egress event is discarded because of another Router Service internal error

Measurement Scope
Server

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance.

CARSTxDscrdSvcUnavail

Measurement ID
9830

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Service ID)

Description
Number of stack events discarded because they were submitted to an Unavailable Routed Service.

Collection Interval
30 min

Peg Condition
Stack event submitted to **ComAgent** by a local User Layer, and the stack event references an Unavailable Routed Service.

Note: Each count of this measurement indicates that a local application attempted to send a stack event to another server using a Routed Service, but the event was discarded due to the Routed Service being unavailable. Routing failures can occur due to:

- Maintenance actions are performed that result in a loss of communication between servers.
- Network problems result in a loss of communication between servers.
- Server overload can result in routes becoming unavailable for some stack events.

Measurement Scope
Server

Recovery

1. Check the **Main Menu** > **Communication Agent** > **Maintenance** > **Routed Services Status** and **Main Menu** > **Communication Agent** > **Maintenance** > **Connection Status** screens to further diagnose the cause of routing failures.

   If a discarded stack event was a request from a reliable transaction and the routing failure was due to a temporary condition, then it is possible that the transaction completed successfully using one or more retransmit attempts.

2. It is recommended to contact My Oracle Support (MOS) for assistance.

CARxDiscUnexpEvent

Measurement ID
9826

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of ingress events discarded because it was unexpected in the connection operational state

Collection Interval
30 min

Peg Condition
For each ingress StackEvent that is discarded by **ComAgent** Stack, due to StackEvent received in unexpected connection state.

Measurement Scope
NE, Server

Recovery

1. No action required.

   This value provides a measure of how many ingress messages are discarded by **ComAgent** due to message received in unexpected connection state.

CARxDscrdBundle

Measurement ID
9994

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of ingress bundled event discarded during routing.

Collection Interval
30 min

Peg Condition
Each time an ingress bundled event is discarded during routing

Measurement Scope
Site

Recovery

1. No action required

CARxDscrdConnUnavail

Measurement ID

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension

Description
Number of User Data ingress events discarded because connection was not in-service.

Collection Interval
30 min

Peg Condition
For each User Data ingress StackEvent received from configured service peer server with connection status not “in-service”.

Measurement Scope
NE, Server

Recovery

1. No action required.

   This value provides a measure of how many User Data ingress messages are discarded by **ComAgent** for the data messages received in connection not in “in-service” state.

CARxDscrdDecodeFailed

Measurement ID
9810

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of ingress events discarded because failed to deserialize (event not part of stack service language).

Collection Interval
30 min

Peg Condition
For each StackEvent received from a configured peer server that resulted in any decode failures within **ComAgent** Stack.

Measurement Scope
NE, Server

Recovery

1. No action required.

   This value provides a measure of how many ingress messages are discarded by **ComAgent** due to internal decode error condition.

CARxDscrdIncompat

Measurement ID
9825

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of ingress events discarded because an Incompatible header version is received.

Collection Interval
30 min

Peg Condition
For each ingress StackEvent that is discarded by **ComAgent** Stack, due to unsupported base header version, as indicated in StackEvent.

Measurement Scope
NE, Server

Recovery

1. No action required.

   This value provides a measure of how many ingress messages are discarded by **ComAgent** due to incompatible base header version of base software event library.

CARxDscrdInternalErr

Measurement ID
9818

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of ingress events discarded because of other unexpected internal processing error.

Collection Interval
30 min

Peg Condition
For each ingress StackEvent that is discarded by **ComAgent** Stack, due to internal processing errors for conditions not covered by other meas-pegs.

Measurement Scope
NE, Server

Recovery

1. No action required.

   This value provides a measure of how many ingress messages are discarded by **ComAgent** due to internal software processing errors for conditions not covered by other measurement pegs.

CARxDscrdLayerSendFail

Measurement ID
9812

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of User Data ingress events discarded because layer's sendTo failed.

Collection Interval
30 min

Peg Condition
For each User Data StackEvent received from a configured service peer server and resulted in send failure to the destination stack layer.

Measurement Scope
NE, Server

Recovery

1. No action required.

   This value provides a measure of how many User Data ingress messages are discarded by **ComAgent** due to internal send failure to destination stack layer.

CARxDscrdMsgLenErr

Measurement ID
9808

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of ingress events discarded as it doesn't contain enough bytes (less than event header bytes).

Collection Interval
30 min

Peg Condition
For each StackEvent received from configured peer with message size less than the minimum required Header.

Measurement Scope
NE, Server

Recovery

1. No action required.

   This value provides a measure of how many ingress messages are discarded by **Communication Agent** due to message size error.

CARxDscrdUnkServer

Measurement ID
9820

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of ingress events discarded because the origination server was unknown/not configured.

Collection Interval
30 min

Peg Condition
For each ingress StackEvent that is discarded by **ComAgent** Stack, due to unknown origination IP address contents in StackEvent.

Measurement Scope
NE, Server

Recovery

1. No action required.

   This value provides a measure of how many ingress messages are discarded by **ComAgent** due to unknown origination IP address in StackEvent.

CARxDscrdUnkStkLyr

Measurement ID
9811

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of User Data ingress events discarded because stack layer is not known.

Collection Interval
30 min

Peg Condition
For each User Data ingress StackEvent received by **Communication Agent** Stack, for an unknown destination stack.

Measurement Scope
NE, Server

Recovery

1. No action required.

   This value provides a measure of how many ingress messages are discarded by **Communication Agent** , as the destination stack is not registered/known.

CARxMsgUnknown

Measurement ID
9809

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of ingress events discarded because stack event was unknown.

Collection Interval
30 min

Peg Condition
For each undefined StackEvent received from one of the configured peer server.

Measurement Scope
NE, Server

Recovery

1. No action required.

   This value provides a measure of how many ingress messages are discarded by **ComAgent** as the message is not defined/known to **ComAgent** Stack.

CAStackQueueFul

Measurement ID
9829

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
StackEvents discarded due to **ComAgent** task queue full condition.

Collection Interval
30 min

Peg Condition
For each User Data egress StackEvent that is discarded by **ComAgent** Stack, due to failure in attempting to put the messages in **ComAgent** Egress Task Queue.

Measurement Scope
NE, Server

Recovery

1. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an **MP** over several collection intervals, then the number of MPs in the Network Element may need to be increased.
2. If the peak and average for an individual **MP** is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist.
3. It is recommended to contact My Oracle Support (MOS) for assistance.

CATransDscrdInvCorrId

Measurement ID
9832

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of received stack events that were received and discarded because they did not correlate with a pending transaction.

Collection Interval
30 min

Peg Condition
ComAgent receives a response stack event that contains a correlation ID that does not match a pending transaction record.

Measurement Scope
Server

Recovery

1. This measurement indicates that one or more destination servers are either responding to requests after a transaction has ended or are sending invalid responses. It is recommended to contact My Oracle Support (MOS) for assistance.

CATransDscrdStaleErrRsp

Measurement ID
9833

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Service ID)

Description
Number of times that an error response was discarded because it contained a valid correlation ID value but its originating server was not the last server to which the request was sent.

Collection Interval
30 min

Peg Condition
ComAgent receives an error response stack event that has a correlation ID for an existing pending transaction record but that is originated from a different server than to which the request was last sent. This measurement indicates that one or more servers are responding with errors to requests after the local **ComAgent** has retransmitted the requests to other destination servers. This could occur due to:

- Network problems result in intermittent loss of communication between servers.
- Server overload results in delayed responses

Measurement Scope
Server

Recovery

1. Use **Main Menu** > **Communication Agent** > **Maintenance** > **Routed Services Status** and **Main Menu** > **Communication Agent** > **Maintenance** > **Connection Status** to check the status of the far-end servers and look for signs of overload.
2. It is recommended to contact My Oracle Support (MOS) for assistance.

CATransEndAbnorm

Measurement ID
9834

Measurement Group
ComAgent Exception, **ComAgent** Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Service ID)

Description
Number of reliable transactions that terminated abnormally.

Collection Interval
30 min

Peg Condition

- Transaction times-out waiting for a response, and the maximum number of transmits has been reached.
- Transaction time-to-live limit is exceeded.
- Transaction terminated due to lack of resources.

Note: This measurement is NOT pegged for these conditions:

- Transaction involves an unknown service.
- Transaction involves an unregistered Routed Service.

Measurement Scope
Server

Recovery

1. Check the **ComAgent** Exception report to further diagnose the reasons why transactions are failing.
2. It is recommended to contact My Oracle Support (MOS) for assistance.

CATransEndAbnormRateAvg

Measurement ID
9865

Measurement Group
ComAgent Performance, **ComAgent** Exception

Measurement Type
Average

Measurement Dimension
Arrayed (by Service ID)

Description
Average rate per second that **ComAgent** transactions ended abnormally during the collection interval.

Collection Interval
30 min

Peg Condition
Rate of transaction failures due to final timeouts. Failed Transaction Rate monitoring is an average rate using a sliding-metric algorithm. The average transaction failure rate is a running average, smoothed over approximately 10 seconds. This measurement provides the average rate per second that **ComAgent** transactions were started. This measurement is useful during troubleshooting when compared to other measurements.

Measurement Scope
Server

Recovery

1. No action necessary.

CATransEndAbnormRateMax

Measurement ID
9866

Measurement Group
ComAgent Performance, **ComAgent** Exception

Measurement Type
Max

Measurement Dimension
Arrayed (by Service ID)

Description
Maximum rate per second that **ComAgent** transactions ended abnormally during the collection interval.

Collection Interval
30 min

Peg Condition
Rate of transaction failures due to final timeouts. Failed Transaction Rate monitoring is an average rate using a sliding-metric algorithm. The average transaction failure rate is a running average, smoothed over approximately 10 seconds. This measurement provides the maximum rate per second that **ComAgent** transactions were started. This measurement is useful during troubleshooting when compared to other measurements.

Measurement Scope
Server

Recovery

1. No action necessary.

CATransEndAnsErr

Measurement ID
9845

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Service ID)

Description
Number of reliable transactions initiated by local User Layers that ended with an error response from a destination server.

Collection Interval
30 min

Peg Condition
When a reliable response stack event (G=1, A=1, E=1) is received from a server to which a request was sent, and the response corresponds to a pending transaction record.

Measurement Scope
Server

Recovery

1. No action necessary.

   This measurement has value when compared against other measurements. Server applications may respond with errors as part of normal operations, as seen by **ComAgent**.

CATransEndErr

Measurement ID
9846

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Service ID)

Description
Number of reliable transactions initiated by local User Layers that ended abnormally with an error response from a destination server.

Collection Interval
30 min

Peg Condition
When a valid reliable response stack event (G=1, A=0, E=1) is received from a server to which a request was sent, and the response corresponds to a pending transaction record. This measurement indicates that one or more destination servers are unable to process reliable requests received from the local server. This can be caused due to maintenance actions, server overload, and unexpected conditions in software.

Measurement Scope
Server

Recovery

1. Use **Main Menu** > **Communication Agent** > **Maintenance** > **Routed Services Status** and **Main Menu** > **Communication Agent** > **Maintenance** > **Connection Status** to determine network and server communications.
2. It is recommended to contact My Oracle Support (MOS) for assistance.

CATransEndNoResources

Measurement ID
9848

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Service ID)

Description
Number of reliable transactions initiated by local User Layers that ended abnormally due to lack of resources.

Collection Interval
30 min

Peg Condition
ComAgent receives a reliable request (G=1, R=1) from a local User Layer and **ComAgent** is unable to allocate resources to process the transaction. This measurement indicates that the local server is exhausting its resources for processing reliable transactions. This can result when the combination of transaction rate and response delays exceeds engineered limits. High transaction rates can result from local server overload. Excess response delays can result from overloaded destination servers and problems in the network between servers.

Measurement Scope
Server

Recovery

1. Use **Main Menu** > **Communication Agent** > **Maintenance** > **Routed Services Status** and **Main Menu** > **Communication Agent** > **Maintenance** > **Connection Status** to determine network and server communications.
2. It is recommended to contact My Oracle Support (MOS) for assistance.

CATransEndNoResponse

Measurement ID
9847

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Service ID)

Description
Number of reliable transactions initiated by local User Layers that ended abnormally due to a timeout waiting for a response.

Collection Interval
30 min

Peg Condition
Limit on the number of retransmits is reached with no response and limit on the transaction time-to-live is exceeded. This measurement indicates that one or more destination servers are unable to process reliable requests received from the local server. This can be caused due to maintenance actions, server overload, and unexpected conditions in software.

Measurement Scope
Server

Recovery

1. Use **Main Menu** > **Communication Agent** > **Maintenance** > **Routed Services Status** and **Main Menu** > **Communication Agent** > **Maintenance** > **Connection Status** to determine network and server communications.
2. It is recommended to contact My Oracle Support (MOS) for assistance.

CATransEndUnkwnSvc

Measurement ID
9842

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of reliable transactions initiated by local User Layers that ended abnormally because they referred to an unknown service.

Collection Interval
30 min

Peg Condition
ComAgent receives a reliable request (G=1, R=1) from a local User Layer that refers to an unknown service. This measurement indicates improper configuration of **ComAgent** and/or a User Layer application.

Measurement Scope
Server

Recovery

1. Use **Main Menu** > **Communication Agent** > **Configuration** > **Routed Services** to confirm that all services expected by local applications are present.
2. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

CATransEndUnregSvc

Measurement ID
9861

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of reliable transactions initiated by local User Layers that ended abnormally because they referred to a known service that lacked a registered User Layer.

Collection Interval
30 min

Peg Condition
ComAgent receives a reliable request (G=1, R=1) from a local User Layer that refers to a known service that has no registered User Layer.

Measurement Scope
Server

Recovery

1. A non-zero value in this measurement indicates a software malfunction. It is recommended to contact My Oracle Support (MOS) for assistance.

CATransNoReTxMaxTTL

Measurement ID
9895

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Service ID)

Description
Number of reliable transactions abnormally ended because of Max Time to live exceeded without any retransmits.

Collection Interval
30 min

Peg Condition
Maximum Time To Live period exceeded with no retransmission attempts and no response received for the transaction. This measurement provides a measure of abnormal transactions due to maximum time to live period exceeded condition (Without any retransmits) and no response is received from remote. Such abnormal transactions can be due to:

- Server overload that can result in delayed responses.
- Unexpected conditions in software.

Measurement Scope
Server

Recovery

1. Use **Main Menu** > **Communication Agent** > **Maintenance** > **Routed Services Status** and **Main Menu** > **Communication Agent** > **Maintenance** > **Connection Status** to determine network and server communications.
2. It is recommended to contact My Oracle Support (MOS) if assistance is needed

CATransRetx

Measurement ID
9831

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Service ID)

Description
Number of times stack events were retransmitted.

Collection Interval
30 min

Peg Condition
ComAgent reliable transaction retransmit timer expires and the limit on the number of retransmits has not been reached. When this measurement is increasing, it indicates that communication between servers is experiencing unexpectedly high latency and/or packet loss. Retransmissions can occur due to:

- Maintenance actions are performed that result in a loss of communication between servers.
- Network problems result in a loss of communication between servers.
- Server overload can result in delayed responses.

Measurement Scope
Server

Recovery

1. Use **Main Menu** > **Communication Agent** > **Maintenance** > **Routed Services Status** and **Main Menu** > **Communication Agent** > **Maintenance** > **Connection Status** to determine network and server communications.
2. It is recommended to contact My Oracle Support (MOS) for assistance.

CATransReTxExceeded

Measurement ID
9894

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Service ID)

Description
Number of reliable transactions abnormally ended because of Max number of Retries exceeded.

Collection Interval
30 min

Peg Condition
Number of retransmits limit is reached with no response received for the transaction. This measurement provides a measure of abnormal transactions due to maximum number of retransmission exceeded condition awaiting response from remote. Such abnormal transactions can be due to:

- Maintenance actions performed that result in a loss of communication between servers.

- Server overload that can result in delayed responses.
- Unexpected conditions in software.

Measurement Scope
Server

Recovery

1. Use **Main Menu** > **Communication Agent** > **Maintenance** > **Routed Services Status** and **Main Menu** > **Communication Agent** > **Maintenance** > **Connection Status** to determine network and server communications.
2. It is recommended to contact My Oracle Support (MOS) if assistance is needed

CATransStaleSuccessRsp

Measurement ID
9862

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Service ID)

Description
Number of times that a success response was received from an unexpected server and was accepted to end a transaction.

Collection Interval
30 min

Peg Condition
ComAgent receives a success response stack event (G=1, A=1, E=1) that has a correlation ID for an existing pending transaction record but that is originated from a different server than to which the request was last sent. This measurement indicates that a Routed Service received a success response from an unexpected server. This most commonly occurs if a server is slow to respond, **ComAgent** retransmits a request to another server, and then the original server finally responds to the request.

Measurement Scope
Server

Recovery

1. Use **Main Menu** > **Communication Agent** > **Maintenance** > **Routed Services Status** and **Main Menu** > **Communication Agent** > **Maintenance** > **Connection Status** to diagnose stale responses.
2. It is recommended to contact My Oracle Support (MOS) for assistance.

CATransTTLExceeded

Measurement ID
9893

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Service ID)

Description
Number of reliable transactions abnormally ended because of Max Time to live exceeded.

Collection Interval
30 min

Peg Condition
Maximum Time To Live period exceeded with at least one retransmission attempted and no response received for the transaction. This measurement provides a measure of abnormal transactions due to maximum time to live period exceeded condition (Where at least one retransmission was also attempted) and no response is received from remote. Such abnormal transactions can be due to:

- Maintenance actions performed that result in a loss of communication between servers.
- Server overload that can result in delayed responses.
- Unexpected conditions in software.

Measurement Scope
Server

Recovery

1. Use **Main Menu** > **Communication Agent** > **Maintenance** > **Routed Services Status** and **Main Menu** > **Communication Agent** > **Maintenance** > **Connection Status** to determine network and server communications.
2. It is recommended to contact My Oracle Support (MOS) if assistance is needed

CATxDscrdBundle

Measurement ID
9993

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of egress bundled event discarded during routing.

Collection Interval
30 min

Peg Condition
Each time an egress bundled event is discarded during routing

Measurement Scope
Site

Recovery

1. No action required

CATxDscrdConnUnAvail

Measurement ID
9802

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of User Data egress events discarded because connection was not in-service(down/blocked/not aligned).

Collection Interval
30 min

Peg Condition
For each User Data egress StackEvent that is discarded by **ComAgent** Stack, due to connection status not being in-service.

Measurement Scope
NE, Server

Recovery

1. No action required.

   This value provides a measure of how many User Data egress messages are discarded by **ComAgent** due to connection unavailability reasons.

CATxDscrdDestUserIncmpat

Measurement ID
9803

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of User Data egress events discarded because the remote doesn't support requested capabilities (either it doesn't support stack or event library or event library version is incompatible).

Collection Interval
30 min

Peg Condition
For each User Data egress StackEvent that is discarded by **Communication Agent** Stack, due to incompatibility in requested library id/version and the one known by **Communication Agent**.

Measurement Scope
NE, Server

Recovery

1. No action required.

   This value provides a measure of how many User Data egress messages are discarded by **Communication Agent** due to remote not supporting requested capabilities.

CATxDscrdEncodeFail

Measurement ID
9804

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of User Data egress events discarded because of serialization failures.

Collection Interval
30 min

Peg Condition
For each User Data egress StackEvent that is discarded by **Communication Agent** Stack, due to any local encode failures.

Measurement Scope
NE, Server

Recovery

1. No action required.

   This value provides a measure of how many User Data egress messages are discarded by **Communication Agent** due to local encode failure.

CATxDscrdInternalErr

Measurement ID
9817

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of egress events discarded because of other unexpected internal processing error.

Collection Interval
30 min

Peg Condition
For each egress StackEvent that is discarded by **ComAgent** Stack, due to internal processing errors for conditions not covered by other meas-pegs.

Measurement Scope
NE, Server

Recovery

1. No action required.

   This value provides a measure of how many egress messages are discarded by **ComAgent** due to internal software processing errors for conditions not covered by other measurement pegs.

CATxDscrdMxSendFail

Measurement ID
9805

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of User Data egress events discarded because of failure reported by MxEndpoint.

Collection Interval
30 min

Peg Condition
For each User Data egress StackEvent that is discarded by **Communication Agent** Stack, due to send failure as indicated by underlying transport.

Measurement Scope
NE, Server

Recovery

1. No action required.

   This value provides a measure of how many User Data egress messages are discarded by **Communication Agent** due to transport reported error condition.

CATxDscrdUnknownSvc

Measurement ID
9849

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of non-reliable and non-request (G=0 or R=0) egress stack events discarded because they refer to an unknown service.This measurement indicates that **ComAgent** is improperly configured to support a local application.

Collection Interval
30 min

Peg Condition
User Layer submits to **ComAgent** a non-reliable or non-request (G=0 or R=0) egress stack event that refers to an unknown service.

Measurement Scope
Server

Recovery

1. Use **Main Menu** > **Communication Agent** > **Configuration** > **Routed Services** screen to verify that all Routed Services expected by local applications are properly configured.
2. It is recommended to contact My Oracle Support (MOS) for assistance.

CATxDscrdUnkServer

Measurement ID
9819

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of egress events discarded because the destination server was unknown/not configured.

Collection Interval
30 min

Peg Condition
For each egress StackEvent that is discarded by **ComAgent** Stack, due to unknown destination IP address contents in StackEvent.

Measurement Scope
NE, Server

Recovery

1. No action required.

   This value provides a measure of how many egress messages are discarded by **ComAgent** due to unknown destination IP address in StackEvent.

CATxDscrdUnregSvc

Measurement ID
9860

Measurement Group
ComAgent Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Service ID)

Description
Number of egress stack events discarded because they reference a known service that has no registered User Layer.

Collection Interval
30 min

Peg Condition
User Layer submits to **ComAgent** an egress stack event that refers to a known service that lacks a registered User Layer.

Measurement Scope
Server

Recovery

1. A non-zero measurement indicates that a local application is malfunctioning and is attempting to use a service for which it has not registered. It is recommended to contact My Oracle Support (MOS) for assistance.

Communication Agent (ComAgent) Performance measurements

The **Communication Agent** Performance measurement group is a set of measurements that provide performance information that is specific to the **Communication Agent** protocol. These measurements will allow the user to determine how many messages are successfully forwarded and received to and from each DSR Application.

CAAvgDataFIFOQueueUtil

Measurement ID
9969

Measurement Group
ComAgent Performance

Measurement Type
Average

Measurement Dimension
Arrayed

Description
Average percentage of ComAgent DataFIFO Queue Utilization.

Collection Interval
30 min

Peg Condition
The average ComAgent connection DataFIFO Queue utilization sample taken during the collection interval.

Measurement Scope
NE, Server

Recovery

1. This measurement is primarily intended to assist in evaluating any issues with ComAgent User Data StackEvent processing and thread scheduling.

   If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP over several collection intervals, then the queue depth may need to be tuned.

   If the peak and average for an individual MP is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist.

2. It is recommended to contact My Oracle Support (MOS) for assistance.

CAAvgMxFIFOQueueUtil

Measurement ID
9967

Measurement Group
ComAgent Performance

Measurement Type
Average

Measurement Dimension
Arrayed

Description
Average percentage of ComAgent MxFIFO Queue Utilization.

Collection Interval
30 min

Peg Condition
The average ComAgent connection MxFIFO Queue utilization sample taken during the collection interval.

Measurement Scope
NE, Server

Recovery

1. This measurement is primarily intended to assist in evaluating any issues with internal StackEvent processing and thread scheduling.

If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP over several collection intervals, then the queue depth may need to be tuned.

If the peak and average for an individual MP is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist.

2. It is recommended to contact My Oracle Support (MOS) for assistance.

CAAvgQueueUtil

Measurement ID
9828

Measurement Group
ComAgent Performance

Measurement Type
Average

Measurement Dimension
Arrayed

Description
Average percentage of Queue Utilization.

Collection Interval
30 min

Peg Condition
The average **ComAgent** Egress Task Queue utilization sample taken during the collection interval.

Measurement Scope
NE, Server

Recovery

1. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an **MP** over several collection intervals, then the number of MPs in the Network Element may need to be increased.
2. If the peak and average for an individual **MP** is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist.
3. It is recommended to contact My Oracle Support (MOS) for assistance.

CAAvgRsrcPoolUtil

Measurement ID
9858

Measurement Group
ComAgent Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Average percentage of internal resource pool utilization.

Collection Interval
30 min

Peg Condition
This is to track the measure of average usage of the internal resource (Ex: CommMessage Resource pool) for a given interval.

Measurement Scope
NE, Server

Recovery

1. This measurement is primarily intended to assist in evaluating the need for additional processing or performance capacity tuning on a node.

   If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of a node over several collection intervals, then the internal engineering resource pool capacity or other dependent parameters may need to be tuned, so that it does not result in unaccounted latency.

CAAvgRxStackEvents

Measurement ID
9822

Measurement Group
ComAgent Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Average Number of User Data ingress events received.

Collection Interval
30 min

Peg Condition
The average User Data ingress StackEvent sample taken during the collection interval.

Measurement Scope
NE, Server

Recovery

1. No action required.

   This value provides a measure of Average Value during the interval, for number of User Data messages received from remote.

CAAvgTxStackEvents

Measurement ID
9816

Measurement Group
ComAgent Performance

Measurement Type
Average

Measurement Dimension
Single

Description
Average Number of User Data egress events received from stacks to deliver it to remote.

Collection Interval
30 min

Peg Condition
The average User Data egress StackEvent sample taken during the collection interval.

Measurement Scope
NE, Server

Recovery

1. No action required.

   This value provides a measure of Average Value during the interval, for number of User Data messages transmitted to remote.

CADSTx

Measurement ID
9814

Measurement Group
ComAgent Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of User Data egress events specifically for the default Direct Service.

Collection Interval
30 min

Peg Condition
For each User Data egress StackEvent received specifically for the default Direct Service and processed by **ComAgent** Stack.

Measurement Scope
NE, Server

Recovery

1. No action required.

   This value provides a measure of how many User Data egress messages are received by **ComAgent** to be transmitted from hosting server to destined remote server using default Direct "EventTransfer" Service.

CAHSTxRsrc

Measurement ID
9876

Measurement Group
ComAgent Performance, **ComAgent** Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Resource ID)

Description
Number of egress stack events that were routed to a known Resource.

Collection Interval
30 min

Peg Condition
User Layer submits to **ComAgent** an egress stack event destined to a known Resource.

Measurement Scope
Server

Recovery

1. No action required.

CAHSTxRsrcRateAvg

Measurement ID
9877

Measurement Group
ComAgent Performance

Measurement Type
Average

Measurement Dimension
Arrayed (by Resource ID)

Description
Average rate per second of egress stack events routed to a known Resource.

Collection Interval
30 min

Peg Condition
Based upon the SysMetric.

Measurement Scope
Server

Recovery

1. No action required.

CAHSTxRsrcRateMax

Measurement ID
9878

Measurement Group
ComAgent Performance

Measurement Type
Max

Measurement Dimension
Arrayed (by Resource ID)

Description
Maximum rate per second of egress stack events routed to a known Resource.

Collection Interval
30 min

Peg Condition
Based upon the SysMetric.

Measurement Scope
Server

Recovery

1. No action required.

CAPeakDataFIFOQueueUtil

Measurement ID
9968

Measurement Group
ComAgent Performance

Measurement Type
Max

Measurement Dimension
Arrayed

Description
Maximum percentage of ComAgent DataFIFO Queue Utilization.

Collection Interval
30 min

Peg Condition
The maximum ComAgent DataFIFO Queue utilization sample taken during the collection interval.

Measurement Scope
NE, Server

Recovery

1. This measurement is primarily intended to assist in evaluating any issues with ComAgent User Data StackEvent processing and thread scheduling.

   If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP over several collection intervals, then the queue depth may need to be tuned.

   If the peak and average for an individual MP is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist.

2. It is recommended to contact My Oracle Support (MOS) for assistance.

CAPeakMxFIFOQueueUtil

Measurement ID
9966

Measurement Group
ComAgent Performance

Measurement Type
Max

Measurement Dimension
Arrayed

Description
Maximum percentage of ComAgent MxFIFO Queue Utilization.

Collection Interval
30 min

Peg Condition
The maximum ComAgent connection MxFIFO Queue utilization sample taken during the collection interval.

Measurement Scope
NE, Server

Recovery

1. This measurement is primarily intended to assist in evaluating any issues with internal StackEvent processing and thread scheduling.

   If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP over several collection intervals, then the queue depth may need to be tuned.

   If the peak and average for an individual MP is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist.

2. It is recommended to contact My Oracle Support (MOS) for assistance.

CAPeakQueueUtil

Measurement ID
9827

Measurement Group
ComAgent Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Maximum percentage of Queue Utilization.

Collection Interval
30 min

Peg Condition
The maximum **ComAgent** Egress Task Queue utilization sample taken during the collection interval.

Measurement Scope
NE, Server

Recovery

1. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an **MP** over several collection intervals, then the number of MPs in the Network Element may need to be increased.
2. If the peak and average for an individual **MP** is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist.
3. It is recommended to contact My Oracle Support (MOS) for assistance.

CAPeakRsrcPoolUtil

Measurement ID
9857

Measurement Group
ComAgent Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Maximum percentage of internal resource pool utilization.

Collection Interval
30 min

Peg Condition
This is to track the measure of maximum usage of the internal resource (Ex: CommMessage Resource pool) for a given interval.

Measurement Scope
NE, Server

Recovery

1. This measurement is primarily intended to assist in evaluating the need for additional processing or performance capacity tuning on a node.

   If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of

a node over several collection intervals, then the internal engineering resource pool capacity or other dependent parameters may need to be tuned, so that it does not result in unaccounted latency.

CAPeakRxStackEvents

Measurement ID
9821

Measurement Group
ComAgent Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Maximum Number of User Data ingress events received.

Collection Interval
30 min

Peg Condition
The maximum User Data ingress StackEvent sample taken during the collection interval.

Measurement Scope
NE, Server

Recovery

1. No action required.

   This value provides a measure of Peak Value during the interval, for number of User Data messages received from remote.

CAPeakTxStackEvents

Measurement ID
9815

Measurement Group
ComAgent Performance

Measurement Type
Max

Measurement Dimension
Single

Description
Maximum Number of User Data egress events received from stacks to deliver it to remote.

Collection Interval
30 min

Peg Condition
The maximum User Data egress StackEvent sample taken during the collection interval.

Measurement Scope
NE, Server

Recovery

1. No action required.

   This value provides a measure of Peak Value during the interval, for number of User Data messages transmitted to remote.

CAPSTxGrp

Measurement ID
8015

Measurement Group
ComAgent Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Peer Group ID)

Description
The number of egress stack events submitted to the Peer Group Service to be routed to a known Peer Group.

Collection Interval
30 min

Peg Condition
For each stack event submitted to ComAgent Peer Group Service by a local User Layer.

Measurement Scope
Server

Recovery

1. No action required. This measurement is useful when compared with other Peer Group Service measurements.

CAPSTxGrpSuccess

Measurement ID
8016

Measurement Group
ComAgent Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Peer Group ID)

Description
The number of egress stack events successfully routed to a known Peer Group.

Collection Interval
30 min

Peg Condition
For each stack event submitted to ComAgent Peer Group Service by a local User Layer and successfully routed

Measurement Scope
Server

Recovery

1. No action required. This measurement is useful when compared with other Peer Group Service measurements.

CARSTx

Measurement ID
9844

Measurement Group
ComAgent Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Service ID)

Description
Number of stack events submitted to a Routed Service for routing.

Collection Interval
30 min

Peg Condition
Stack event submitted to **ComAgent** Routed Service by a local User Layer

Measurement Scope
Server

Recovery

1. No action necessary

CARx

Measurement ID
9806

Measurement Group
ComAgent Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of User Data ingress events received from a peer server.

Collection Interval
30 min

Peg Condition
For each User Data StackEvent received from one of the configured peer and processed by **Communication Agent** Stack.

Measurement Scope
NE, Server

Recovery

1. No action required.

   This value provides a measure of how many User Data ingress messages are received by **Communication Agent** to be transmitted to local hosting stack. This measurement count should be equal to the summation of User Data ingress events success and all User Data ingress events discards measurement counts

CARxBundled

Measurement ID
9986

Measurement Group
ComAgent Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of ComAgent Bundled events received by ComAgent

Collection Interval
30 min

Peg Condition
Each time a ComAgent Bundled event is received by ComAgent

Measurement Scope
Site

Recovery

1. No action required

CARxEventsBundled

Measurement ID
9988

Measurement Group
ComAgent Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of stackevents received in ComAgent Bundled events

Collection Interval
30 min

Peg Condition
Each time a stackevent is received in ComAgent Bundled events

Measurement Scope
Site

Recovery

1. No action required

CARxSuccess

Measurement ID
9807

Measurement Group
ComAgent Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of User Data ingress events successfully routed to local layers.

Collection Interval
30 min

Peg Condition
For each User Data StackEvent received from a peer server and successfully transmitted to the local stack.

Measurement Scope
NE, Server

Recovery

1. No action required.

   This value provides a measure of how many User Data ingress messages are received by **Communication Agent** and are successfully transmitted to local hosting stack.

CATransEndAbnorm

Measurement ID
9834

Measurement Group
ComAgent Exception, **ComAgent** Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Service ID)

Description
Number of reliable transactions that terminated abnormally.

Collection Interval
30 min

Peg Condition

- Transaction times-out waiting for a response, and the maximum number of transmits has been reached.
- Transaction time-to-live limit is exceeded.
- Transaction terminated due to lack of resources.

Note: This measurement is NOT pegged for these conditions:

- Transaction involves an unknown service.
- Transaction involves an unregistered Routed Service.

Measurement Scope
Server

Recovery

1. Check the **ComAgent** Exception report to further diagnose the reasons why transactions are failing.
2. It is recommended to contact My Oracle Support (MOS) for assistance.

CATransEndAbnormRateAvg

Measurement ID
9865

Measurement Group
ComAgent Performance, **ComAgent** Exception

Measurement Type
Average

Measurement Dimension
Arrayed (by Service ID)

Description
Average rate per second that **ComAgent** transactions ended abnormally during the collection interval.

Collection Interval
30 min

Peg Condition
Rate of transaction failures due to final timeouts. Failed Transaction Rate monitoring is an average rate using a sliding-metric algorithm. The average transaction failure rate is a running average, smoothed over approximately 10 seconds. This measurement provides the average rate per second that **ComAgent** transactions were started. This measurement is useful during troubleshooting when compared to other measurements.

Measurement Scope
Server

Recovery

1. No action necessary.

CATransEndAbnormRateMax

Measurement ID
9866

Measurement Group
ComAgent Performance, **ComAgent** Exception

Measurement Type
Max

Measurement Dimension
Arrayed (by Service ID)

Description
Maximum rate per second that **ComAgent** transactions ended abnormally during the collection interval.

Collection Interval
30 min

Peg Condition
Rate of transaction failures due to final timeouts. Failed Transaction Rate monitoring is an average rate using a sliding-metric algorithm. The average transaction failure rate is a running average, smoothed over approximately 10 seconds. This measurement provides the maximum rate per second that **ComAgent** transactions were started. This measurement is useful during troubleshooting when compared to other measurements.

Measurement Scope
Server

Recovery

1. No action necessary.

CATransEndNorm

Measurement ID
9836

Measurement Group
ComAgent Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Service ID)

Description
Number of reliable transactions initiated by local User Layers that ended normally with a response from a destination server.

Collection Interval
30 min

Peg Condition
When a valid reliable response stack event (G=1, A=1) is received that corresponds to a pending transaction record.

Measurement Scope
Server

Recovery

1. No action necessary.

   This measurement has value when compared against other measurements. If no new transactions are started, then during normal operation, this measurement should match CATransStarted .

CATransPendingAvg

Measurement ID
9838

Measurement Group
ComAgent Performance

Measurement Type
Average

Measurement Dimension
Arrayed (by Service ID)

Description
Average number of allocated pending transaction records over the collection interval.

Collection Interval
30 min

Peg Condition
Average number of allocated pending transaction records during the collection interval.

Measurement Scope
Server

Recovery

1. No action necessary.

CATransPendingMax

Measurement ID
9837

Measurement Group
ComAgent Performance

Measurement Type
Max

Measurement Dimension
Arrayed (by Service ID)

Description
Maximum number of allocated pending transaction records.

Collection Interval
30 min

Peg Condition
When a pending transaction record is allocated, and the total count of allocated pending transaction records exceeds the current peak.

Measurement Scope
Server

Recovery

1. No action necessary.

CATransRateAvg

Measurement ID
9863

Measurement Group
ComAgent Performance

Measurement Type
Average

Measurement Dimension
Arrayed (by Service ID)

Description
Average rate per second that **ComAgent** transactions were started during the collection interval.

Collection Interval
30 min

Peg Condition
Transaction rate monitoring is an average rate using a sliding-metric algorithm. The average transaction rate is a running average, smoothed over approximately 10 seconds. This measurement provides the average rate per second that **ComAgent** transactions were started. This measurement is useful during troubleshooting when compared to other measurements.

Measurement Scope
Server

Recovery

1. No action necessary.

CATransRateMax

Measurement ID
9864

Measurement Group
ComAgent Performance

Measurement Type
Max

Measurement Dimension
Arrayed (by Service ID)

Description
Maximum rate per second that **ComAgent** transactions were started during the collection interval.

Collection Interval
30 min

Peg Condition
Transaction rate monitoring is an average rate using a sliding-metric algorithm. The average transaction rate is a running average, smoothed over approximately 10 seconds. This measurement provides the maximum rate per second that **ComAgent** transactions were started. This measurement is useful during troubleshooting when compared to other measurements.

Measurement Scope
Server

Recovery

1. No action necessary.

CATransStarted

Measurement ID
9835

Measurement Group
ComAgent Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Service ID)

Description
Number of reliable transactions initiated by local User Layers.

Collection Interval
30 min

Peg Condition
When a valid reliable request stack event (G=1, R=1) is received from a local User Layer.

Measurement Scope
Server

Recovery

1. No action necessary.

CATransTimeAvg

Measurement ID
9840

Measurement Group
ComAgent Performance

Measurement Type
Average

Measurement Dimension
Arrayed (by Service ID)

Description
Average transaction life-time in milliseconds.

Collection Interval
30 min

Peg Condition
Transaction ends either normally or abnormally.

Measurement Scope
Server

Recovery

1. No action necessary.

CATransTimeMax

Measurement ID
9839

Measurement Group
ComAgent Performance

Measurement Type
Max

Measurement Dimension
Arrayed (by Service ID)

Description
Maximum transaction life-time in milliseconds.

Collection Interval
30 min

Peg Condition
Transaction ends either normally or abnormally.

Measurement Scope
Server

Recovery

1. No action necessary.

CATx

Measurement ID
9800

Measurement Group
ComAgent Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of User Data egress events received on **Communication Agent** task queue from local stacks to deliver it to a peer server.

Collection Interval
30 min

Peg Condition
For each User Data egress StackEvent received and processed by **Communication Agent** Stack.

Measurement Scope
NE, Server

Recovery

1. No action required.

   This value provides a measure of how many User Data egress messages are received by **Communication Agent** for direct or indirect routing service.

   This measurement count should be equal to the summation of User Data egress events success and all User Data egress events discards measurement counts.

This measurement count should be equal to the summation of User Data egress events received by **Communication Agent** for each (Direct, Routed and HA) routing service.

CATxBundled

Measurement ID
9985

Measurement Group
ComAgent Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of ComAgent Bundled events transmitted by ComAgent

Collection Interval
30 min

Peg Condition
Each time a ComAgent Bundled event is transmitted by ComAgent

Measurement Scope
Site

Recovery

1. No action required

CATxEventsBundled

Measurement ID
9987

Measurement Group
ComAgent Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of stackevents transmitted through ComAgent Bundled events

Collection Interval
30 min

Peg Condition
Each time a stackevent is transmitted through ComAgent Bundled events

Measurement Scope
Site

Recovery

1. No action required

CATxSuccess

Measurement ID
9801

Measurement Group
ComAgent Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of User Data egress events successfully delivered to a peer server.

Collection Interval
30 min

Peg Condition
For each User Data egress StackEvent transmitted to the peer server.

Measurement Scope
NE, Server

Recovery

1. No action required.

   This value provides a measure of how many User Data messages are successfully transmitted from hosting server to destined remote server over "event transfer" static connection.

Computer Aided Policy Making (CAPM) measurements

The Computer-Aided Policy Making (CAPM) measurement report contains usage-based measurements related to the Diameter Mediation feature.

CAPM_Temp_Invoked

Measurement ID
16500

Measurement Group
CAPM

Measurement Type
Simple

Measurement Dimension
Arrayed (by Mediation Rule Template ID)

Description
Indicates the number of times a Rule Template has been invoked. This counter is incremented on a per Rule Template basis every time the Rule Template is processed.

Collection Interval
5 min

Peg Condition
A Rule Template is invoked during the message processing.

Measurement Scope
Server Group

Recovery

1. Verify that the Rule Template was set to Test or Active state and was assigned to the correct Execution Trigger.
2. Verify the conditions of the Rule Template were properly set and the provisioned routing or/and mediation data matches the incoming message.
3. Verify that Alarm 25000 - Rule Template failed to be updated (refer to the *DSR Alarms and KPIs Reference* for details about this alarm) is not raised.

CAPM_CondSet_True

Measurement ID
16501

Measurement Group
CAPM

Measurement Type
Simple

Measurement Dimension
Arrayed (by Mediation Rule Template ID)

Description
Indicates the number of times a condition set has been evaluated to True. This counter is incremented on a per Rule Template basis every time all the conditions of the condition set match.

Collection Interval
5 min

Peg Condition
A Condition Set matches during the message processing.

Measurement Scope
Server Group

Recovery

1. Verify that the Rule Template was set to Test or Active state and was assigned to the correct Execution Trigger.
2. Verify the conditions of the Rule Template were properly set and the provisioned routing or/and mediation data matches the incoming message.
3. Also verify that Alarm 25000 - Rule Template failed to be updated (refer to the *DSR Alarms and KPIs Reference* for details about this alarm) is not raised.

CAPM_Action_Set_Fails

Measurement ID
16502

Measurement Group
CAPM

Measurement Type
Simple

Measurement Dimension
Arrayed (by Mediation Rule Template ID)

Description
Indicates the number of times a failure has occurred while executing the action set. This counter is incremented on a per Rule Template basis every time some of the actions fails.

Note: This counter is incremented only once even if several actions within an action set have failed.

Collection Interval
5 min

Peg Condition
At least one action within an Action Set has failed.

Measurement Scope
Server Group

Recovery

1. Verify that the actions are set correctly, there are enough system resources to perform the actions, and the actions refer to the part of the incoming message that is available.

CAPM_Match_Rule

Measurement ID
16504

Measurement Group
CAPM

Measurement Type
Simple

Measurement Dimension
Arrayed (by Mediation Rule Template ID)

Description
The array of measurements for pegged rules. An element of the array shows how many times a rule matched on an MP.

Collection Interval
5 min

Peg Condition
Each time the MessageCopy action has been invoked successfully.

Measurement Scope
Server Group

Recovery

1. No action required.

CAPM_MsgCopyTriggered

Measurement ID
16600

Measurement Group
CAPM

Measurement Type
Simple

Measurement Dimension
Arrayed (by Mediation Rule Template ID)

Description
The number of times the MessageCopy action has been invoked successfully.

Collection Interval
5 min

Peg Condition
Each time the MessageCopy action has been invoked successfully.

Measurement Scope
Server Group

Recovery

1. No action required.

CAPM_RxRejectWithErrorAnswer

Measurement ID
16601

Measurement Group
CAPM

Measurement Type
Simple

Measurement Dimension
Arrayed (by Transport Connection)

Description
The number of Request messages from a downstream peer rejected by a Local Node when an indication from mediation to send back an error answer is received

Collection Interval
5 min

Peg Condition
When mediation indicates to send back an answer

Measurement Scope
Server Group

Recovery

1. No action required.

CAPM_RxSilentDiscard

Measurement ID
16602

Measurement Group
CAPM

Measurement Type
Simple

Measurement Dimension
Arrayed (by Transport Connection)

Description
The number of Request messages from a downstream peer silently by a Local Node when an indication from mediation to discard the request is received

Collection Interval
5 min

Peg Condition
When mediation indicates to silently discard the request

Measurement Scope
Server Group

Recovery

1. No action required.

CAPM_RxRedirectHost

Measurement ID
16603

Measurement Group
CAPM

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Connection ID)

Description
The number of times the Request was redirected with the 3006 response sent by Mediation

Collection Interval
5 min

Peg Condition
When the action "Redirect Request-Host" successfully executes

Measurement Scope
Site

Recovery

1. No action required.

CAPM_RxRedirectRealm

Measurement ID
16604

Measurement Group
CAPM

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Connection ID)

Description
The number of times the Request was redirected with the 3011 response sent by Mediation

Collection Interval
5 min

Peg Condition
When the action "Redirect Request-Realm" successfully executes

Measurement Scope
Site

Recovery

1. No action required.

CAPM_RxProcessNAI

Measurement ID
16605

Measurement Group
CAPM

Measurement Type
Simple

Measurement Dimension
Arrayed (by Template Name)

Description
The number of times the Request was modified by the "Process Decorated NAI" Mediation action

Collection Interval
5 min

Peg Condition
When the action "Process Decorated NAI" successfully executes

Measurement Scope
Site

Recovery

1. No action required.

CAPM_Match_Rule

Measurement ID
16504

Measurement Group
CAPM

Measurement Type
Simple

Measurement Dimension
Arrayed (by Mediation Rule Template ID)

Description
The array of measurements for pegged rules. An element of the array shows how many times a rule matched on an MP.

Collection Interval
5 min

Peg Condition
Each time the MessageCopy action has been invoked successfully.

Measurement Scope
Server Group

Recovery

1. No action required.

Connection Congestion measurements

The Connection Congestion measurement report contains per-connection measurements related to Diameter Connection congestion states. Measurements in this group include:

- Congestion Level-X time duration
- Number of times entered Congestion Level-X
- Number of times Remote Busy Congestion occurred

RxRejectedConnCongestion

Measurement ID
10004

Measurement Group
Connection Congestion

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
Number of Request messages from a downstream peer rejected by a Local Node because of Diameter Connection Congestion.

Collection Interval
5 min

Peg Condition
Each time an ingress transaction is abandoned and the Routing Option Set "Connection Congestion" action is invoked.

Measurement Scope
Site

Recovery

1. No action required.

Connection Exception measurements

The Connection Exception measurement report contains measurements that provide information about exceptions and unexpected messages and events for individual SCTP/TCP connections that are not specific to the Diameter protocol.

EvRxException

Measurement ID
18008

Measurement Group
Connection Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of connection ingress message processing exception events.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each EvRxException event, regardless of event reason or throttling.

Measurement Scope
Site

Recovery

1. No action required.

EvTxException

Measurement ID
18009

Measurement Group
Connection Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Connection egress message processing exception events.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each EvTxException event, regardless of event reason or throttling.

Measurement Scope
Site

Recovery

1. No action required.

Connection Performance measurements

The Connection Performance measurement report contains measurements that provide performance information for individual SCTP/TCP connections that are not specific to the Diameter protocol.

DclTxConnQueueAvg

Measurement ID
10224

Measurement Group
Connection Performance

Measurement Type
Average

Measurement Dimension
Arrayed (Connection ID)

Description
DCL egress connection message queue utilization average.

Collection Interval
5 min

Peg Condition
Output measurement of the DclTxConnQueue metric.

Measurement Scope
Site

Recovery

1. No action required.

DclTxConnQueuePeak

Measurement ID
10223

Measurement Group
Connection Performance

Measurement Type
Max

Measurement Dimension
Arrayed (Connection ID)

Description
DCL egress connection message queue utilization peak.

Collection Interval
5 min

Peg Condition
Output measurement of the DclTxConnQueue metric.

Measurement Scope
Site

Recovery

1. No action required.

EcCL1

Measurement ID
10524

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection onset for egress message rate in congestion level 1.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each onset of CL1.

Measurement Scope
Site

Recovery

1. No action required.

EcCL2

Measurement ID
10525

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection onset for egress message rate in congestion level 2.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each onset of CL2.

Measurement Scope
Site

Recovery

1. No action required.

EcCL3

Measurement ID
10526

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection onset for egress message rate in congestion level 3.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each onset of CL3.

Measurement Scope
Site

Recovery

1. No action required.

EcCL98

Measurement ID
10527

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection onset for egress message rate in congestion level 98.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each onset of CL98.

Measurement Scope
Site

Recovery

1. No action required.

EcRateAvg

Measurement ID
10193

Measurement Group
Connection Performance

Measurement Type
Average

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection egress message rate average.

Collection Interval
5 min

Peg Condition
Output measurement of the EcRate metric.

Measurement Scope
Site

Recovery

1. No action required.

EcRatePeak

Measurement ID
10192

Measurement Group
Connection Performance

Measurement Type
Max

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection egress message rate peak.

Collection Interval
5 min

Peg Condition
Output measurement of the EcRate metric.

Measurement Scope
Site

Recovery

1. No action required.

Ert

Measurement ID
18054

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Connection egress messages on routing egress.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each egress message during the Egress Routing phase.

Measurement Scope
Site

Recovery

1. No action required.

ErtDrop

Measurement ID
18044

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of DA-MP egress messages discarded or rejected by routing egress.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each egress message dropped during the Routing Egress phase.

The associated reasons can be found in this table:

Layer	Event	Reason
CSL	EvFsmOpState	StateChange (TransportCongestion)
	EvTxException	ConnUnavailable
DCL	EvTxException	DclTxConnQueueCongested
		DtlsMsgOversized
RCL	MpEvTxException	RclTxTaskQueueCongested
		EtrPoolCongested
		RadiusMsgPoolCongested
		SharedSecretUnavailable
		RadiusIdPoolCongested
	EvTxException	MsgAttrLenUnsupported
		MsgTypeUnsupported
		MsgLenInvalid
		AnsOnClientConn
		ReqDuplicate

Measurement Scope
Site

Recovery

1. No action required.

Ic

Measurement ID
18053

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Connection ingress messages.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message during the Ingress Control phase.

Measurement Scope
Site

Recovery

1. No action required.

IcDrop

Measurement ID
18041

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Connection ingress messages discarded or rejected by ingress control.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message dropped during the Ingress Control phase.
The associated reasons can be found in this table:

Layer	Event	Reason
CSL	EvRxException	MaxMpsExceeded

Measurement Scope
Site

Recovery

1. No action required.

IcDropP0

Measurement ID
18063

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection ingress messages discarded or rejected by ingress control with priority 0.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message dropped during the Ingress Control phase with priority 0.
The associated reasons can be found in this table:

Layer	Event	Reason
CSL	EvRxException	MaxMpsExceeded

Measurement Scope
Site

Recovery

1. No action required.

IcDropP1

Measurement ID
18064

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection ingress messages discarded or rejected by ingress control with priority 1.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message dropped during the Ingress Control phase with priority 1.
The associated reasons can be found in this table:

Layer	Event	Reason
CSL	EvRxException	MaxMpsExceeded

Measurement Scope
Site

Recovery

1. No action required.

IcDropP2

Measurement ID
18065

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection ingress messages discarded or rejected by ingress control with priority 2.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message dropped during the Ingress Control phase with priority 2.
The associated reasons can be found in this table:

Layer	Event	Reason
CSL	EvRxException	MaxMpsExceeded

Measurement Scope
Site

Recovery

1. No action required.

IcDropP3

Measurement ID
18066

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection ingress messages discarded or rejected by ingress control with priority 3.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message dropped during the Ingress Control phase with priority 3.
The associated reasons can be found in this table:

Layer	Event	Reason
CSL	EvRxException	MaxMpsExceeded

Measurement Scope
Site

Recovery

1. No action required.

IcDropP4

Measurement ID
18357

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection ingress messages discarded or rejected by ingress control with priority 4.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped during the Ingress Control phase with priority 4.

Measurement Scope
Site

Recovery

1. No action required.

IcDropP5

Measurement ID
18358

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection ingress messages discarded or rejected by ingress control with priority 5.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped during the Ingress Control phase with priority 5.

Measurement Scope
Site

Recovery

1. No action required.

IcDropP6

Measurement ID
18359

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection ingress messages discarded or rejected by ingress control with priority 6.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped during the Ingress Control phase with priority 6.

Measurement Scope
Site

Recovery

1. No action required.

IcDropP7

Measurement ID
18360

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection ingress messages discarded or rejected by ingress control with priority 7.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped during the Ingress Control phase with priority 7.

Measurement Scope
Site

Recovery

1. No action required.

IcDropP8

Measurement ID
18361

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection ingress messages discarded or rejected by ingress control with priority 8.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped during the Ingress Control phase with priority 8.

Measurement Scope
Site

Recovery

1. No action required.

IcDropP9

Measurement ID
18362

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection ingress messages discarded or rejected by ingress control with priority 9.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped during the Ingress Control phase with priority 9.

Measurement Scope
Site

Recovery

1. No action required.

IcDropP10

Measurement ID
18363

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection ingress messages discarded or rejected by ingress control with priority 10.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped during the Ingress Control phase with priority 10.

Measurement Scope
Site

Recovery

1. No action required.

IcDropP11

Measurement ID
18364

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection ingress messages discarded or rejected by ingress control with priority 11.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped during the Ingress Control phase with priority 11.

Measurement Scope
Site

Recovery

1. No action required.

IcDropP12

Measurement ID
18365

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection ingress messages discarded or rejected by ingress control with priority 12.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped during the Ingress Control phase with priority 12.

Measurement Scope
Site

Recovery

1. No action required.

IcDropP13

Measurement ID
18366

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection ingress messages discarded or rejected by ingress control with priority 13.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped during the Ingress Control phase with priority 13.

Measurement Scope
Site

Recovery

1. No action required.

IcDropP14

Measurement ID
18367

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection ingress messages discarded or rejected by ingress control with priority 14.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped during the Ingress Control phase with priority 14.

Measurement Scope
Site

Recovery

1. No action required.

IcDropP15

Measurement ID
18368

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection ingress messages discarded or rejected by ingress control with priority 15.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped during the Ingress Control phase with priority 15.

Measurement Scope
Site

Recovery

1. No action required.

IcRateAvg

Measurement ID
10500

Measurement Group
Connection Performance

Measurement Type
Average

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection ingress message rate average.

Collection Interval
5 min

Peg Condition
Output measurement of the IcRate metric.

Measurement Scope
Site

Recovery

1. No action required.

IcRatePeak

Measurement ID
10501

Measurement Group
Connection Performance

Measurement Type
Max

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection ingress message rate peak.

Collection Interval
5 min

Peg Condition
Output measurement of the IcRate metric.

Measurement Scope
Site

Recovery

1. No action required.

Irt

Measurement ID
18067

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection ingress messages on routing ingress.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message during the Ingress Routing phase.

Measurement Scope
Site

Recovery

1. No action required.

IrtDrop

Measurement ID
18043

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Connection ingress messages discarded or rejected by routing ingress.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message dropped during the Routing Ingress phase.
The associated reasons can be found in this table:

Layer	Event	Reason
CSL	MpEvRxException	DiamMsgPoolCongested
		SigEvPoolCongested
		DstMpUnknown
		DstMpCongested
		DrlReqQueueCongested
		DrlAnsQueueCongested
		ComAgentCongested
RCL	MpEvRxException	RadiusMsgPoolCongested
		RclRxTaskQueueCongested
		RclSigEvPoolCongested
		SharedSecretUnavailable

Layer	Event	Reason
		ItrPoolCongested
	EvRxException	MsgAttrLenInvalid
		MsgAttrLenUnsupported
		AnsOrphaned
		AccessAuthMissing
		StatusAuthMissing
		MsgAuthInvalid
		ReqAuthInvalid
		AnsAuthInvalid
		MsgAttrAstUnsupported
		ReqDuplicate
		MsgTypeMissingMccs
		ConnUnavailable

Measurement Scope
Site

Recovery

1. No action required.

OcDrop

Measurement ID
18042

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Connection ingress messages discarded or rejected by overload control.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message dropped during the Overload Control phase.
The associated reasons can be found in this table:

Layer	Event	Reason
CSL	MpEvRxException	CpuCongested

Measurement Scope
Site

Recovery

1. No action required.

RadiusXactionFailAvg

Measurement ID
18234

Measurement Group
Connection Performance

Measurement Type
Average

Measurement Dimension
Single

Description
RADIUS connection transaction failure rate average.

Collection Interval
5 min

Peg Condition
The average RADIUS connection transaction failure rate sample taken during the collection interval.

Measurement Scope
Site

Recovery

1. No action required.

RxAll

Measurement ID
10104

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of connection ingress messages (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message during the Rx phase (routable and peer-to-peer).

Measurement Scope
Site

Recovery

1. No action required.

RxAllDrop

Measurement ID
10171

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Connection ingress messages dropped (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message dropped during the Rx phase (routable and peer-to-peer).
The associated reasons can be found in this table:

Layer	Event	Reason
DCL	EvRxException	MsgInvalid
RCL	EvRxException	MsgTypeUnsupported

Measurement Scope
Site

Recovery

1. No action required.

RxAllLenAvg

Measurement ID
18036

Measurement Group
Connection Performance

Measurement Type
Average

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection ingress message length average (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
This measurement is updated for each ingress message during the Rx phase (routable and peer-to-peer).

Measurement Scope
Site

Recovery

1. No action required.

RxAllLenPeak

Measurement ID
18037

Measurement Group
Connection Performance

Measurement Type
Max

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection ingress message length peak (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
This measurement is updated for each ingress message during the Rx phase (routable and peer-to-peer).

Measurement Scope
Site

Recovery

1. No action required.

RxNgnPsAccepted

Measurement ID
18059

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection ingress NGN-PS messages accepted.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress NGN-PS message accepted during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

RxNgnPsOffered

Measurement ID
18058

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection ingress NGN-PS messages offered.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress NGN-PS message offered during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

RxP0

Measurement ID
18038

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Connection ingress messages with priority 0.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message with priority 0 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

RxP1

Measurement ID
18039

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Connection ingress messages with priority 1.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message with priority 1 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

RxP2

Measurement ID
18040

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Connection ingress messages with priority 2.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message with priority 2 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

RxP3

Measurement ID
10152

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Connection ingress messages with priority 3.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message with priority 3 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

RxP4

Measurement ID
18062

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection ingress messages with priority 4.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message with priority 4 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

RxP5

Measurement ID
18346

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection ingress messages with priority 5.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 5 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

RxP6

Measurement ID
18347

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection ingress messages with priority 6.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 6 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

RxP7

Measurement ID
18348

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection ingress messages with priority 7.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 7 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

RxP8

Measurement ID
18349

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection ingress messages with priority 8.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 8 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

RxP9

Measurement ID
18350

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection ingress messages with priority 9.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 9 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

RxP10

Measurement ID
18351

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection ingress messages with priority 10.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 10 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

RxP11

Measurement ID
18352

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection ingress messages with priority 11.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 11 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

RxP12

Measurement ID
18353

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection ingress messages with priority 12.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 12 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

RxP13

Measurement ID
18354

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection ingress messages with priority 13.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 13 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

RxP14

Measurement ID
18355

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection ingress messages with priority 14.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 14 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

RxP15

Measurement ID
18356

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection ingress messages with priority 15.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 15 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

RxSctpChunkMp

Measurement ID
10516

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of SCTP data chunks received by the MP (excluding duplicates).

Collection Interval
5 min

Peg Condition
SCTP statistics polling.

Measurement Scope
Server Group

Recovery

1. No action required.

TmEcCL1

Measurement ID
10520

Measurement Group
Connection Performance

Measurement Type
Timer

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection timer for egress message rate in congestion level 1.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each millisecond the connection is in CL1.

Measurement Scope
Site

Recovery

1. No action required.

TmEcCL2

Measurement ID
10521

Measurement Group
Connection Performance

Measurement Type
Timer

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection timer for egress message rate in congestion level 2.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each millisecond the connection is in CL2.

Measurement Scope
Site

Recovery

1. No action required.

TmEcCL3

Measurement ID
10522

Measurement Group
Connection Performance

Measurement Type
Timer

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection timer for egress message rate in congestion level 3.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each millisecond the connection is in CL3.

Measurement Scope
Site

Recovery

1. No action required.

TmEcCL98

Measurement ID
10523

Measurement Group
Connection Performance

Measurement Type
Timer

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection timer for egress message rate in congestion level 98.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each millisecond the connection is in CL98.

Measurement Scope
Site

Recovery

1. No action required.

TxAll

Measurement ID
10100

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Connection egress messages (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
This measurement is incremented for each egress message during the Tx phase (routable and peer-to-peer).

Measurement Scope
Site

Recovery

1. No action required.

TxAllDrop

Measurement ID
18050

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Connection egress messages dropped (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
This measurement is incremented for each egress message dropped during the Tx phase (routable and peer-to-peer).

The associated reasons can be found in this table:

Layer	Event	Reason
CSL	EvFsmOpState	StateChange (TransportCongestion)
	EvTxException	ConnUnavailable
RCL	EvTxException	WriteFailure

Measurement Scope
Site

Recovery

1. No action required.

TxAllLenAvg

Measurement ID
18048

Measurement Group
Connection Performance

Measurement Type
Average

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection egress message length average (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
This measurement is updated for each egress message during the Tx phase (routable and peer-to-peer).

Measurement Scope
Site

Recovery

1. No action required.

TxAllLenPeak

Measurement ID
18049

Measurement Group
Connection Performance

Measurement Type
Max

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection egress message length peak (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
This measurement is updated for each egress message during the Tx phase (routable and peer-to-peer).

Measurement Scope
Site

Recovery

1. No action required.

TxConnTotalDataChunks

Measurement ID
10507

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of total data chunks sent on the SCTP connection.

Collection Interval
5 min

Peg Condition
When data chunks are transmitted on the SCTP connection.

Measurement Scope
Server Group

Recovery

1. No action required.

TxP0

Measurement ID
18038

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Connection ingress messages with priority 0.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each egress message with priority 0 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

TxP1

Measurement ID
18046

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Connection egress messages with priority 1.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each egress message with priority 1 during the Tx phase.

Measurement Scope
Site

Recovery

1. No action required.

TxP2

Measurement ID
18047

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Connection egress messages with priority 2.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each egress message with priority 2 during the Tx phase.

Measurement Scope
Site

Recovery

1. No action required.

TxP3

Measurement ID
10154

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Connection egress messages with priority 3.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each egress message with priority 3 during the Tx phase.

Measurement Scope
Site

Recovery

1. No action required.

TxP4

Measurement ID
18068

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection egress messages with priority 4.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each egress message with priority 4 during the Tx phase.

Measurement Scope
Site

Recovery

1. No action required.

TxP5

Measurement ID
18369

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection egress messages with priority 5.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each egress message with priority 5 during the Tx phase.

Measurement Scope
Site

Recovery

1. No action required.

TxP6

Measurement ID
18370

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection egress messages with priority 6.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each egress message with priority 6 during the Tx phase.

Measurement Scope
Site

Recovery

1. No action required.

TxP7

Measurement ID
18371

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection egress messages with priority 7.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each egress message with priority 7 during the Tx phase.

Measurement Scope
Site

Recovery

1. No action required.

TxP8

Measurement ID
18372

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection egress messages with priority 8.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each egress message with priority 8 during the Tx phase.

Measurement Scope
Site

Recovery

1. No action required.

TxP9

Measurement ID
18373

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection egress messages with priority 9.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each egress message with priority 9 during the Tx phase.

Measurement Scope
Site

Recovery

1. No action required.

TxP10

Measurement ID
18374

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection egress messages with priority 10.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each egress message with priority 10 during the Tx phase.

Measurement Scope
Site

Recovery

1. No action required.

TxP11

Measurement ID
18375

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection egress messages with priority 11.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each egress message with priority 11 during the Tx phase.

Measurement Scope
Site

Recovery

1. No action required.

TxP12

Measurement ID
18376

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection egress messages with priority 12.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each egress message with priority 12 during the Tx phase.

Measurement Scope
Site

Recovery

1. No action required.

TxP13

Measurement ID
18377

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection egress messages with priority 13.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each egress message with priority 13 during the Tx phase.

Measurement Scope
Site

Recovery

1. No action required.

TxP14

Measurement ID
18378

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection egress messages with priority 14.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each egress message with priority 14 during the Tx phase.

Measurement Scope
Site

Recovery

1. No action required.

TxP15

Measurement ID
18379

Measurement Group
Connection Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <Connection>

Description
The number of Connection egress messages with priority 15.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each egress message with priority 15 during the Tx phase.

Measurement Scope
Site

Recovery

1. No action required.

Connection Service measurements

EvException

Measurement ID
18007

Measurement Group
Connection Service

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection exception events.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each EvException event, regardless of event reason or throttling.

Measurement Scope
Site

Recovery

1. No action required.

EvFsmAdState

Measurement ID
18004

Measurement Group
Connection Service

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Connection FSM administrative state change events.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each EvFsmAdState event, regardless of event reason or throttling.

Measurement Scope
Site

Recovery

1. No action required.

EvFsmException

Measurement ID
18006

Measurement Group
Connection Service

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Connection FSM exception events.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each EvFsmException event, regardless of event reason or throttling.

Measurement Scope
Site

Recovery

1. No action required.

EvFsmOpState

Measurement ID
18005

Measurement Group
Connection Service

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Connection FSM operational state change events.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each EvFsmOpState event, regardless of event reason or throttling.

Measurement Scope
Site

Recovery

1. No action required.

TmFsmOpStateAvailable

Measurement ID
10150

Measurement Group
Connection Service

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection timer for operational state available.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each millisecond the connection is operationally available.

Measurement Scope
Site

Recovery

1. No action required.

TmFsmOpStateDegraded

Measurement ID
10183

Measurement Group
Connection Service

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection timer for operational state degraded.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each millisecond the connection is operationally degraded.

Measurement Scope
Site

Recovery

1. No action required.

TmFsmOpStateUnavailable

Measurement ID
10182

Measurement Group
Connection Service

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection timer for operational state unavailable.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each millisecond the connection is operationally unavailable.

Measurement Scope
Site

Recovery

1. No action required.

Connection Transport measurements

The Connection Transport measurement report contains measurements that provide performance information that is specific to the DCL at the connection level.

RxBufAvg

Measurement ID
10106

Measurement Group
Connection Transport

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection ingress buffer utilization average.

Collection Interval
5 min

Peg Condition
Output from Linux networking stack.

Measurement Scope
Site

Recovery

1. No action required.

RxBufPeak

Measurement ID
10107

Measurement Group
Connection Transport

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection ingress buffer utilization peak.

Collection Interval
5 min

Peg Condition
Output from Linux networking stack.

Measurement Scope
Site

Recovery

1. No action required.

RxOctets

Measurement ID
10105

Measurement Group
Connection Transport

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Connection ingress octets.

Collection Interval
5 min

Peg Condition
This measurement is updated for each ingress message during the Rx phase (routable and peer-to-peer).

Measurement Scope
Site

Recovery

1. No action required.

RxSctpChunk

Measurement ID
10516

Measurement Group
Connection Transport

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
SCTP total chunks on ingress.

Collection Interval
5 min

Peg Condition
Output from Linux networking stack.

Measurement Scope
Site

Recovery

1. No action required.

RxSctpDupTsn

Measurement ID
10504

Measurement Group
Connection Transport

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
SCTP duplicate TSNs on ingress.

Collection Interval
5 min

Peg Condition
Output from Linux networking stack.

Measurement Scope
Site

Recovery

1. No action required.

RxSctpGapAck

Measurement ID
10505

Measurement Group
Connection Transport

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
SCTP gap acknowledgement on ingress.

Collection Interval
5 min

Peg Condition
Output from Linux networking stack.

Measurement Scope
Site

Recovery

1. No action required.

RxTcpDupPkt

Measurement ID
10508

Measurement Group
Connection Transport

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
TCP duplicate packets on ingress.

Collection Interval
5 min

Peg Condition
Output from Linux networking stack.

Measurement Scope
Site

Recovery

1. No action required.

TxBufAvg

Measurement ID
10102

Measurement Group
Connection Transport

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection egress buffer utilization average.

Collection Interval
5 min

Peg Condition
Output from Linux networking stack.

Note: This measurement is not supported (always zero) for SCTP connections.

Measurement Scope
Site

Recovery

1. No action required.

TxBufPeak

Measurement ID
10103

Measurement Group
Connection Transport

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
Connection egress buffer utilization peak.

Collection Interval
5 min

Peg Condition
Output from Linux networking stack.

Note: This measurement is not supported (always zero) for SCTP connections.

Measurement Scope
Site

Recovery

1. No action required.

TxOctets

Measurement ID
10101

Measurement Group
Connection Transport

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Connection egress octets.

Collection Interval
5 min

Peg Condition
This measurement is updated for each egress message during the Tx phase (routable and peer-to-peer).

Measurement Scope
Site

Recovery

1. No action required.

TxSctpChunk

Measurement ID
10507

Measurement Group
Connection Transport

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
SCTP total chunks on egress.

Collection Interval
5 min

Peg Condition
Output from Linux networking stack.

Measurement Scope
Site

Recovery

1. No action required.

TxSctpRtxChunk

Measurement ID
10506

Measurement Group
Connection Transport

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
SCTP retransmitted chunks on egress.

Collection Interval
5 min

Peg Condition
Output from Linux networking stack.

Measurement Scope
Site

Recovery

1. No action required.

TxTcpRtxSeg

Measurement ID
10509

Measurement Group
Connection Transport

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
TCP retransmitted segments on egress.

Collection Interval
5 min

Peg Condition
Output from Linux networking stack.

Measurement Scope
Site

Recovery

1. No action required.

DA-MP Exception measurements

MpEvRxException

Measurement ID
18002

Measurement Group
DA-MP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress message processing exception events.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each MpEvRxException event, regardless of event reason or throttling.

Measurement Scope
Site

Recovery

1. No action required.

MpEvTxException

Measurement ID
18003

Measurement Group
DA-MP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP egress message processing exception events.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each MpEvTxException event, regardless of event reason or throttling.

Measurement Scope
Site

Recovery

1. No action required.

DA-MP Performance measurements

The DA-MP measurement report contains measurements that provide performance information that is specific to the DCL at the DA-MP level.

DclTxTaskQueueAvg

Measurement ID
10217

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
DCL egress task message queue utilization average.

Collection Interval
5 min

Peg Condition
Output measurement of the DclTxTaskQueue metric.

Measurement Scope
Site

Recovery

1. No action required.

DclTxTaskQueuePeak

Measurement ID
10216

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
DCL egress task message queue utilization peak.

Collection Interval
5 min

Peg Condition
Output measurement of the DclTxTaskQueue metric.

Measurement Scope
Site

Recovery

1. No action required.

MpCpuAvg

Measurement ID
10204

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
DA-MP average CPU utilization by Diameter process.

Collection Interval
5 min

Peg Condition
Output measurement of the dsr.Cpu metric.

Measurement Scope
Site

Recovery

1. No action required.

MpCpuCL1

Measurement ID
10285

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
DA-MP onset for CPU utilization in congestion level 1.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each onset of CL1.

Measurement Scope
Site

Recovery

1. No action required.

MpCpuCL2

Measurement ID
10287

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
DA-MP onset for CPU utilization in congestion level 2.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each onset of CL2.

Measurement Scope
Site

Recovery

1. No action required.

MpCpuCL3

Measurement ID
10289

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
DA-MP onset for CPU utilization in congestion level 3.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each onset of CL3.

Measurement Scope
Site

Recovery

1. No action required.

MpCpuPeak

Measurement ID
10203

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
DA-MP peak CPU utilization by Diameter process.

Collection Interval
5 min

Peg Condition
Output measurement of the dsr.Cpu metric.

Measurement Scope
Site

Recovery

1. No action required.

MpDiamAnsTimeAvg

Measurement ID
10198

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
Diameter answer message processing time average (ingress to egress).

Collection Interval
5 min

Peg Condition
Updated for each egress Diameter answer message during the Tx phase.

Measurement Scope
Site

Recovery

1. No action required.

MpDiamAnsTimePeak

Measurement ID
10199

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
Diameter answer message processing time peak (ingress to egress).

Collection Interval
5 min

Peg Condition
Updated for each egress Diameter answer message during the Tx phase.

Measurement Scope
Site

Recovery

1. No action required.

MpDiamMsgPoolAvg

Measurement ID
10209

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
DA-MP Diameter message pool utilization average.

Collection Interval
5 min

Peg Condition
Output measurement of the MpDiamMsgPool metric.

Measurement Scope
Site

Recovery

1. No action required.

MpDiamMsgPoolPeak

Measurement ID
10208

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
DA-MP Diameter message pool utilization peak.

Collection Interval
5 min

Peg Condition
Output measurement of the MpDiamMsgPool metric.

Measurement Scope
Site

Recovery

1. No action required.

MpDiamReqTimeAvg

Measurement ID
10196

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
Diameter request message processing time average (ingress to egress).

Collection Interval
5 min

Peg Condition
Updated for each egress Diameter request message during the Tx phase.

Measurement Scope
Site

Recovery

1. No action required.

MpDiamReqTimePeak

Measurement ID
10197

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
Diameter request message processing time peak (ingress to egress).

Collection Interval
5 min

Peg Condition
Updated for each egress Diameter request message during the Tx phase.

Measurement Scope
Site

Recovery

1. No action required.

MpErt

Measurement ID
18030

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP egress messages on routing egress.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each egress message during the Egress Routing phase.

Measurement Scope
Site

Recovery

1. No action required.

MpErtDrop

Measurement ID
18031

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP egress messages discarded or rejected by routing egress.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each egress message dropped during the Routing Egress phase.
The associated reasons can be found in this table:

Layer	Event	Reason
CSL	MpEvTxException	ConnUnknown

Layer	Event	Reason
	EvFsmOpState	StateChange (TransportCongestion)
	EvTxException	ConnUnavailable
DCL	MpEvTxException	DclTxTaskQueueCongested
	EvTxException	DclTxConnQueueCongested
		DtlsMsgOversized
RCL	MpEvTxException	RclTxTaskQueueCongested
		EtrPoolCongested
		RadiusMsgPoolCongested
		SharedSecretUnavailable
		RadiusIdPoolCongested
	EvTxException	MsgAttrLenUnsupported
		MsgTypeUnsupported
		MsgLenInvalid
		AnsOnClientConn
		ReqDuplicate

Measurement Scope
Site

Recovery

1. No action required.

Mpic

Measurement ID
18051

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress messages.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message during the Ingress Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MpIcDrop

Measurement ID
18018

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress messages discarded or rejected by ingress control.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message dropped during the Ingress Control phase.
The associated reasons can be found in this table:

Layer	Event	Reason
CSL	MpEvRxException	MaxMpsExceeded
	EvRxException	MaxMpsExceeded

Measurement Scope
Site

Recovery

1. No action required.

MpIcP0G

Measurement ID
18011

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress messages with priority 0 and color green.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message with priority 0 and color green during the Ingress Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MpIcP0Y

Measurement ID
18014

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress messages with priority 0 and color yellow.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message with priority 0 and color yellow during the Ingress Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MplcP1G

Measurement ID
18012

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress messages with priority 1 and color green.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message with priority 1 and color green during the Ingress Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MplcP1Y

Measurement ID
18015

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress messages with priority 1 and color yellow.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message with priority 1 and color yellow during the Ingress Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MpIcP2G

Measurement ID
18013

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress messages with priority 2 and color green.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message with priority 2 and color green during the Ingress Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MpIcP2Y

Measurement ID
18016

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress messages with priority 2 and color yellow.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message with priority 2 and color yellow during the Ingress Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MpIcP3G

Measurement ID
18017

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
DA-MP ingress messages with priority 3 and color green.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message with priority 3 and color green during the Ingress Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MpIcP3Y

Measurement ID
18056

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
DA-MP ingress messages with priority 3 and color yellow.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message with priority 3 and color yellow during the Ingress Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MplcP4G

Measurement ID
18055

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
DA-MP ingress messages with priority 4 and color green.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message with priority 4 and color green during the Ingress Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MplcP4Y

Measurement ID
18057

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
DA-MP ingress messages with priority 4 and color yellow.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message with priority 4 and color yellow during the Ingress Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MplcP5G

Measurement ID
18300

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages with priority 5 and color green.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 5 and color green during the Ingress Control phase

Measurement Scope
Site

Recovery

1. No action required.

MplcP5Y

Measurement ID
18311

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages with priority 5 and color yellow.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 5 and color yellow during the Ingress Control phase

Measurement Scope
Site

Recovery

1. No action required.

MplcP6G

Measurement ID
18301

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages with priority 6 and color green.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 6 and color green during the Ingress Control phase

Measurement Scope
Site

Recovery

1. No action required.

MpIcP6Y

Measurement ID
18312

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages with priority 6 and color yellow.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 6 and color yellow during the Ingress Control phase

Measurement Scope
Site

Recovery

1. No action required.

MpIcP7G

Measurement ID
18302

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages with priority 7 and color green.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 7 and color green during the Ingress Control phase

Measurement Scope
Site

Recovery

1. No action required.

MpIcP7Y

Measurement ID
18313

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages with priority 7 and color yellow.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 7 and color yellow during the Ingress Control phase

Measurement Scope
Site

Recovery

1. No action required.

MpIcP8G

Measurement ID
18303

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages with priority 8 and color green.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 8 and color green during the Ingress Control phase

Measurement Scope
Site

Recovery

1. No action required.

MplcP8Y

Measurement ID
18314

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages with priority 8 and color yellow.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 8 and color yellow during the Ingress Control phase

Measurement Scope
Site

Recovery

1. No action required.

MpIcP9G

Measurement ID
18304

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages with priority 9 and color green.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 9 and color green during the Ingress Control phase

Measurement Scope
Site

Recovery

1. No action required.

MpIcP9Y

Measurement ID
18315

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages with priority 9 and color yellow.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 9 and color yellow during the Ingress Control phase

Measurement Scope
Site

Recovery

1. No action required.

MplcP10G

Measurement ID
18305

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages with priority 10 and color green.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 10 and color green during the Ingress Control phase

Measurement Scope
Site

Recovery

1. No action required.

MplcP10Y

Measurement ID
18316

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages with priority 10 and color yellow.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 10 and color yellow during the Ingress Control phase

Measurement Scope
Site

Recovery

1. No action required.

MplcP11G

Measurement ID
18306

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages with priority 11 and color green.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 11 and color green during the Ingress Control phase

Measurement Scope
Site

Recovery

1. No action required.

MplcP11Y

Measurement ID
18317

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages with priority 11 and color yellow.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 11 and color yellow during the Ingress Control phase

Measurement Scope
Site

Recovery

1. No action required.

MplcP12G

Measurement ID
18307

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages with priority 12 and color green.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 12 and color green during the Ingress Control phase

Measurement Scope
Site

Recovery

1. No action required.

MplcP12Y

Measurement ID
18318

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages with priority 12 and color yellow.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 12 and color yellow during the Ingress Control phase

Measurement Scope
Site

Recovery

1. No action required.

MplcP13G

Measurement ID
18308

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages with priority 13 and color green.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 13 and color green during the Ingress Control phase

Measurement Scope
Site

Recovery

1. No action required.

MplcP13Y

Measurement ID
18319

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages with priority 13 and color yellow.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 13 and color yellow during the Ingress Control phase

Measurement Scope
Site

Recovery

1. No action required.

MplcP14G

Measurement ID
18309

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages with priority 14 and color green.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 14 and color green during the Ingress Control phase

Measurement Scope
Site

Recovery

1. No action required.

MpIcP14Y

Measurement ID
18320

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages with priority 14 and color yellow.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 14 and color yellow during the Ingress Control phase

Measurement Scope
Site

Recovery

1. No action required.

MpIcP15G

Measurement ID
18310

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages with priority 15 and color green.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 15 and color green during the Ingress Control phase

Measurement Scope
Site

Recovery

1. No action required.

MpIcP15Y

Measurement ID
18321

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages with priority 15 and color yellow.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message with priority 15 and color yellow during the Ingress Control phase

Measurement Scope
Site

Recovery

1. No action required.

MpIrt

Measurement ID
10247

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress messages on routing ingress.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message during the Routing Ingress phase.

Measurement Scope
Site

Recovery

1. No action required.

MpIrtDrop

Measurement ID
18029

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress messages discarded or rejected by routing ingress.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message dropped during the Routing Ingress phase.
The associated reasons can be found in this table:

Layer	Event	Reason
CSL	MpEvRx Exception	DiamMsgPoolCongested

Layer	Event	Reason
		SigEvPoolCongested
		DstMpUnknown
		DstMpCongested
		DrlReqQueueCongested
		DrlAnsQueueCongested
		ComAgentCongested
RCL	MpEvRx Exception	RadiusMsgPoolCongested
		RclRxTaskQueueCongested
		RclSigEvPoolCongested
		SharedSecretUnavailable
		ItrPoolCongested
	EvRxExceptio n	MsgAttrLenInvalid
		MsgAttrLenUnsupported
		AnsOrphaned
		AccessAuthMissing
		StatusAuthMissing
		MsgAuthInvalid
		ReqAuthInvalid
		AnsAuthInvalid
		MsgAttrAstUnsupported
		ReqDuplicate
		MsgTypeMissingMccs
		ConnUnavailable

Measurement Scope
Site

Recovery

1. No action required.

MpMemCL1

Measurement ID
14151

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
DA-MP onset for memory utilization in congestion level 1.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each onset of CL1.

Measurement Scope
Site

Recovery

1. No action required.

MpMemCL2

Measurement ID
14153

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
DA-MP onset for memory utilization in congestion level 2.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each onset of CL2.

Measurement Scope
Site

Recovery

1. No action required.

MpMemCL3

Measurement ID
14155

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
DA-MP onset for memory utilization in congestion level 3.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each onset of CL3.

Measurement Scope
Site

Recovery

1. No action required.

MpNgnPsXactionFailPeersAvg

Measurement ID
18076

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
DA-MP NGN-PS transaction failure rate by peers average.

Collection Interval
5 min

Peg Condition
Placeholder measurement of the MpNgnPsXactionFailPeers metric. This metric is the ratio of the number of non-2xx NGN-PS Answers received from Peer / Number of NGN-PS messages Accepted by DSR.

Measurement Scope
Site

Recovery

1. No action required.

MpNgnPsXactionPassAvg

Measurement ID
18075

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
DA-MP NGN-PS transaction success rate average.

Collection Interval
5 min

Peg Condition
Placeholder measurement of the MpNgnPsXactionPass metric. This metric is the ratio of the number of 2xx NGN-PS Answers sent to Peer/Number of NGN-PS messages Accepted by DSR.

Measurement Scope
Site

Recovery

1. No action required.

MpIc

Measurement ID
18079

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP messages offered to overload control

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message during the Overload Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MpOcDrop

Measurement ID
18052

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress messages discarded or rejected by overload control.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message dropped during the Overload Control phase.
The associated reasons can be found in this table:

Layer	Event	Reason
CSL	MpEvRxException	CpuCongested
	MpEvRxException	MaxMpsExceeded

Measurement Scope
Site

Recovery

1. No action required.

MpOcDropP0G

Measurement ID
10276

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress messages discarded or rejected by overload control with priority 0 and color green.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message dropped with priority 0 and color green during the Overload Control phase.
The associated reasons can be found in this table:

Layer	Event	Reason
CSL	MpEvRxException	CpuCongested
	MpEvRxException	MaxMpsExceeded

Measurement Scope
Site

Recovery

1. No action required.

MpOcDropP0Y

Measurement ID
10277

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress messages discarded or rejected by overload control with priority 0 and color yellow.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message dropped with priority 0 and color yellow during the Overload Control phase.
The associated reasons can be found in this table:

Layer	Event	Reason
CSL	MpEvRxException	CpuCongested
	MpEvRxException	MaxMpsExceeded

Measurement Scope
Site

Recovery

1. No action required.

MpOcDropP1G

Measurement ID
10278

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress messages discarded or rejected by overload control with priority 1 and color green.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message dropped with priority 1 and color green during the Overload Control phase.
The associated reasons can be found in this table:

Layer	Event	Reason
CSL	MpEvRxException	CpuCongested
	MpEvRxException	MaxMpsExceeded

Measurement Scope
Site

Recovery

1. No action required.

MpOcDropP1Y

Measurement ID
10279

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress messages discarded or rejected by overload control with priority 1 and color yellow.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message dropped with priority 1 and color yellow during the Overload Control phase.
The associated reasons can be found in this table:

Layer	Event	Reason
CSL	MpEvRxException	CpuCongested
	MpEvRxException	MaxMpsExceeded

Measurement Scope
Site

Recovery

1. No action required.

MpOcDropP2G

Measurement ID
10280

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress messages discarded or rejected by overload control with priority 2 and color green.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message dropped with priority 2 and color green during the Overload Control phase.
The associated reasons can be found in this table:

Layer	Event	Reason
CSL	MpEvRxException	CpuCongested
	MpEvRxException	MaxMpsExceeded

Measurement Scope
Site

Recovery

1. No action required.

MpOcDropP2Y

Measurement ID
10281

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress messages discarded or rejected by overload control with priority 2 and color yellow.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message dropped with priority 2 and color yellow during the Overload Control phase.
The associated reasons can be found in this table:

Layer	Event	Reason
CSL	MpEvRxException	CpuCongested

Layer	Event	Reason
	MpEvRxException	MaxMpsExceeded

Measurement Scope
Site

Recovery

1. No action required.

MpOcDropP3G

Measurement ID
18077

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress messages discarded or rejected by overload control with priority 3 and color green.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message dropped with priority 3 and color green during the Overload Control phase.
The associated reasons can be found in this table:

Layer	Event	Reason
CSL	MpEvRxException	CpuCongested
	MpEvRxException	MaxMpsExceeded

Measurement Scope
Site

Recovery

1. No action required.

MpOcDropP3Y

Measurement ID
18078

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress messages discarded or rejected by overload control with priority 3 and color yellow.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message dropped with priority 3 and color yellow during the Overload Control phase.
The associated reasons can be found in this table:

Layer	Event	Reason
CSL	MpEvRxException	CpuCongested
	MpEvRxException	MaxMpsExceeded

Measurement Scope
Site

Recovery

1. No action required.

MpOcDropP4G

Measurement ID
18322

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages discarded or rejected by overload control with priority 4 and color green

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped with priority 4 and color green during the Overload Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MpOcDropP4Y

Measurement ID
18334

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages discarded or rejected by overload control with priority 4 and color yellow.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped with priority 4 and color green during the Overload Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MpOcDropP5G

Measurement ID
18323

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages discarded or rejected by overload control with priority 5 and color green

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped with priority 5 and color green during the Overload Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MpOcDropP5Y

Measurement ID
18335

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages discarded or rejected by overload control with priority 5 and color yellow.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped with priority 5 and color yellow during the Overload Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MpOcDropP6G

Measurement ID
18324

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages discarded or rejected by overload control with priority 6 and color green

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped with priority 6 and color green during the Overload Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MpOcDropP6Y

Measurement ID
18336

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages discarded or rejected by overload control with priority 6 and color yellow.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped with priority 6 and color yellow during the Overload Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MpOcDropP7G

Measurement ID
18325

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages discarded or rejected by overload control with priority 7 and color green

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped with priority 7 and color green during the Overload Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MpOcDropP7Y

Measurement ID
18337

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages discarded or rejected by overload control with priority 7 and color yellow.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped with priority 7 and color yellow during the Overload Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MpOcDropP8G

Measurement ID
18326

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages discarded or rejected by overload control with priority 8 and color green

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped with priority 8 and color green during the Overload Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MpOcDropP8Y

Measurement ID
18338

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages discarded or rejected by overload control with priority 8 and color yellow.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped with priority 8 and color yellow during the Overload Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MpOcDropP9G

Measurement ID
18327

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages discarded or rejected by overload control with priority 9 and color green

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped with priority 9 and color green during the Overload Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MpOcDropP9Y

Measurement ID
18339

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages discarded or rejected by overload control with priority 9 and color yellow.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped with priority 9 and color yellow during the Overload Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MpOcDropP10G

Measurement ID
18328

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages discarded or rejected by overload control with priority 10 and color green

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped with priority 10 and color green during the Overload Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MpOcDropP10Y

Measurement ID
18340

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages discarded or rejected by overload control with priority 10 and color yellow.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped with priority 10 and color yellow during the Overload Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MpOcDropP11G

Measurement ID
18329

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages discarded or rejected by overload control with priority 11 and color green

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped with priority 11 and color green during the Overload Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MpOcDropP11Y

Measurement ID
18341

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages discarded or rejected by overload control with priority 11 and color yellow.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped with priority 11 and color yellow during the Overload Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MpOcDropP12G

Measurement ID
18330

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages discarded or rejected by overload control with priority 12 and color green

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped with priority 12 and color green during the Overload Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MpOcDropP12Y

Measurement ID
18342

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages discarded or rejected by overload control with priority 12 and color yellow.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped with priority 12 and color yellow during the Overload Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MpOcDropP13G

Measurement ID
18331

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages discarded or rejected by overload control with priority 13 and color green

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped with priority 13 and color green during the Overload Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MpOcDropP13Y

Measurement ID
18343

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages discarded or rejected by overload control with priority 13 and color yellow.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped with priority 13 and color yellow during the Overload Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MpOcDropP14G

Measurement ID
18332

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages discarded or rejected by overload control with priority 14 and color green

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped with priority 14 and color green during the Overload Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MpOcDropP14Y

Measurement ID
18344

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages discarded or rejected by overload control with priority 14 and color yellow.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped with priority 14 and color yellow during the Overload Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MpOcDropP15G

Measurement ID
18333

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages discarded or rejected by overload control with priority 15 and color green

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped with priority 15 and color green during the Overload Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MpOcDropP15Y

Measurement ID
18345

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress messages discarded or rejected by overload control with priority 15 and color yellow.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message dropped with priority 15 and color yellow during the Overload Control phase.

Measurement Scope
Site

Recovery

1. No action required.

MpOcRateAvgP0

Measurement ID
18019

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
DA-MP ingress message rate average offered to overload control with priority 0.

Collection Interval
5 min

Peg Condition
Output measurement of the MpOcRateP0 metric.

Measurement Scope
Site

Recovery

1. No action required.

MpOcRateAvgP0G

Measurement ID
18023

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
DA-MP ingress message rate average offered to overload control with priority 0 and color green.

Collection Interval
5 min

Peg Condition
Output measurement of the MpOcRateP0G metric.

Measurement Scope
Site

Recovery

1. No action required.

MpOcRateAvgP0Y

Measurement ID
18026

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
DA-MP ingress message rate average offered to overload control with priority 0 and color yellow.

Collection Interval
5 min

Peg Condition
Output measurement of the MpOcRateP0Y metric.

Measurement Scope
Site

Recovery

1. No action required.

MpOcRateAvgP1

Measurement ID
18020

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
DA-MP ingress message rate average offered to overload control with priority 1.

Collection Interval
5 min

Peg Condition
Output measurement of the MpOcRateP1 metric.

Measurement Scope
Site

Recovery

1. No action required.

MpOcRateAvgP1G

Measurement ID
18024

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
DA-MP ingress message rate average offered to overload control with priority 1 and color green.

Collection Interval
5 min

Peg Condition
Output measurement of the MpOcRateP1G metric.

Measurement Scope
Site

Recovery

1. No action required.

MpOcRateAvgP1Y

Measurement ID
18027

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
DA-MP ingress message rate average offered to overload control with priority 1 and color yellow.

Collection Interval
5 min

Peg Condition
Output measurement of the MpOcRateP1Y metric.

Measurement Scope
Site

Recovery

1. No action required.

MpOcRateAvgP2

Measurement ID
18021

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
DA-MP ingress message rate average offered to overload control with priority 2.

Collection Interval
5 min

Peg Condition
Output measurement of the MpOcRateP2 metric.

Measurement Scope
Site

Recovery

1. No action required.

MpOcRateAvgP2G

Measurement ID
18025

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
DA-MP ingress message rate average offered to overload control with priority 2 and color green.

Collection Interval
5 min

Peg Condition
Output measurement of the MpOcRateP2G metric.

Measurement Scope
Site

Recovery

1. No action required.

MpOcRateAvgP2Y

Measurement ID
18028

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
DA-MP ingress message rate average offered to overload control with priority 2 and color yellow.

Collection Interval
5 min

Peg Condition
Output measurement of the MpOcRateP2Y metric.

Measurement Scope
Site

Recovery

1. No action required.

MpOcRateAvgP3

Measurement ID
18022

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
DA-MP ingress message rate average offered to overload control with priority 3.

Collection Interval
5 min

Peg Condition
Output measurement of the MpOcRateP3 metric.

Measurement Scope
Site

Recovery

1. No action required.

MpOcRatePeakP0

Measurement ID
10266

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
DA-MP ingress message rate peak offered to overload control with priority 0.

Collection Interval
5 min

Peg Condition
Output measurement of the MpOcRateP0 metric.

Measurement Scope
Site

Recovery

1. No action required.

MpOcRatePeakP0G

Measurement ID
10267

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
DA-MP ingress message rate peak offered to overload control with priority 0 and color green.

Collection Interval
5 min

Peg Condition
Output measurement of the MpOcRateP0G metric.

Measurement Scope
Site

Recovery

1. No action required.

MpOcRatePeakP0Y

Measurement ID
10268

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
DA-MP ingress message rate peak offered to overload control with priority 0 and color yellow.

Collection Interval
5 min

Peg Condition
Output measurement of the MpOcRateP0Y metric.

Measurement Scope
Site

Recovery

1. No action required.

MpOcRatePeakP1

Measurement ID
10269

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
DA-MP ingress message rate peak offered to overload control with priority 1.

Collection Interval
5 min

Peg Condition
Output measurement of the MpOcRateP1 metric.

Measurement Scope
Site

Recovery

1. No action required.

MpOcRatePeakP1G

Measurement ID
10270

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
DA-MP ingress message rate peak offered to overload control with priority 1 and color green.

Collection Interval
5 min

Peg Condition
Output measurement of the MpOcRateP1G metric.

Measurement Scope
Site

Recovery

1. No action required.

MpOcRatePeakP1Y

Measurement ID
10271

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
DA-MP ingress message rate peak offered to overload control with priority 1 and color yellow.

Collection Interval
5 min

Peg Condition
Output measurement of the MpOcRateP1Y metric.

Measurement Scope
Site

Recovery

1. No action required.

MpOcRatePeakP2

Measurement ID
10272

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
DA-MP ingress message rate peak offered to overload control with priority 2.

Collection Interval
5 min

Peg Condition
Output measurement of the MpOcRateP2 metric.

Measurement Scope
Site

Recovery

1. No action required.

MpOcRatePeakP2G

Measurement ID
10273

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
DA-MP ingress message rate peak offered to overload control with priority 2 and color green.

Collection Interval
5 min

Peg Condition
Output measurement of the MpOcRateP2G metric.

Measurement Scope
Site

Recovery

1. No action required.

MpOcRatePeakP2Y

Measurement ID
10274

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
DA-MP ingress message rate peak offered to overload control with priority 2 and color yellow.

Collection Interval
5 min

Peg Condition
Output measurement of the MpOcRateP2Y metric.

Measurement Scope
Site

Recovery

1. No action required.

MpOcRatePeakP3

Measurement ID
10275

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
DA-MP ingress message rate peak offered to overload control with priority 3.

Collection Interval
5 min

Peg Condition
Output measurement of the MpOcRateP3 metric.

Measurement Scope
Site

Recovery

1. No action required.

MpRadiusAnsTimeAvg

Measurement ID
18226

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
RADIUS answer message processing time average (ingress to egress).

Collection Interval
5 min

Peg Condition
This measurement is pegged when a routable RADIUS Response message is sent to a RADIUS Peer Node on a connection.
The DSR holding time starts when a Signaling-Data Stack Event is initially allocated for the message and the stop time occurs when the message is sent on a socket.

Measurement Scope
Site

Recovery

1. No action required.

MpRadiusAnsTimePeak

Measurement ID
18227

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
RADIUS answer message processing time peak (ingress to egress).

Collection Interval
5 min

Peg Condition
This measurement is pegged when the hold time of a routable RADIUS Response message sent to a RADIUS Peer Node on a connection is larger than any other message sent to a RADIUS Peer Node hold time during the reporting interval.
The DSR holding time starts when a Signaling-Data Stack Event is initially allocated for the message and the stop time occurs when the message is sent on a socket.

Measurement Scope
Site

Recovery

1. No action required.

MpRadiusMsgPoolAvg

Measurement ID
18228

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
DA-MP RADIUS message pool utilization average.

Collection Interval
5 min

Peg Condition
The average of all RADIUS PDU Buffer Pool utilization samples taken during the collection interval.

Measurement Scope
Site

Recovery

1. No action required.

MpRadiusMsgPoolPeak

Measurement ID
18229

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
DA-MP RADIUS message pool utilization peak.

Collection Interval
5 min

Peg Condition
The maximum RADIUS PDU Buffer Pool utilization sample taken during the collection interval.

Measurement Scope
Site

Recovery

1. No action required.

MpRadiusReqTimeAvg

Measurement ID
18224

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
RADIUS request message processing time average (ingress to egress).

Collection Interval
5 min

Peg Condition
This measurement is pegged when a routable RADIUS Request message is sent to a RADIUS Peer Node on a connection. The DSR holding time starts when a Signaling-Data Stack Event is initially allocated for the message and the stop time occurs when the message is sent on a socket.

Measurement Scope
Site

Recovery

1. No action required.

MpRadiusReqTimePeak

Measurement ID
18225

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
RADIUS request message processing time peak (ingress to egress).

Collection Interval
5 min

Peg Condition
This measurement is pegged when the hold time of a routable RADIUS Request message sent to a RADIUS Peer Node on a connection is larger than any other message sent to a RADIUS Peer Node hold time during the reporting interval. The DSR holding time starts when a Signaling-Data Stack Event is initially allocated for the message and the stop time occurs when the message is sent on a socket.

Measurement Scope
Site

Recovery

1. No action required.

MpRxAll

Measurement ID
10244

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress messages (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message during the Rx phase (routable and peer-to-peer).

Measurement Scope
Site

Recovery

1. No action required.

MpRxAllDrop

Measurement ID
18010

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress messages dropped (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress message dropped during the Rx phase (routable and peer-to-peer).
The associated reasons can be found in this table:

Layer	Event	Reason
DCL	EvRxException	MsgInvalid
RCL	MpEvRxException	MsgMalformed
		PeerUnknown
		RadiusMsgPoolCongested

Measurement Scope
Site

Recovery

1. No action required.

MpRxAllRateAvg

Measurement ID
10202

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
DA-MP ingress message rate average (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
Output measurement of the MpRxAllRate metric.

Measurement Scope
Site

Recovery

1. No action required.

MpRxAllRatePeak

Measurement ID
10201

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
DA-MP ingress message rate peak (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
Output measurement of the MpRxAllRate metric.

Measurement Scope
Site

Recovery

1. No action required.

MpRxDiamAll

Measurement ID
18100

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
DA-MP ingress Diameter messages (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
Incremented for each ingress Diameter message during the Rx phase (routable and peer-to-peer).

Measurement Scope
Site

Recovery

1. No action required.

MpRxDiamAllLen

Measurement ID
10135

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Bucket)

Description
DA-MP ingress Diameter message length (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
Updated for each ingress Diameter message during the Rx phase (routable and peer-to-peer).

Measurement Scope
Site

Recovery

1. No action required.

MpRxDiamAllLenAvg

Measurement ID
10133

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
DA-MP ingress Diameter message length (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
Updated for each ingress Diameter message during the Rx phase (routable and peer-to-peer).

Measurement Scope
Site

Recovery

1. No action required.

MpRxDiamAllLenPeak

Measurement ID
10134

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
DA-MP ingress Diameter message length (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
Updated for each ingress Diameter message during the Rx phase (routable and peer-to-peer).

Measurement Scope
Site

Recovery

1. No action required.

MpRxDiamAllRateAvg

Measurement ID
18101

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
DA-MP ingress Diameter message rate average (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
Output measurement of the MpRxDiamAllRate metric.

Measurement Scope
Site

Recovery

1. No action required.

MpRxDiamAllRatePeak

Measurement ID
18102

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
DA-MP ingress Diameter message rate peak (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
Output measurement of the MpRxDiamAllRate metric.

Measurement Scope
Site

Recovery

1. No action required.

MpRxDiamP0

Measurement ID
18103

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
DA-MP ingress Diameter messages with priority 0.

Collection Interval
5 min

Peg Condition
Incremented for each ingress Diameter message with priority 0 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

MpRxDiamP1

Measurement ID
18104

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
DA-MP ingress Diameter messages with priority 1.

Collection Interval
5 min

Peg Condition
Incremented for each ingress Diameter message with priority 1 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

MpRxDiamP2

Measurement ID
18105

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
DA-MP ingress Diameter messages with priority 2.

Collection Interval
5 min

Peg Condition
Incremented for each ingress Diameter message with priority 2 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

MpRxDiamP3

Measurement ID
10132

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
DA-MP ingress Diameter messages with priority 3.

Collection Interval
5 min

Peg Condition
Incremented for each ingress Diameter message with priority 3 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

MpRxDiamP4

Measurement ID
18112

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
DA-MP ingress Diameter messages with priority 4.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress Diameter message with priority 4 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

MpRxDiamP5

Measurement ID
18114

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress Diameter messages with priority 5.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress Diameter message with priority 5 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

MpRxDiamP6

Measurement ID
18115

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress Diameter messages with priority 6.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress Diameter message with priority 6 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

MpRxDiamP7

Measurement ID
18116

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress Diameter messages with priority 7.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress Diameter message with priority 7 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

MpRxDiamP8

Measurement ID
18117

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress Diameter messages with priority 8.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress Diameter message with priority 8 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

MpRxDiamP9

Measurement ID
18118

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress Diameter messages with priority 9.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress Diameter message with priority 9 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

MpRxDiamP10

Measurement ID
18119

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress Diameter messages with priority 10.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress Diameter message with priority 10 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

MpRxDiamP11

Measurement ID
18120

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress Diameter messages with priority 11.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress Diameter message with priority 11 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

MpRxDiamP12

Measurement ID
18121

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress Diameter messages with priority 12.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress Diameter message with priority 12 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

MpRxDiamP13

Measurement ID
18122

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress Diameter messages with priority 13.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress Diameter message with priority 13 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

MpRxDiamP14

Measurement ID
18123

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress Diameter messages with priority 14.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress Diameter message with priority 14 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

MpRxDiamP15

Measurement ID
18124

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP ingress Diameter messages with priority 15.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress Diameter message with priority 15 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

MpRxNgnPsAccepted

Measurement ID
18072

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
DA-MP ingress NGN-PS messages accepted.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each ingress NGN-PS message accepted during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

MpRxNgnPsAcceptedRateAvg

Measurement ID
18073

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
DA-MP ingress NGN-PS messages accepted rate average.

Collection Interval
5 min

Peg Condition
Output measurement of the MpRxNgnPsAcceptedRate metric.

Measurement Scope
Site

Recovery

1. No action required.

MpRxNgnPsAcceptedRatePeak

Measurement ID
18074

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Arrayed (by DA-MP)

Description
DA-MP ingress NGN-PS messages accepted rate peak.

Collection Interval
5 min

Peg Condition
Output measurement of the MpRxNgnPsAcceptedRate metric.

Measurement Scope
Site

Recovery

1. No action required.

MpRxNgnPsOffered

Measurement ID
18069

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
DA-MP ingress NGN-PS messages offered.

Collection Interval
5 min

Peg Condition
Incremented for each ingress NGN-PS message offered during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

MpRxNgnPsOfferedRateAvg

Measurement ID
18070

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
DA-MP ingress NGN-PS messages offered rate average.

Collection Interval
5 min

Peg Condition
Output measurement of the MpRxNgnPsOfferedRate metric.

Measurement Scope
Site

Recovery

1. No action required.

MpRxNgnPsOfferedRatePeak

Measurement ID
18071

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Arrayed (by DA-MP)

Description
DA-MP ingress NGN-PS messages offered rate peak.

Collection Interval
5 min

Peg Condition
Output measurement of the MpRxNgnPsOfferedRate metric.

Measurement Scope
Site

Recovery

1. No action required.

MpRxRadiusAll

Measurement ID
18200

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress RADIUS messages (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message is received from a RADIUS Peer Node on a connection.

Measurement Scope
Site

Recovery

1. No action required.

MpRxRadiusAllLen

Measurement ID
18203

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Bucket ID)

Description
DA-MP ingress RADIUS message length (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
This measurement is pegged immediately after reading a RADIUS message from a RADIUS connection socket and prior to any further processing.

Note: Each bucket in the array contains the number of PDUs whose RADIUS payload octets fell within the bucket's range during the measurement period.
[0] = less than 512 octets

[1] = 512 to 1023 octets

[2] = 1024 to 1535 octets

[3] = 1536 to 2047 octets

[4] = 2048 to 2559 octets

[5] = 2560 to 3071 octets

[6] = 3072 to 3583 octets

[7] = 3584 to 4096 octets

Measurement Scope
Site

Recovery

1. No action required.

MpRxRadiusAllLenAvg

Measurement ID
18204

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
DA-MP ingress RADIUS message length average (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
This measurement is pegged immediately after reading a RADIUS message from a RADIUS connection socket and prior to any further processing.

Measurement Scope
Site

Recovery

1. No action required.

MpRxRadiusAllLenPeak

Measurement ID
18205

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
DA-MP ingress RADIUS message length peak (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
This measurement is pegged immediately after reading a RADIUS message from a RADIUS connection socket and prior to any further processing. The measurement is pegged when the size of the RADIUS message received from any RADIUS Peer Node on a connection is larger than any other message received from any RADIUS Peer Node during the reporting interval.

Measurement Scope
Site

Recovery

1. No action required.

MpRxRadiusAllRateAvg

Measurement ID
18201

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
DA-MP ingress RADIUS message rate average (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
Output measurement of the MpRxRadiusAllRate metric.

Measurement Scope
Site

Recovery

1. No action required.

MpRxRadiusAllRatePeak

Measurement ID
18202

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
DA-MP ingress RADIUS message rate peak (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
Output measurement of the MpRxRadiusAllRate metric.

Measurement Scope
Site

Recovery

1. No action required.

MpRxRadiusP0

Measurement ID
18206

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress RADIUS messages with priority 0.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message is received from any RADIUS Peer Node on a connection which is assigned a priority of 0.

Measurement Scope
Site

Recovery

1. No action required.

MpRxRadiusP1

Measurement ID
18207

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress RADIUS messages with priority 1.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message is received from any RADIUS Peer Node on a connection which is assigned a priority of 1.

Measurement Scope
Site

Recovery

1. No action required.

MpRxRadiusP2

Measurement ID
18208

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress RADIUS messages with priority 2.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message is received from any RADIUS Peer Node on a connection which is assigned a priority of 2.

Measurement Scope
Site

Recovery

1. No action required.

MpRxRadiusP3

Measurement ID
18209

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress RADIUS messages with priority 3.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message is received from any RADIUS Peer Node on a connection which is assigned a priority of 3.

Measurement Scope
Site

Recovery

1. No action required.

MpRxRadiusP3

Measurement ID
18209

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress RADIUS messages with priority 3.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message is received from any RADIUS Peer Node on a connection which is assigned a priority of 3.

Measurement Scope
Site

Recovery

1. No action required.

MpRxRadiusP4

Measurement ID
18237

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress RADIUS messages with priority 4.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message is received from any RADIUS Peer Node on a connection which is assigned a priority of 4.

Measurement Scope
Site

Recovery

1. No action required.

MpRxRadiusP5

Measurement ID
18238

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress RADIUS messages with priority 5.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message is received from any RADIUS Peer Node on a connection which is assigned a priority of 5.

Measurement Scope
Site

Recovery

1. No action required.

MpRxRadiusP6

Measurement ID
18239

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress RADIUS messages with priority 6.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message is received from any RADIUS Peer Node on a connection which is assigned a priority of 6.

Measurement Scope
Site

Recovery

1. No action required.

MpRxRadiusP7

Measurement ID
18240

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress RADIUS messages with priority 7.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message is received from any RADIUS Peer Node on a connection which is assigned a priority of 7.

Measurement Scope
Site

Recovery

1. No action required.

MpRxRadiusP8

Measurement ID
18241

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress RADIUS messages with priority 8.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message is received from any RADIUS Peer Node on a connection which is assigned a priority of 8.

Measurement Scope
Site

Recovery

1. No action required.

MpRxRadiusP9

Measurement ID
18242

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress RADIUS messages with priority 9.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message is received from any RADIUS Peer Node on a connection which is assigned a priority of 9.

Measurement Scope
Site

Recovery

1. No action required.

MpRxRadiusP10

Measurement ID
18243

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress RADIUS messages with priority 10.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message is received from any RADIUS Peer Node on a connection which is assigned a priority of 10.

Measurement Scope
Site

Recovery

1. No action required.

MpRxRadiusP11

Measurement ID
18244

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress RADIUS messages with priority 11.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message is received from any RADIUS Peer Node on a connection which is assigned a priority of 11.

Measurement Scope
Site

Recovery

1. No action required.

MpRxRadiusP12

Measurement ID
18245

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress RADIUS messages with priority 12.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message is received from any RADIUS Peer Node on a connection which is assigned a priority of 12.

Measurement Scope
Site

Recovery

1. No action required.

MpRxRadiusP13

Measurement ID
18246

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress RADIUS messages with priority 13.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message is received from any RADIUS Peer Node on a connection which is assigned a priority of 13.

Measurement Scope
Site

Recovery

1. No action required.

MpRxRadiusP14

Measurement ID
18247

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress RADIUS messages with priority 14.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message is received from any RADIUS Peer Node on a connection which is assigned a priority of 14.

Measurement Scope
Site

Recovery

1. No action required.

MpRxRadiusP15

Measurement ID
18248

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP ingress RADIUS messages with priority 15.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message is received from any RADIUS Peer Node on a connection which is assigned a priority of 15.

Measurement Scope
Site

Recovery

1. No action required.

MpTxAll

Measurement ID
18032

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP egress messages (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
This measurement is incremented for each egress message during the Tx phase (routable and peer-to-peer).

Measurement Scope
Site

Recovery

1. No action required.

MpTxAllDrop

Measurement ID
18035

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP egress messages dropped (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
This measurement is incremented for each egress message dropped during the Tx phase (routable and peer-to-peer).
The associated reasons can be found in this table:

Layer	Event	Reason
CSL	EvFsmOpState	StateChange (TransportCongestion)
	EvTxException	ConnUnavailable
RCL	EvTxException	WriteFailure

Measurement Scope
Site

Recovery

1. No action required.

MpTxAllRateAvg

Measurement ID
18033

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
DA-MP egress message rate average (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
Output measurement of the MpTxAllRate metric.

Measurement Scope
Site

Recovery

1. No action required.

MpTxAllRatePeak

Measurement ID
18034

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
DA-MP egress message rate peak (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
Output measurement of the MpTxAllRate metric.

Measurement Scope
Site

Recovery

1. No action required.

MpTxDiamAll

Measurement ID
18109

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
DA-MP egress Diameter messages (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
Incremented for each egress Diameter message during the Tx phase (routable and peer-to-peer).

Measurement Scope
Site

Recovery

1. No action required.

MpTxDiamAllLen

Measurement ID
10140

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Bucket)

Description
DA-MP egress Diameter message length (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
Updated for each egress Diameter message during the Tx phase (routable and peer-to-peer).

Measurement Scope
Site

Recovery

1. No action required.

MpTxDiamAllLenAvg

Measurement ID
10138

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
DA-MP egress Diameter message length (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
Updated for each egress Diameter message during the Tx phase (routable and peer-to-peer).

Measurement Scope
Site

Recovery

1. No action required.

MpTxDiamAllLenPeak

Measurement ID
10139

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
DA-MP egress Diameter message length peak (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
Updated for each egress Diameter message during the Tx phase (routable and peer-to-peer).

Measurement Scope
Site

Recovery

1. No action required.

MpTxDiamAllRateAvg

Measurement ID
18110

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
DA-MP egress Diameter message rate average (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
Output measurement of the MpTxDiamAllRate metric.

Measurement Scope
Site

Recovery

1. No action required.

MpTxDiamAllRatePeak

Measurement ID
18111

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
DA-MP egress Diameter message rate peak (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
Output measurement of the MpTxDiamAllRate metric.

Measurement Scope
Site

Recovery

1. No action required.

MpTxDiamP0

Measurement ID
18106

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
DA-MP egress Diameter messages with priority 0.

Collection Interval
5 min

Peg Condition
Incremented for each egress Diameter message with priority 0 during the Tx phase.

Measurement Scope
Site

Recovery

1. No action required.

MpTxDiamP1

Measurement ID
18107

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
DA-MP egress Diameter messages with priority 1.

Collection Interval
5 min

Peg Condition
Incremented for each egress Diameter message with priority 1 during the Tx phase.

Measurement Scope
Site

Recovery

1. No action required.

MpTxDiamP2

Measurement ID
18108

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
DA-MP egress Diameter messages with priority 2.

Collection Interval
5 min

Peg Condition
Incremented for each egress Diameter message with priority 2 during the Tx phase.

Measurement Scope
Site

Recovery

1. No action required.

MpTxDiamP3

Measurement ID
10137

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
DA-MP egress Diameter messages with priority 3.

Collection Interval
5 min

Peg Condition
Incremented for each egress Diameter message with priority 3 during the Tx phase.

Measurement Scope
Site

Recovery

1. No action required.

MpTxDiamP4

Measurement ID
18113

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
DA-MP egress Diameter messages with priority 4.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each egress Diameter message with priority 4 during the Tx phase.

Measurement Scope
Site

Recovery

1. No action required.

MpTxDiamP5

Measurement ID
18125

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP egress Diameter messages with priority 5.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each egress Diameter message with priority 5 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

MpTxDiamP6

Measurement ID
18126

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP egress Diameter messages with priority 6.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each egress Diameter message with priority 6 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

MpTxDiamP7

Measurement ID
18127

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP egress Diameter messages with priority 7.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each egress Diameter message with priority 7 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

MpTxDiamP8

Measurement ID
18128

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP egress Diameter messages with priority 8.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each egress Diameter message with priority 8 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

MpTxDiamP9

Measurement ID
18129

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP egress Diameter messages with priority 9.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each egress Diameter message with priority 9 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

MpTxDiamP10

Measurement ID
18130

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP egress Diameter messages with priority 10.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each egress Diameter message with priority 10 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

MpTxDiamP11

Measurement ID
18131

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP egress Diameter messages with priority 11.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each egress Diameter message with priority 11 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

MpTxDiamP12

Measurement ID
18132

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP egress Diameter messages with priority 12.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each egress Diameter message with priority 12 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

MpTxDiamP13

Measurement ID
18133

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP egress Diameter messages with priority 13.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each egress Diameter message with priority 13 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

MpTxDiamP14

Measurement ID
18134

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP egress Diameter messages with priority 14.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each egress Diameter message with priority 14 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

MpTxDiamP15

Measurement ID
18135

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single by <DA-MP>

Description
The number of DA-MP egress Diameter messages with priority 15.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each egress Diameter message with priority 15 during the Message Priority phase.

Measurement Scope
Site

Recovery

1. No action required.

MpTxRadiusAll

Measurement ID
18218

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP egress RADIUS messages (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message is sent to a RADIUS Peer Node on a connection.

Measurement Scope
Site

Recovery

1. No action required.

MpTxRadiusAllLen

Measurement ID
18221

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Bucket ID)

Description
DA-MP ingress RADIUS message length (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
This measurement is pegged when a routable RADIUS message is sent to any RADIUS Peer Node on a connection.

Note: Each bucket in the array contains the number of PDUs whose RADIUS payload octets fell within the bucket's range during the measurement period.
[0] = less than 512 octets

[1] = 512 to 1023 octets

[2] = 1024 to 1535 octets

[3] = 1536 to 2047 octets

[4] = 2048 to 2559 octets

[5] = 2560 to 3071 octets

[6] = 3072 to 3583 octets

[7] = 3584 to 4096 octets

Measurement Scope
Site

Recovery

1. No action required.

MpTxRadiusAllLenAvg

Measurement ID
18222

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
DA-MP egress RADIUS message length average (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
This measurement is pegged when a routable RADIUS message is sent to a RADIUS Peer Node on a connection.

Measurement Scope
Site

Recovery

1. No action required.

MpTxRadiusAllLenPeak

Measurement ID
18223

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
DA-MP egress RADIUS message length peak (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
This measurement is pegged when the size of a routable RADIUS message sent to a RADIUS Peer Node on a connection is larger than any other message sent to a RADIUS Peer Node during the reporting interval.

Measurement Scope
Site

Recovery

1. No action required.

MpTxRadiusAllRateAvg

Measurement ID
18219

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
DA-MP egress RADIUS message rate average (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
Output measurement of the MpTxRadiusAllRate metric.

Measurement Scope
Site

Recovery

1. No action required.

MpTxRadiusAllRatePeak

Measurement ID
18220

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
DA-MP egress RADIUS message rate peak (routable and peer-to-peer).

Collection Interval
5 min

Peg Condition
Output measurement of the MpTxRadiusAllRate metric.

Measurement Scope
Site

Recovery

1. No action required.

MpTxRadiusP0

Measurement ID
18214

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP egress RADIUS messages with priority 0.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message assigned a priority of 0 is sent to any RADIUS Peer Node on a connection.

Measurement Scope
Site

Recovery

1. No action required.

MpTxRadiusP1

Measurement ID
18215

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP egress RADIUS messages with priority 1.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message assigned a priority of 1 is sent to any RADIUS Peer Node on a connection.

Measurement Scope
Site

Recovery

1. No action required.

MpTxRadiusP2

Measurement ID
18216

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP egress RADIUS messages with priority 2.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message assigned a priority of 2 is sent to any RADIUS Peer Node on a connection.

Measurement Scope
Site

Recovery

1. No action required.

MpTxRadiusP3

Measurement ID
18217

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP egress RADIUS messages with priority 3.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message assigned a priority of 3 is sent to any RADIUS Peer Node on a connection.

Measurement Scope
Site

Recovery

1. No action required.

MpTxRadiusP4

Measurement ID
18249

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP egress RADIUS messages with priority 4.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message assigned a priority of 4 is sent to any RADIUS Peer Node on a connection

Measurement Scope
Site

Recovery

1. No action required.

MpTxRadiusP5

Measurement ID
18250

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP egress RADIUS messages with priority 5.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message assigned a priority of 5 is sent to any RADIUS Peer Node on a connection

Measurement Scope
Site

Recovery

1. No action required.

MpTxRadiusP6

Measurement ID
18251

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP egress RADIUS messages with priority 6.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message assigned a priority of 6 is sent to any RADIUS Peer Node on a connection

Measurement Scope
Site

Recovery

1. No action required.

MpTxRadiusP7

Measurement ID
18252

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP egress RADIUS messages with priority 7.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message assigned a priority of 7 is sent to any RADIUS Peer Node on a connection

Measurement Scope
Site

Recovery

1. No action required.

MpTxRadiusP8

Measurement ID
18253

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP egress RADIUS messages with priority 8.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message assigned a priority of 8 is sent to any RADIUS Peer Node on a connection

Measurement Scope
Site

Recovery

1. No action required.

MpTxRadiusP9

Measurement ID
18254

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP egress RADIUS messages with priority 9.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message assigned a priority of 9 is sent to any RADIUS Peer Node on a connection

Measurement Scope
Site

Recovery

1. No action required.

MpTxRadiusP10

Measurement ID
18255

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP egress RADIUS messages with priority 10.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message assigned a priority of 10 is sent to any RADIUS Peer Node on a connection

Measurement Scope
Site

Recovery

1. No action required.

MpTxRadiusP11

Measurement ID
18256

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP egress RADIUS messages with priority 11.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message assigned a priority of 11 is sent to any RADIUS Peer Node on a connection

Measurement Scope
Site

Recovery

1. No action required.

MpTxRadiusP12

Measurement ID
18257

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP egress RADIUS messages with priority 12.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message assigned a priority of 12 is sent to any RADIUS Peer Node on a connection

Measurement Scope
Site

Recovery

1. No action required.

MpTxRadiusP13

Measurement ID
18258

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP egress RADIUS messages with priority 13.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message assigned a priority of 13 is sent to any RADIUS Peer Node on a connection

Measurement Scope
Site

Recovery

1. No action required.

MpTxRadiusP14

Measurement ID
18259

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP egress RADIUS messages with priority 14.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message assigned a priority of 14 is sent to any RADIUS Peer Node on a connection

Measurement Scope
Site

Recovery

1. No action required.

MpTxRadiusP15

Measurement ID
18260

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP egress RADIUS messages with priority 15.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a RADIUS message assigned a priority of 15 is sent to any RADIUS Peer Node on a connection

Measurement Scope
Site

Recovery

1. No action required.

MpXactionPassAvg

Measurement ID
10097

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
DA-MP transaction success rate average.

Collection Interval
5 min

Peg Condition
Placeholder measurement of the MpXactionPass metric.

Measurement Scope
Site

Recovery

1. No action required.

RclEtrPoolAvg

Measurement ID
18232

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
RCL ETR pool utilization average.

Collection Interval
5 min

Peg Condition
The average of all RADIUS ETR Pool utilization samples taken during the collection interval.

Measurement Scope
Site

Recovery

1. No action required.

RclEtrPoolPeak

Measurement ID
18233

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
RCL ETR pool utilization peak.

Collection Interval
5 min

Peg Condition
The maximum RADIUS ETR Pool utilization sample taken during the collection interval.

Measurement Scope
Site

Recovery

1. No action required.

RclItrPoolAvg

Measurement ID
18230

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
RCL ITR pool utilization average.

Collection Interval
5 min

Peg Condition
The average of all RADIUS ITR Pool utilization samples taken during the collection interval.

Measurement Scope
Site

Recovery

1. No action required.

RclItrPoolPeak

Measurement ID
18231

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
RCL ITR pool utilization peak.

Collection Interval
5 min

Peg Condition
The maximum RADIUS ITR Pool utilization sample taken during the collection interval.

Measurement Scope
Site

Recovery

1. No action required.

RclRxTaskQueueAvg

Measurement ID
18210

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
RCL ingress task message queue utilization average.

Collection Interval
5 min

Peg Condition
The average of all RADIUS Ingress Message Queue utilization samples taken during the collection interval.

Measurement Scope
Site

Recovery

1. No action required.

RclRxTaskQueuePeak

Measurement ID
18211

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
RCL ingress task message queue utilization peak.

Collection Interval
5 min

Peg Condition
The maximum RADIUS Ingress Message Queue utilization sample taken during the collection interval.

Measurement Scope
Site

Recovery

1. No action required.

RclTxTaskQueueAvg

Measurement ID
18212

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
RCL egress task message queue utilization average.

Collection Interval
5 min

Peg Condition
The average of all RADIUS Egress Message Queue utilization samples taken during the collection interval.

Measurement Scope
Site

Recovery

1. No action required.

RclTxTaskQueuePeak

Measurement ID
18213

Measurement Group
DA-MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
RCL egress task message queue utilization peak.

Collection Interval
5 min

Peg Condition
The maximum RADIUS Egress Message Queue utilization sample taken during the collection interval.

Measurement Scope
Site

Recovery

1. No action required.

TmMpCpuCL1

Measurement ID
10284

Measurement Group
DA-MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
DA-MP onset for CPU utilization in congestion level 1.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each onset of CL1.

Measurement Scope
Site

Recovery

1. No action required.

TmMpCpuCL2

Measurement ID
10286

Measurement Group
DA-MP Performance

Measurement Type
Timer

Measurement Dimension
Single

Description
DA-MP timer for CPU utilization in congestion level 2.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each millisecond CPU utilization is in CL2.

Measurement Scope
Site

Recovery

1. No action required.

TmMpCpuCL3

Measurement ID
10288

Measurement Group
DA-MP Performance

Measurement Type
Timer

Measurement Dimension
Single

Description
DA-MP timer for CPU utilization in congestion level 3.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each millisecond CPU utilization is in CL3.

Measurement Scope
Site

Recovery

1. No action required.

TmMpMemCL1

Measurement ID
14150

Measurement Group
DA-MP Performance

Measurement Type
Timer

Measurement Dimension
Single

Description
DA-MP timer for memory utilization in congestion level 1.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each millisecond memory utilization is in CL1.

Measurement Scope
Site

Recovery

1. No action required.

TmMpMemCL2

Measurement ID
14152

Measurement Group
DA-MP Performance

Measurement Type
Timer

Measurement Dimension
Single

Description
DA-MP timer for memory utilization in congestion level 2.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each millisecond memory utilization is in CL2.

Measurement Scope
Site

Recovery

1. No action required.

TmMpMemCL3

Measurement ID
14154

Measurement Group
DA-MP Performance

Measurement Type
Timer

Measurement Dimension
Single

Description
DA-MP timer for memory utilization in congestion level 3.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each millisecond memory utilization is in CL3.

Measurement Scope
Site

Recovery

1. No action required.

TmRclEtrHoldTimeAvg

Measurement ID
18236

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
RCL ETR hold time average.

Collection Interval
5 min

Peg Condition
The average RADIUS ETR hold time sample taken during the collection interval.

Measurement Scope
Site

Recovery

1. No action required.

TmRclItrHoldTimeAvg

Measurement ID
18235

Measurement Group
DA-MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
RCL ITR hold time average.

Collection Interval
5 min

Peg Condition
The average RADIUS ITR hold time sample taken during the collection interval.

Measurement Scope
Site

Recovery

1. No action required.

DA-MP Service measurements

MpEvException

Measurement ID
18001

Measurement Group
DA-MP Service

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP exception events.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each MpEvException event, regardless of event reason or throttling.

Measurement Scope
Site

Recovery

1. No action required.

MpEvFsmException

Measurement ID
18000

Measurement Group
DA-MP Service

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DA-MP connection FSM exception events.

Collection Interval
5 min

Peg Condition
This measurement is incremented for each MpEvFsmException event, regardless of event reason or throttling.

Measurement Scope
Site

Recovery

1. No action required.

DCA Custom measurement templates

The DCA Framework allows for the creation of customized measurement reports with the use of templates. The DCA Custom measurement templates are presented in their differentiated form.

Arrayed Average Measurement (DcaCustomMeal.name + Avg + "_" + DcaDalId.shortName)

Measurement ID
19800-19849

Measurement Group
DCA concatenated with the *DcaDalId.shortName* of the DCA App the Custom MEAL is assigned to

Measurement Type
Average

Measurement Dimension
Arrayed

Description
Average value of *DcaCustomMeal.name* per second

Collection Interval
5 min

Peg Condition
This measurement is pegged via the Custom MEAL API.

Measurement Scope
Server Group

Arrayed Measurement (DcaCustomMeal.name + Cnt + "_" + DcaDalId.shortName)

Measurement ID
19600-19649

Measurement Group
DCA concatenated with the *DcaDalId.shortName* of the DCA App the Custom MEAL is assigned to

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
DcaCustomMeal.name measurement

Collection Interval
5 min

Peg Condition
This measurement is pegged via the Custom MEAL API.

Measurement Scope
Server Group

Arrayed Peak Measurement (DcaCustomMeal.name + Peak + "_" + DcaDalId.shortName)

Measurement ID
19700-19749

Measurement Group
DCA concatenated with the *DcaDalId.shortName* of the DCA App the Custom MEAL is assigned to

Measurement Type
Max

Measurement Dimension
Arrayed

Description
Peak value of *DcaCustomMeal.name* per second

Collection Interval
5 min

Peg Condition
This measurement is pegged via the Custom MEAL API.

Measurement Scope
Server Group

Scalar Average Measurement (DcaCustomMeal.name + Avg + "_" + DcaDalId.shortName)

Measurement ID
19750-19799

Measurement Group
DCA concatenated with the *DcaDalId.shortName* of the DCA App the Custom MEAL is assigned to

Measurement Type
Average

Measurement Dimension
Single

Description
Average value of *DcaCustomMeal.name* per second

Collection Interval
5 min

Peg Condition
This measurement is pegged via the Custom MEAL API.

Measurement Scope
Server Group

Scalar Measurement (DcaCustomMeal.name + Cnt + "_" + DcaDalId.shortName)

Measurement ID
19550-19599

Measurement Group
DCA concatenated with the *DcaDalId.shortName* of the DCA App the Custom MEAL is assigned to

Measurement Type
Simple

Measurement Dimension
Single

Description
DcaCustomMeal.name measurement

Collection Interval
5 min

Peg Condition
This measurement is pegged via the Custom MEAL API.

Measurement Scope
Server Group

Scalar Peak Measurement (DcaCustomMeal.name + Peak + "_" + DcaDalId.shortName)

Measurement ID
19650-19699

Measurement Group
DCA concatenated with the *DcaDalId.shortName* of the DCA App the Custom MEAL is assigned to

Measurement Type
Max

Measurement Dimension
Single

Description
Peak value of *DcaCustomMeal.name* per second

Collection Interval
5 min

Peg Condition
This measurement is pegged via the Custom MEAL API.

Measurement Scope
Server Group

DCA Framework Exception measurements

The DCA Framework Exception measurement report contains measurements that provide information about exceptions and unexpected messages and events that are specific to the DCA Framework.

TxDcaFullDRLAnswerDiscard

Measurement ID
19507

Measurement Group
DCA Framework Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by DcaDalId)

Description
The number of egress Diameter Answer messages that were discarded because the DRL's Answer Queue was full, counted during a collection interval.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each Answer message discarded because the DRL's Answer Queue was full.

Measurement Scope
Server Group

Recovery

1. No action required.

TxDcaFullDRLRequestReject

Measurement ID
19506

Measurement Group
DCA Framework Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by DcaDalId)

Description
The number of egress Diameter Request messages that were rejected because the DRL's Request Queue was full, counted during a collection interval.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each Request message discarded because the DRL's Request Queue was full.

Measurement Scope
Server Group

Recovery

1. No action required.

TxDcaSbrQueryFailCount

Measurement ID
19517

Measurement Group
DCA Framework Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by DcaDalId)

Description
The total number of SBR query send errors, counted during the collection interval.

Collection Interval
5 min

Peg Condition
This measurement is pegged each time sending a Stack Event to the U-SBR fails.

Measurement Scope
Server Group

Recovery

1. No action required.

TxDcaSbrQueryFailRateAvg

Measurement ID
19521

Measurement Group
DCA Framework Exception

Measurement Type
Average

Measurement Dimension
Arrayed (by DcaDalId)

Description
The average DSR Application's SBR Query Fail Rate, measured during the collection interval.

Collection Interval
5 min

Peg Condition
The average of the U-SBR query send failure samples taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. No action required.

TxDcaSbrQueryFailRatePeak

Measurement ID
19522

Measurement Group
DCA Framework Exception

Measurement Type
Max

Measurement Dimension
Arrayed (by DcaDalId)

Description
The peak DSR Application's SBR Query Fail Rate, measured during the collection interval.

Collection Interval
5 min

Peg Condition
The maximum number of the U-SBR query send failure samples taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. No action required.

DCA Framework Performance measurements

The DCA Framework Performance measurement report contains measurements that provide performance information that is specific to the DCA Framework.

DcaOpcodeHandlerMax

Measurement ID
19526

Measurement Group
DCA Framework Performance

Measurement Type
Max

Measurement Dimension
Arrayed (by DcaDalId)

Description
The maximum number of opcodes executed by Perl script event handlers.

Collection Interval
5 min

Peg Condition
This measurement is the destination measurement of the DcaOpcodeHandler sysmetric.

Measurement Scope
Server Group

Recovery

1. No action required.

DcaOpcodeMainMax

Measurement ID
19524

Measurement Group
DCA Framework Performance

Measurement Type
Max

Measurement Dimension
Arrayed (by DcaDalId)

Description
The maximum number of opcodes executed by the main part of the Perl script.

Collection Interval
5 min

Peg Condition
This measurement is the destination measurement of the DcaOpcodeMain sysmetric.

Measurement Scope
Server Group

Recovery

1. No action required.

DcaRuntimeErrCount

Measurement ID
19516

Measurement Group
DCA Framework Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by DcaDalId)

Description
The total number of Diameter messages that encounter script run-time errors, counted during the collection interval.

Collection Interval
5 min

Peg Condition
This measurement is pegged each time the Perl interpreter returns a run-time error.

Measurement Scope
Server Group

Recovery

1. No action required.

DcaTermOpcodeCnt

Measurement ID
19527

Measurement Group
DCA Framework Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by DcaDalId)

Description
The number of Diameter transactions terminated because one of the event handlers have exceeded the maximum configured number of opcodes.

Collection Interval
5 min

Peg Condition
An event handler is terminated because it has exceeded the maximum configured number of opcodes.

Measurement Scope
Server Group

Recovery

1. No action required.

RxDcaAnswerMsgQueueAvg

Measurement ID
19503

Measurement Group
DCA Framework Performance

Measurement Type
Average

Measurement Dimension
Arrayed (by DcaDalId)

Description
The average Answer Message Queue utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The average of all Answer Message Queue utilization samples taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. No action required.

RxDcaAnswerMsgQueuePeak

Measurement ID
19502

Measurement Group
DCA Framework Performance

Measurement Type
Max

Measurement Dimension
Arrayed (by DcaDalId)

Description
The peak Answer Message Queue utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The maximum Answer Message Queue utilization sample taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. No action required.

RxDcaAnswerProcessed

Measurement ID
19512

Measurement Group
DCA Framework Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by DcaDalId)

Description
The number of Answers processed by a DSR Application, counted during the collection interval.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each Answer message successfully de-queued from the DSR Application Answer Message queue.

Measurement Scope
Server Group

Recovery

1. No action required.

RxDcaMsgProcessed

Measurement ID
19510

Measurement Group
DCA Framework Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by DcaDalId)

Description
The number of Requests and Answers processed by a DSR Application, counted during the collection interval.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each Request/Answer message successfully de-queued from the DSR Application Request/Answer Message queue.

Measurement Scope
Server Group

Recovery

1. No action required.

RxDcaMsgRateAvg

Measurement ID
19509

Measurement Group
DCA Framework Performance

Measurement Type
Average

Measurement Dimension
Arrayed (by DcaDalId)

Description
The average DSR Application's Ingress Message Rate, measured during the collection interval.

Collection Interval
5 min

Peg Condition
The average of all DSR Application Ingress Message Rate samples taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. No action required.

RxDcaMsgRatePeak

Measurement ID
19508

Measurement Group
DCA Framework Performance

Measurement Type
Max

Measurement Dimension
Arrayed (by DcaDalId)

Description
The peak DSR Application's Ingress Message Rate, measured during the collection interval.

Collection Interval
5 min

Peg Condition
The maximum DSR Application Ingress Message Rate sample taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. No action required.

RxDcaRequestMsgQueueAvg

Measurement ID
19501

Measurement Group
DCA Framework Performance

Measurement Type
Average

Measurement Dimension
Arrayed (by DcaDalId)

Description
The average Request Message Queue utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The average of all Request Message Queue utilization samples taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. No action required.

RxDcaRequestMsgQueuePeak

Measurement ID
19500

Measurement Group
DCA Framework Performance

Measurement Type
Max

Measurement Dimension
Arrayed (by DcaDalId)

Description
The peak DSR Application's Request Message Queue utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The maximum Request Message Queue utilization sample taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. No action required.

RxDcaRequestProcessed

Measurement ID
19511

Measurement Group
DCA Framework Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by DcaDalId)

Description
The number of Requests processed by a DSR Application, counted during the collection interval.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each Request message successfully de-queued from the DSR Application Request Message queue.

Measurement Scope
Server Group

Recovery

1. No action required.

RxDcaSbrEventMsgQueueAvg

Measurement ID
19505

Measurement Group
DCA Framework Performance

Measurement Type
Average

Measurement Dimension
Arrayed (by DcaDalId)

Description
The average SBR Event Message Queue utilization (0-100%), measured during the collection interval.

Collection Interval
5 min

Peg Condition
The average of all SBR Event Message Queue utilization samples taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. No action required.

RxDcaSbrEventMsgQueuePeak

Measurement ID
19504

Measurement Group
DCA Framework Performance

Measurement Type
Max

Measurement Dimension
Arrayed (by DcaDalId)

Description
The peak SBR Event Message Queue utilization (0-100%), measured during the collection interval.

Collection Interval
5 min

Peg Condition
The maximum SBR Event Message Queue utilization sample taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. No action required.

RxDcaTransactionsCompleted

Measurement ID
19519

Measurement Group
DCA Framework Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by DcaDalId)

Description
The number of transactions completed by the DCA Application.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each transaction terminated by forwarding the original Diameter Answer (either explicitly using a "forward" API call or implicitly by having the DCA framework default to forwarding the answer if no explicit action is encountered in the script).

Measurement Scope
Server Group

Recovery

1. No action required.

RxDcaTransactionsTerminatedAns

Measurement ID
19518

Measurement Group
DCA Framework Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by DcaDalId)

Description
The number of transactions terminated by the DCA Application by returning an error answer.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each transaction when the DCA Application, acting as a relay, initiates an error answer response using the "answer" built-in API call.

Measurement Scope
Server Group

Recovery

1. No action required.

RxDcaTransactionsTerminatedDrop

Measurement ID
19520

Measurement Group
DCA Framework Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by DcaDalId)

Description
The number of transactions terminated by the DCA Application by discarding the request.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each transaction when the DCA Application, acting as a relay, discards the ingress message using the "drop" built-in API call.

Measurement Scope
Server Group

Recovery

1. No action required.

TxDcaSbrEventRateAvg

Measurement ID
19514

Measurement Group
DCA Framework Performance

Measurement Type
Average

Measurement Dimension
Arrayed (by DcaDalId)

Description
The average DSR Application's SBR Query Rate, measured during the collection interval.

Collection Interval
5 min

Peg Condition
The average DSR Application SBR Query Rate sample taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. No action required.

TxDcaSbrEventRatePeak

Measurement ID
19513

Measurement Group
DCA Framework Performance

Measurement Type
Max

Measurement Dimension
Arrayed (by DcaDalId)

Description
The peak DSR Application's SBR Query Rate, measured during the collection interval.

Collection Interval
5 min

Peg Condition
The maximum DSR Application SBR Query Rate sample taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. No action required.

TxDcaSbrEventSent

Measurement ID
19515

Measurement Group
DCA Framework Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by DcaDalId)

Description
The number of SBR Queries successfully sent to the U-SBR, counted during the collection interval.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each SBR Query successfully sent to the U-SBR.

Measurement Scope
Server Group

Recovery

1. No action required.

Diameter Signaling Router (DSR) Application Exception measurements

The DSR Application Exception measurement group is a set of measurements that provide information about exceptions and unexpected messages and events that are specific to the DSR protocol.

RxApplRequestNoRoutes

Measurement ID
10015

Measurement Group
DSR Application Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by DSR Application ID)

Description
Number of Request messages received from a DSR Application that could not be routed.

Collection Interval
5 min

Peg Condition
When DRL successfully receives a Request message from the DSR Application that is rejected with an Answer response because either a Peer Routing Rule was not found or implicit routing could not be invoked.

The DSR Application is forwarding Request messages that cannot be routed to a peer. The following problems could exist:

- A Peer Routing Rule could be missing of incorrectly configured.
- The DSR Application could be incorrectly configured.
- The Request message from a downstream peer was mis-routed to the DSR.

Measurement Scope
Server Group

Recovery

1. Verify the Peer Routing Rules on the **Diameter** > **Configuration** > **Peer Routing Rules** GUI screen and make any needed corrections.
2. Verify the DSR Application Id configuration on the **Diameter** > **Configuration** > **Application Ids** GUI screen and make any needed corrections.

RxApplUnavailable

Measurement ID
10016

Measurement Group
DSR Application Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Application ID)

Description
Number of Request messages received for a DSR Application that could not be routed to the DSR Application because the DSR Application was Unavailable.

Collection Interval
5 min

Peg Condition
When DRL receives a Request message from a peer that matches an Application Routing Rule, but cannot be routed to the DSR Application because its Operational Status is "Unavailable".

The DSR Application Operational Status is "Unavailable" when one of the following conditions occurs:

- The operator has removed the DSR Application from service (Admin State is "Disabled".)
- The DSR Application was congested when an attempt to route a Request message to the SR Application occurred.

When a DSR Application is "Unavailable", the message will be handled as defined by the "unavailability Action" attribute for the DSR Application (see the GUI screen for the DSR Application).

Measurement Scope
Server Group

Recovery

1. Verify the DSR Application Admin State on the **Diameter** > **Maintenance** > **Applications** GUI screen.
2. Verify the DSR Application "Unavailability Action" attribute configuration on the **Diameter** > **Configuration** > **Application IDs** GUI screen.

RxApplUnavailableForAnswer

Measurement ID
10017

Measurement Group
DSR Application Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by DSR Application ID)

Description
Number of Answer messages received for a DSR Application which could not be routed to DSR Application because it was not available.

Collection Interval
5 min

Peg Condition
When DRL receives an Answer message from a peer associated with a PTR indicating that the Answer response must be routed back to the DSR Application but cannot be routed to the DSR Application because its Operational Status is “Unavailable.”

A DSR Application’s Operational Status is “Unavailable” when one of the following conditions occur:

- The operator has removed the DSR Application from service (Admin State is “Disabled”)
- The DSR Application was congested when an attempt to route a Request message to the DSR Application occurred.

When a DSR Application is "Unavailable", the message will be handled as defined by the "unavailability Action" attribute for the DSR Application (see the GUI screen for the DSR Application).

Measurement Scope
Server Group

Recovery

1. Verify the DSR Application Admin State on the **Diameter** > **Maintenance** > **Applications** GUI screen.
2. Verify the DSR Application "Unavailability Action" attribute configuration on the **Diameter** > **Configuration** > **Application Ids** GUI screen.

RxApplUnavailableForRequest

Measurement ID
10016

Measurement Group
DSR Application Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by DSR Application ID)

Description
Number of Request messages received for a DSR Application which could not be routed to DSR Application because it was not available.

Collection Interval
5 min

Peg Condition
When DRL receives a Request message from a peer which matches a ART rule but cannot be routed to the DSR Application because its Operational Status was not "Available".

A DSR Application's Operational Status is "Unavailable" when one of the following conditions occur:

- The operator has removed the DSR Application from service (Admin State is "Disabled").
- The DSR Application was congested when an attempt to route a Request message to the DSR Application occurred.

When a DSR Application is "Unavailable", the message will be handled as defined by the "unavailability Action" attribute for the DSR Application (see the GUI screen for the DSR Application).

Measurement Scope
Server Group

Recovery

1. Verify the DSR Application Admin State on the **Diameter** > **Maintenance** > **Applications** GUI screen.
2. Verify the DSR Application "Unavailability Action" attribute configuration on the **Diameter** > **Configuration** > **Application IDs** GUI screen.

TxCpaFullDRLRequestReject

Measurement ID
10704

Measurement Group
DSR Application Exception

Measurement Type
Average

Measurement Dimension
Single

Description
The number of egress Diameter Request messages that were rejected because the DRL's Request Queue was full.

Collection Interval
5 min

Peg Condition
For each Request message discarded because the "DRL's Request Queue" was full. Used for congestion control by DSR.

Measurement Scope
Server Group

Recovery

1. This measurement is primarily intended to assist in evaluating the need for additional **Message Processor** (**MP**) processing capacity at a Network Element and indicates overall **MP** congestion is occurring.

   - If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an **MP** over several collection intervals, then the number of MPs in the Network Element may need to be increased.
   - If the peak and average for an individual **MP** is significantly different than other MPs in the same Network Element, then an MP-specific hardware, software, or configuration problem may exist or a Diameter peer and/or DNS routing mis-configuration problem may exist.
   - If the problem persists, it is recommended to contact My Oracle Support (MOS).

TxCpaFullDRLAnswerDiscard

Measurement ID
10705

Measurement Group
DSR Application Exception

Measurement Type
Average

Measurement Dimension
Single

Description
The number of egress Diameter Answer messages that were discarded because the DRL's Answer Queue was full.

Collection Interval
5 min

Peg Condition
For each Answer message discarded because the "All-Connections Event Queue" was full. Used for congestion control by DSR.

Measurement Scope
Server Group

Recovery

1. This measurement is primarily intended to assist in evaluating the need for additional **Message Processor** (**MP**) processing capacity at a Network Element and indicates overall **MP** congestion is occurring.

   - If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an **MP** over several collection intervals, then the number of MPs in the Network Element may need to be increased.
   - If the peak and average for an individual **MP** is significantly different than other MPs in the same Network Element, then an MP-specific hardware, software, or configuration problem may exist or a Diameter peer and/or DNS routing mis-configuration problem may exist.
   - If the problem persists, it is recommended to contact My Oracle Support (MOS).

TxFabrFullDRLRequestReject

Measurement ID
10602

Measurement Group
DSR Application Exception

Measurement Type
Average

Measurement Dimension
Single

Description
The average Request Message Queue utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The average of all Request Message Queue utilization samples taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. This measurement is primarily intended to assist in evaluating the need for additional **Message Processor** (**MP**) processing capacity at a Network Element and indicates overall **MP** congestion is occurring.

   - If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an **MP** over several collection intervals, then the number of MPs in the Network Element may need to be increased.

- If the peak and average for an individual **MP** is significantly different than other MPs in the same Network Element, then an MP-specific hardware, software, or configuration problem may exist or a Diameter peer and/or DNS routing mis-configuration problem may exist.
- If the problem persists, it is recommended to contact My Oracle Support (MOS).

TxFabrFullDRLAnswerDiscard

Measurement ID
10603

Measurement Group
DSR Application Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of egress Diameter Answer messages that were discarded because the DRL's Answer Queue was full.

Collection Interval
5 min

Peg Condition
For each Answer message discarded because the "All-Connections Event Queue" was full.

Measurement Scope
Server Group

Recovery

1. This measurement is primarily intended to assist in evaluating the need for additional **Message Processor** (**MP**) processing capacity at a Network Element and indicates overall **MP** congestion is occurring.
   - If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an **MP** over several collection intervals, then the number of MPs in the Network Element may need to be increased.
   - If the peak and average for an individual **MP** is significantly different than other MPs in the same Network Element, then an MP-specific hardware, software, or configuration problem may exist or a Diameter peer and/or DNS routing mis-configuration problem may exist.
   - If the problem persists, it is recommended to contact My Oracle Support (MOS).

TxRbarFullDRLRequestReject

Measurement ID
10302

Measurement Group
DSR Application Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of egress Diameter Request messages that were rejected because the DRL's Request Queue was full.

Collection Interval
5 min

Peg Condition
When a Request message is discarded because the DRL's Request Queue is full.

Measurement Scope
Server Group

Recovery

1. This measurement is primarily intended to assist in evaluating the need for additional **Message Processor** (**MP**) processing capacity at a Network Element and indicates overall **MP** congestion is occurring.

   - If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an **MP** over several collection intervals, then the number of MPs in the Network Element may need to be increased.
   - If the peak and average for an individual **MP** is significantly different than other MPs in the same Network Element, then an MP-specific hardware, software, or configuration problem may exist or a Diameter peer and/or DNS routing mis-configuration problem may exist.
   - If the problem persists, it is recommended to contact My Oracle Support (MOS).

TxRbarFullDRLAnswerDiscard

Measurement ID
10303

Measurement Group
DSR Application Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of egress Diameter Answer messages that were discarded because the DRL's Answer Queue was full.

Collection Interval
5 min

Peg Condition
When an Answer message is discarded because the All-Connections Event Queue is full.

Measurement Scope
Server Group

Recovery

1. This measurement is primarily intended to assist in evaluating the need for additional **Message Processor** (**MP**) processing capacity at a Network Element and indicates overall **MP** congestion is occurring.

   - If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an **MP** over several collection intervals, then the number of MPs in the Network Element may need to be increased.
   - If the peak and average for an individual **MP** is significantly different than other MPs in the same Network Element, then an MP-specific hardware, software, or configuration problem may exist or a Diameter peer and/or DNS routing mis-configuration problem may exist.
   - If the problem persists, it is recommended to contact My Oracle Support (MOS).

TxGlaFullDRLAnswerDiscard

Measurement ID
15904

Measurement Group
DSR Application Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of egress Diameter Answer messages that were discarded because the DRL's Answer Queue was full.

Collection Interval
5 min

Peg Condition
Each time an Answer message is discarded because the "All-Connections Event Queue" was full.

Measurement Scope
Server Group

Recovery

1. This measurement is primarily intended to assist in evaluating the need for additional **Message Processor** (**MP**) processing capacity at a Network Element and indicates overall **MP** congestion is occurring.

   - If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an **MP** over several collection intervals, then the number of MPs in the Network Element may need to be increased.
   - If the peak and average for an individual **MP** is significantly different than other MPs in the same Network Element, then an MP-specific hardware, software, or configuration problem may exist or a Diameter peer and/or DNS routing mis-configuration problem may exist.
   - If the problem persists, it is recommended to contact My Oracle Support (MOS).

Diameter Signaling Router (DSR) Application Performance measurements

The DSR Application Performance measurement group is a set of measurements that provide performance information that is specific to the DSR protocol. These measurements will allow the user to determine how many messages are successfully forwarded and received to and from each DSR Application.

RxApplAnswerFwdSuccess

Measurement ID
10011

Measurement Group
DSR Application Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by DSR Application ID)

Description
Number of Answer messages successfully forwarded to a DSR Application

Collection Interval
5 min

Peg Condition
When DRL successfully enqueues an Answer message on the DSR Application's internal Message Queue.

Measurement Scope
Server Group

Recovery

1. No action required.

RxApplAnswerReceived

Measurement ID
10013

Measurement Group
DSR Application Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by DSR Application ID)

Description
Number of Request messages received from a DSR Application.

Collection Interval
5 min

Peg Condition
When DRL successfully receives a Request message from a DSR Application.

Measurement Scope
Server Group

Recovery

1. No action required.

RxApplRequestFwdSuccess

Measurement ID
10010

Measurement Group
DSR Application Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by DSR Application ID)

Description
Number of Request messages successfully forwarded to a DSR Application.

Collection Interval
5 min

Peg Condition
When DRL successfully enqueues a Request message on the DSR Application's internal Message Queue.

Measurement Scope
Server Group

Recovery

1. No action required.

RxApplRequestReceived

Measurement ID
10012

Measurement Group
DSR Application Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by DSR Application ID)

Description
Number of Request messages received from a DSR Application.

Collection Interval
5 min

Peg Condition
When DRL successfully receives a Request message from a DSR Application.

Measurement Scope
Server Group

Recovery

1. No action required.

RxCpaAnswerMsgQueueAvg

Measurement ID
10703

Measurement Group
DSR Application Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average Answer Message Queue utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The average of all Answer Message Queue utilization samples taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. No action required.

RxCpaAnswerMsgQueuePeak

Measurement ID
10702

Measurement Group
DSR Application Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The peak Answer Message Queue utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The maximum Answer Message Queue utilization sample taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. No action required.

RxCpaAnswerProcessed

Measurement ID
10709

Measurement Group
DSR Application Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The total number of Answers processed by DSR Application.

Collection Interval
5 min

Peg Condition
This measurement will be incremented when a Diameter Answer is received.

Measurement Scope
Server Group

Recovery

1. No action required.

RxCpaEventMsgQueueAvg

Measurement ID
10746

Measurement Group
DSR Application Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average CPA Application Event Message Queue utilization measured during the collection interval.

Collection Interval
5 min

Peg Condition
The average Event Message Queue utilizations sample taken during the collection interval.

Measurement Scope
Network, NE, Server Group

Recovery

1. No action required.

RxCpaEventMsgQueuePeak

Measurement ID
10745

Measurement Group
DSR Application Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The peak CPA Application Event Message Queue utilization measured during the collection interval.

Collection Interval
5 min

Peg Condition
The maximum Event Message Queue utilization sample taken during the collection interval.

Measurement Scope
Network, NE, Server Group

Recovery

1. No action required.

RxCpaMsgRateAvg

Measurement ID
10707

Measurement Group
DSR Application Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average DSR Application's Message Processing rate measured during the collection interval.

Collection Interval
5 min

Peg Condition
The average of all message processing rate samples taken during the collection interval. Used for congestion control by DSR.

Measurement Scope
Server Group

Recovery

1. No action required.

RxCpaMsgRatePeak

Measurement ID
10706

Measurement Group
DSR Application Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The peak DSR Application's Message Processing rate measured during the collection interval.

Collection Interval
5 min

Peg Condition
The maximum message processing rate sample taken during the collection interval. Used for congestion control by DSR.

Measurement Scope
Server Group

Recovery

1. No action required.

RxCpaRequestMsgQueueAvg

Measurement ID
10701

Measurement Group
DSR Application Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average Request Message Queue utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The average of all Request Message Queue utilization samples taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. No action required.

RxCpaRequestMsgQueuePeak

Measurement ID
10700

Measurement Group
DSR Application Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The peak DSR Application's Request Message Queue utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The maximum Request Message Queue utilization sample taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. No action required.

RxCpaRequestProcessed

Measurement ID
10708

Measurement Group
DSR Application Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The total number of Requests processed by DSR Application.

Collection Interval
5 min

Peg Condition
This measurement will be incremented when a Diameter Request is received.

Measurement Scope
Server Group

Recovery

1. No action required.

RxDmiwfRequestMsgQueuePeak

Measurement ID
15600

Measurement Group
DSR Application Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The peak DSR Application's Request Message Queue utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The maximum Request Message Queue utilization sample taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. Application Routing might be mis-configured and is sending too much traffic to the DSR Application. Verify the configuration by selecting **Diameter** > **Configuration** > **Application Routing Rules**.
2. If no additional congestion alarms are asserted, the DSR Application Task may be experiencing a problem preventing it from processing messages from its Request Message Queue. Examine the Alarm log in **Alarms & Events**.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

RxDmiwfRequestMsgQueueAvg

Measurement ID
15601

Measurement Group
DSR Application Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average Request Message Queue utilization (0-100%) measured during the collection interval

Collection Interval
5 min

Peg Condition
The average of all Request Message Queue utilization samples taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. Application Routing might be mis-configured and is sending too much traffic to the DSR Application. Verify the configuration by selecting **Diameter** > **Configuration** > **Application Routing Rules**.
2. If no additional congestion alarms are asserted, the DSR Application Task may be experiencing a problem preventing it from processing messages from its Request Message Queue. Examine the Alarm log in **Alarms & Events**.

3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

RxDmiwfAnswerMsgQueuePeak

Measurement ID
15602

Measurement Group
DSR Application Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The maximum Answer Message Queue utilization (0-100%) taken during the collection interva

Collection Interval
5 min

Peg Condition
The maximum Answer Message Queue utilization sample taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. Application Routing might be mis-configured and is sending too much traffic to the DSR Application. Verify the configuration by selecting **Diameter** > **Configuration** > **Application Routing Rules**.
2. If no additional congestion alarms are asserted, the DSR Application Task may be experiencing a problem preventing it from processing messages from its Answer Message Queue. Examine the Alarm log in **Alarms & Events**.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

RxDmiwfAnswerMsgQueueAvg

Measurement ID
15603

Measurement Group
DSR Application Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average of all Answer Message Queue utilization samples taken during the collection interval

Collection Interval
5 min

Peg Condition
The average of all Answer Message Queue utilization samples taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. Application Routing might be mis-configured and is sending too much traffic to the DSR Application. Verify the configuration by selecting **Diameter** > **Configuration** > **Application Routing Rules**
2. If no additional congestion alarms are asserted, the DSR Application Task may be experiencing a problem preventing it from processing messages from its Answer Message Queue. Examine the Alarm log in **Alarms & Events**.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

TxDmiwfFullDRLRequestReject

Measurement ID
15604

Measurement Group
DSR Application Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of egress Diameter Request messages that were rejected because the **DRL**'s Request Queue was full.

Collection Interval
5 min

Peg Condition
For each Request message discarded because the **DRL**'s Request Queue was full.

Measurement Scope
Server Group

Recovery

1. This measurement is primarily intended to assist in evaluating the need for additional **Message Processor** (**MP**) processing capacity at a Network Element and indicates overall **MP** congestion is occuring.

   - If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an **MP** over several collection intervals, then the number of MPs in the Network Element may need to be increased.
   - If the peak and average for an individual **MP** is significantly different than other MPs in the same Network Element, then an MP-specific hardware, software, or configuration problem may exist or a Diameter peer and/or DNS routing mis-configuration problem may exist.
   - If the problem persists, it is recommended to contact the My Oracle Support (MOS) for assistance.

TxDmiwfFullDRLAnswerDiscard

Measurement ID
15605

Measurement Group
DSR Application Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of egress Diameter Answer messages that were discarded because the **DRL**'s Answer Queue was full

Collection Interval
5 min

Peg Condition
For each Answer message discarded because the All-Connections Event Queue was full

Measurement Scope
Server Group

Recovery

1. This measurement is primarily intended to assist in evaluating the need for additional **Message Processor** (**MP**) processing capacity at a Network Element and indicates overall **MP** congestion is occuring.

   - If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an **MP** over several collection intervals, then the number of MPs in the Network Element may need to be increased.

- If the peak and average for an individual **MP** is significantly different than other MPs in the same Network Element, then an MP-specific hardware, software, or configuration problem may exist or a Diameter peer and/or DNS routing mis-configuration problem may exist.
- If the problem persists, it is recommended to contact the My Oracle Support (MOS) for assistance.

RxDmiwfMsgRatePeak

Measurement ID
15606

Measurement Group
DSR Application Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The peak DSR Application's Ingress Message Rate measured during the collection interval.

Collection Interval
5 min

Peg Condition
The maximum DSR Application Ingress Message Rate sample taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. Application Routing might be mis-configured and is sending too much traffic to the DSR Application. Verify the configuration by selecting **Diameter** > **Configuration** > **Application Routing Rules**
2. There may be an insufficient number of **MP**s configured to handle the network load. The ingress traffic rate of each MP can be monitored from **Main Menu** > **Status & Manage** > **KPIs**. If MPs are in a congestion state then the offered load to the server site is exceeding its capacity.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

RxDmiwfMsgRateAvg

Measurement ID
15607

Measurement Group
DSR Application Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average DSR Application's Ingress Message Rate measured during the collection interval.

Collection Interval
5 min

Peg Condition
The average of all DSR Application Ingress Message Rate samples taken during the collection interval

Measurement Scope
Server Group

Recovery

1. Application Routing might be mis-configured and is sending too much traffic to the DSR Application. Verify the configuration by selecting **Diameter** > **Configuration** > **Application Routing Rules**
2. There may be an insufficient number of **MP**s configured to handle the network load. The ingress traffic rate of each MP can be monitored from **Main Menu** > **Status & Manage** > **KPIs**. If MPs are in a congestion state then the offered load to the server site is exceeding its capacity.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

RxDmiwfRequestProcessed

Measurement ID
15608

Measurement Group
DSR Application Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Requests processed by a DSR Application during the collection interval.

Collection Interval
5 min

Peg Condition
For each Request message successfully de-queued from the DSR Application's Request Message queue

Measurement Scope
Server Group

Recovery

1. No action required.

RxDmiwfAnswerProcessed

Measurement ID
15609

Measurement Group
DSR Application Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Answers processed by a **DSR** Application during the collection interval

Collection Interval
5 min

Peg Condition
For each Answer message successfully de-queued from the **DSR** Application's Answer Message" queue

Measurement Scope
Server Group

Recovery

1. No action required.

RxFabrMsgRateAvg

Measurement ID
10605

Measurement Group
DSR Application Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average **DSR** Application's Ingress Message Rate measured during the collection interval.

Collection Interval
5 min

Peg Condition
The average of all **DSR** Application Ingress Message Rate samples taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. Verify the configuration using **Diameter** > **Configuration** > **Application Routing Rules**.

   The Application Routing Table may be mis-configured and sending too much traffic to the **DSR** Application.

2. Use **Main Menu** > **Status & Manage** > **KPIs**to monitor the ingress traffic rate of each MP.

   The MPs may be unable to handle the network load. MPs are in a congestion state when the ingress message rate to the **MP** is exceeding its capacity to process the messages.

3. If the problem persists, it is recommended to contact My Oracle Support (MOS).

RxFabrMsgRatePeak

Measurement ID
10604

Measurement Group
DSR Application Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The peak **DSR** Application's Ingress Message Rate measured during the collection interval.

Collection Interval
5 min

Peg Condition
The maximum **DSR** Application Ingress Message Rate sample taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. Verify the configuration using **Diameter** > **Configuration** > **Application Routing Rules**.

   The Application Routing Table may be mis-configured and sending too much traffic to the **DSR** Application.

2. Use **Main Menu** > **Status & Manage** > **KPIs**to monitor the ingress traffic rate of each MP.

   The MPs may be unable to handle the network load. MPs are in a congestion state when the ingress message rate to the **MP** is exceeding its capacity to process the messages.

3. If the problem persists, it is recommended to contact My Oracle Support (MOS).

RxFabrRequestMsgQueueAvg

Measurement ID
10601

Measurement Group
DSR Application Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average Request Message Queue utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The average of all Request Message Queue utilization samples taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. Display and monitor the **DSR** Application status by selecting **Diameter** > **Maintenance** > **Applications**. Verify that the Admin State is set as expected.

The **DSR** Application's Request Message Queue Utilization is approaching its maximum capacity. This alarm should not normally occur when no other congestion alarms are asserted.

2. Application Routing might be mis-configured and is sending too much traffic to the **DSR** Application. Verify the configuration by selecting **Diameter** > **Configuration** > **Application Routing Rules**.
3. If no additional congestion alarms are asserted, the **DSR** Application Task might be experiencing a problem that is preventing it from processing message from its Request Message Queue. Examine the Alarm log in **Alarms & Events**
4. If the problem persists, it is recommended to contact My Oracle Support (MOS).

RxFabrRequestMsgQueuePeak

Measurement ID
10600

Measurement Group
DSR Application Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The peak **DSR** Application's Request Message Queue utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The maximum Request Message Queue utilization sample taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. Display and monitor the **DSR** Application status by selecting **Diameter** > **Maintenance** > **Applications**. Verify that the Admin State is set as expected.

   The **DSR** Application's Request Message Queue Utilization is approaching its maximum capacity. This alarm should not normally occur when no other congestion alarms are asserted.

2. Application Routing might be mis-configured and is sending too much traffic to the **DSR** Application. Verify the configuration by selecting **Diameter** > **Configuration** > **Application Routing Rules**.

3. If no additional congestion alarms are asserted, the **DSR** Application Task might be experiencing a problem that is preventing it from processing message from its Request Message Queue. Examine the Alarm log in **Alarms & Events**
4. If the problem persists, it is recommended to contact My Oracle Support (MOS).

RxFabrRequestProcessed

Measurement ID
10660

Measurement Group
DSR Application Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Requests processed by a **DSR** Application during the collection interval.

Collection Interval
5 min

Peg Condition
For each Request message successfully de-queued from the **DSR** Application's Request Message queue.

Measurement Scope
Server Group

Recovery

1. No action required.

RxGlaMsgRateAvg

Measurement ID
15906

Measurement Group
DSR Application Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average **DSR** Application's Ingress Message Rate measured during the collection interval.

Collection Interval
5 min

Peg Condition
The average of all **DSR** Application Ingress Message Rate samples taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. Determine if the Application Routing Table is mis-configured and sending too much traffic to the DSR Application. Verify the configuration via the Main Menu: **Diameter** > **Configuration** > **Application Routing Rules**
2. Determine if there are an insufficient number of MPs configured to handle the network load. The ingress traffic rate of each MP can be monitored from Main Menu: **Status & Manage** > **KPIs**. If MPs are in a congestion state, then the offered load to the server site is exceeding its capacity.
3. It is recommended to contact My Oracle Support (MOS) for further assistance.

RxGlaMsgRatePeak

Measurement ID
15905

Measurement Group
DSR Application Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The peak **DSR** Application's Ingress Message Rate measured during the collection interval.

Collection Interval
5 min

Peg Condition
The maximum **DSR** Application Ingress Message Rate sample taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. Determine if the Application Routing Table is mis-configured and sending too much traffic to the DSR Application. Verify the configuration via the Main Menu: **Diameter** > **Configuration** > **Application Routing Rules**

2. Determine if there are an insufficient number of MPs configured to handle the network load. The ingress traffic rate of each MP can be monitored from Main Menu: **Status & Manage** > **KPIs**. If MPs are in a congestion state, then the offered load to the server site is exceeding its capacity.
3. It is recommended to contact My Oracle Support (MOS) for further assistance.

RxGlaRequestMsgQueueAvg

Measurement ID
15903

Measurement Group
DSR Application Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average Request Message Queue utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The average of all Request Message Queue utilization samples taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. Determine if the Application Routing Table is mis-configured and sending too much traffic to the DSR Application. Verify the configuration via the Main Menu: **Diameter** > **Configuration** > **Application Routing Rules**
2. Determine if there are an insufficient number of MPs configured to handle the network load. The ingress traffic rate of each MP can be monitored from Main Menu: **Status & Manage** > **KPIs**. If MPs are in a congestion state, then the offered load to the server site is exceeding its capacity.
3. Contact My Oracle Support (MOS) for further assistance.

RxGlaRequestMsgQueuePeak

Measurement ID
15902

Measurement Group
DSR Application Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The peak DSR Application's Request Message Queue utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The maximum Request Message Queue utilization sample taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. Determine if the Application Routing Table is mis-configured and sending too much traffic to the DSR Application. Verify the configuration via the Main Menu: **Diameter** > **Configuration** > **Application Routing Rules**
2. Determine if there are an insufficient number of MPs configured to handle the network load. The ingress traffic rate of each MP can be monitored from Main Menu: **Status & Manage** > **KPIs**. If MPs are in a congestion state, then the offered load to the server site is exceeding its capacity.
3. It is recommended to contact My Oracle Support (MOS) for further assistance.

RxGlaRequestProcessed

Measurement ID
15900

Measurement Group
DSR Application Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Requests processed by a DSR Application during the collection interval.

Collection Interval
5 min

Peg Condition
Each time a Request message successfully de-queued from the DSR Application's Request Message queue.

Measurement Scope
Server Group

Recovery

1. No action required.

RxPcaRequestProcessed

Measurement ID
11358

Measurement Group
DSR Application Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Requests processed by Policy and Charging DSR Application during the collection interval

Collection Interval
5 min

Peg Condition
Each time a Diameter Request message is successfully de-queued from the Policy and Charging DSR Application's Request Message queue.

Measurement Scope
Server Group

Recovery

1. No action required.

RxPcaAnswerProcessed

Measurement ID
11359

Measurement Group
DSR Application Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Diameter Answer messages processed by Policy and Charging DSR Application.

Collection Interval
5 min

Peg Condition
Each time a Diameter Answer message is successfully de-queued from the Policy and Charging DSR Application's Request Message queue.

Measurement Scope
Server Group

Recovery

1. No action required.

RxPcaMsgRateAvg

Measurement ID
11361

Measurement Group
DSR Application Performance

Measurement Type
Average

Measurement Dimension
Single

Description
Average Policy and Charging DSR Application's Ingress Message Rate measured during the collection interval

Collection Interval
5 min

Peg Condition
When the average of all DSR Application Ingress Message Rate samples is taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. Display and monitor the DSR Application message rate by selecting **Diameter** > **Maintenance** > **Applications**. Verify that the message rate is set as expected.

2. Application Routing might be mis-configured and is sending too much traffic to the DSR Application. Verify the configuration by selecting **Diameter** > **Configuration** > **Application Routing Rules**.
3. There might be an insufficient number of MPs configured to handle the network load. Monitor the traffic rate of each **MP** by selecting **Diameter** > **Status & Manage** > **KPIs**.

   If MPs are in a congestion state, then the offered load to the server site is exceeding its capacity.
4. If the problem persists, it is recommended to contact My Oracle Support (MOS).

RxPcaMsgRatePeak

Measurement ID
11362

Measurement Group
DSR Application Performance

Measurement Type
Max

Measurement Dimension
Single

Description
Peak Policy and Charging DSR Application's Ingress Message Rate measured during the collection interval

Collection Interval
5 min

Peg Condition
When the maximum of all DSR Application Ingress Message Rate samples is taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. Display and monitor the DSR Application message rate by selecting **Diameter** > **Maintenance** > **Applications**. Verify that the message rate is set as expected.
2. Application Routing might be mis-configured and is sending too much traffic to the DSR Application. Verify the configuration by selecting **Diameter** > **Configuration** > **Application Routing Rules**.
3. There might be an insufficient number of MPs configured to handle the network load. Monitor the traffic rate of each **MP** by selecting **Diameter** > **Status & Manage** > **KPIs**.

   If MPs are in a congestion state, then the offered load to the server site is exceeding its capacity.

4. If the problem persists, it is recommended to contact My Oracle Support (MOS).

RxRbarMsgRateAvg

Measurement ID
10305

Measurement Group
DSR Application Performance

Measurement Type
Average

Measurement Dimension
Single

Description
Average DSR Application's Ingress Message Rate measured during the collection interval

Collection Interval
5 min

Peg Condition
When the average of all DSR Application Ingress Message Rate samples is taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. Display and monitor the DSR Application message rate by selecting **Diameter** > **Maintenance** > **Applications**. Verify that the message rate is set as expected.
2. Application Routing might be mis-configured and is sending too much traffic to the DSR Application. Verify the configuration by selecting **Diameter** > **Configuration** > **Application Routing Rules**.
3. There might be an insufficient number of MPs configured to handle the network load. Monitor the traffic rate of each **MP** by selecting **Diameter** > **Status & Manage** > **KPIs**.

   If MPs are in a congestion state, then the offered load to the server site is exceeding its capacity.
4. If the problem persists, it is recommended to contact My Oracle Support (MOS).

RxRbarMsgRatePeak

Measurement ID
10304

Measurement Group
DSR Application Performance

Measurement Type
Max

Measurement Dimension
Single

Description
Peak DSR Application's Ingress Message Rate measured during the collection interval

Collection Interval
5 min

Peg Condition
When the maximum DSR Application Ingress Message Rate sample is taken during the collection interval

Measurement Scope
Server Group

Recovery

1. Display and monitor the DSR Application message rate by selecting **Diameter** > **Maintenance** > **Applications**. Verify that the message rate is set as expected.
2. Application Routing might be mis-configured and is sending too much traffic to the DSR Application. Verify the configuration by selecting **Diameter** > **Configuration** > **Application Routing Rules**.
3. There might be an insufficient number of MPs configured to handle the network load. Monitor the traffic rate of each **MP** by selecting **Diameter** > **Status & Manage** > **KPIs**.

   If MPs are in a congestion state, then the offered load to the server site is exceeding its capacity.
4. If the problem persists, it is recommended to contact My Oracle Support (MOS).

RxRbarRequestMsgQueueAvg

Measurement ID
10301

Measurement Group
DSR Application Performance

Measurement Type
Average

Measurement Dimension
Single

Description
Average Request Message Queue utilization (0-100%) measured during the collection interval

Collection Interval
5 min

Peg Condition
When the average of all Request Message Queue utilization samples is taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. Display and monitor the DSR Application status by selecting **Diameter** > **Maintenance** > **Applications**. Verify that the Operational Reason, which indicates congestion level, is set as expected.

   The DSR Application's Request Message Queue Utilization is approaching its maximum capacity. This alarm should not normally occur when no other congestion alarms are asserted.

2. Application Routing might be mis-configured and is sending too much traffic to the DSR Application. Verify the configuration by selecting **Diameter** > **Configuration** > **Application Routing Rules**.

3. If no additional congestion alarms are asserted, the DSR Application Task might be experiencing a problem that is preventing it from processing message from its Request Message Queue. Examine the Alarm log in **Alarms & Events**

4. If the problem persists, it is recommended to contact My Oracle Support (MOS).

RxRbarRequestMsgQueuePeak

Measurement ID
10300

Measurement Group
DSR Application Performance

Measurement Type
Max

Measurement Dimension
Single

Description
Peak DSR Application's Request Message Queue utilization (0-100%) measured during the collection interval

Collection Interval
5 min

Peg Condition
When the maximum Request Message Queue utilization sample is taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. Display and monitor the DSR Application status by selecting **Diameter** > **Maintenance** > **Applications**. Verify that the Operational Reason, which indicates congestion level, is set as expected.

   The DSR Application's Request Message Queue Utilization is approaching its maximum capacity. This alarm should not normally occur when no other congestion alarms are asserted.

2. Application Routing might be mis-configured and is sending too much traffic to the DSR Application. Verify the configuration by selecting **Diameter** > **Configuration** > **Application Routing Rules**.

3. If no additional congestion alarms are asserted, the DSR Application Task might be experiencing a problem that is preventing it from processing message from its Request Message Queue. Examine the Alarm log in **Alarms & Events**

4. If the problem persists, it is recommended to contact My Oracle Support (MOS).

RxRbarRequestProcessed

Measurement ID
10350

Measurement Group
DSR Application Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Requests processed by a DSR Application during the collection interval

Collection Interval
5 min

Peg Condition
When a Request message is successfully de-queued from the DSR Application's Request Message queue.

Measurement Scope
Server Group

Recovery

1. No action required.

TxApplTransSuccess

Measurement ID
10014

Measurement Group
DSR Application Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by DSR Application ID)

Description
Number of Request messages received from a DSR Application.

Collection Interval
5 min

Peg Condition
When DRL successfully receives a Request message from a DSR Application.

Measurement Scope
Server Group

Recovery

1. No action required.

Diameter Egress Transaction measurements

The Diameter Egress Transaction measurement report contains measurements providing information about Diameter peer-to-peer transactions forwarded to upstream peers.

RxAnswerExpectedAll

Measurement ID
10040

Measurement Group
Diameter Egress Transaction, Diameter Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of valid Answer messages received from an upstream peer that were associated with a pending transaction.

Collection Interval
5 min

Peg Condition
When the DSR receives an Answer message event with a valid transport connection ID for which a pending transaction is found.

The connection measurement is associated with the connection from which the Answer message was received.

Measurement Scope
Server Group

Recovery

1. No action required.

RxAnswerMsgQueueFullDiscard

Measurement ID
10232

Measurement Group
Diameter Egress Transaction, Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress Diameter Answer messages that were discarded because the Answer Message Queue was full.

Collection Interval
5 min

Peg Condition
For each Answer message discarded because the Answer Message Queue was full.

The connection measurement is associated with the connection from which the message was received.

Measurement Scope
Server Group

Recovery

1. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an **MP** over several collection intervals, then the number of MPs in the Network Element may need to be increased.
2. If the peak and average for an individual **MP** is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist or a Diameter peer and/or DNS routing mis-configuration problem may exist.

3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

RxRedirectHostNotRouted

Measurement ID
14071

Measurement Group
Diameter Egress Transaction

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Redirect Host Notifications received for which a Redirected Request was not submitted for rerouting.

Collection Interval
5 min

Peg Condition
When **DRL**, for any reason, does not submit the Redirected Request message for routing.

The connection measurement is associated with the connection from which the Redirect Notification was received.

Measurement Scope
Site

Recovery

1. No action required.

RxRedirectHostRouted

Measurement ID
14070

Measurement Group
Diameter Egress Transaction

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Redirect Host Notifications received for which the Redirect-Host AVP has been updated and submitted for rerouting.

Collection Interval
5 min

Peg Condition
When **DRL** successfully queues a Redirected Request message for routing.

The connection measurement is associated with the Connection from which the Redirect Notification was received.

Measurement Scope
Site

Recovery

1. No action required.

RxRedirectRealmNotRouted

Measurement ID
14073

Measurement Group
Diameter Egress Transaction

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Redirect Realm Notifications received for which a Redirected Request was not submitted for rerouting.

Collection Interval
5 min

Peg Condition
When **DRL**, for any reason, does not submit the Redirected Request message for routing.

The connection measurement is associated with the connection from which the Redirect Notification was received.

Measurement Scope
Site

Recovery

1. No action required.

RxRedirectRealmRouted

Measurement ID
14072

Measurement Group
Diameter Egress Transaction

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Redirect Realm Notifications received for which the Redirect-Host AVP has been updated and submitted for rerouting.

Collection Interval
5 min

Peg Condition
When **DRL** successfully queues a Redirected Request message for routing.

The connection measurement is associated with the connection from which the Redirect Notification was received.

Measurement Scope
Site

Recovery

1. No action required.

TxAnswerTimeout

Measurement ID
10044

Measurement Group
Diameter Egress Transaction

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of times that an Answer response was not received from a peer before the maximum allowed time defined by the "Pending Answer Timer" value.

Answer timeouts can be caused by a variety of reasons:

- The peer associated with this connection may be experiencing congestion, causing delays in sending the Answer response.
- IP Network congestion.

- If the peer associated with this connection is a Diameter **Relay Agent**, then an upstream node from the peer may be experiencing congestion, causing delays in sending the Answer response.

Collection Interval
5 min

Peg Condition
When timer PENDING-ANSWER-TIMER expires.

The connection measurement is associated with the connection from which the corresponding Request message was sent.

Measurement Scope
Server Group

Recovery

1. If the user-configurable answer response timer is set too low it can cause the timer to expire before a Answer response is received. The user-configurable value is set using the page **Diameter** > **Configuration** > **System Options**.
2. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

TxAnswerTimeoutAllMp

Measurement ID
14075

Measurement Group
Diameter Egress Transaction

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of times that an Answer response was not received from a peer before the maximum allowed time defined by the "Pending Answer Timer" value.

Collection Interval
5 min

Peg Condition
When timer PENDING-ANSWER-TIMER expires.

The connection measurement is associated with the connection from which the corresponding Request message was sent.

Note: This measurement is the DA-MP equivalent to the "per connection" measurement TxAnswerTimeout.

Measurement Scope
Site

Recovery

1. If the user-configurable answer response timer is set too low it can cause the timer to expire before a Answer response is received. The user-configurable value is set using the page **Diameter** > **Configuration** > **System Options**.
2. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

TxAnswerTimeoutMp

Measurement ID
14075

Measurement Group
Diameter Egress Transaction

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of times that an Answer response was not received from a peer before the maximum allowed time defined by the "Pending Answer Timer" value.

Collection Interval
5 min

Peg Condition
When timer PENDING-ANSWER-TIMER expires. The connection measurement is associated with the connection from which the corresponding Request message was sent.

Note: This is the DA-MP equivalent to the "per connection" measurement, TxAnswerTimeout.

Measurement Scope
Site

Recovery

1. If the user-configurable answer response timer is set too low it can cause the timer to expire before an Answer response is received. The user-configurable value is set using the page **Diameter** > **Configuration** > **System Options**.
2. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

TxConnectionFailed

Measurement ID
10046

Measurement Group
Diameter Egress Transaction

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of times that a pending peer-to-peer transaction was abandoned due to a transport connection failure.

Collection Interval
5 min

Peg Condition
When a pending transaction is rerouted due to a transport connection failure.

This connection measurement is associated with the connection to which the corresponding Request message was sent.

Measurement Scope
Server Group

Recovery

1. Connection status can be monitored using the **Diameter** > **Maintenance** > **Connections** page.
2. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

TxConnAnswerMsgs

Measurement ID
10154

Measurement Group
Diameter Egress Transaction, Diameter Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of routable Answer messages successfully sent on the connection.

Collection Interval
5 min

Peg Condition
Pegged when a Diameter Answer message is sent to the peer.

Measurement Scope
Server Group

Recovery

1. No action required.

TxConnRequestMsgs

Measurement ID
10153

Measurement Group
Diameter Egress Transaction, Diameter Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of routable Request messages successfully sent on the connection.

Collection Interval
5 min

Peg Condition
Pegged when a Diameter request message is sent to the peer.

Measurement Scope
Server Group

Recovery

1. No action required.

TxRequestSuccessAllConn

Measurement ID
10043

Measurement Group
Diameter Egress Transaction

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Request messages successfully routed to a peer.

Collection Interval
5 min

Peg Condition
When the DSR successfully queues a Request message to the DCL.

The connection measurement is associated with the connection to which the Request message was sent.

Measurement Scope
Server Group

Recovery

1. No action required.

Diameter Exception measurements

The Diameter Exception measurement report contains measurements that provide information about exceptions and unexpected messages and events that are specific to the Diameter protocol.

EvAppIdListInconsistency

Measurement ID
10009

Measurement Group
Diameter Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
Number of times that the supported Application IDs received from the peer were inconsistent with another transport connection.

Collection Interval
5 min

Peg Condition
If the Application ID list received from the DSR for a peer's transport connection is not identical to the Application ID list for at least one of the transport connections for a peer that has an Operation Status state of Available.

Measurement Scope
Server Group

Recovery

1. If one or more MPs in a server site have failed, the traffic will be distributed between the remaining MPs in the server site. **MP** server status can be monitored from the **Status & Manage** > **Server** page.
2. The mis-configuration of Diameter peers may result in too much traffic being distributed to the MP. The ingress traffic rate of each **MP** can be monitored from the **Status & Manage** > **KPIs** page. Each **MP** in the server site should be receiving approximately the same ingress transaction per second.
3. There may be an insufficient number of MPs configured to handle the network traffic load. The ingress traffic rate of each **MP** can be monitored from the **Status & Manage** > **KPIs** page. If all MPs are in a congestion state then the offered load to the server site is exceeding its capacity.
4. If no additional congestion alarms are asserted, the DSR may be experiencing a problem preventing it from processing events from its All-Connections Event Queue. The alarm log should be examined using the **Alarms & Events** page.
5. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvTransLifetimeExceededMp

Measurement ID
10098

Measurement Group
Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of transaction failures because “Transaction Lifetime” exceeded.

Collection Interval
5 min

Peg Condition
When the **DRL** was prevented from rerouting a Request message because the “Transaction Lifetime” was exceeded.

Measurement Scope
Site

Recovery

1. No action required.

EvTransRejectedByExternalNode

Measurement ID
14068

Measurement Group
Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of transactions rejected by an external node with a non-2xxx Result-Code value.

Collection Interval
5 min

Peg Condition
When DSR successfully relays an answer response received from an upstream external node to a downstream external node and the answer contains a failure response (i.e., a Result-Code AVP value not in the range of 2000-2099)

Note: This measurement is not pegged for answer generated by application.

Measurement Scope
Server Group

Recovery

1. No action required.

RxAnswerMsgQueueFullDiscard

Measurement ID
10232

Measurement Group
Diameter Egress Transaction, Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress Diameter Answer messages that were discarded because the Answer Message Queue was full.

Collection Interval
5 min

Peg Condition
For each Answer message discarded because the Answer Message Queue was full.

The connection measurement is associated with the connection from which the message was received.

Measurement Scope
Server Group

Recovery

1. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an **MP** over several collection intervals, then the number of MPs in the Network Element may need to be increased.
2. If the peak and average for an individual **MP** is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist or a Diameter peer and/or DNS routing mis-configuration problem may exist.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

RxAnswerUnexpected

Measurement ID
10008

Measurement Group
Diameter Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of valid Answer messages received from an upstream peer that were associated with a pending transaction.

Collection Interval
5 min

Peg Condition
When the DRL receives an Answer message event from DCL/RCL with a valid transport connection ID for which a pending transaction is found.

The connection measurement is associated with the connection from which the Answer message was received.

Measurement Scope
Server Group

Recovery

1. No action required.

RxAnswerUnexpectedAllMp

Measurement ID
14064

Measurement Group
Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Answer messages received from an upstream peer that could not be associated with a pending transaction.

Collection Interval
5 min

Peg Condition
When DRL receives an answer message event from DCL/RCL with a valid Diameter Connection ID for which a pending transaction cannot be found

The connection measurement is associated with the connection from which the Answer message was received.

Measurement Scope
Server Group

Recovery

1. No action required.

RxDOCRejectMp

Measurement ID
10251

Measurement Group
Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress messages that were rejected with error answer due to local DA-MP danger of CPU congestion.

Collection Interval
5 min

Peg Condition
Pegged for each message discarded with a DIAMETER (Error) Answer due to DA-MP danger of CPU congestion.

Measurement Scope
Server Group

Recovery

1. The **DA-MP** is approaching or exceeding its maximum configured MPS limitation. If this value is not set to the MP's engineered traffic handling capacity, then the maximum MPS capacity allowed may need to be changed.
2. If one or more MPs in a server site have failed, the traffic will be distributed between the remaining MPs in the server site. **DA-MP** server status can be monitored from the **Status & Manage** > **Server** page.
3. The mis-configuration of Diameter peers may result in too much traffic being distributed to the MP. The ingress traffic rate of each **DA-MP** can be monitored from the **Status & Manage** > **KPIs** page. Each **DA-MP** in the server site should be receiving approximately the same ingress transaction per second.
4. There may be an insufficient number of MPs configured to handle the network traffic load. The ingress traffic rate of each **DA-MP** can be monitored from the **Status & Manage** > **KPIs** page. If all MPs are in a congestion state then the offered load to the server site is exceeding its capacity.
5. The Diameter process may be experiencing problems. The alarm log should be examined using the **Alarms & Events** page.
6. If the problem persists, it is recommended to contact My Oracle Support (MOS).

RxMsgsOCGreenPri0DiscardMp

Measurement ID
10276

Measurement Group
Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Green ingress Priority 0 messages discarded by the **DA-MP** Overload Control component.

Collection Interval
5 min

Peg Condition
Each time a Priority 0 Diameter Request message marked "Green" arrives at the DA-MP Overload Control component

Measurement Scope
Site

Recovery

1. If one or more **MPs**s in a server site have failed, the traffic will be distributed amongst the remaining MPs in the server site. Monitor the DA-MP server status from **Main Menu** > **Status & Manage** > **Server Status**.
2. The mis-configuration of Diameter peers may result in too much traffic being distributed to the MP. Monitor the ingress traffic rate of each DA-MP from **Main Menu** > **Status & Manage** > **KPIs**. Each DA-MP in the server site should be receiving approximately the same ingress transaction per second.
3. There may be an insufficient number of MPs configured to handle the network traffic load. Monitor the ingress traffic rate of each DA-MP from **Main Menu** > **Status & Manage** > **KPIs**. If all MPs are in a congestion state, then the offered load to the server site is exceeding its capacity.
4. The Diameter Process may be experiencing problems. Examine the alarm log from **Main Menu** > **Alarms & Events**.
5. If the problem persists, it is recommended to contact My Oracle Support (MOS).

RxMsgsOCYellowPri0DiscardMp

Measurement ID
10277

Measurement Group
Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Yellow ingress Priority 0 messages discarded by the **DA-MP** Overload Control component.

Collection Interval
5 min

Peg Condition
Each time a Priority 0 Diameter Request message marked "Yellow" arrives at the DA-MP Overload Control component

Measurement Scope
Site

Recovery

1. If one or more **MP**s in a server site have failed, the traffic will be distributed amongst the remaining MPs in the server site. Monitor the DA-MP server status from **Main Menu** > **Status & Manage** > **Server Status**.
2. The mis-configuration of Diameter peers may result in too much traffic being distributed to the MP. Monitor the ingress traffic rate of each DA-MP from **Main Menu** > **Status & Manage** > **KPIs**. Each DA-MP in the server site should be receiving approximately the same ingress transaction per second.
3. There may be an insufficient number of MPs configured to handle the network traffic load. Monitor the ingress traffic rate of each DA-MP from **Main Menu** > **Status & Manage** > **KPIs**. If all MPs are in a congestion state, then the offered load to the server site is exceeding its capacity.
4. The Diameter Process may be experiencing problems. Examine the alarm log from **Main Menu** > **Alarms & Events**.
5. If the problem persists, it is recommended to contact My Oracle Support (MOS).

RxMsgsOCGreenPri1DiscardMp

Measurement ID
10278

Measurement Group
Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Green ingress Priority 1 messages discarded by the **DA-MP** Overload Control component.

Collection Interval
5 min

Peg Condition
Each time a Priority 1 Diameter Request message marked "Green" arrives at the DA-MP Overload Control component

Measurement Scope
Site

Recovery

1. If one or more **MP**s in a server site have failed, the traffic will be distributed amongst the remaining MPs in the server site. Monitor the DA-MP server status from **Main Menu** > **Status & Manage** > **Server Status**.
2. The mis-configuration of Diameter peers may result in too much traffic being distributed to the MP. Monitor the ingress traffic rate of each DA-MP from **Main**

Menu > **Status & Manage** > **KPIs**. Each DA-MP in the server site should be receiving approximately the same ingress transaction per second.

3. There may be an insufficient number of MPs configured to handle the network traffic load. Monitor the ingress traffic rate of each DA-MP from **Main Menu** > **Status & Manage** > **KPIs**. If all MPs are in a congestion state, then the offered load to the server site is exceeding its capacity.
4. The Diameter Process may be experiencing problems. Examine the alarm log from **Main Menu** > **Alarms & Events**.
5. If the problem persists, it is recommended to contact My Oracle Support (MOS).

RxMsgsOCYellowPri1DiscardMp

Measurement ID
10279

Measurement Group
Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Yellow ingress Priority 1 messages discarded by the **DA-MP** Overload Control component.

Collection Interval
5 min

Peg Condition
Each time a Priority 1 Diameter Request message marked "Yellow" arrives at the DA-MP Overload Control component

Measurement Scope
Site

Recovery

1. If one or more **MP**s in a server site have failed, the traffic will be distributed amongst the remaining MPs in the server site. Monitor the DA-MP server status from **Main Menu** > **Status & Manage** > **Server Status**.
2. The mis-configuration of Diameter peers may result in too much traffic being distributed to the MP. Monitor the ingress traffic rate of each DA-MP from **Main Menu** > **Status & Manage** > **KPIs**. Each DA-MP in the server site should be receiving approximately the same ingress transaction per second.
3. There may be an insufficient number of MPs configured to handle the network traffic load. Monitor the ingress traffic rate of each DA-MP from **Main Menu** > **Status & Manage** > **KPIs**. If all MPs are in a congestion state, then the offered load to the server site is exceeding its capacity.

4. The Diameter Process may be experiencing problems. Examine the alarm log from **Main Menu** > **Alarms & Events**.
5. If the problem persists, it is recommended to contact My Oracle Support (MOS).

RxMsgsOCGreenPri2DiscardMp

Measurement ID
10280

Measurement Group
Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Green ingress Priority 2 messages discarded by the **DA-MP** Overload Control component.

Collection Interval
5 min

Peg Condition
Each time a Priority 2 Diameter Request message marked "Green" arrives at the DA-MP Overload Control component

Measurement Scope
Site

Recovery

1. If one or more **MP**s in a server site have failed, the traffic will be distributed amongst the remaining MPs in the server site. Monitor the DA-MP server status from **Main Menu** > **Status & Manage** > **Server Status**.
2. The mis-configuration of Diameter peers may result in too much traffic being distributed to the MP. Monitor the ingress traffic rate of each DA-MP from **Main Menu** > **Status & Manage** > **KPIs**. Each DA-MP in the server site should be receiving approximately the same ingress transaction per second.
3. There may be an insufficient number of MPs configured to handle the network traffic load. Monitor the ingress traffic rate of each DA-MP from **Main Menu** > **Status & Manage** > **KPIs**. If all MPs are in a congestion state, then the offered load to the server site is exceeding its capacity.
4. The Diameter Process may be experiencing problems. Examine the alarm log from **Main Menu** > **Alarms & Events**.
5. If the problem persists, it is recommended to contact My Oracle Support (MOS).

RxMsgsOCYellowPri2DiscardMp

Measurement ID
10281

Measurement Group
Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Yellow ingress Priority 2 messages discarded by the **DA-MP** Overload Control component.

Collection Interval
5 min

Peg Condition
Each time a Priority 2 Diameter Request message marked "Yellow" arrives at the DA-MP Overload Control component

Measurement Scope
Site

Recovery

1. If one or more **MP**s in a server site have failed, the traffic will be distributed amongst the remaining MPs in the server site. Monitor the DA-MP server status from **Main Menu** > **Status & Manage** > **Server Status**.
2. The mis-configuration of Diameter peers may result in too much traffic being distributed to the MP. Monitor the ingress traffic rate of each DA-MP from **Main Menu** > **Status & Manage** > **KPIs**. Each DA-MP in the server site should be receiving approximately the same ingress transaction per second.
3. There may be an insufficient number of MPs configured to handle the network traffic load. Monitor the ingress traffic rate of each DA-MP from **Main Menu** > **Status & Manage** > **KPIs**. If all MPs are in a congestion state, then the offered load to the server site is exceeding its capacity.
4. The Diameter Process may be experiencing problems. Examine the alarm log from **Main Menu** > **Alarms & Events**.
5. If the problem persists, it is recommended to contact My Oracle Support (MOS).

TmConnDegraded

Measurement ID
10183

Measurement Group
Diameter Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
Total time (in seconds) during the reporting period that the connection state was in the Degraded state.

Collection Interval
5 min

Peg Condition
Pegging started when a peer enters the Degraded state. Pegging stopped when the peer enters the Available or Unavailable state.

A peer may be degraded for short periods of time (< 30 seconds) due to being in a proving period or during a graceful disconnect; degraded conditions lasting longer periods of time are most likely due to local congestion.

Measurement Scope
Server Group

Recovery

1. If this measurement indicates an excessive amount of time spent in the degraded state, examine the Alarm History to determine the cause of the degraded condition.
2. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

TmConnEnabledNotAvail

Measurement ID
10182

Measurement Group
Diameter Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
Total time (in seconds) during the reporting period that the connection state was administratively enabled and the connection state was not Available.

Collection Interval
5 min

Peg Condition
Pegging is started when a peer is enabled or when a peer disconnects. Pegging is stopped when the peer connects and completes capabilities exchange, or when the connection is disabled.

Measurement Scope
Server Group

Recovery

1. Examine the Alarm History to determine if the connection is being rejected by either end, and for notification of local congestion.
2. Make sure the peer is running.
3. If the connection is configured as a Responder connection, make sure that the peer is attempting to initiate a connection.
4. If the connection is an Initiator connection, make sure that the peer is listening on the configured port.
5. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

TxDtlsOversizedDiscard

Measurement ID
10515

Measurement Group
Diameter Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of oversized egress messages discarded on the **DTLS** connection.

Collection Interval
5 min

Peg Condition
When the message size to be sent on the DTLS connection is greater than 16K (16384) bytes.

Measurement Scope
Server Group

Recovery

1. No action required.

TxReqMsgPerConnPtrMax

Measurement ID
10007

Measurement Group
Diameter Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of times message routing bypassed the connection because the maximum allowed pending transactions was exceeded.

Collection Interval
5 min

Peg Condition
Each time the DSR bypasses a transport connection during route selection because the maximum number of pending transactions allowed for the connection was exceeded.

The connection measurement is pegged against the egress connection with the maximum number of pending transactions condition which prevented message routing.

Measurement Scope
Server Group

Recovery

1. If one or more MPs in a server site have failed, the traffic will be distributed between the remaining MPs in the server site. **MP** server status can be monitored from the **Status & Manage** > **Server** page.
2. The mis-configuration of Diameter peers may result in too much traffic being distributed to the MP. The ingress traffic rate of each **MP** can be monitored from the **Status & Manage** > **KPIs** page. Each **MP** in the server site should be receiving approximately the same ingress transaction per second.
3. There may be an insufficient number of MPs configured to handle the network traffic load. The ingress traffic rate of each **MP** can be monitored from the **Status & Manage** > **KPIs** page. If all MPs are in a congestion state then the offered load to the server site is exceeding its capacity.
4. If no additional congestion alarms are asserted, the DSR may be experiencing a problem preventing it from processing messages from its Request Message Queue. The alarm log should be examined from the **Alarms & Events** page.
5. If the problem persists, it is recommended to contact My Oracle Support (MOS).

TxRequestEgressLoop

Measurement ID
10005

Measurement Group
Diameter Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of times that a selected route associated with an egress peer was not selected because a forwarding loop would occur (i.e., the upstream peer has already processed the Request message as determined by the Route-Record AVPs).

Collection Interval
5 min

Peg Condition
Each time the DSR bypasses a peer during route selection because the peer's FQDN matches one of the FQDNs in the message's Route-Record AVPs.

The connection measurement is associated with the first connection assigned to the peer.

> **Note:** This failure is associated with the peer, not any particular connection. The measurement should always be pegged against the same peer connection, i.e., the first one assigned to the peer.

Measurement Scope
Server Group

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

Diameter Ingress Transaction Exception measurements

The Diameter Ingress Transaction Exception report group contains measurements providing information about exceptions associated with the routing of Diameter transactions received from downstream peers.

RxArtRuleRejection

Measurement ID
14067

Measurement Group
Diameter Ingress Transaction Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Connection ID)

Description
The number of Request messages from a downstream peer rejected by a local node because an application routing rule Action is set to 'Send Answer" or "Abandon with No Answer".

Collection Interval
5 min

Peg Condition
Each time a Request message from a downstream peer is rejected by a Local node because an application routing rule Action is set to "Send Answer".

> **Note:** The "connection measurement" is associated with the Diameter Connection from which the Request message was received.

Measurement Scope
Server Group

Recovery

1. No action necessary

RxDecodeFailure

Measurement ID
10031

Measurement Group
Diameter Ingress Transaction Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
Number of Request messages rejected from a downstream peer because the message could not be decoded.

Collection Interval
5 min

Peg Condition
Request message from a downstream peer is rejected by a Local Node because it could not be decoded.

The connection measurement is associated with the connection from which the Request message was received.

Measurement Scope
Server Group

Recovery

1. These protocol violations are caused by the originator of the message (identified by the Origin-Host AVP in the message) or the peer that forwarded the message to this node (identified by the peer name) and cannot be fixed using the application.

2. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

RxDOCDiscardMp

Measurement ID
10252

Measurement Group
Diameter Ingress Transaction Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress messages that were discarded due to local DA-MP danger of CPU congestion.

Collection Interval
5 min

Peg Condition
Pegged for each message discarded due to DA-MP danger of CPU congestion.

Measurement Scope
Server Group

Recovery

1. If one or more MPs in a server site have failed, the traffic will be distributed between the remaining MPs in the server site. **DA-MP** server status can be monitored from the **Status & Manage** > **Server** page.
2. The mis-configuration of Diameter peers may result in too much traffic being distributed to the MP. The ingress traffic rate of each **DA-MP** can be monitored from the **Status & Manage** > **KPIs** page. Each **DA-MP** in the server site should be receiving approximately the same ingress transaction per second.
3. There may be an insufficient number of MPs configured to handle the network traffic load. The ingress traffic rate of each **DA-MP** can be monitored from the **Status & Manage** > **KPIs** page. If all MPs are in a congestion state then the offered load to the server site is exceeding its capacity.
4. The Diameter Process may be experiencing problems. The alarm log should be examined using the **Alarms & Events** page.
5. If the problem persists, it is recommended to contact My Oracle Support (MOS).

RxMessageLooping

Measurement ID
10032

Measurement Group
Diameter Ingress Transaction Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Request messages from a downstream peer rejected by a Local Node because message looping was detected (FQDN of the Local Node associated with the ingress transport connection matched a FQDN in the messages' Route-Record AVPs).

Collection Interval
5 min

Peg Condition
Request message from a downstream peer is rejected by a Local Node with Result-Code 3005 (DIAMETER_LOOP_DETECTED).

The connection measurement is associated with the connection from which the Request message was received.

Measurement Scope
Server Group

Recovery

1. An excessive amount of Request message rerouting may have been triggered by either connection failures or Answer timeouts. The status of connections should be examined from the **Diameter** > **Maintenance** > **Connections** page.
2. If no additional congestion alarms are asserted, the routing Answer task may be experiencing a problem preventing it from processing messages from its Answer Message Queue. The alarm log should be examined using the **Alarms & Events** page.
3. If the problem persists, it is recommended to contact My Oracle Support (MOS).

RxNoRoutesFound

Measurement ID
10035

Measurement Group
Diameter Ingress Transaction Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
Number of Request messages from a downstream peer rejected by a Local Node because no routes were available for routing the message.

Collection Interval
5 min

Peg Condition
Request message from a downstream peer is rejected by a Local Node because no routes were available for routing the message. A No Routes Available condition occurs when:

- A Route List was selected via a Peer Routing Rule or implicit routing but its Operational Status was Unavailable
- Implicit routing was invoked and the peer's Operational Status was not Available and an alternate implicit route was not provisioned for the peer
- Implicit routing was invoked but failed to find a route list by matching the configured realm/application ID (using the Realm Route table); or failed to select a valid egress connection from the matched route list

The connection measurement is associated with the connection from which the Request message was received.

Measurement Scope
Server Group

Recovery

1. If the message matched a Peer Routing Rule but none of the peers in the Route List were eligible for routing the message because either their operation state was Unavailable, the Application ID in the Request message did not match an application ID supported by the peer, or the peer had previously processed the message as defined by the Route-Record AVPs in the message:
   a. Verify that IP network connectivity exists between the MP server and the peers.
   b. Check the event history logs for additional DIAM events or alarms from this **MP** server.
   c. Verify that the peers in the Route List are not under maintenance. It is recommended to contact My Oracle Support (MOS) for assistance if needed.
2. If the message was addressed to a peer directly connected to the Local Node via the Destination-Host AVP but the peer's operational status was Unavailable or the alternate path to the peer, designated by the peer's alternate implicit route was either not provisioned or was Unavailable:
   a. Verify that IP network connectivity exists between the MP server and the adjacent servers.
   b. Check the event history logs for additional DIAM events or alarms from this **MP** server.
   c. Verify that the peer is not under maintenance.

3. If the message was addressed to a peer directly connected to the Local Node via the Destination-Host AVP but the application ID in the Request message did not match an Application ID supported by the peer:

   a. The mis-configuration of Diameter peers may result in too much traffic being distributed to the MP. The ingress traffic rate of each **MP** can be monitored from the **Status & Manage** > **KPIs** page. Each **MP** in the server site should be receiving approximately the same ingress transaction per second.

   b. There may be an insufficient number of MPs configured to handle the network traffic load. The ingress traffic rate of each **MP** can be monitored from the **Status & Manage** > **KPIs** page. If all MPs are in a congestion state then the offered load to the server site is exceeding its capacity.

   c. A software defect may exist resulting in PTR buffers not being deallocated to the pool. This alarm should not normally occur when no other congestion alarms are asserted. The alarm log should be examined from the **Alarms & Events** page.

4. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

RxNoRulesFailure

Measurement ID
10034

Measurement Group
Diameter Ingress Transaction Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Request messages from a downstream peer rejected by a Local Node because no Peer Routing Rule was found.

Collection Interval
5 min

Peg Condition
Request message from a downstream peer is rejected by a Local Node because no Peer Routing Rules were found in the peer routing table and the message was not addressed to a peer (either Destination-Host AVP was absent or Destination-Host AVP was present but was not a peer's FQDN) or a configured Realm/Application-Id (via the Realm Route Table).

The connection measurement is associated with the connection from which the Request message was received.

Measurement Scope
Server Group

Recovery

1. If one or more MPs in a server site have failed, the traffic will be distributed between the remaining MPs in the server site. **MP** server status can be monitored from the **Status & Manage** > **Server** page.
2. The mis-configuration of Diameter peers may result in too much traffic being distributed to the MP. The ingress traffic rate of each **MP** can be monitored from the **Status & Manage** > **KPIs** page. Each **MP** in the server site should be receiving approximately the same ingress transaction per second.
3. There may be an insufficient number of MPs configured to handle the network traffic load. The ingress traffic rate of each **MP** can be monitored from the **Status & Manage** > **KPIs** page. If all MPs are in a congestion state then the offered load to the server site is exceeding its capacity.
4. If no additional congestion alarms are asserted, the Routing Answer Task may be experiencing a problem preventing it from processing messages from its Answer Message Queue. The alarm log should be examined from the **Alarms & Events** page.
5. If the problem persists, it is recommended to contact My Oracle Support (MOS).

RxPrtRuleRejection

Measurement ID
10037

Measurement Group
Diameter Ingress Transaction Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Request messages from a downstream peer rejected by a Local Node because a Peer Routing Rule action is set to "Send Answer" or "Abandon with No Answer".

Collection Interval
5 min

Peg Condition
Request message from a downstream peer rejected by a Local Node because a Peer Routing Rule action is set to "Send Answer" or "Abandon with No Answer".

The connection measurement is associated with the connection from which the Request message was received.

Measurement Scope
Site

Recovery

1. No action required.

RxRejectedAll

Measurement ID
10030

Measurement Group
Diameter Ingress Transaction Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Request messages rejected from a downstream peer by a Local Node (all reasons).

Collection Interval
5 min

Peg Condition
When measurement RxRejectedConnCongestion, RxDecodeFailure, RxMessageLooping, RxAllDrop, RxNoRulesFailure, RxNoRoutesFound, RxTransactionTimeout, RxPrtRuleRejection, or RxRejectedOther is pegged.

Measurement Scope
Server Group

Recovery

1. No action required.

RxRejectedOther

Measurement ID
10038

Measurement Group
Diameter Ingress Transaction Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Request messages from a downstream peer rejected by a Local Node for any reason other than those identified by measurements RxDecodeFailure, RxMessageLooping, RxAllDrop, RxNoRulesFailure, RxNoRoutesFound, RxTransactionTimeout, RxArtRuleRejection, or RxPrtRuleRejection.

Collection Interval
5 min

Peg Condition
Request message from a downstream peer rejected by a Local Node for any reason other than those identified by measurements RxDecodeFailure, RxMessageLooping, RxAllDrop, RxNoRulesFailure, RxNoRoutesFound, RxTransactionTimeout, RxArtRuleRejection, or RxPrtRuleRejection.

The connection measurement is associated with the connection from which the Request message was received.

Measurement Scope
Server Group

Recovery

1. No action required.

RxRequestMsgQueueFullDiscard

Measurement ID
10231

Measurement Group
Diameter Ingress Transaction Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress Diameter Request messages that were discarded because the Request Message Queue was full.

Collection Interval
5 min

Peg Condition
For each Request message discarded because the Request Message Queue was full.

The connection measurement is associated with the connection from which the message was received.

Measurement Scope
Server Group

Recovery

1. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an **MP** over several collection intervals, then the number of MPs in the Network Element may need to be increased.

2. If the peak and average for an individual **MP** is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist or a Diameter peer and/or DNS routing mis-configuration problem may exist.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

RxTransactionTimeout

Measurement ID
10036

Measurement Group
Diameter Ingress Transaction Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Request messages from a downstream peer rejected by a Local Node because maximum message reroutes are exceeded.

Collection Interval
5 min

Peg Condition
Request message from a downstream peer is rejected by a Local Node because maximum number of message reroutes was exceeded.

The connection measurement is associated with the connection from which the Request message was received.

Measurement Scope
Server Group

Recovery

1. If the maximum number of message reroutes is set too low (e.g., zero) then any failure trigger message reroute will fail. The user-configurable value is set using the **Diameter** > **Configuration** > **System Options** page.
2. If the user-configurable answer response timer is set too low the timer expires before an Answer response is received. The user-configurable value is set using the **Diameter** > **Configuration** > **System Options** page.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

TxLongTimeoutPtrListEmpty

Measurement ID
10296

Measurement Group
Diameter Ingress Transaction Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress Diameter Request messages that were discarded because no Long Timeout PTR Buffers were available.

Collection Interval
5 min

Peg Condition
When any DRL thread within the Diameter Process needs to allocate a Long Timeout PTR Buffer from the Long Timeout PTR Buffer Pool and the number of allocated Long Timeout PTRs from a Long Timeout PTR Buffer Pool is less than the maximum configured capacity of Long Timeout PTR Buffers then:

- A Long Timeout PTR Buffer shall be allocated from the Long Timeout PTR Buffer Pool
- The count for the number of allocated Long Timeout PTRs from a Long Timeout PTR Buffer Pool shall be incremented by one.

Measurement Scope
Server Group

Recovery

1. If both the peak and average measurements for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP when the Ingress Message Rate and/or Diameter Process CPU Utilization measurements are below the recommended maximum engineered capacity of an MP, then a network (IP or Diameter) problem may exist. Looking at these measurements on a time of day basis may provide additional insight into potential network problems.
2. If the peak and average for an individual MP is significantly different than other MPs in the same Network Element then an MP-specific software problem may exist (e.g., a buffer pool leak).
3. If the problem persists, it is recommended to contact My Oracle Support (MOS).

TxPtrListEmpty

Measurement ID
10228

Measurement Group
Diameter Ingress Transaction Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress Diameter Request messages that were discarded because no PTR Buffers were available.

Collection Interval
5 min

Peg Condition
When any DRL thread within the Diameter Process needs to allocate a PTR Buffer from the PTR Buffer Pool and the number of allocated PTRs from a PTR Buffer Pool is less than the maximum configured capacity of PTR Buffers then:

- A PTR Buffer shall be allocated from the PTR Buffer Pool
- The count for the number of allocated PTRs from a PTR Buffer Pool shall be incremented by one.

Measurement Scope
Server Group

Recovery

1. If both the peak and average measurements for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an **MP** when the Ingress Message Rate and/or Diameter Process CPU Utilization measurements are below the recommended maximum engineered capacity of an MP, then a network (IP or Diameter) problem may exist. Looking at these measurements on a time of day basis may provide additional insight into potential network problems.
2. If the peak and average for an individual **MP** is significantly different than other MPs in the same Network Element then an MP-specific software problem may exist (e.g., a buffer pool leak).
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

TxRerouteQueueFullReject

Measurement ID
10241

Measurement Group
Diameter Ingress Transaction Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of egress Diameter Request messages that were rejected because the Reroute Queue was full.

Collection Interval
5 min

Peg Condition
For each Request message rejected because the Reroute Queue was full.

The connection measurement is associated with the connection the Request message was received from.

Measurement Scope
Server Group

Recovery

1. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an **MP** over several collection intervals, then the number of MPs in the Network Element may need to be increased.
2. If the peak and average for an individual **MP** is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist or a Diameter peer and/or DNS routing mis-configuration problem may exist.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

Diameter Ingress Transaction Performance measurements

The Diameter Ingress Transaction Performance measurement report contains measurements providing information about the outcome of Diameter transactions received from downstream peers.

TxAnswer1xxx

Measurement ID
10020

Measurement Group
Diameter Ingress Transaction Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Answer responses from peers that were successfully routed to a downstream peer with a Result-Code value 1xxx.

Collection Interval
5 min

Peg Condition
Answer message received from a peer that was successfully sent to the DCL/RCL with a Result-Code value in the range of 1000 - 1999.

The connection measurement is associated with the connection to which the message was routed.

Measurement Scope
Server Group

Recovery

1. No action required.

TxAnswer2xxx

Measurement ID
10021

Measurement Group
Diameter Ingress Transaction Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Answer responses from peers that were successfully routed to a downstream peer with a Result-Code value 2xxx.

Collection Interval
5 min

Peg Condition
Answer message received from a peer that was successfully sent to the DCL/RCL with a Result-Code value in the range of 2000 - 2999.

The connection measurement is associated with the connection to which the message was routed.

Measurement Scope
Server Group

Recovery

1. No action required.

TxAnswer3xxx

Measurement ID
10022

Measurement Group
Diameter Ingress Transaction Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Answer responses from peers that were successfully routed to a downstream peer with a Result-Code value 3xxx (Protocol Error).

Collection Interval
5 min

Peg Condition
Answer message received from a peer that was successfully sent to the DCL//RCL with a Result-Code value in the range of 3000 - 3999.

The connection measurement is associated with the connection to which the message was routed.

Measurement Scope
Server Group

Recovery

1. No action required.

TxAnswer4xxx

Measurement ID
10023

Measurement Group
Diameter Ingress Transaction Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Answer responses from peers that were successfully routed to a downstream peer with a Result-Code value 4xxx (Transient Failure).

Collection Interval
5 min

Peg Condition
Answer message received from a peer that was successfully sent to the DCL/RCL with a Result-Code value in the range of 4000 - 4999.

The connection measurement is associated with the connection to which the message was routed.

Measurement Scope
Server Group

Recovery

1. No action required.

TxAnswer5xxx

Measurement ID
10024

Measurement Group
Diameter Ingress Transaction Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Answer responses from peers that were successfully routed to a downstream peer with a Result-Code value 5xxx (Permanent Failure).

Collection Interval
5 min

Peg Condition
Answer message received from a peer that was successfully sent to the DCL/RCL with a Result-Code value in the range of 5000 - 5999.

The connection measurement is associated with the connection to which the message was routed.

Measurement Scope
Server Group

Recovery

1. No action required.

TxAnswerFailure

Measurement ID
10027

Measurement Group
Diameter Ingress Transaction Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of (expected) Answer responses from a peer and Answer responses created by a Local Node which were not successfully routed to a downstream peer (for any reason).

> **Note:** An expected Answer response from a peer is an Answer response for which a pending transaction existed.

Collection Interval
5 min

Peg Condition
Any time the DCL/RCL fails to queue an Answer response.

The connection measurement is associated with the connection from which the Request message was received.

Measurement Scope
Server Group

Recovery

1. No action required.

TxAnswerLocalNode

Measurement ID
10026

Measurement Group
Diameter Ingress Transaction Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Answer responses from a Local Node that were successfully routed to a downstream peer (all Result-Code values).

Collection Interval
5 min

Peg Condition
Any time the DCL/RCL successfully creates and queues an Answer response to DCL in response to a Request message received from a downstream peer.

The connection measurement is associated with the connection from which the Request message was received.

Measurement Scope
Server Group

Recovery

1. No action required.

TxAnswerOther

Measurement ID
10025

Measurement Group
Diameter Ingress Transaction Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Answer responses from peers that were successfully routed to a downstream peer with a Result-Code value not in the range of 1000-5999.

Collection Interval
5 min

Peg Condition
Answer message received from a peer which was successfully sent to the DCL/RCL with either a Result-Code value not in the range of 1000 - 5999 or without a Result-Code AVP.

The connection measurement is associated with the connection to which the message was routed.

Measurement Scope
Server Group

Recovery

1. No action required.

Diameter Performance measurements

The Diameter Performance measurement report contains measurements that provide performance information that is specific to the Diameter protocol.

EvPerConnPtrQueueAvg

Measurement ID
10240

Measurement Group
Diameter Performance

Measurement Type
Average

Measurement Dimension
Arrayed (by Connection ID)

Description
The average length of the PTR queue for a connection during the collection interval.

Collection Interval
5 min

Peg Condition
Each time a PTR is dequeued or enqueued on the connection's PTR queue, the average queue length is calculated using the **COMCOL** average measurement type method.

Measurement Scope
Server Group

Recovery

1. No action required.

EvPerConnPtrQueuePeak

Measurement ID
10239

Measurement Group
Diameter Performance

Measurement Type
Max

Measurement Dimension
Arrayed (by Connection ID)

Description
The maximum length of the PTR queue for a connection during the collection interval.

Collection Interval
5 min

Peg Condition
Each time a PTR is dequeued or enqueued on the connection's PTR queue, the maximum queue length is calculated using the COMCOL maximum measurement type method.

Measurement Scope
Server Group

Recovery

1. No action required.

RoutingMsgs

Measurement ID
10243

Measurement Group
Diameter Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Diameter and RADIUS messages processed by DRL, including Rerouting and Message Copy.

Collection Interval
5 min

Peg Condition
This measurement should be incremented as per the following conditions.

- Ingress RADIUS Request processing resulting in a Request being routed upstream (with or without local DSR application processing of the Request)
- Ingress RADIUS Response processing resulting in forwarding of Answer/Response downstream (with or without local DSR application processing of the Response)
- Ingress Request processing resulting in Answer message sent by DSR to originator (with or without local DSR application processing of the Request)
- Ingress RADIUS Request discarded due to validation error or overload
- Ingress RADIUS Response discarded due to validation error
- Initial copy and transmit of a RADIUS Request to a DAS
- Ingress RADIUS Response triggering reroute of the pending Request message (including Answers from DAS for copied RADIUS Requests)
- RADIUS Request reroute due to connection failure or Answer/Response timeout (including reroute of copied Requests to DAS for same reasons)
- Ingress Answer from a DAS terminated by DSR due to RADIUS Request copy completion or termination

Measurement Scope
Network

Recovery

1. No action required.

RxAnswerExpectedAll

Measurement ID
10040

Measurement Group
Diameter Egress Transaction, Diameter Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of valid Answer messages received from an upstream peer that were associated with a pending transaction.

Collection Interval
5 min

Peg Condition
When the DSR receives an Answer message event with a valid transport connection ID for which a pending transaction is found.

The connection measurement is associated with the connection from which the Answer message was received.

Measurement Scope
Server Group

Recovery

1. No action required.

RxAnswerExpectedAllMp

Measurement ID
10091

Measurement Group
Diameter Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of valid Answer messages received from an upstream peer that were associated with a pending transaction.

Collection Interval
5 min

Peg Condition
When the **DSR** receives an Answer message event with a valid transport connection ID for which a pending transaction is found.

The connection measurement is associated with the connection from which the Answer message was received.

Measurement Scope
Server Group

Recovery

1. No action required.

RxAnswerExpectedRoutedMp

Measurement ID
10092

Measurement Group
Diameter Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of valid Answer messages received from an upstream peer that were successfully routed to a downstream peer.

Collection Interval
5 min

Peg Condition

Measurement Scope
Server Group

Recovery

1. No action required.

RxRequestNoErrors

Measurement ID
10003

Measurement Group
Diameter Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of transactions successfully processed on one routing attempt.

Collection Interval
5 min

Peg Condition
When an Answer response from a peer is successfully queued to the DCL/RCL for a transaction and the total number of times that the corresponding Request message has been forwarded to a peer equals "1".

The connection measurement is associated with the connection from which the Request message was received.

Measurement Scope
Server Group

Recovery

1. No action required

RxRequestNoErrorsMp

Measurement ID
10094

Measurement Group
Diameter Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of transactions successfully processed on one routing attempt.

Collection Interval
5 min

Peg Condition
When an Answer response from a peer is successfully queued to the DSR for a transaction and the total number of times that the corresponding Request message has been forwarded to a peer equals "1".

The connection measurement is associated with the connection from which the Request message was received.

Measurement Scope
Server Group

Recovery

1. No action required.

TmResponseTimeDownstream

Measurement ID
10001

Measurement Group
Diameter Performance

Measurement Type
Average

Measurement Dimension
Arrayed (by Connection ID)

Description
Average time (in milliseconds) from when routing receives a Request message from a downstream peer to the time that an Answer response is sent to that downstream peer.

Collection Interval
5 min

Peg Condition
Time interval for each transaction starts when the DRL successfully decodes an ingress Request message from a downstream peer. Time interval for each transaction stops when the DRL attempts to send an Answer response to the DCL/RCL. This includes Answer messages received from upstream peers and those generated by the DRL.

The connection measurement is associated with the connection from which the Request message was received.

Measurement Scope
Server Group

Recovery

1. If the average is significantly larger than what is considered normal, then additional measurements, such as measurement TmResponseTimeUpstream, should be consulted to assist in determining the source of the delay.
2. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

TmResponseTimeDownstreamMp

Measurement ID
10093

Measurement Group
Diameter Performance

Measurement Type
Average

Measurement Dimension
Single

Description
Average time (in milliseconds) from when routing receives a Request message from a downstream peer to the time that an Answer response is sent to that downstream peer.

Collection Interval
5 min

Peg Condition
Time interval for each transaction starts when the DSR successfully decodes an ingress Request message from a downstream peer. Time interval for each transaction stops when the DSR attempts to send an Answer response. This includes Answer messages received from upstream peers and those generated by the DSR.

The connection measurement is associated with the connection from which the Request message was received.

Measurement Scope
Server Group

Recovery

1. No action required.

TmResponseTimeUpstream

Measurement ID
10002

Measurement Group
Diameter Performance

Measurement Type
Average

Measurement Dimension
Arrayed (by Connection ID)

Description
Average time (in milliseconds) from when routing forwards a Request message to an upstream peer to the time that an Answer response is received.

Collection Interval
5 min

Peg Condition
Time interval for each transaction starts when the DRL successfully queues a Request message to the DCL/RCL. Time interval for each transaction stops when the DRL receives an Answer response for the pending transaction associated with the forwarded Request message.

The connection measurement is associated with the connection the Request message is sent to.

> **Note:** This measurement excludes transactions which are aborted due to a failure (e.g., timer PENDING-ANSWER-TIMER or PENDING-TRANSACTION-TIMER expiration or transport connection failure).

Measurement Scope
Server Group

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

TxRequestSuccessAllMP

Measurement ID
10090

Measurement Group
Diameter Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Request messages successfully routed to a peer.

Collection Interval
5 min

Peg Condition
When the DSR successfully queues a Request message.

The connection measurement is associated with the connection to which the Request message was sent.

Measurement Scope
Server Group

Recovery

1. No action required.

Diameter Rerouting measurements

The Diameter Rerouting measurement report is a set of measurements which allows the user to evaluate the amount of message rerouting attempts which are occurring, the reasons for why message rerouting is occurring, and the success rate of message rerouting attempts.

MpRerouteToRequestRatio

Measurement ID
14014

Measurement Group
Diameter Rerouting

Measurement Type
Average

Measurement Dimension
Single

Description
Ratio of Request reroutes due to Answer Result-Code and/or Answer timeout to Total Requests routed by DSR.

Collection Interval
5 min

Peg Condition
The numerator of this measurement is pegged when request message reroute is triggered under these conditions:

- When DRL does not receive an answer from an upstream Peer Node within the PAT expiry.
- When DRL receives an Answer response from an upstream Peer Node and it finds a match in the Reroute on Answer table.

The denominator of this measurement is pegged under these scenarios:

- First attempt of Request routing
- First attempt of Message Copy Request routing

Measurement Scope
Site

Recovery

1. No action required.

RxRerouteAnswerRsp

Measurement ID
10054

Measurement Group
Diameter Rerouting

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of valid Answer messages received from an upstream peer that were associated with a pending rerouted transaction.

Collection Interval
5 min

Peg Condition
When the DSR receives an Answer message event with a valid transport connection ID for which a pending transaction associated with a rerouted message is found. The connection measurement is associated with the connection from which the Answer message was received.

Measurement Scope
Server Group

Recovery

1. No action required.

RxRerouteAnswerRspMp

Measurement ID
10095

Measurement Group
Diameter Rerouting

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of valid Answer messages received from an upstream peer that were associated with a pending rerouted transaction.

Collection Interval
5 min

Peg Condition
When the DSR receives an Answer message event with a valid Transport Connection ID for which a pending transaction associated with a rerouted message is found. The connection measurement is associated with the connection from which the Answer message was received.

Measurement Scope
Server Group

Recovery

1. No action required.

TxRerouteAnswerResponse

Measurement ID
10055

Measurement Group
Diameter Rerouting

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of message rerouting attempts triggered by the receipt of an Answer response Result-Code value that is a candidate for message rerouting.

Collection Interval
5 min

Peg Condition
When the DSR receives an Answer response with a Result-Code value that is a candidate for message rerouting. The connection measurement is associated with the upstream connection from which the Answer response was received.

Measurement Scope
Server Group

Recovery

1. No action required.

TxRerouteAnswerTimeout

Measurement ID
10052

Measurement Group
Diameter Rerouting

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of message rerouting attempts triggered by a timeout (PENDING-ANSWER-TIMER) on the Answer response.

Collection Interval
5 min

Peg Condition
When timer PENDING-ANSWER-TIMER expires and the DSR attempts to reroute a Request message.

Measurement Scope
Server Group

Recovery

1. If the user-configurable answer response timer is set too low it can cause the timer to expire before a Answer response is received. The user-configurable value is set from the **Diameter** > **Configuration** > **System Options** page.
2. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

TxRerouteAttempts

Measurement ID
10050

Measurement Group
Diameter Rerouting

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
Total number of message rerouting attempts.

Collection Interval
5 min

Peg Condition
When the DSR attempts to reroute a Request message routed via a Route List for various potential reasons:

- Transport connection fails
- PENDING-ANSWER-TIMER expires

- Answer response Result-Code plus application ID matches user-defined values for message rerouting

This measurement will be pegged when measurement TxRerouteConnFailure, TxRerouteAnswerTimeout, or TxRerouteAnswerResponse is pegged.

The connection measurement is associated with the upstream connection from which rerouting was triggered.

Measurement Scope

Recovery

1. If the user-configurable answer response timer is set too low it can cause the timer to expire before an Answer response is received. The user-configurable value is set from the **Diameter** > **Configuration** > **System Options** page.
2. Connection status can be monitored from the **Diameter** > **Maintenance** > **Connections** page.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

TxRerouteConnFailure

Measurement ID
10051

Measurement Group
Diameter Rerouting

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of message rerouting attempts triggered by a connection failure.

Collection Interval
5 min

Peg Condition
For each Request message rerouting attempt invoked by the receipt of a valid Connection Down event notification from the DSR.

Measurement Scope
Server Group

Recovery

1. Connection status can be monitored from the **Diameter** > **Maintenance** > **Connections** page.
2. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

TxRerouteSuccessSent

Measurement ID
10053

Measurement Group
Diameter Rerouting

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of message rerouting attempts that were successfully rerouted.

Collection Interval
5 min

Peg Condition
When the DSR successfully reroutes a Request message. The connection measurement is associated with the upstream connection from which rerouting was triggered.

Measurement Scope
Server Group

Recovery

1. No action required.

DM-IWF Exception measurements

The DM-IWF Exception measurement report contains measurements providing information about transaction processing exceptions that are specific to the MAP-Diameter **IWF** Application running on a **DA-MP**.

TxDmiwfMtoDRoutingFail

Measurement ID
15630

Measurement Group
DM-IWF Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of MAP-to-Diameter transactions which could not be routed to the Diameter network due to a failure.

Collection Interval
5 min

Peg Condition

- Whenever **DM-IWF** is unable to successfully forward a Request message received from a **SS7-MP** due to a failure.
- Whenever the Request message is not routed to a Diameter Peer Node due to a routing error (either **DRL** or another DSR Application initiates an Answer response).
- Whenever **DM-IWF** receives an Answer response from **DRL** and the Application-Data stack event parameter "Message Source ID" is set to "DRL" or "APP".

Measurement Scope
Site

Recovery

1. Examine the Admin State of the DM-IWF DSR application. Verify that the DM-IWF DSR application is Enabled via the **Diameter** > **Maintenance** > **Applications** screen.
2. If the DM-IWF DSR application is enabled, this measurement is pegged when either DM-IWF internal resources are exhausted or DSR's internal request processing queue is highly congested. Examine the following additional information to determine which resources are exhausted and/or whether the DSR internal queue is congested:
   - Alarms and Events from the Alarms & Events screen (Alarm 33005 - DM-IWF PTR Pool Utilization. Refer to the *DSR Alarms and KPIs Reference* for details about this alarm)
   - Measurement EvDmiwfPtrPoolExceeded
   - Measurement EvDmIwfTxFwdFail
3. Evaluate the cause of resource exhaustion or internal queue congestion and take corrective action. Examine the following additional information to assist with determination of the cause of resource exhaustion:
   - Alarms and Events from the Alarms & Events screen
   - The rate of messages being processed by DM-IWF from the **Status & Manage** > **KPIs** page
4. If the problem persists, it is recommended to contact My Oracle Support (MOS).

TxDmiwfDtoMRoutingFail

Measurement ID
15631

Measurement Group
DM-IWF Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Diameter-to-MAP transactions which could not be routed to a **SS7-MP**.

Collection Interval
5 min

Peg Condition
Whenever **DM-IWF** is unable to successfully forward a Request message received from **DRL** to a **SS7-MP** due to a failure.

Measurement Scope
Site

Recovery

1. Examine whether DM-IWF resources are exhausted.
   - Alarms and Events from the Alarms & Events screen (Alarm 33005 - DM-IWF PTR Pool Utilization. Refer to the *DSR Alarms and KPIs Reference* for details about this alarm).
   - Measurement EvDmiwfPtrPoolExceeded
2. If DM-IWF resources are exhausted, evaluate the cause of resource exhaustion and take corrective action. Examine the following additional information to assist with determination of the cause of resource exhaustion
   - Alarms and Events from the Alarms & Events screen
   - The rate of messages being processed by DM-IWF from the **Status & Manage** > **KPIs** page
3. Examine whether the MAP routed service is congested, by reviewing the "MDIWFSvc" Routed Service Provider's states for via **Main Menu** > **Communication Agent** > **Maintenance** > **Routed Services Status** screen. If the routed service is congested, the number of SS7-MPs that act as providers for the MAP Routed Service might be insufficient to service the offered ingress load. Individual service provider status can be monitored from **Main Menu** > **Communication Agent** > **Maintenance** > **Routed Services Status**.
4. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvDmiwfDtoMtimeout

Measurement ID
15632

Measurement Group
DM-IWF Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Diameter-to-MAP transaction failures due to time-out on a **DA-MP**.

Collection Interval
5 min

Peg Condition
Each **DM-IWF** abandons a Diameter-to-MAP transaction due to a **DM-IWF** Pending Answer Timer expiration.

Measurement Scope
Site

Recovery

1. Diameter-to-MAP timeouts are most likely caused by excessive SS7 network delays. Determine if the MAP Origination Transaction Timer value is set too low via **Main Menu** > **MAP Interworking** > **Configuration** > **Options (MF-IWF tab)**.
2. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvDmiwfPtrPoolExceeded

Measurement ID
15634

Measurement Group
DM-IWF Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Transaction Direction)

Description
Number of transactions rejected - no **PTR**s

Collection Interval
5 min

Peg Condition
Each time **DM-IWF** fails to allocate a PTR for either a Diameter-to-MAP or MAP-to-Diameter transaction.

Measurement Scope
Site

Recovery

1. The maximum number of PTRs on a **DA-MP** is set to a default value, but may need to be increased.
2. It is recommended to contact My Oracle Support (MOS) for assistance.

RxDmiwfSS7MPAnswerUnexpected

Measurement ID
15635

Measurement Group
DM-IWF Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Unexpected Answer messages received from **SS7-MP**s

Collection Interval
5 min

Peg Condition
Each time an Answer message received from an **MD-IWF** which was discarded because the pending transaction associated with the message could not be found.

Measurement Scope
Site

Recovery

1. If this event is occurring frequently, the timer may be set too low. The timer value can be viewed via **Main Menu** > **MAP Interworking** > **Configuration** > **System Options**.
2. It is recommended to contact My Oracle Support (MOS) for assistance.

EvMdIwfSvcCongest

Measurement ID
15636

Measurement Group
DM-IWF Exception

Measurement Type
Single

Measurement Dimension
Simple

Description
Number of Diameter-to-MAP Request messages that could not be forwarded to **MD-IWF** Routed Service due to service congestion.

Collection Interval
5 min

Peg Condition
Each time **DM-IWF** fails to forward a Request to MD-IWF (SS7-MP) because the message priority of the Request message was less than the MD-IWF Routed Service Congestion Level.

Measurement Scope
Site

Recovery

1. The number of SS7-MPs that act as providers for the MD-IWF Routed Service might be insufficient to service the offered ingress load.
2. If the problem occurs frequently, it is recommended to contact My Oracle Support (MOS).

EvMdIwfError

Measurement ID
15637

Measurement Group
DM-IWF Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Diameter-to-MAP Request messages forwarded to MAP Routed Service that received error notification.

Collection Interval
5 min

Peg Condition
For each Request forwarded to MD-IWF that received a **ComAgent** Error response

Measurement Scope
Site

Recovery

1. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvMdIwfConnExhausted

Measurement ID
15638

Measurement Group
DM-IWF Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Message Type)

Description
Number of Diameter messages that could not be forwarded to **MD-IWF** (SS7-MP) due to failure to enqueue message to **ComAgent**.

Collection Interval
5 min

Peg Condition
For each Request forwarded to MD-IWF that received a ComAgent Error response

Measurement Scope
Site

Recovery

1. If the problem persists, it is recommended to contact My Oracle Support (MOS).

RxDiscOnError

Measurement ID
15639

Measurement Group
DM-IWF Exception

Measurement Type
Arrayed (by Error Condition)

Measurement Dimension
Simple

Description
The number of Diameter messages that were discarded on error for the error conditions:

- 0: Encode decode error, D-to-M Request
- 1: Encode decode error, D-to-M Answer
- 2: Encode decode error, M-to-D Request

- 3: Encode decode error, M-to-D Answer

Collection Interval
5 min

Peg Condition
When a Diameter message is discarded on error

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) for further assistance.

EvDmIwfTxFwdFail

Measurement ID
15640

Measurement Group
DM-IWF Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Message Type)

Description
Number of Diameter messages that could not be forwarded by **DM-IWF** to **DRL** due to DRL queue exhaustion

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Note: This measurement should not occur unless the **MP** is experiencing local congestion as indicated by Alarms 22000 - Local MP Congestion, 22201 - Ingress Message Rate, 22204 - Request Message Queue Utilization, and 22205 - Answer Message Queue Utilization. Refer to the *DSR Alarms and KPIs Reference* for details about these alarms.

Collection Interval
5 min

Peg Condition
Any time DM-IWF fails to enqueue a Diameter message to DRL's Request or Answer Task

Measurement Scope
Site

Recovery

1. If the problem occurs frequently, it is recommended to contact My Oracle Support (MOS).

EvDmiwfMsgSizeExceeded

Measurement ID
15641

Measurement Group
DM-IWF Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Message Type - Request/Answer)

Description
Number of Diameter messages received from DRL that got rejected because the Diameter message size exceeded maximum "Diameter Max Message Size"

Collection Interval
5 min

Peg Condition
Each time DM-IWF fails to forward a Diameter message to SS7-MP because its size exceeds the supported maximum

Measurement Scope
Site

Recovery

1. Occurrence of this event indicates that diameter message received has size that exceeds maximum diameter message size supported by MAP-Diameter Interworking function and therefore be handled as "Internal Processing Error". Source of these requests can be tracked using "Origin Host", "Application Id" and "Command Code".

RxDmiwfTransactionsRejected

Measurement ID
15642

Measurement Group
DM-IWF Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of interworking attempts that failed due to action initiated by DM-IWF (not due to far end).

Collection Interval
5 min

Peg Condition
This measurement is pegged each time an interworking attempt by DM-IWF fails due to an action initiated by DM-IWF as send answer or discard request. This measurement does not include failures that are due to an error response received from the far end.

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance if this measurement is being pegged frequently.

DmIwfOcDrop

Measurement ID
15643

Measurement Group
DM-IWF Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
DM-IWF originated messages discarded or rejected by overload control.

Collection Interval
5 min

Peg Condition
This measurement is incremented each time a Diameter message received from SS7MP is dropped because DA-MP is in Overload.

Measurement Scope
Site

Recovery

1. No action required.

DM-IWF Performance measurements

The Diameter Interworking Function Performance measurement report contains measurements providing performance information that is specific to the MAP-Diameter **IWF** Application running on a **DA-MP**.

RxDmiwfDtoMTransCnt

Measurement ID
15610

Measurement Group
DM-IWF Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Diameter-to-MAP transaction messages processed.

Collection Interval
5 min

Peg Condition

- When **DM-IWF** processes a Request message received from **DRL**.
- When **DM-IWF** processes an Answer message received from an **MD-IWF**.

Note: Two messages are processed for each Diameter-to-MAP transaction: the Request received from **DRL** (e.g., CLR) and the Answer response received from a **SS7-MP** and returned to the Diameter network (e.g., CLA).

Note: This measurement serves as baseline for calculating measurements RxDmiwfDtoMTransRateAvg and RxDmiwfDtoMTransRatePeak, as well as KPI Diameter-to-MAP Trans Msg Rate (refer to the *DSR Alarms and KPIs Reference* for details on this KPI).

Measurement Scope
Site

Recovery

1. No action required.

RxDmiwfDtoMTransRateAvg

Measurement ID
15611

Measurement Group
DM-IWF Performance

Measurement Type
Avg

Measurement Dimension
Single

Description
Average number of Diameter-to-MAP transaction messages processed per second.

> **Note:** Two messages are processed for each Diameter-to-MAP transaction: the Request received from **DRL** (e.g., CLR) and the Answer response received from a **SS7-MP** and returned to the Diameter network (e.g., CLA).

Collection Interval
5 min

Peg Condition
Each time measurement RxDmiwfDtoMTransCnt is sampled.

Measurement Scope
Site

Recovery

1. Determine if the Application Routing Table is mis-configured and sending too much traffic to this DSR Application. Verify the configuration from **Main Menu** > **Diameter** > **Configuration** > **Application Routing Rules**
2. Determine if there are an insufficient number of DA-MPs configured to handle the network load. Monitor the ingress traffic rate of each **MP** from **Main Menu** > **Status & Manage** > **KPIs**. If MPs are in a congestion state, then the offered load to the server site is exceeding its capacity.
3. It is recommended to contact My Oracle Support (MOS) for assistance.

RxDmiwfDtoMTransRatePeak

Measurement ID
15612

Measurement Group
DM-IWF Performance

Measurement Type
Max

Measurement Dimension
Single

Description
Peak number of Diameter-to-MAP transaction messages processed per second.

Note: Two messages are processed for each Diameter-to-MAP transaction: the Request received from **DRL** (e.g., CLR) and the Answer response received from a **SS7-MP** and returned to the Diameter network (e.g. CLA).

Collection Interval
5 min

Peg Condition
Each time measurement RxDmiwfDtoMTransCnt is sampled.

Measurement Scope
Site

Recovery

1. No action required.

RxDmiwfMtoDTransCnt

Measurement ID
15613

Measurement Group
DM-IWF Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of MAP-to-Diameter transaction messages processed.

Collection Interval
5 min

Peg Condition

- When **DM-IWF** processes a Request message received from an **MD-IWF**.
- When **DM-IWF** processes an Answer message received from **DRL**.

Note: Two messages are processed for each MAP-to-Diameter transaction: the Request received from a **SS7-MP** (e.g., CLR) and the Answer response received from **DRL** and returned to the **SS7-MP** (e.g., CLA).

Measurement Scope
Site

Recovery

1. No action required.

RxDmiwfMtoDTransRateAvg

Measurement ID
15614

Measurement Group
DM-IWF Performance

Measurement Type
Avg

Measurement Dimension
Single

Description
Average number of MAP-to-Diameter transaction messages processed per second.

> **Note:** Two messages are processed for each MAP-to-Diameter transaction: the Request received from a **SS7-MP** (e.g., CLR) and the Answer response received from **DRL** and returned to the **SS7-MP** (e.g., CLA).

Collection Interval
5 min

Peg Condition
Each time measurement RxDmiwfMtoDTransCnt is sampled.

Measurement Scope
Site

Recovery

1. No action required.

RxDmiwfMtoDTransRatePeak

Measurement ID
15615

Measurement Group
DM-IWF Performance

Measurement Type
Max

Measurement Dimension
Single

Description
Peak number of MAP-to-Diameter transaction messages processed per second.

Note: Two messages are processed for each MAP-to-Diameter transaction: the Request received from a **SS7-MP** (e.g., CLR) and the Answer response received from **DRL** and returned to the **SS7-MP** (e.g., CLA).

Collection Interval
5 min

Peg Condition
Each time measurement RxDmiwfMtoDTransCnt is sampled.

Measurement Scope
Site

Recovery

1. No action required.

RxDmiwfTransactionRspQueuePeak

Measurement ID
15616

Measurement Group
DM-IWF Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The peak Transaction Response Queue utilization (0-100%) measured during the collection interval. Values above 100% can be seen briefly during high traffic load conditions.

Collection Interval
5 min

Peg Condition
The maximum Transaction Response Queue utilization sample taken during the collection interval.

Measurement Scope
Site

Recovery

1. No action required.

RxDmiwfTransactionRspQueueAvg

Measurement ID
15617

Measurement Group
DM-IWF Performance

Measurement Type
Avg

Measurement Dimension
Single

Description
The average Transaction Response Queue utilization (0-100%) measured during the collection interval. Values above 100% can be seen briefly during high traffic load conditions.

Collection Interval
5 min

Peg Condition
The average of all Transaction Response Queue utilization samples taken during the collection interval.

Measurement Scope

Recovery

1. No action required.

EvDmiwfPtrPoolPeak

Measurement ID
15618

Measurement Group
DM-IWF Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The peak **DM-IWF PTR** Pool utilization (0-100%) measured during the collection interval. Values above 100% can be seen briefly during high traffic load conditions.

Collection Interval
5 min

Peg Condition
The maximum **DM-IWF PTR** Pool utilization sample taken during the collection interval

Measurement Scope
Site

Recovery

1. No action required.

EvDmiwfPtrPoolAvg

Measurement ID
15619

Measurement Group
DM-IWF Performance

Measurement Type
Avg

Measurement Dimension
Single

Description
The **DM-IWF PTR** Buffer Pool Average Utilization

Collection Interval
5 min

Peg Condition
The average **DM-IWF PTR** Pool utilization sample taken during the collection interval. Values above 100% can be seen briefly during high traffic load conditions.

Measurement Scope
Site

Recovery

1. No action required.

RxDmiwfRequestMessage

Measurement ID
15620

Measurement Group
DM-IWF Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Command Code)

Description
Number of Request messages with Command Code "X" received from **DRL**.

Collection Interval
5 min

Peg Condition
Each time **DM-IWF** processes a Request message received from **DRL**.

Measurement Scope
Site

Recovery

1. No action required.

RxDmiwfAnswerMessage

Measurement ID
15621

Measurement Group
DM-IWF Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Command Code)

Description
Number of Answer messages with Command Code "X" received from **DRL**.

Collection Interval
5 min

Peg Condition
Each time **DM-IWF** processes an Answer message received from **DRL**.

Measurement Scope
Site

Recovery

1. No action required.

TxDmiwfRequestMessage

Measurement ID
15622

Measurement Group
DM-IWF Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Command Code ID)

Description
Number of Request messages with Command Code "X" received from **DRL**.

Collection Interval
5 min

Peg Condition
Each time **DM-IWF** successfully enqueues a Request message to **DRL**'s Request Queue, which includes Request messages forwarded from **MD-IWF**s and Request messages forwarded back to **DRL** for "Unavailability Action" handling.

Measurement Scope
Site

Recovery

1. No action required.

TxDmiwfAnswerMessage

Measurement ID
15623

Measurement Group
DM-IWF Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Command Code)

Description
Number of Answer messages with Command Code "X" sent to from **DRL**.

Collection Interval
5 min

Peg Condition
Each time **DM-IWF** successfully enqueues an Answer message to **DRL**'s Answer Queue.

Measurement Scope
Site

Recovery

1. No action required.

RxDmiwfRequestMessageIwf

Measurement ID
15624

Measurement Group
DM-IWF Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Request messages processed from am **SS7-MP**.

Collection Interval
5 min

Peg Condition
Each time **DM-IWF** processes a request message received from an MD-IWF (SS7-MP).

Measurement Scope
Site

Recovery

1. No action required.

RxDmiwfAnswerMessageIwf

Measurement ID
15625

Measurement Group
DM-IWF Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Answer messages processed by DM-IWF that were received from an SS7-MP.

Collection Interval
5 min

Peg Condition
Each time **DM-IWF** processes an Answer message received from an MD-IWF (SS7-MP).

Measurement Scope
Site

Recovery

1. No action required.

TxDmiwfRequestMessageIwf

Measurement ID
15626

Measurement Group
DM-IWF Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Request messages sent to an SS7-MP.

Collection Interval
5 min

Peg Condition
Each time **DM-IWF** sends a Request message to an MD-IWF (SS7-MP).

Measurement Scope

Recovery

1. No action required.

TxDmiwfAnswerMessageIwf

Measurement ID
15627

Measurement Group
DM-IWF Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Answer messages sent to an SS7-MP.

Collection Interval
5 min

Peg Condition
Each time **DM-IWF** sends a Request message to an MD-IWF (SS7-MP).

Measurement Scope

Recovery

1. No action required.

DP Measurements

Table 4-3 DP Measurements

Measurement Tag	Description	Collection Interval
DpsQueriesReceived	Number of Queries received	5 minutes
DpsMsisdnQueriesReceived	Number of MSISDN Queries received	5 minutes
DpsImsiQueriesReceived	Number of IMSI Queries received	5 minutes
DpsNaiQueriesReceived	Number of NAI Queries received	5 minutes
DpsExtIdQueriesReceived	Number of External Identifier Queries received	5 minutes
DpsQueriesFailed	Number of Queries failed	5 minutes
DpsMsisdnQueriesFailed	Number of MSISDN Queries with Fail response	5 minutes
DpsImsiQueriesFailed	Number of IMSI Queries with Fail response	5 minutes
DpsNaiQueriesFailed	Number of NAI Queries with Fail response	5 minutes
DpsExtIdQueriesFailed	Number of External Identifier Queries with Fail response	5 minutes
DpsSuccessResponses	Number of Queries with Success response	5 minutes
DpsMsisdnSuccessResponses	Number of MSISDN Queries with Success response	5 minutes
DpsImsiSuccessResponses	Number of IMSI Queries with Success response	5 minutes
DpsNaiSuccessResponses	Number of NAI Queries with Success response	5 minutes
DpsExtIdSuccessResponses	Number of External Identifier Queries with Success response	5 minutes
DpsNotFoundReponses	Number of Queries with Not Found response	5 minutes
DpsMsisdnNotFound Responses	Number of MSISDN Queries with Not Found response	5 minutes

Table 4-3 (Cont.) DP Measurements

Measurement Tag	Description	Collection Interval
DpsImsiNotFoundResponses	Number of IMSI Queries with Not Found response	5 minutes
DpsNaiNotFoundResponses	Number of NAI Queries with Not Found response	5 minutes
DpsExtIdNotFoundResponses	Number of External Identifier Queries with NotFound Response	5 minutes
DpsRespSent	Total number of responses sent	5 minutes
DpsIngressQueuePeak	Peak DPS Ingress Queue utilization during collection period	5 minutes
DpsIngressQueueAvg	Average DPS Ingress Queue utilization during the collection period	5 minutes
DpsIngressQueueFull	Number of DPS Ingress Queue StackTask messages discarded during the collection period because the number of message queued exceeded the maximum capacity	5 minutes
DpsQueryRatePeak	Peak Ingress Message Rate in messages per second during the collection period	5 minutes
DpsQueryRateAvg	Average Ingress Message Rate in messages per second during the collection period	5 minutes
DpsQueryProcessingTime	Distribution of times (in microseconds) taken by dpserver to process each query and send its reply.	5 minutes
DpsQueryProcessingTimeAvg	The average query processing time (in microseconds) taken by dpserver to process each query and sent its reply.	5 minutes
DpsMsisdnBlacklistedResponses	Number of MSISDN Queries with Blacklisted response	5 minutes
DpsImsiBlacklistedResponses	Number of IMSI Queries with Blacklisted response	5 minutes

Table 4-3 (Cont.) DP Measurements

Measurement Tag	Description	Collection Interval
DpsMsisdnPrefixFound	Number of MSISDN Queries that were found by matching a prefix	5 minutes
DpsImsiPrefixFound	Number of IMSI Queries that were found by matching a prefix	5 minutes
DpsMsisdnBlacklistLookups	Number of MSISDN Blacklist Lookups performed	5 minutes
DpsImsiBlacklistLookups	Number of IMSI Blacklist Lookups performed	5 minutes
DpsMsisdnPrefixLookups	Number of MSISDN Prefix Lookups performed	5 minutes
DpsImsiPrefixLookups	Number of IMSI Prefix Lookups performed	5 minutes
DpExtIdDomainLookups	Number of Domain Identifier Lookups performed	5 minutes

DpsQueriesReceived

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Number of Queries received

Collection Interval
5 min

Peg Condition

Measurement Scope
DP Group

Recovery

1. No action required.

DpsMsisdnQueriesReceived

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Number of **MSISDN** Queries received

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsImsiQueriesReceived

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Number of **IMSI** Queries received

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsNaiQueriesReceived

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Number of NAI Queries received

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsExtIdQueriesReceived

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Number of External Identifier Queries received

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsQueriesFailed

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Number of Queries failed

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsMsisdnQueriesFailed

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Number of **MSISDN** Queries with Fail response

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsImsiQueriesFailed

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Number of **IMSI** Queries with Fail response

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsNaiQueriesFailed

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Number of **NAI** Queries with Fail response

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsExtIdQueriesFailed

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Number of External Identifier Queries with Fail response

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsSuccessResponses

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Number of Queries with Success response

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsMsisdnSuccessResponses

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Number of **MSISDN** Queries with Success response

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsImsiSuccessResponses

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Number of **IMSI** Queries with Success response

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsNaiSuccessResponses

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Number of **NAI** Queries with Success response

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsExtIdSuccessResponses

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Number of External Identifier Queries with Success response

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsNotFoundResponses

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Number of Queries with Not Found response

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsMsisdnNotFoundResponses

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Number of **MSISDN** Queries with Not Found response

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsImsiNotFoundResponses

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Number of **IMSI** Queries with Not Found response

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsNaiNotFoundResponses

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Number of **NAI** Queries with Not Found response

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsExtIdNotFoundResponses

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Number of External Identifier Queries with NotFound Response

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsRespSent

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Total number of responses sent

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsIngressQueuePeak

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Peak DPS Ingress Queue utilization during collection period

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsIngressQueueAvg

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Average DPS Ingress Queue utilization during collection period

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsIngressQueueFull

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Number of DPS Ingress Queue Stack Task messages discarded during the collection period because the number of messages queued exceeded the maximum capacity

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsQueryRatePeak

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Peak Ingress Message Rate in messages per second during the collection period

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsQueryRateAvg

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Average Ingress Message Rate in messages per second during the collection period

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsQueryProcessingTime

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Distribution of times (in microseconds) taken by dpserver to process each query and send its reply

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsQueryProcessingTimeAvg

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
The average query processing time (in microseconds) taken by dpserver to process each query and send its reply

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsMsisdnBlacklistedResponses

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Number of **MSISDN** Queries with Blacklisted response

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsImsiBlacklistedResponses

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Number of **IMSI** Queries with Blacklisted response

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsMsisdnPrefixFound

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Number of **MSISDN** Queries that were found by matching a prefix

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsImsiPrefixFound

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Number of **IMSI** Queries that were found by matching a prefix

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsMsisdnBlacklistLookups

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Number of **MSISDN** Blacklist Lookups performed

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsImsiBlacklistLookups

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Number of **IMSI** Blacklist Lookups performed

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsMsisdnPrefixLookups

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Number of **MSISDN** Prefix Lookups performed

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpsImsiPrefixLookups

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Number of **IMSI** Prefix Lookups performed

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

DpExtIdDomainLookups

Measurement ID

Measurement Group
DP

Measurement Type
Simple

Description
Number of Domain Identifier Lookups performed

Collection Interval
5 min

Peg Condition

Measurement Scope
Data Processor

Recovery

1. No action required.

Egress Throttle Group Performance measurements

The Diameter Egress Throttle Group Performance measurement report contains measurements providing information related to a specific **ETG**.

TxEtgMsgsLocal

Measurement ID
14000

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by ETG ID)

Description
Number of messages (Request or Answer) send on a Connection or a Peer which is part of **ETG** .

Collection Interval
5 min

Peg Condition
When **DRL** successfully queues a message (Request (including Reroutes and MessageCopy) or Answer) to DCL for transmission to Connection or a Peer which is part of **ETG**. This peg is incremented even if ETG Rate Limiting function is Disabled. This peg is incremented only for "Routable" messages i.e messages terminated in **DCL** layer (eg CEX, DWX) are not counted.

Measurement Scope
Site

Recovery

1. No action required

TxEtgMsgRatePeak

Measurement ID
14001

Measurement Group
Egress Throttle Group Performance

Measurement Type
Max

Measurement Dimension
Arrayed (by ETG ID)

Description
Peak Aggregated **ETG** Message Rate calculation made during the collection interval

Collection Interval
5 min

Peg Condition
An **ETG** Message Rate calculation A_t is periodically calculated. If the new A_t exceeds any previous A_{t-k} value for the collection interval, then this measurement will be updated with the new A_t value.

Measurement Scope
Site

Recovery

1. No action required

TxEtgMsgRateAvg

Measurement ID
14002

Measurement Group
Egress Throttle Group Performance

Measurement Type
Avg

Measurement Dimension
Arrayed (by ETG ID)

Description
Average **ETG** Message Rate calculation made during the collection interval

Collection Interval
5 min

Peg Condition
Each time an ETG Message Rate calculation A_t is calculated.

Measurement Scope
Site

Recovery

1. No action required

EtgSelected

Measurement ID
14500

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected Destination-Host Implicit Routing) which is associated with an ETG. Additionally, either an ETG's Rate Limiting Admin State = Enabled or an ETG's Pending Transaction Limiting Admin State = Enabled

Measurement Scope
Site

Recovery

1. No action necessary.

EtgTmStaticThrottling

Measurement ID
14501

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Duration of time (in seconds) that ETG throttling was being applied

Collection Interval
5 min

Peg Condition
The time duration interval starts when any of these events occur:

- The ETG's Operation Reason is changed to Static Rate Limit Exceeded or Maximum Pending Trans Exceeded
- A new measurement collection interval begins and the ETG's Operation Reason is Static Rate Limit Exceeded

The time duration interval stops when any of these events occur:

- The ETG's Operation Reason is changed from Status Rate Limit Exceeded or Maximum Pending Trans Exceeded to any other value
- The current measurement collection interval ends (such as end of the current 5 minute collection interval)
- When a time duration interval completes, the time measured is added to the measurement value

Measurement Scope
Site

Recovery

1. No action necessary.

EvEtgRateCongestionOnset

Measurement ID
14003

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by ETG ID)

Description
Number of times an **ETG-RCL** was advanced.

Collection Interval
5 min

Peg Condition
Each time the **EMR** Congestion Level is advanced

Measurement Scope
Site

Recovery

1. Verify that the "Maximum EMR" for the **ETG** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the "Rate Convergence Time" parameter for the ETG if necessary. Increasing the "Rate Convergence Time" value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the "EMR Abatement Timeout" for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgRateDiscardPri0G

Measurement ID
14004

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by ETG ID)

Description
Number of Request Messages with priority 0 and color green discarded (with or without response) due to last connection evaluated for routing being **ETG** Rate Limited.

Collection Interval
5 min

Peg Condition
Each time that Routing Layer discarded a Request message with priority 0 and color green due to last connection evaluated being ETG Rate Limited

Measurement Scope
Site

Recovery

1. Verify that the "Maximum EMR" for the **ETG** is set sufficiently high.
2. Adjust the **EMR** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the "Rate Convergence Time" parameter for the ETG if necessary. Increasing the "Rate Convergence Time" value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the "EMR Abatement Timeout" for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, t is recommended to contact My Oracle Support (MOS).

EvEtgRateDiscardPri0Y

Measurement ID
14579

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 0 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETG Rate Limited.

Collection Interval
5 min

Peg Condition
Each time a request message with priority 0 and color yellow is discarded due to last connection evaluated being ETG Rate Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETG** is set sufficiently high.
2. Adjust the **EMR** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETG if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the EMR Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, t is recommended to contact My Oracle Support (MOS).

EvEtgRateDiscardPri1G

Measurement ID
14005

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by ETG ID)

Description
Number of Request Messages with priority 1 and color green discarded (with or without response) due to last connection evaluated for routing being **ETG** Rate Limited.

Collection Interval
5 min

Peg Condition
Each time that Routing Layer discarded a Request message with priority 1 and color green due to last connection evaluated being ETG Rate Limited

Measurement Scope
Site

Recovery

1. Verify that the "Maximum EMR" for the **ETG** is set sufficiently high.
2. Adjust the **EMR** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the "Rate Convergence Time" parameter for the ETG if necessary. Increasing the "Rate Convergence Time" value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the "EMR Abatement Timeout" for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgRateDiscardPri1Y

Measurement ID
14580

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 1 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETG Rate Limited.

Collection Interval
5 min

Peg Condition
Each time a request message with priority 1 and color yellow is discarded due to last connection evaluated being ETG Rate Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETG** is set sufficiently high.
2. Adjust the **EMR** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETG if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the EMR Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, t is recommended to contact My Oracle Support (MOS).

EvEtgRateDiscardPri2G

Measurement ID
14006

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by ETG ID)

Description
Number of Request Messages with priority 2 and color green discarded (with or without response) due to last connection evaluated for routing being **ETG** Rate Limited.

Collection Interval
5 min

Peg Condition
Each time that Routing Layer discarded a Request message with priority 2 and color green due to last connection evaluated being ETG Rate Limited

Measurement Scope
Site

Recovery

1. Verify that the "Maximum EMR" for the **ETG** is set sufficiently high.
2. Adjust the **EMR** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the "Rate Convergence Time" parameter for the ETG if necessary. Increasing the "Rate Convergence Time" value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the "EMR Abatement Timeout" for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgRateDiscardPri2Y

Measurement ID
14581

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 2 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETG Rate Limited.

Collection Interval
5 min

Peg Condition
Each time a request message with priority 2 and color yellow is discarded due to last connection evaluated being ETG Rate Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETG** is set sufficiently high.
2. Adjust the **EMR** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETG if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the EMR Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, t is recommended to contact My Oracle Support (MOS).

EvEtgRateDiscardPri3G

Measurement ID
14566

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 3 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETG Rate Limited.

Collection Interval
5 min

Peg Condition
Each time a request message with priority 3 and color green is discarded due to last connection evaluated being ETG Rate Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETG** is set sufficiently high.
2. Adjust the **EMR** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETG if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the EMR Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, t is recommended to contact My Oracle Support (MOS).

EvEtgRateDiscardPri3Y

Measurement ID
14582

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 3 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETG Rate Limited.

Collection Interval
5 min

Peg Condition
Each time a request message with priority 3 and color yellow is discarded due to last connection evaluated being ETG Rate Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETG** is set sufficiently high.
2. Adjust the **EMR** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETG if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the EMR Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, t is recommended to contact My Oracle Support (MOS).

EvEtgRateDiscardPri4G

Measurement ID
14567

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 4 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETG Rate Limited.

Collection Interval
5 min

Peg Condition
Each time a request message with priority 4 and color green is discarded due to last connection evaluated being ETG Rate Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETG** is set sufficiently high.
2. Adjust the **EMR** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETG if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the EMR Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, t is recommended to contact My Oracle Support (MOS).

EvEtgRateDiscardPri4Y

Measurement ID
14583

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 4 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETG Rate Limited.

Collection Interval
5 min

Peg Condition
Each time a request message with priority 4 and color yellow is discarded due to last connection evaluated being ETG Rate Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETG** is set sufficiently high.
2. Adjust the **EMR** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETG if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the EMR Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, t is recommended to contact My Oracle Support (MOS).

EvEtgRateDiscardPri5G

Measurement ID
14568

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 5 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETG Rate Limited.

Collection Interval
5 min

Peg Condition
Each time a request message with priority 5 and color green is discarded due to last connection evaluated being ETG Rate Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETG** is set sufficiently high.
2. Adjust the **EMR** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETG if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the EMR Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, t is recommended to contact My Oracle Support (MOS).

EvEtgRateDiscardPri5Y

Measurement ID
14584

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 5 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETG Rate Limited.

Collection Interval
5 min

Peg Condition
Each time a request message with priority 5 and color yellow is discarded due to last connection evaluated being ETG Rate Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETG** is set sufficiently high.
2. Adjust the **EMR** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETG if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the EMR Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, t is recommended to contact My Oracle Support (MOS).

EvEtgRateDiscardPri6G

Measurement ID
14569

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 6 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETG Rate Limited.

Collection Interval
5 min

Peg Condition
Each time a request message with priority 6 and color green is discarded due to last connection evaluated being ETG Rate Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETG** is set sufficiently high.
2. Adjust the **EMR** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETG if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the EMR Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, t is recommended to contact My Oracle Support (MOS).

EvEtgRateDiscardPri6Y

Measurement ID
14585

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 6 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETG Rate Limited.

Collection Interval
5 min

Peg Condition
Each time a request message with priority 6 and color yellow is discarded due to last connection evaluated being ETG Rate Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETG** is set sufficiently high.
2. Adjust the **EMR** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETG if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the EMR Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, t is recommended to contact My Oracle Support (MOS).

EvEtgRateDiscardPri7G

Measurement ID
14570

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 7 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETG Rate Limited.

Collection Interval
5 min

Peg Condition
Each time a request message with priority 7 and color green is discarded due to last connection evaluated being ETG Rate Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETG** is set sufficiently high.
2. Adjust the **EMR** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETG if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the EMR Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, t is recommended to contact My Oracle Support (MOS).

EvEtgRateDiscardPri7Y

Measurement ID
14586

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 7 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETG Rate Limited.

Collection Interval
5 min

Peg Condition
Each time a request message with priority 7 and color yellow is discarded due to last connection evaluated being ETG Rate Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETG** is set sufficiently high.
2. Adjust the **EMR** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETG if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the EMR Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, t is recommended to contact My Oracle Support (MOS).

EvEtgRateDiscardPri8G

Measurement ID
14571

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 8 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETG Rate Limited.

Collection Interval
5 min

Peg Condition
Each time a request message with priority 8 and color green is discarded due to last connection evaluated being ETG Rate Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETG** is set sufficiently high.
2. Adjust the **EMR** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETG if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the EMR Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, t is recommended to contact My Oracle Support (MOS).

EvEtgRateDiscardPri8Y

Measurement ID
14587

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 8 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETG Rate Limited.

Collection Interval
5 min

Peg Condition
Each time a request message with priority 8 and color yellow is discarded due to last connection evaluated being ETG Rate Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETG** is set sufficiently high.
2. Adjust the **EMR** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETG if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the EMR Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, t is recommended to contact My Oracle Support (MOS).

EvEtgRateDiscardPri9G

Measurement ID
14572

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 9 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETG Rate Limited.

Collection Interval
5 min

Peg Condition
Each time a request message with priority 9 and color green is discarded due to last connection evaluated being ETG Rate Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETG** is set sufficiently high.
2. Adjust the **EMR** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETG if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the EMR Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, t is recommended to contact My Oracle Support (MOS).

EvEtgRateDiscardPri9Y

Measurement ID
14588

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 9 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETG Rate Limited.

Collection Interval
5 min

Peg Condition
Each time a request message with priority 9 and color yellow is discarded due to last connection evaluated being ETG Rate Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETG** is set sufficiently high.
2. Adjust the **EMR** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETG if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the EMR Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, t is recommended to contact My Oracle Support (MOS).

EvEtgRateDiscardPri10G

Measurement ID
14573

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 10 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETG Rate Limited.

Collection Interval
5 min

Peg Condition
Each time a request message with priority 10 and color green is discarded due to last connection evaluated being ETG Rate Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETG** is set sufficiently high.
2. Adjust the **EMR** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETG if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the EMR Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, t is recommended to contact My Oracle Support (MOS).

EvEtgRateDiscardPri10Y

Measurement ID
14589

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 10 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETG Rate Limited.

Collection Interval
5 min

Peg Condition
Each time a request message with priority 10 and color yellow is discarded due to last connection evaluated being ETG Rate Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETG** is set sufficiently high.
2. Adjust the **EMR** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETG if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the EMR Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, t is recommended to contact My Oracle Support (MOS).

EvEtgRateDiscardPri11G

Measurement ID
14574

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 11 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETG Rate Limited.

Collection Interval
5 min

Peg Condition
Each time a request message with priority 11 and color green is discarded due to last connection evaluated being ETG Rate Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETG** is set sufficiently high.
2. Adjust the **EMR** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETG if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the EMR Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, t is recommended to contact My Oracle Support (MOS).

EvEtgRateDiscardPri11Y

Measurement ID
14590

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 11 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETG Rate Limited.

Collection Interval
5 min

Peg Condition
Each time a request message with priority 11 and color yellow is discarded due to last connection evaluated being ETG Rate Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETG** is set sufficiently high.
2. Adjust the **EMR** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETG if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the EMR Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, t is recommended to contact My Oracle Support (MOS).

EvEtgRateDiscardPri12G

Measurement ID
14575

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 12 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETG Rate Limited.

Collection Interval
5 min

Peg Condition
Each time a request message with priority 12 and color green is discarded due to last connection evaluated being ETG Rate Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETG** is set sufficiently high.
2. Adjust the **EMR** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETG if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the EMR Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, t is recommended to contact My Oracle Support (MOS).

EvEtgRateDiscardPri12Y

Measurement ID
14591

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 12 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETG Rate Limited.

Collection Interval
5 min

Peg Condition
Each time a request message with priority 12 and color yellow is discarded due to last connection evaluated being ETG Rate Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETG** is set sufficiently high.
2. Adjust the **EMR** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETG if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the EMR Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, t is recommended to contact My Oracle Support (MOS).

EvEtgRateDiscardPri13G

Measurement ID
14576

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 13 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETG Rate Limited.

Collection Interval
5 min

Peg Condition
Each time a request message with priority 13 and color green is discarded due to last connection evaluated being ETG Rate Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETG** is set sufficiently high.
2. Adjust the **EMR** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETG if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the EMR Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, t is recommended to contact My Oracle Support (MOS).

EvEtgRateDiscardPri13Y

Measurement ID
14592

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 13 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETG Rate Limited.

Collection Interval
5 min

Peg Condition
Each time a request message with priority 13 and color yellow is discarded due to last connection evaluated being ETG Rate Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETG** is set sufficiently high.
2. Adjust the **EMR** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETG if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the EMR Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, t is recommended to contact My Oracle Support (MOS).

EvEtgRateDiscardPri14G

Measurement ID
14577

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 14 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETG Rate Limited.

Collection Interval
5 min

Peg Condition
Each time a request message with priority 14 and color green is discarded due to last connection evaluated being ETG Rate Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETG** is set sufficiently high.
2. Adjust the **EMR** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETG if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the EMR Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, t is recommended to contact My Oracle Support (MOS).

EvEtgRateDiscardPri14Y

Measurement ID
14593

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 14 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETG Rate Limited.

Collection Interval
5 min

Peg Condition
Each time a request message with priority 14 and color yellow is discarded due to last connection evaluated being ETG Rate Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETG** is set sufficiently high.
2. Adjust the **EMR** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETG if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the EMR Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, t is recommended to contact My Oracle Support (MOS).

EvEtgRateDiscardPri15G

Measurement ID
14578

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 15 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETG Rate Limited.

Collection Interval
5 min

Peg Condition
Each time a request message with priority 15 and color green is discarded due to last connection evaluated being ETG Rate Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETG** is set sufficiently high.
2. Adjust the **EMR** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETG if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the EMR Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, t is recommended to contact My Oracle Support (MOS).

EvEtgRateDiscardPri15Y

Measurement ID
14594

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 15 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETG Rate Limited.

Collection Interval
5 min

Peg Condition
Each time a request message with priority 15 and color yellow is discarded due to last connection evaluated being ETG Rate Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETG** is set sufficiently high.
2. Adjust the **EMR** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETG if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to ETG rate.
4. Verify the EMR Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
7. If the problem persists, t is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransPeak

Measurement ID
14007

Measurement Group
Egress Throttle Group Performance

Measurement Type
Max

Measurement Dimension
Arrayed (by ETG ID)

Description
Peak pending transactions to members of this **ETG** during the collection interval.

Collection Interval
5 min

Peg Condition
Each time a new P_t value exceeds any previous P_{t-k} value.

Measurement Scope
Site

Recovery

1. No action required

EvEtgPendingTransAvg

Measurement ID
14008

Measurement Group
Egress Throttle Group Performance

Measurement Type
Avg

Measurement Dimension
Arrayed (by ETG ID)

Description
Average pending transactions to members of this **ETG** during the collection interval.

Collection Interval
5 min

Peg Condition
Each time an ETG Pending Request P_t value is calculated.

Measurement Scope
Site

Recovery

1. No action required

EvEtgPendingTransCongestionOnset

Measurement ID
14009

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by ETG ID)

Description
Number of times an **ETG-PCL** was advanced.

Collection Interval
5 min

Peg Condition
Each time the ETG Window Congestion Level is advanced

Measurement Scope
Site

Recovery

1. Verify that the "Maximum EPT" for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the "EPT Abatement Timeout" for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransDiscardPri0G

Measurement ID
14010

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by ETG ID)

Description
Number of Request Messages with priority 0 and color green discarded (with or without response) due to last connection evaluated for routing being **ETG** Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time that Routing Layer discarded a Request message with priority 0 and color green due to last connection evaluated being ETG Pending Transaction Limited

Measurement Scope
Site

Recovery

1. Verify that the "Maximum EPT" for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the "EPT Abatement Timeout" for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransDiscardPri0Y

Measurement ID
14608

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 0 and color yellow discarded (with or without response) due to last connection evaluated for routing being ETG Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time a request message with priority 0 and color yellow is discarded due to last connection evaluated being ETG Pending Transaction Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransDiscardPri1G

Measurement ID
14011

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by ETG ID)

Description
Number of Request Messages with priority 1 and color green discarded (with or without response) due to last connection evaluated for routing being **ETG** Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time that Routing Layer discarded a Request message with priority 1 and color green due to last connection evaluated being ETG Pending Transaction Limited

Measurement Scope
Site

Recovery

1. Verify that the "Maximum EPT" for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the "EPT Abatement Timeout" for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransDiscardPri1Y

Measurement ID
14609

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 1 and color yellow discarded (with or without response) due to last connection evaluated for routing being ETG Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time a request message with priority 1 and color yellow is discarded due to last connection evaluated being ETG Pending Transaction Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransDiscardPri2G

Measurement ID
14012

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by ETG ID)

Description
Number of Request Messages with priority 2 and color green discarded (with or without response) due to last connection evaluated for routing being **ETG** Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time that Routing Layer discarded a Request message with priority 2 and color green due to last connection evaluated being ETG Pending Transaction Limited

Measurement Scope
Site

Recovery

1. Verify that the "Maximum EPT" for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the "EPT Abatement Timeout" for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransDiscardPri2Y

Measurement ID
14610

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 2 and color yellow discarded (with or without response) due to last connection evaluated for routing being ETG Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time a request message with priority 2 and color yellow is discarded due to last connection evaluated being ETG Pending Transaction Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransDiscardPri3G

Measurement ID
14595

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 3 and color green discarded (with or without response) due to last connection evaluated for routing being ETG Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time a request message with priority 3 and color green is discarded due to last connection evaluated being ETG Pending Transaction Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransDiscardPri3Y

Measurement ID
14611

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 3 and color yellow discarded (with or without response) due to last connection evaluated for routing being ETG Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time a request message with priority 3 and color yellow is discarded due to last connection evaluated being ETG Pending Transaction Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransDiscardPri4G

Measurement ID
14596

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 4 and color green discarded (with or without response) due to last connection evaluated for routing being ETG Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time a request message with priority 4 and color green is discarded due to last connection evaluated being ETG Pending Transaction Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransDiscardPri4Y

Measurement ID
14612

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 4 and color yellow discarded (with or without response) due to last connection evaluated for routing being ETG Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time a request message with priority 4 and color yellow is discarded due to last connection evaluated being ETG Pending Transaction Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransDiscardPri5G

Measurement ID
14597

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 5 and color green discarded (with or without response) due to last connection evaluated for routing being ETG Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time a request message with priority 5 and color green is discarded due to last connection evaluated being ETG Pending Transaction Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransDiscardPri5Y

Measurement ID
14613

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 5 and color yellow discarded (with or without response) due to last connection evaluated for routing being ETG Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time a request message with priority 5 and color yellow is discarded due to last connection evaluated being ETG Pending Transaction Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransDiscardPri6G

Measurement ID
14598

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 6 and color green discarded (with or without response) due to last connection evaluated for routing being ETG Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time a request message with priority 6 and color green is discarded due to last connection evaluated being ETG Pending Transaction Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransDiscardPri6Y

Measurement ID
14614

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 6 and color yellow discarded (with or without response) due to last connection evaluated for routing being ETG Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time a request message with priority 6 and color yellow is discarded due to last connection evaluated being ETG Pending Transaction Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransDiscardPri7G

Measurement ID
14599

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 7 and color green discarded (with or without response) due to last connection evaluated for routing being ETG Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time a request message with priority 7 and color green is discarded due to last connection evaluated being ETG Pending Transaction Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransDiscardPri7Y

Measurement ID
14615

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 7 and color yellow discarded (with or without response) due to last connection evaluated for routing being ETG Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time a request message with priority 7 and color yellow is discarded due to last connection evaluated being ETG Pending Transaction Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransDiscardPri8G

Measurement ID
14600

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 8 and color green discarded (with or without response) due to last connection evaluated for routing being ETG Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time a request message with priority 8 and color green is discarded due to last connection evaluated being ETG Pending Transaction Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransDiscardPri8Y

Measurement ID
14616

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 8 and color yellow discarded (with or without response) due to last connection evaluated for routing being ETG Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time a request message with priority 8 and color yellow is discarded due to last connection evaluated being ETG Pending Transaction Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransDiscardPri9G

Measurement ID
14601

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 9 and color green discarded (with or without response) due to last connection evaluated for routing being ETG Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time a request message with priority 9 and color green is discarded due to last connection evaluated being ETG Pending Transaction Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransDiscardPri9Y

Measurement ID
14617

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 9 and color yellow discarded (with or without response) due to last connection evaluated for routing being ETG Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time a request message with priority 9 and color yellow is discarded due to last connection evaluated being ETG Pending Transaction Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransDiscardPri10G

Measurement ID
14602

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 10 and color green discarded (with or without response) due to last connection evaluated for routing being ETG Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time a request message with priority 10 and color green is discarded due to last connection evaluated being ETG Pending Transaction Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransDiscardPri10Y

Measurement ID
14618

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 10 and color yellow discarded (with or without response) due to last connection evaluated for routing being ETG Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time a request message with priority 10 and color yellow is discarded due to last connection evaluated being ETG Pending Transaction Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransDiscardPri11G

Measurement ID
14603

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 11 and color green discarded (with or without response) due to last connection evaluated for routing being ETG Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time a request message with priority 11 and color green is discarded due to last connection evaluated being ETG Pending Transaction Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransDiscardPri11Y

Measurement ID
14619

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 11 and color yellow discarded (with or without response) due to last connection evaluated for routing being ETG Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time a request message with priority 11 and color yellow is discarded due to last connection evaluated being ETG Pending Transaction Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransDiscardPri12G

Measurement ID
14604

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 12 and color green discarded (with or without response) due to last connection evaluated for routing being ETG Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time a request message with priority 12 and color green is discarded due to last connection evaluated being ETG Pending Transaction Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransDiscardPri12Y

Measurement ID
14620

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 12 and color yellow discarded (with or without response) due to last connection evaluated for routing being ETG Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time a request message with priority 12 and color yellow is discarded due to last connection evaluated being ETG Pending Transaction Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransDiscardPri13G

Measurement ID
14605

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 13 and color green discarded (with or without response) due to last connection evaluated for routing being ETG Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time a request message with priority 13 and color green is discarded due to last connection evaluated being ETG Pending Transaction Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransDiscardPri13Y

Measurement ID
14621

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 13 and color yellow discarded (with or without response) due to last connection evaluated for routing being ETG Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time a request message with priority 13 and color yellow is discarded due to last connection evaluated being ETG Pending Transaction Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransDiscardPri14G

Measurement ID
14606

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 14 and color green discarded (with or without response) due to last connection evaluated for routing being ETG Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time a request message with priority 14 and color green is discarded due to last connection evaluated being ETG Pending Transaction Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransDiscardPri14Y

Measurement ID
14622

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 14 and color yellow discarded (with or without response) due to last connection evaluated for routing being ETG Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time a request message with priority 14 and color yellow is discarded due to last connection evaluated being ETG Pending Transaction Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransDiscardPri15G

Measurement ID
14607

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 15 and color green discarded (with or without response) due to last connection evaluated for routing being ETG Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time a request message with priority 15 and color green is discarded due to last connection evaluated being ETG Pending Transaction Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransDiscardPri15Y

Measurement ID
14623

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with priority 15 and color yellow discarded (with or without response) due to last connection evaluated for routing being ETG Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time a request message with priority 15 and color yellow is discarded due to last connection evaluated being ETG Pending Transaction Limited

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETG** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETG is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETG**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETG than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETG is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETG.
6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtgPendingTransPeak

Measurement ID
14007

Measurement Group
Egress Throttle Group Performance

Measurement Type
Max

Measurement Dimension
Arrayed (by ETG ID)

Description
Peak pending transactions to members of this **ETG** during the collection interval.

Collection Interval
5 min

Peg Condition
Each time a new P_t value exceeds any previous P_{t-k} value.

Measurement Scope
Site

Recovery

1. No action required

EtgHandledP0G

Measurement ID
14502

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were not throttled/diverted with message priority 0 and color green

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 0
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

EtgHandledP0Y

Measurement ID
14518

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were not throttled/diverted with message priority 0 and color yellow

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 0
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

EtgHandledP1G

Measurement ID
14503

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were not throttled/diverted with message priority 1 and color green

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 1
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

EtgHandledP1Y

Measurement ID
14519

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were not throttled/diverted with message priority 1 and color yellow

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 1
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

EtgHandledP2G

Measurement ID
14504

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were not throttled/diverted with message priority 2 and color green

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 2
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

EtgHandledP2Y

Measurement ID
14520

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were not throttled/diverted with message priority 2 and color yellow

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 2
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

EtgHandledP3G

Measurement ID
14505

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were not throttled/diverted with message priority 3 and color green

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 3

- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

EtgHandledP3Y

Measurement ID
14521

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were not throttled/diverted with message priority 3 and color yellow

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 3
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

EtgHandledP4G

Measurement ID
14506

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were not throttled/diverted with message priority 4 and color green

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 4
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

EtgHandledP4Y

Measurement ID
14522

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were not throttled/diverted with message priority 4 and color yellow

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 4
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

EtgHandledP5G

Measurement ID
14507

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were not throttled/diverted with message priority 5 and color green

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 5
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

EtgHandledP5Y

Measurement ID
14523

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were not throttled/diverted with message priority 5 and color yellow

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 5
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

EtgHandledP6G

Measurement ID
14508

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were not throttled/diverted with message priority 6 and color green

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 6
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

EtgHandledP6Y

Measurement ID
14524

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were not throttled/diverted with message priority 6 and color yellow

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 6

- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

EtgHandledP7G

Measurement ID
14509

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were not throttled/diverted with message priority 7 and color green

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 7
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

EtgHandledP7Y

Measurement ID
14525

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were not throttled/diverted with message priority 7 and color yellow

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 7
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

EtgHandledP8G

Measurement ID
14510

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were not throttled/diverted with message priority 8 and color green

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 8
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

EtgHandledP8Y

Measurement ID
14526

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were not throttled/diverted with message priority 8 and color yellow

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 8
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

EtgHandledP9G

Measurement ID
14511

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were not throttled/diverted with message priority 9 and color green

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 9
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

EtgHandledP9Y

Measurement ID
14527

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were not throttled/diverted with message priority 9 and color yellow

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 9
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

EtgHandledP10G

Measurement ID
14512

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were not throttled/diverted with message priority 10 and color green

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 10

- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

EtgHandledP10Y

Measurement ID
14528

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were not throttled/diverted with message priority 10 and color yellow

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 10
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

EtgHandledP11G

Measurement ID
14513

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were not throttled/diverted with message priority 11 and color green

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 11
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

EtgHandledP11Y

Measurement ID
14529

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were not throttled/diverted with message priority 11 and color yellow

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 11
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

EtgHandledP12G

Measurement ID
14514

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were not throttled/diverted with message priority 12 and color green

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 12
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

EtgHandledP12Y

Measurement ID
14530

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were not throttled/diverted with message priority 12 and color yellow

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 12
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

EtgHandledP13G

Measurement ID
14515

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were not throttled/diverted with message priority 13 and color green

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 13
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

EtgHandledP13Y

Measurement ID
14531

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were not throttled/diverted with message priority 13 and color yellow

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 13

- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

EtgHandledP14G

Measurement ID
14516

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were not throttled/diverted with message priority 14 and color green

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 14
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

EtgHandledP14Y

Measurement ID
14532

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were not throttled/diverted with message priority 14 and color yellow

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 14
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

EtgHandledP15G

Measurement ID
14517

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were not throttled/diverted with message priority 15 and color green

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 15
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

EtgHandledP15Y

Measurement ID
14533

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were not throttled/diverted with message priority 15 and color yellow

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 15
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedOutP0G

Measurement ID
14534

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were throttled/diverted with message priority 0 and color green

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 0
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedOutP0Y

Measurement ID
14550

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were throttled/diverted with message priority 0 and color yellow

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 0
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedOutP1G

Measurement ID
14535

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were throttled/diverted with message priority 1 and color green

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 1

- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedOutP1Y

Measurement ID
14551

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were throttled/diverted with message priority 1 and color yellow

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 1
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedOutP2G

Measurement ID
14536

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were throttled/diverted with message priority 2 and color green

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 2
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedOutP2Y

Measurement ID
14552

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were throttled/diverted with message priority 2 and color yellow

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 2
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedOutP3G

Measurement ID
14537

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were throttled/diverted with message priority 3 and color green

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 3
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedOutP3Y

Measurement ID
14553

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were throttled/diverted with message priority 3 and color yellow

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 3
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedOutP4G

Measurement ID
14538

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were throttled/diverted with message priority 4 and color green

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 4
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedOutP4Y

Measurement ID
14554

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were throttled/diverted with message priority 4 and color yellow

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 4

- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedOutP5G

Measurement ID
14539

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were throttled/diverted with message priority 5 and color green

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 5
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedOutP5Y

Measurement ID
14555

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were throttled/diverted with message priority 5 and color yellow

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 5
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedOutP6G

Measurement ID
14540

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were throttled/diverted with message priority 6 and color green

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 6
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedOutP6Y

Measurement ID
14556

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were throttled/diverted with message priority 6 and color yellow

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 6
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedOutP7G

Measurement ID
14541

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were throttled/diverted with message priority 7 and color green

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 7
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedOutP7Y

Measurement ID
14557

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were throttled/diverted with message priority 7 and color yellow

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 7
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedOutP8G

Measurement ID
14542

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were throttled/diverted with message priority 8 and color green

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 8

- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedOutP8Y

Measurement ID
14558

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were throttled/diverted with message priority 8 and color yellow

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 8
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedOutP9G

Measurement ID
14543

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were throttled/diverted with message priority 9 and color green

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 9
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedOutP9Y

Measurement ID
14559

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were throttled/diverted with message priority 9 and color yellow

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 9
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedOutP10G

Measurement ID
14544

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were throttled/diverted with message priority 10 and color green

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 10
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedOutP10Y

Measurement ID
14560

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were throttled/diverted with message priority 10 and color yellow

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 10
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedOutP11G

Measurement ID
14545

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were throttled/diverted with message priority 11 and color green

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 11
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedOutP11Y

Measurement ID
14561

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were throttled/diverted with message priority 11 and color yellow

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 11

- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedOutP12G

Measurement ID
14546

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were throttled/diverted with message priority 12 and color green

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 12
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedOutP12Y

Measurement ID
14562

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were throttled/diverted with message priority 12 and color yellow

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 12
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedOutP13G

Measurement ID
14547

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were throttled/diverted with message priority 13 and color green

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 13
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedOutP13Y

Measurement ID
14563

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were throttled/diverted with message priority 13 and color yellow

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 13
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedOutP14G

Measurement ID
14548

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were throttled/diverted with message priority 14 and color green

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 14
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedOutP14Y

Measurement ID
14564

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were throttled/diverted with message priority 14 and color yellow

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 14
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedOutP15G

Measurement ID
14549

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were throttled/diverted with message priority 15 and color green

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 15

- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedOutP15Y

Measurement ID
14565

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETG which were throttled/diverted with message priority 15 and color yellow

Collection Interval
5 min

Peg Condition
The ETG was selected based on a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally, multiple criteria are met:

- Transaction was diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 15
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

EtgDivertedInP0G

Measurement ID
14806

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 0 and color green that were routed to ETG which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 0
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtgDivertedInP0Y

Measurement ID
14822

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 0 and color yellow that were routed to ETG which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 0
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtgDivertedInP1G

Measurement ID
14807

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 1 and color green that were routed to ETG which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 1
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtgDivertedInP1Y

Measurement ID
14823

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 1 and color yellow that were routed to ETG which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 1
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtgDivertedInP2G

Measurement ID
14808

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 2 and color green that were routed to ETG which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 2
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtgDivertedInP2Y

Measurement ID
14824

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 2 and color yellow that were routed to ETG which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 2
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtgDivertedInP3G

Measurement ID
14809

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 3 and color green that were routed to ETG which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 3
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtgDivertedInP3Y

Measurement ID
14825

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 3 and color yellow that were routed to ETG which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 3
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtgDivertedInP4G

Measurement ID
14810

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 4 and color green that were routed to ETG which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 4
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtgDivertedInP4Y

Measurement ID
14826

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 4 and color yellow that were routed to ETG which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR

- Message Priority = 4
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtgDivertedInP5G

Measurement ID
14811

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 5 and color green that were routed to ETG which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 5
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtgDivertedInP5Y

Measurement ID
14827

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 5 and color yellow that were routed to ETG which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 5
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtgDivertedInP6G

Measurement ID
14812

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 6 and color green that were routed to ETG which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 6
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtgDivertedInP6Y

Measurement ID
14828

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 6 and color yellow that were routed to ETG which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 6
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtgDivertedInP7G

Measurement ID
14813

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 7 and color green that were routed to ETG which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 7
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtgDivertedInP7Y

Measurement ID
14829

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 7 and color yellow that were routed to ETG which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 7
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtgDivertedInP8G

Measurement ID
14814

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 8 and color green that were routed to ETG which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 8
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtgDivertedInP8Y

Measurement ID
14830

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 8 and color yellow that were routed to ETG which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 8
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtgDivertedInP9G

Measurement ID
14815

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 9 and color green that were routed to ETG which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 9
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtgDivertedInP9Y

Measurement ID
14831

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 9 and color yellow that were routed to ETG which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 9
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtgDivertedInP10G

Measurement ID
14816

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 10 and color green that were routed to ETG which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR

- Message Priority = 10
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtgDivertedInP10Y

Measurement ID
14832

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 10 and color yellow that were routed to ETG which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 10
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtgDivertedInP11G

Measurement ID
14817

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 11 and color green that were routed to ETG which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 11
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtgDivertedInP11Y

Measurement ID
14833

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 11 and color yellow that were routed to ETG which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 11
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtgDivertedInP12G

Measurement ID
14818

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 12 and color green that were routed to ETG which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 12
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtgDivertedInP12Y

Measurement ID
14834

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 12 and color yellow that were routed to ETG which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 12
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtgDivertedInP13G

Measurement ID
14819

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 13 and color green that were routed to ETG which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 13
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtgDivertedInP13Y

Measurement ID
14835

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 13 and color yellow that were routed to ETG which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 13
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtgDivertedInP14G

Measurement ID
14820

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 14 and color green that were routed to ETG which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 14
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtgDivertedInP14Y

Measurement ID
14836

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 14 and color yellow that were routed to ETG which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 14
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtgDivertedInP15G

Measurement ID
14821

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 15 and color green that were routed to ETG which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 15
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtgDivertedInP15Y

Measurement ID
14837

Measurement Group
Egress Throttle Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 15 and color yellow that were routed to ETG which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR

- Message Priority = 15
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

Egress Throttle List Performance measurements

The Diameter Egress Throttle List Performance measurement report contains measurements providing information related to a specific **ETL**.

TxEtlMsgRatePeak

Measurement ID
14052

Measurement Group
Egress Throttle List Performance

Measurement Type
Max

Measurement Dimension
Arrayed (by ETL ID)

Description
Peak Aggregated **ETL** Request Message Rate calculation made during the collection interval

Collection Interval
5 min

Peg Condition
An ETL Message Rate calculation A_t is periodically calculated. If the new A_t exceeds any previous A_{t-k} value for the collection interval, then this measurement will be updated with the new A_t value. This measurement is pegged regardless of whether the ETL's ETG is scoped to ETL or ETG level.

Measurement Scope
Site

Recovery

1. No action required

TxEtlMsgRateAvg

Measurement ID
14053

Measurement Group
Egress Throttle List Performance

Measurement Type
Avg

Measurement Dimension
Arrayed (by ETL ID)

Description
Average **ETL** Request Message Rate calculation made during the collection interval

Collection Interval
5 min

Peg Condition
Each time an ETL Message Rate calculation A_t is calculated.

Measurement Scope
Network

Recovery

1. No action required

EtlSelected

Measurement ID
14650

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to ETL

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Measurement Scope
Site

Recovery

1. None

EtlTmStaticThrottling

Measurement ID
14651

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Duration of time (in seconds) that ETL throttling was being applied.

Collection Interval
5 min

Peg Condition

Note: This measurement only applies when Limit Throttling mode is enabled and the ETG's control scope = ETL

A time duration interval is determined by:

- The time duration interval starts when:
  - The ETL's Operational Reason is changed to Static Rate Limit Exceeded
  - A new measurement collection interval begins and the ETL's Operational Reason is Static Rate Limit Exceeded
- The time duration interval stops when:
  - The ETL's Operational Reason is changed from Static Rate Limit Exceeded to any other value
  - The current measurement collection interval ends (such as the end of the current five minute collection interval)
  - When a time duration interval completes, the time measured is added to the total measurement value

Measurement Scope
Site

Recovery

1. None

EvEtlRateCongestionOnset

Measurement ID
14054

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by ETL ID)

Description
Number of times an **ETL-RCL** was advanced.

Collection Interval
5 min

Peg Condition
Each time the **EMR** Congestion Level is advanced

Measurement Scope
Network

Recovery

1. Verify that the "Maximum EMR" for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the "Rate Convergence Time" parameter for the ETL if necessary. Increasing the "Rate Convergence Time" value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the "EMR Abatement Timeout" for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlRateDiscardPri0G

Measurement ID
14055

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by ETL ID)

Description
Number of Request Messages with priority 0 and color green discarded (with or without response) due to last connection evaluated for routing being **ETL** Rate Limited.

Collection Interval
5 min

Peg Condition
Each time that Routing Layer discarded a Request message with priority 0 and color green due to last connection evaluated being ETL Rate Limited

Measurement Scope
Network

Recovery

1. Verify that the "Maximum EMR" for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the "Rate Convergence Time" parameter for the ETL if necessary. Increasing the "Rate Convergence Time" value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the "EMR Abatement Timeout" for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlRateDiscardPri0Y

Measurement ID
14729

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 0 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETL Rate Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 0 and color yellow due to last connection evaluated being ETL Rate Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETL if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the EMR Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlRateDiscardPri1G

Measurement ID
14056

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by ETL ID)

Description
Number of Request Messages with priority 1 and color green discarded (with or without response) due to last connection evaluated for routing being **ETL** Rate Limited.

Collection Interval
5 min

Peg Condition
Each time that Routing Layer discarded a Request message with priority 1 and color green due to last connection evaluated being ETL Rate Limited

Measurement Scope
Network

Recovery

1. Verify that the "Maximum EMR" for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the "Rate Convergence Time" parameter for the ETL if necessary. Increasing the "Rate Convergence Time" value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the "EMR Abatement Timeout" for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlRateDiscardPri1Y

Measurement ID
14730

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 1 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETL Rate Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 1 and color yellow due to last connection evaluated being ETL Rate Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETL if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the EMR Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlRateDiscardPri2G

Measurement ID
14057

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by ETL ID)

Description
Number of Request Messages with priority 2 and color green discarded (with or without response) due to last connection evaluated for routing being **ETL** Rate Limited.

Collection Interval
5 min

Peg Condition
Each time that Routing Layer discarded a Priority 2 Request message due to last connection evaluated being ETL Rate Limited

Measurement Scope
Network

Recovery

1. Verify that the "Maximum EMR" for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the "Rate Convergence Time" parameter for the ETL if necessary. Increasing the "Rate Convergence Time" value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the "EMR Abatement Timeout" for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlRateDiscardPri2Y

Measurement ID
14731

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 2 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETL Rate Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 2 and color yellow due to last connection evaluated being ETL Rate Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETL if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the EMR Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlRateDiscardPri3G

Measurement ID
14716

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 3 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETL Rate Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 3 and color green due to last connection evaluated being ETL Rate Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETL if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the EMR Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlRateDiscardPri3Y

Measurement ID
14732

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 3 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETL Rate Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 3 and color yellow due to last connection evaluated being ETL Rate Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETL if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the EMR Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlRateDiscardPri4G

Measurement ID
14717

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 4 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETL Rate Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 4 and color green due to last connection evaluated being ETL Rate Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETL if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the EMR Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlRateDiscardPri4Y

Measurement ID
14733

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 4 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETL Rate Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 4 and color yellow due to last connection evaluated being ETL Rate Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETL if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the EMR Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlRateDiscardPri5G

Measurement ID
14718

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 5 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETL Rate Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 5 and color green due to last connection evaluated being ETL Rate Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETL if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the EMR Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlRateDiscardPri5Y

Measurement ID
14734

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 5 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETL Rate Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 5 and color yellow due to last connection evaluated being ETL Rate Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETL if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the EMR Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlRateDiscardPri6G

Measurement ID
14719

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 6 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETL Rate Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 6 and color green due to last connection evaluated being ETL Rate Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETL if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the EMR Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlRateDiscardPri6Y

Measurement ID
14735

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 6 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETL Rate Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 6 and color yellow due to last connection evaluated being ETL Rate Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETL if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the EMR Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlRateDiscardPri7G

Measurement ID
14720

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 7 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETL Rate Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 7 and color green due to last connection evaluated being ETL Rate Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETL if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the EMR Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlRateDiscardPri7Y

Measurement ID
14736

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 7 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETL Rate Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 7 and color yellow due to last connection evaluated being ETL Rate Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETL if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the EMR Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlRateDiscardPri8G

Measurement ID
14721

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 8 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETL Rate Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 8 and color green due to last connection evaluated being ETL Rate Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETL if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the EMR Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlRateDiscardPri8Y

Measurement ID
14737

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 8 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETL Rate Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 8 and color yellow due to last connection evaluated being ETL Rate Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETL if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the EMR Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlRateDiscardPri9G

Measurement ID
14722

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 9 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETL Rate Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 9 and color green due to last connection evaluated being ETL Rate Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETL if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the EMR Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlRateDiscardPri9Y

Measurement ID
14738

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 9 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETL Rate Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 9 and color yellow due to last connection evaluated being ETL Rate Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETL if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the EMR Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlRateDiscardPri10G

Measurement ID
14723

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 10 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETL Rate Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 10 and color green due to last connection evaluated being ETL Rate Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETL if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the EMR Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlRateDiscardPri10Y

Measurement ID
14739

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 10 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETL Rate Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 10 and color yellow due to last connection evaluated being ETL Rate Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETL if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the EMR Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlRateDiscardPri11G

Measurement ID
14724

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 11 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETL Rate Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 11 and color green due to last connection evaluated being ETL Rate Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETL if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the EMR Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlRateDiscardPri11Y

Measurement ID
14740

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 11 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETL Rate Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 11 and color yellow due to last connection evaluated being ETL Rate Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETL if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the EMR Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlRateDiscardPri12G

Measurement ID
14725

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 12 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETL Rate Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 12 and color green due to last connection evaluated being ETL Rate Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETL if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the EMR Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlRateDiscardPri12Y

Measurement ID
14741

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 12 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETL Rate Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 12 and color yellow due to last connection evaluated being ETL Rate Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETL if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the EMR Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlRateDiscardPri13G

Measurement ID
14726

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 13 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETL Rate Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 13 and color green due to last connection evaluated being ETL Rate Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETL if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the EMR Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlRateDiscardPri13Y

Measurement ID
14742

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 13 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETL Rate Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 13 and color yellow due to last connection evaluated being ETL Rate Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETL if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the EMR Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlRateDiscardPri14G

Measurement ID
14727

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 14 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETL Rate Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 14 and color green due to last connection evaluated being ETL Rate Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETL if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the EMR Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlRateDiscardPri14Y

Measurement ID
14743

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 14 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETL Rate Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 14 and color yellow due to last connection evaluated being ETL Rate Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETL if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the EMR Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlRateDiscardPri15G

Measurement ID
14728

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 15 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETL Rate Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 15 and color green due to last connection evaluated being ETL Rate Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETL if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the EMR Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlRateDiscardPri15Y

Measurement ID
14744

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 15 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETL Rate Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 15 and color yellow due to last connection evaluated being ETL Rate Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EMR for the **ETL** is set sufficiently high.
2. Adjust the EMR onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Adjust the Rate Convergence Time parameter for the ETL if necessary. Increasing the Rate Convergence Time value allows the user to control the sensitivity of the request traffic bursts to **ETG** rate.
4. Verify the EMR Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EMR throttling too rapidly.
5. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
6. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransPeak

Measurement ID
14058

Measurement Group
Egress Throttle List Performance

Measurement Type
Max

Measurement Dimension
Arrayed (by ETL ID)

Description
Peak pending transactions to members of this **ETL** during the collection interval.

Collection Interval
5 min

Peg Condition
An ETL Pending Request calculation P_t is periodically calculated. If the new P_t value exceeds any previous P_{t-k} value for the collection interval, then this measurement will be updated with the new P_t value. This measurement is pegged regardless of whether the ETL's ETG is scoped to ETL or ETG level.

Measurement Scope
Network

Recovery

1. No action required

EvEtlPendingTransAvg

Measurement ID
14059

Measurement Group
Egress Throttle List Performance

Measurement Type
Avg

Measurement Dimension
Arrayed (by ETL ID)

Description
Average pending transactions to members of this **ETL** during the collection interval.

Collection Interval
5 min

Peg Condition
An ETL Pending Request calculation Pt is periodically calculated. Each time P_t is calculated the Average Pending Requests measurement shall be updated. This

measurement is pegged regardless of whether the ETL's ETG is scoped to ETL or ETG level.

Measurement Scope
Network

Recovery

1. No action required

EvEtlPendingTransCongestionOnset

Measurement ID
14060

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by ETL ID)

Description
Number of times an **ETL-PCL** was advanced.

Collection Interval
5 min

Peg Condition
Each time the ETL Window Congestion Level is advanced

Measurement Scope
Network

Recovery

1. Verify that the "Maximum EPT" for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the "EPT Abatement Timeout" for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransDiscardPri0G

Measurement ID
14061

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by ETL ID)

Description
Number of Request Messages with priority 0 and color green discarded (with or without response) due to last connection evaluated for routing being **ETL** Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time that Routing Layer discarded a Request message with priority 0 and color green due to last connection evaluated being ETL Pending Transaction Limited

Measurement Scope
Network

Recovery

1. Verify that the "Maximum EPT" for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the "EPT Abatement Timeout" for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransDiscardPri0Y

Measurement ID
14758

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 0 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETL Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 0 and color yellow due to last connection evaluated being ETL Pending Transaction Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransDiscardPri1G

Measurement ID
14062

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by ETL ID)

Description
Number of Request Messages with priority 1 and color green discarded (with or without response) due to last connection evaluated for routing being **ETL** Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time that Routing Layer discarded a Request message priority 1 and color green due to last connection evaluated being ETL Pending Transaction Limited

Measurement Scope
Network

Recovery

1. Verify that the "Maximum EPT" for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the "EPT Abatement Timeout" for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransDiscardPri1Y

Measurement ID
14759

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 1 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETL Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 1 and color yellow due to last connection evaluated being ETL Pending Transaction Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransDiscardPri2

Measurement ID
14063

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by ETL ID)

Description
Number of Request Messages with priority 2 and color green discarded (with or without response) due to last connection evaluated for routing being **ETL** Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time that Routing Layer discarded a Request message with priority 2 and color green due to last connection evaluated being ETL Pending Transaction Limited

Measurement Scope
Network

Recovery

1. Verify that the "Maximum EPT" for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the "EPT Abatement Timeout" for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransDiscardPri2Y

Measurement ID
14760

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 2 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETL Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 2 and color yellow due to last connection evaluated being ETL Pending Transaction Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransDiscardPri3G

Measurement ID
14745

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 3 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETL Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 3 and color green due to last connection evaluated being ETL Pending Transaction Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransDiscardPri3Y

Measurement ID
14761

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 3 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETL Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 3 and color yellow due to last connection evaluated being ETL Pending Transaction Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransDiscardPri4G

Measurement ID
14746

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 4 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETL Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 4 and color green due to last connection evaluated being ETL Pending Transaction Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransDiscardPri4Y

Measurement ID
14762

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 4 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETL Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 4 and color yellow due to last connection evaluated being ETL Pending Transaction Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransDiscardPri5G

Measurement ID
14747

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 5 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETL Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 5 and color green due to last connection evaluated being ETL Pending Transaction Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransDiscardPri5Y

Measurement ID
14763

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 5 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETL Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 5 and color yellow due to last connection evaluated being ETL Pending Transaction Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransDiscardPri6G

Measurement ID
14748

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 6 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETL Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 6 and color green due to last connection evaluated being ETL Pending Transaction Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransDiscardPri6Y

Measurement ID
14764

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 6 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETL Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 6 and color yellow due to last connection evaluated being ETL Pending Transaction Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransDiscardPri7G

Measurement ID
14749

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 7 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETL Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 7 and color green due to last connection evaluated being ETL Pending Transaction Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransDiscardPri7Y

Measurement ID
14765

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 7 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETL Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 7 and color yellow due to last connection evaluated being ETL Pending Transaction Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransDiscardPri8G

Measurement ID
14750

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 8 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETL Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 8 and color green due to last connection evaluated being ETL Pending Transaction Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransDiscardPri8Y

Measurement ID
14766

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 8 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETL Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 8 and color yellow due to last connection evaluated being ETL Pending Transaction Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransDiscardPri9G

Measurement ID
14751

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 9 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETL Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 9 and color green due to last connection evaluated being ETL Pending Transaction Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransDiscardPri9Y

Measurement ID
14767

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 9 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETL Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 9 and color yellow due to last connection evaluated being ETL Pending Transaction Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransDiscardPri10G

Measurement ID
14752

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 10 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETL Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 10 and color green due to last connection evaluated being ETL Pending Transaction Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransDiscardPri10Y

Measurement ID
14768

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 10 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETL Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 10 and color yellow due to last connection evaluated being ETL Pending Transaction Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransDiscardPri11G

Measurement ID
14753

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 11 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETL Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 11 and color green due to last connection evaluated being ETL Pending Transaction Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransDiscardPri11Y

Measurement ID
14769

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 11 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETL Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 11 and color yellow due to last connection evaluated being ETL Pending Transaction Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransDiscardPri12G

Measurement ID
14754

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 12 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETL Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 12 and color green due to last connection evaluated being ETL Pending Transaction Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransDiscardPri12Y

Measurement ID
14770

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 12 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETL Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 12 and color yellow due to last connection evaluated being ETL Pending Transaction Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransDiscardPri13G

Measurement ID
14755

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 13 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETL Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 13 and color green due to last connection evaluated being ETL Pending Transaction Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransDiscardPri13Y

Measurement ID
14771

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 13 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETL Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 13 and color yellow due to last connection evaluated being ETL Pending Transaction Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransDiscardPri14G

Measurement ID
14756

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 14 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETL Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 14 and color green due to last connection evaluated being ETL Pending Transaction Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransDiscardPri14Y

Measurement ID
14772

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 14 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETL Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 14 and color yellow due to last connection evaluated being ETL Pending Transaction Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransDiscardPri15G

Measurement ID
14757

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 15 and color green that were discarded (with or without response) due to last connection evaluated for routing being ETL Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 15 and color green due to last connection evaluated being ETL Pending Transaction Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransDiscardPri15Y

Measurement ID
14773

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 15 and color yellow that were discarded (with or without response) due to last connection evaluated for routing being ETL Pending Transaction Limited

Collection Interval
5 min

Peg Condition
Each time the Routing Layer discards a request message with priority 15 and color yellow due to last connection evaluated being ETL Pending Transaction Limited.

Measurement Scope
Site

Recovery

1. Verify that the Maximum EPT for the **ETL** is set sufficiently high.
2. Adjust the **EPT** onset/abatement thresholds if necessary. Setting an abatement threshold too close to its onset threshold may trigger oscillation between higher and lower congestion levels.
3. Verify the EPT Abatement Timeout for the ETL is set sufficiently high. Short abatement time periods may result in triggering EPT throttling too rapidly.
4. Determine if other connections (not part of this **ETL**) to the adjacent Diameter Node are out of service thus causing more traffic to be sent on connections/peers of this ETL than what the adjacent Diameter Node can support on a per-connection basis.
5. Determine if the ETL is over-subscribed from a routing perspective. Any recent changes to DSR routing configurable may have inadvertently diverted more message traffic to connections/peers in this ETL.

6. Determine if the Peer is exhibiting congestion, causing it to either drop the Requests or process them slowly, causing Pending Transactions on DSR to increase and exceed the threshold.
7. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvEtlPendingTransPeak

Measurement ID
14058

Measurement Group
Egress Throttle List Performance

Measurement Type
Max

Measurement Dimension
Arrayed (by ETL ID)

Description
Peak pending transactions to members of this **ETL** during the collection interval.

Collection Interval
5 min

Peg Condition
An ETL Pending Request calculation P_t is periodically calculated. If the new P_t value exceeds any previous P_{t-k} value for the collection interval, then this measurement will be updated with the new P_t value. This measurement is pegged regardless of whether the ETL's ETG is scoped to ETL or ETG level.

Measurement Scope
Network

Recovery

1. No action required

EtlHandledP0G

Measurement ID
14652

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 0 and color green routed to ETL which were not throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 0
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlHandledP0Y

Measurement ID
14668

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 0 and color yellow routed to ETL which were not throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 0
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlHandledP1G

Measurement ID
14653

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 1 and color green routed to ETL which were not throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 1

- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlHandledP1Y

Measurement ID
14669

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 1 and color yellow routed to ETL which were not throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 1
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlHandledP2G

Measurement ID
14654

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 2 and color green routed to ETL which were not throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 2
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlHandledP2Y

Measurement ID
14670

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 2 and color yellow routed to ETL which were not throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 2
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlHandledP3G

Measurement ID
14655

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 3 and color green routed to ETL which were not throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 3
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlHandledP3Y

Measurement ID
14671

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 3 and color yellow routed to ETL which were not throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 3

- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlHandledP4G

Measurement ID
14656

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 4 and color green routed to ETL which were not throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 4
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlHandledP4Y

Measurement ID
14672

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 4 and color yellow routed to ETL which were not throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 4
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlHandledP5G

Measurement ID
14657

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 5 and color green routed to ETL which were not throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 5
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlHandledP5Y

Measurement ID
14673

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 5 and color yellow routed to ETL which were not throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 5
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlHandledP6G

Measurement ID
14658

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 6 and color green routed to ETL which were not throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 6

- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlHandledP6Y

Measurement ID
14674

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 6 and color yellow routed to ETL which were not throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 6
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlHandledP7G

Measurement ID
14659

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 7 and color green routed to ETL which were not throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 7
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlHandledP7Y

Measurement ID
14675

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 7 and color yellow routed to ETL which were not throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 7
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlHandledP8G

Measurement ID
14660

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 8 and color green routed to ETL which were not throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 8
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlHandledP8Y

Measurement ID
14676

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 8 and color yellow routed to ETL which were not throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 8

- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlHandledP9G

Measurement ID
14661

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 9 and color green routed to ETL which were not throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 9
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlHandledP9Y

Measurement ID
14677

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 9 and color yellow routed to ETL which were not throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 9
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlHandledP10G

Measurement ID
14662

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 10 and color green routed to ETL which were not throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 10
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlHandledP10Y

Measurement ID
14678

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 10 and color yellow routed to ETL which were not throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 10
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlHandledP11G

Measurement ID
14663

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 11 and color green routed to ETL which were not throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 11

- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlHandledP11Y

Measurement ID
14679

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 11 and color yellow routed to ETL which were not throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 11
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlHandledP12G

Measurement ID
14664

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 12 and color green routed to ETL which were not throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 12
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlHandledP12Y

Measurement ID
14680

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 12 and color yellow routed to ETL which were not throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 12
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlHandledP13G

Measurement ID
14665

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 13 and color green routed to ETL which were not throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 13
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlHandledP13Y

Measurement ID
14681

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 13 and color yellow routed to ETL which were not throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 13

- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlHandledP14G

Measurement ID
14666

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 14 and color green routed to ETL which were not throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 14
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlHandledP14Y

Measurement ID
14682

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 14 and color yellow routed to ETL which were not throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 14
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlHandledP15G

Measurement ID
14667

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 15 and color green routed to ETL which were not throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 15
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlHandledP15Y

Measurement ID
14683

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 15 and color yellow routed to ETL which were not throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was not diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 15
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlDivertedOutP0G

Measurement ID
14684

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 0 and color green routed to ETL which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was throttled/diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 0

- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlDivertedOutP0Y

Measurement ID
14700

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 0 and color yellow routed to ETL which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was throttled/diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 0
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlDivertedOutP1G

Measurement ID
14685

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 1 and color green routed to ETL which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was throttled/diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 1
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlDivertedOutP1Y

Measurement ID
14701

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 1 and color yellow routed to ETL which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was throttled/diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 1
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlDivertedOutP2G

Measurement ID
14686

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 2 and color green routed to ETL which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was throttled/diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 2
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlDivertedOutP2Y

Measurement ID
14702

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 2 and color yellow routed to ETL which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was throttled/diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 2

- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlDivertedOutP3G

Measurement ID
14687

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 3 and color green routed to ETL which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was throttled/diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 3
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlDivertedOutP3Y

Measurement ID
14703

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 3 and color yellow routed to ETL which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was throttled/diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 3
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlDivertedOutP4G

Measurement ID
14688

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 4 and color green routed to ETL which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was throttled/diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 4
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlDivertedOutP4Y

Measurement ID
14704

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 4 and color yellow routed to ETL which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was throttled/diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 4
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlDivertedOutP5G

Measurement ID
14689

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 5 and color green routed to ETL which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was throttled/diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 5

- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlDivertedOutP5Y

Measurement ID
14705

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 5 and color yellow routed to ETL which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was throttled/diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 5
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlDivertedOutP6G

Measurement ID
14690

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 6 and color green routed to ETL which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was throttled/diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 6
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlDivertedOutP6Y

Measurement ID
14706

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 6 and color yellow routed to ETL which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was throttled/diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 6
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlDivertedOutP7G

Measurement ID
14691

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 7 and color green routed to ETL which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was throttled/diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 7
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlDivertedOutP7Y

Measurement ID
14707

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 7 and color yellow routed to ETL which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was throttled/diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 7

- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlDivertedOutP8G

Measurement ID
14692

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 8 and color green routed to ETL which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was throttled/diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 8
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlDivertedOutP8Y

Measurement ID
14708

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 8 and color yellow routed to ETL which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was throttled/diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 8
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlDivertedOutP9G

Measurement ID
14693

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 9 and color green routed to ETL which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was throttled/diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 9
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlDivertedOutP9Y

Measurement ID
14709

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 9 and color yellow routed to ETL which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was throttled/diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 9
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlDivertedOutP10G

Measurement ID
14694

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 10 and color green routed to ETL which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was throttled/diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 10

- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlDivertedOutP10Y

Measurement ID
14710

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 10 and color yellow routed to ETL which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was throttled/diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 10
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlDivertedOutP11G

Measurement ID
14695

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 11 and color green routed to ETL which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was throttled/diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 11
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlDivertedOutP11Y

Measurement ID
14711

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 11 and color yellow routed to ETL which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was throttled/diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 11
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlDivertedOutP12G

Measurement ID
14696

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 12 and color green routed to ETL which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was throttled/diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 12
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlDivertedOutP12Y

Measurement ID
14712

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 12 and color yellow routed to ETL which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was throttled/diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 12

- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlDivertedOutP13G

Measurement ID
14697

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 13 and color green routed to ETL which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was throttled/diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 13
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlDivertedOutP13Y

Measurement ID
14713

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 13 and color yellow routed to ETL which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was throttled/diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 13
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlDivertedOutP14G

Measurement ID
14698

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 14 and color green routed to ETL which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was throttled/diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 14
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlDivertedOutP14Y

Measurement ID
14714

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 14 and color yellow routed to ETL which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was throttled/diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 14
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlDivertedOutP15G

Measurement ID
14699

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 15 and color green routed to ETL which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was throttled/diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 15

- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlDivertedOutP15Y

Measurement ID
14715

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 15 and color yellow routed to ETL which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which is associate with an ETG. Additionally, either:

- ETG's Rate Limiting Admin State = Enabled
- ETG's Pending Transaction Limiting Admin State = Enabled

Multiple other criteria are also met:

- Transaction was throttled/diverted by either Rate Limiting or Pending Transaction Limiting
- Message Priority = 15
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlDivertedInP0G

Measurement ID
14774

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 0 and color green that were routed to ETL which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 0
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlDivertedInP0Y

Measurement ID
14790

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 0 and color yellow that were routed to ETL which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 0
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlDivertedInP1G

Measurement ID
14775

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 1 and color green that were routed to ETL which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 1
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlDivertedInP1Y

Measurement ID
14791

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 1 and color yellow that were routed to ETL which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 1
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlDivertedInP2G

Measurement ID
14776

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 2 and color green that were routed to ETL which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 2
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlDivertedInP2Y

Measurement ID
14792

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 2 and color yellow that were routed to ETL which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 2
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlDivertedInP3G

Measurement ID
14777

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 3 and color green that were routed to ETL which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 3
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlDivertedInP3Y

Measurement ID
14793

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 3 and color yellow that were routed to ETL which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 3
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlDivertedInP4G

Measurement ID
14778

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 4 and color green that were routed to ETL which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 4
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlDivertedInP4Y

Measurement ID
14794

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 4 and color yellow that were routed to ETL which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 4
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlDivertedInP5G

Measurement ID
14779

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 5 and color green that were routed to ETL which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 5
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlDivertedInP5Y

Measurement ID
14795

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 5 and color yellow that were routed to ETL which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 5
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlDivertedInP6G

Measurement ID
14780

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 6 and color green that were routed to ETL which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 6
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlDivertedInP6Y

Measurement ID
14796

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 6 and color yellow that were routed to ETL which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR

- Message Priority = 6
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlDivertedInP7G

Measurement ID
14781

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 7 and color green that were routed to ETL which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 7
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlDivertedInP7Y

Measurement ID
14797

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 7 and color yellow that were routed to ETL which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 7
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlDivertedInP8G

Measurement ID
14782

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 8 and color green that were routed to ETL which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 8
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlDivertedInP8Y

Measurement ID
14798

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 8 and color yellow that were routed to ETL which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 8
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlDivertedInP9G

Measurement ID
14783

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 9 and color green that were routed to ETL which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 9
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlDivertedInP9Y

Measurement ID
14799

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 9 and color yellow that were routed to ETL which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 9
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlDivertedInP10G

Measurement ID
14784

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 10 and color green that were routed to ETL which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 10
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlDivertedInP10Y

Measurement ID
14800

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 10 and color yellow that were routed to ETL which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 10
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlDivertedInP11G

Measurement ID
14785

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 11 and color green that were routed to ETL which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 11
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlDivertedInP11Y

Measurement ID
14801

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 11 and color yellow that were routed to ETL which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 11
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlDivertedInP12G

Measurement ID
14786

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 12 and color green that were routed to ETL which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR

- Message Priority = 12
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlDivertedInP12Y

Measurement ID
14802

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 12 and color yellow that were routed to ETL which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 12
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlDivertedInP13G

Measurement ID
14787

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 13 and color green that were routed to ETL which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 13
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlDivertedInP13Y

Measurement ID
14803

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 13 and color yellow that were routed to ETL which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 13
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlDivertedInP14G

Measurement ID
14788

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 14 and color green that were routed to ETL which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 14
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlDivertedInP14Y

Measurement ID
14804

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 14 and color yellow that were routed to ETL which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 14
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

EtlDivertedInP15G

Measurement ID
14789

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 15 and color green that were routed to ETL which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 15
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

EtlDivertedInP15Y

Measurement ID
14805

Measurement Group
Egress Throttle List Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 15 and color yellow that were routed to ETL which were throttled/diverted from another ETG/ETL.

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with an ETG. Additionally:

- The ETG's Pending Transaction Limiting Admin State = Enabled
- Transaction is marked as ETG/ETL Diverted in its PTR
- Message Priority = 15
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

Full Address Based Resolution (FABR) Application Exception measurements

The **FABR** Application Exception measurement group is a set of measurements that provide information about exceptions and unexpected messages and events that are specific to the FABR feature.

RxFabrBlacklistedImsi

Measurement ID
10658

Measurement Group
Full Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
The number of request messages received containing IMSI of a Blacklisted subscriber

Collection Interval
5 min

Peg Condition
Each time the Routing Exception "BlackListed Subscriber" is invoked

Measurement Scope
Server Group

Recovery

1. No action required.

RxFabrBlacklistedMsisdn

Measurement ID
10659

Measurement Group
Full Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
The number of request messages received containing MSISDN of Blacklisted subscriber

Collection Interval
5 min

Peg Condition
Each time the Routing Exception "BlackListed Subscriber" is invoked

Measurement Scope
Server Group

Recovery

1. Validate which User identity address is not blacklisted by using **DP** configuration.
2. If the problem persists, it is recommended to contact My Oracle Support (MOS).

RxFabrDecodeFailureResol

Measurement ID
10609

Measurement Group
Full Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Request messages rejected due to a message decoding error.

Collection Interval
5 min

Peg Condition
For each routing exception when the Application ID is not valid or the AVP extends beyond the length of the message indicated by the `Message Length` parameter in the message header.

Measurement Scope
Server Group

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance.

RxFabrInvalidImsiMcc

Measurement ID
10657

Measurement Group
Full Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of times an AVP instance present in a Diameter request message is rejected due to the MCC contained in the decoded IMSI falling within one of the configured Reserved MCC Ranges.

Collection Interval
5 min

Peg Condition
Each time a Diameter request message is rejected due to the MCC contained in the decoded IMSI falling within one of the configured Reserved MCC Ranges.

Measurement Scope
Server Group

Recovery

1. Validate the ranges configured in the Reserved MCC Ranges table.
2. Verify that the MCC portion of the decodable IMSI received by RBAR does not fall within the configured Reserved MCC Ranges.
3. If the problem persists, it is recommended to contact My Oracle Support (MOS).

RxFabrNgnPsDrop

Measurement ID
10672

Measurement Group
Full Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of FABR ingress NGN-PS messages discarded or rejected.

Collection Interval
5 min

Peg Condition
Each time NGN-PS Diameter message is dropped due these conditions:

- In scenarios where the configured action is 'Discard'
  - where address resolution is unsuccessful
  - Event sending to ComAgent is unsuccessful
  - Delivery failure notification from
- Event sending failure to DRL.

Measurement Scope
Server Group

Recovery

1. When non-zero, examine other failure measurements (RxFabrUnkApplId, RxFabrDecodeFailureResol, RxFabrResolFailAll, RxFabrResolFailCmdcode, RxFabrResolFailNoAddrAvps, TxFabrDbConFail, TxFabrAbandonRequest, RxFabrInvalidImsiMcc, RxFabrBlacklistedImsi, RxFabrBlacklistedMsisdn) to isolate reasons for failures.
2. It is recommended to contact My Oracle Support (MOS) for assistance.

RxFabrResolFailAll

Measurement ID
10630

Measurement Group
Full Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Total number of Request messages received which did not resolve a Destination address.

Collection Interval
5 min

Peg Condition
For each Request message which did not resolve to a Destination address.

Measurement Scope
Server Group

Recovery

1. Validate which destination address is associated with the user identity address by using DP GUI.
2. It is recommended to contact My Oracle Support (MOS) for assistance.

RxFabrResolFailCmdcode

Measurement ID
10631

Measurement Group
Full Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Request messages received with an unknown Command Code.

Collection Interval
5 min

Peg Condition
For each routing exception where the (Application ID, Command Code) pair in the incoming Request message is not configured.

Measurement Scope
Server Group

Recovery

1. The currently provisioned Diameter Application IDs can be viewed in the FABR Configuration & Maintenance GUI.

   It is recommended to contact My Oracle Support (MOS) for assistance.

RxFabrResolFailDpCongested

Measurement ID
10669

Measurement Group
Full Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Database queries that failed to be serviced due DP/ComAgent errors.

Collection Interval
5 min

Peg Condition
When FABR application received service notification indicating Database (DP) or DB connection (ComAgent) Errors (DP timeout, errors, or ComAgent internal errors) for the sent database query.

Measurement Scope
Server Group

Recovery

1. No action required

RxFabrResolFailImpiMatch

Measurement ID
10636

Measurement Group
Full Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Request messages received for which IMPI was used for Destination address resolution, but no Destination address was found.

Collection Interval
5 min

Peg Condition
For each message which did not successfully resolve to a Destination using a Routing Entity Type of IMPI.

Measurement Scope
Server Group

Recovery

1. Validate which destination address is associated with the user identity address by using DP GUI.

2. It is recommended to contact My Oracle Support (MOS) for assistance.

RxFabrResolFailImpuMatch

Measurement ID
10637

Measurement Group
Full Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Request messages received for which IMPU was used for Destination address resolution, but no Destination address was found.

Collection Interval
5 min

Peg Condition
For each message which did not successfully resolve to a Destination using a Routing Entity Type of IMPU.

Measurement Scope
Server Group

Recovery

1. Validate which destination address is associated with the user identity address by using DP GUI.
2. It is recommended to contact My Oracle Support (MOS) for assistance.

RxFabrResolFailImsiMatch

Measurement ID
10634

Measurement Group
Full Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Request messages received for which IMSI was used for Destination address resolution, but no Destination address was found.

Collection Interval
5 min

Peg Condition
For each message which did not successfully resolve to a Destination using a Routing Entity Type of IMSI.

Measurement Scope
Server Group

Recovery

1. Validate which destination address is associated with the user identity address by using DP GUI.
2. It is recommended to contact My Oracle Support (MOS) for assistance.

RxFabrResolFailMsisdnMatch

Measurement ID
10635

Measurement Group
Full Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Request messages received for which MSISDN was used for Destination address resolution, but no Destination address was found.

Collection Interval
5 min

Peg Condition
For each message which did not successfully resolve to a Destination using a Routing Entity Type of MSISDN.

Measurement Scope
Server Group

Recovery

1. Validate which destination address is associated with the user identity address by using DP GUI.

   It is recommended to contact My Oracle Support (MOS) for assistance.

RxFabrResolFailNoAddrAvps

Measurement ID
10632

Measurement Group
Full Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Request messages received without a Routing Entity Address AVP.

Collection Interval
5 min

Peg Condition
For each routing exception with no valid User Identity address found and the number of AVPs searched for the message was 0.

Measurement Scope
Server Group

Recovery

1. If this event is considered abnormal, then use validate which AVPs are configured for routing with the Application ID and Command Code using the FABR GUI screen.

   It is recommended to contact My Oracle Support (MOS) for assistance.

RxFabrResolFailNoValidAddr

Measurement ID
10633

Measurement Group
Full Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Request messages received with at least Routing Entity Address AVP but no valid Routing Entity Addresses were found.

Collection Interval
5 min

Peg Condition
For each routing exception with no valid User Identity address found and the number of AVPs searched for the message was greater than 0.

Measurement Scope
Server Group

Recovery

1. If this event is considered abnormal, then use validate which AVPs are configured for routing with the Application ID and Command Code using the FABR GUI screen.
2. It is recommended to contact My Oracle Support (MOS) for assistance.

RxFabrSrvNotiDpComAgentErrors

Measurement ID
10649

Measurement Group
Full Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (per Diameter Application)

Description
Number of failed Database queries received in the service notifications from Com Agent indicating DP/COM Agent errors.

Collection Interval
5 min

Peg Condition
When FABR receives a service notification from Communication Agent indicating a DP/Communication Agent error.

Measurement Scope
MP

Recovery

1. No action necessary.

RxFabrSrvNotiDpCongest

Measurement ID
10647

Measurement Group
Full Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Service Notifications received from ComAgent indicating DP is congested with CL=2 or CL=3.

Collection Interval
5 min

Peg Condition
When FABR receives Service Notification from ComAgent indicating a DP congestion at CL=2 or CL=3.

Measurement Scope
MP

Recovery

1. No action necessary.

RxFabrTransactionsRejected

Measurement ID
10670

Measurement Group
Full Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of transactions rejected by FABR.

Collection Interval
5 min

Peg Condition
Each time the RBAR application sends an answer response with Result-Code/ Experimental-Code or abandons an ingress request message.

Measurement Scope
Server Group

Recovery

1. When non-zero, examine other failure measurements (RxFabrUnkApplId, RxFabrDecodeFailureResol, RxFabrResolFailAll, RxFabrResolFailCmdcode, RxFabrResolFailNoAddrAvps, TxFabrDbConFail, TxFabrAbandonRequest,

RxFabrInvalidImsiMcc, RxFabrBlacklistedImsi, RxFabrBlacklistedMsisdn) to isolate reasons for failures.

2. If the problem persists, it is recommended to contact My Oracle Support (MOS).

RxFabrUnkAppId

Measurement ID
10608

Measurement Group
Full Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Request messages rejected due to an unknown Application ID.

Collection Interval
5 min

Peg Condition
For each routing exception when the Application ID is not valid.

Measurement Scope
Server Group

Recovery

1. The currently provisioned Diameter Application IDs can be viewed in the FABR Configuration & Maintenance GUI.
2. The currently provisioned Application Routing Rules can be viewed using **Main Menu** > **Diameter** > **Configuration** > **Application Routing Rules.**
3. It is recommended to contact My Oracle Support (MOS) for assistance.

TxFabrDbConFail

Measurement ID
10639

Measurement Group
Full Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of database queries failed due to the **Communication Agent** queue exhaustion.

Collection Interval
5 min

Peg Condition
Each time the application attempts to send DP queries and fails due to **Communication Agent** queue exhaustion.

Measurement Scope
Server Group

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance.

TxFabrFwdFail

Measurement ID
10640

Measurement Group
Full Address Resolution Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of routing attempt failures due to internal resource exhaustion.

Collection Interval
5 min

Peg Condition
Each time the application attempts to enqueue a Request message on the DSR **Relay Agent**'s "Request Message Queue" or enqueue a Answer message on "DRL Answer Queue" and it fails (e.g., queue full).

Measurement Scope
Server Group

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance.

Full Address Based Resolution (FABR) Application Performance measurements

The FABR Application Performance measurement group is a set of measurements that provide performance information that is specific to the FABR feature. These

measurements will allow you to determine how many messages are successfully forwarded and received to and from the FABR Application.

FabrAverageQueriesPerBundle

Measurement ID
10667

Measurement Group
Full Address Resolution Performance

Measurement Type
Average

Measurement Dimension
Single

Description
Average number of queries per Bundle sent by FABR.

Collection Interval
5 min

Peg Condition
When FABR successfully sends a Bundled query event to **ComAgent** for processing

Measurement Scope
Server Group

Recovery

1. No action required.

RxDpResponseTimeAvg

Measurement ID
10650

Measurement Group
Full Address Resolution Performance

Measurement Type
Average

Measurement Dimension
Single

Description
Average time (in milliseconds) it takes to receive a DP response after sending the correlated database query.

Collection Interval
5 min

Peg Condition
It is calculated based on the total number of sampled database queries during the collection interval.

Measurement Scope
MP

Recovery

1. No action necessary.

RxFabrAvgMsgSize

Measurement ID
10623

Measurement Group
Full Address Resolution Performance

Measurement Type
Average

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Average size of Request message received.

Collection Interval
5 min

Peg Condition
Average calculated for each Request message received.

Measurement Scope
Server Group

Recovery

1. No action necessary.

RxFabrBundledResponseEvents

Measurement ID
10666

Measurement Group
Full Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Bundled Response Events received by FABR.

Collection Interval
5 min

Peg Condition
When FABR successfully receives a Bundled response event from **ComAgent**.

Measurement Scope
Server Group

Recovery

1. No action required.

RxFabrDpResponseMsgQueueAvg

Measurement ID
10655

Measurement Group
Full Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The average DP Response Message Queue utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The average of all Request Message Queue utilization samples taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. This alarm may occur due to persistent overload conditions with respect to database response processing.

   It is recommended to contact My Oracle Support (MOS) for assistance.

RxFabrDpResponseMsgQueuePeak

Measurement ID
10654

Measurement Group
Full Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The peak DSR Application's DP Response Message Queue utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The maximum DP Response Message Queue utilization sample taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. This alarm may occur due to persistent overload conditions with respect to database response processing.

   It is recommended to contact My Oracle Support (MOS) for assistance.

RxFabrMsgs

Measurement ID
10610

Measurement Group
Full Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Request messages received by FABR application.

Collection Interval
5 min

Peg Condition
For each message successfully de-queued from the application’s internal “Message Event” queue.

Measurement Scope
Server Group

Recovery

1. No action necessary.

RxFabrNgnPs

Measurement ID
10671

Measurement Group
Full Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of FABR ingress NGN-PS messages.

Collection Interval
5 min

Peg Condition
Each time NGN-PS Diameter message is received.

Measurement Scope
Server Group

Recovery

1. No action required.

RxFabrResolAll

Measurement ID
10611

Measurement Group
Full Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Addresses Successfully Resolved to a Destination.

Collection Interval
5 min

Peg Condition
For each message successfully resolved to a Destination.

Measurement Scope
Server Group

Recovery

1. No action necessary.

RxFabrResolAllMp

Measurement ID
10653

Measurement Group
Full Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Addresses Successfully Resolved to a Destination by the MP.

Collection Interval
5 min

Peg Condition
For each message successfully resolved to a Destination by the MP.

Measurement Scope
Server Group

Recovery

1. No action necessary.

RxFabrResolExtId

Measurement ID
10673

Measurement Group
Full Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (Per Diameter Application)

Description
Number of addresses successfully resolved with a complete External Identifier.

Collection Interval
5 min

Peg Condition
For each request message successfully resolved to a destination using a Routing Entity Type of External Identifier as defined by the following requirements:

- R166849_SIGP_RTE_DEST_0020
- R166849_SIGP_RTE_DEST_0030
- R166849_SIGP_RTE_DEST_0040

and the DP response indicates:

- The query was successful; and
- An exact match was found using the entire External Identifier.

Measurement Scope
Server Group

Recovery

1. No action necessary.

RxFabrResolExtIdDomainId

Measurement ID
10674

Measurement Group
Full Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (Per Diameter Application)

Description
Number of addresses successfully resolved with the domain identifier received in an External Identifier.

Collection Interval
5 min

Peg Condition
For each request message successfully resolved to a destination using a Routing Entity Type of External Identifier as defined by the following requirements:

- R166849_SIGP_RTE_DEST_0020

- R166849_SIGP_RTE_DEST_0030
- R166849_SIGP_RTE_DEST_0040

and the DP response indicates:

- The query was successful; and
- An exact match was found using only the domain identifier component of the entire External Identifier.

Measurement Scope
Server Group

Recovery

1. No action necessary.

RxFabrResolFailExtIdMatch

Measurement ID
10675

Measurement Group
Full Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (Per Diameter Application)

Description
Number of request messages received with a valid External Identifier AVP value that did not match a provisioned address.

Collection Interval
5 min

Peg Condition
For each request message that did not successfully resolve to a destination using a Routing Entity Type of External Identifier.

Measurement Scope
Server Group

Recovery

1. No action necessary.

RxFabrResolImpi

Measurement ID
10615

Measurement Group
Full Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Addresses Successful Resolved with Routing Entity type IMPI.

Collection Interval
5 min

Peg Condition
For each message successfully resolved to a Destination using a Routing Entity Type of IMPI.

Measurement Scope
Server Group

Recovery

1. No action necessary.

RxFabrResolImpu

Measurement ID
10616

Measurement Group
Full Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Addresses Successful Resolved with Routing Entity type IMPU.

Collection Interval
5 min

Peg Condition
For each message successfully resolved to a Destination using a Routing Entity Type of IMPU.

Measurement Scope
Server Group

Recovery

1. No action necessary.

RxFabrResolImsi

Measurement ID
10613

Measurement Group
Full Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Addresses Successful Resolved with Routing Entity type IMSI.

Collection Interval
5 min

Peg Condition
For each message successfully resolved to a Destination using a Routing Entity Type of IMSI.

Measurement Scope
Server Group

Recovery

1. No action necessary.

RxFabrResolMsisdn

Measurement ID
10614

Measurement Group
Full Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Addresses Successful Resolved with Routing Entity type MSISDN.

Collection Interval
5 min

Peg Condition
For each message successfully resolved to a Destination using a Routing Entity Type of MSISDN.

Measurement Scope
Server Group

Recovery

1. No action necessary.

RxFabrResolRateAvg

Measurement ID
10606

Measurement Group
Full Address Resolution Performance

Measurement Type
Average

Measurement Dimension
Single

Description
Average Addresses Successfully Resolved per second.

Collection Interval
5 min

Peg Condition
The "average per second" is periodically calculated based on the total number of addresses successfully resolved.

Measurement Scope
Server Group

Recovery

1. No action required.

RxFabrResolRatePeak

Measurement ID
10607

Measurement Group
Full Address Resolution Performance

Measurement Type
Max

Measurement Dimension
Single

Description
Peak Addresses Successfully Resolved per second.

Collection Interval
5 min

Peg Condition
At the end of each sample period associated with average successfully resolved message rate, as defined by measurement RxFabrResolRateAvg, if the value exceeds the current value for this measurement, then the measurement will be updated with the current sample periods value.

Measurement Scope
Server Group

Recovery

1. No action required.

TxFabrAbandonRequest

Measurement ID
10656

Measurement Group
Full Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Request message that are abandoned.

Collection Interval
5 min

Peg Condition
Each time the Routing Exception "Abandon Request" is invoked.

Measurement Scope
Server Group

Recovery

1. No action necessary.

TxFabrBundledQueryEvents

Measurement ID
10665

Measurement Group
Full Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Bundled Query Events sent to **ComAgent**.

Collection Interval
5 min

Peg Condition
When FABR successfully sends a Bundled query event to **ComAgent** for processing.

Measurement Scope
Server Group

Recovery

1. No action required.

TxFabrFwdDefaultDest

Measurement ID
10621

Measurement Group
Full Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Request message forwarding attempts using a Default Destination.

Collection Interval
5 min

Peg Condition
Each time the Routing Exception "Forward route the message with a user-configurable Default Destination" is invoked.

Measurement Scope
Server Group

Recovery

1. No action necessary.

TxFabrFwdNochange

Measurement ID
10620

Measurement Group
Full Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Request message forwarding attempts without changing the message.

Collection Interval
5 min

Peg Condition
Each time the Routing Exception "Forward route the message unchanged" is invoked.

Measurement Scope
Server Group

Recovery

1. No action necessary.

TxFabrFwdSuccess

Measurement ID
10622

Measurement Group
Full Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Request messages successfully forwarded (all reasons).

Collection Interval
5 min

Peg Condition
Each time the application successfully enqueues a Request message on the DSR **Relay Agent**'s Request Message Queue.

Measurement Scope
Server Group

Recovery

1. If this value is less than TxFabrMsgAttempt, then an internal resource error is occurring. It is recommended to contact My Oracle Support (MOS) for assistance.

TxFabrMsgAttempt

Measurement ID
10619

Measurement Group
Full Address Resolution Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Application ID)

Description
Number of Request message forwarding attempts (all reasons).

Collection Interval
5 min

Peg Condition
Each time the application attempts to enqueue a Request message on the DSR **Relay Agent**'s "Request Message Queue".

Measurement Scope
Server Group

Recovery

1. No action necessary.

GLA Exception measurements

The GLA Exception measurement group contains measurements that provide performance information that is specific to the GLA application.

RxGlaDecodeFailures

Measurement ID
15911

Measurement Group
GLA Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of GGRs unsuccessfully processed due to unsupported Application ID, Command Code, Subscriber Info, or other decoding issue.

Collection Interval
5 min

Peg Condition
During GGR failure handling

Measurement Scope
Server Group

Recovery

1. While parsing the message, one of the following conditions occurred:
   - The message content was inconsistent with the "Message Length" in the message header.
   - The IMSI contained in the User-Name AVP was considered invalid due to length.
   - The MSISDN contained in the MSISDN AVP was considered invalid due to length.
2. These protocol errors can be caused by the originator of the message (identified by the Origin-Host AVP in the message) or the peer who forwarded the message to this node. Collect a trace containing the **GGR**, and determine which node is causing the invalid data.
3. If the problem persists, it is recommended to contact My Oracle Support (MOS).

RxGlaDatabaseFailures

Measurement ID
15912

Measurement Group
GLA Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of **GGR**s unsuccessfully processed due to queries to **pSBR-B** receiving a negative acknowledgment.

Collection Interval
5 min

Peg Condition
During pSBR-B query failures

Measurement Scope
Server Group

Recovery

1. Examine the current state of the pSBR-B via the **Communication Agent** > **Maintenance** > **HA Service Status** screen.
2. The status of the Reporting Server's BindingRd should be examined to verify that all SubResources are Available. This will provide information about Availability and Congestion of each SubResource.
3. If the problem persists, it is recommended to contact My Oracle Support (MOS).

RxGlaDatabaseTimeouts

Measurement ID
15913

Measurement Group
GLA Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of **GGR**s unsuccessfully processed due to queries to **pSBR-B** timing out before a response is received.

Collection Interval
5 min

Peg Condition
During pSBR-B query failures

Measurement Scope
Server Group

Recovery

1. Examine the current state of the pSBR-B via the **Communication Agent** > **Maintenance** > **HA Service Status** screen.
2. The status of the Reporting Server's BindingRd should be examined to verify that all SubResources are Available. This will provide information about Availability and Congestion of each SubResource.
3. If the problem persists, it is recommended to contact My Oracle Support (MOS).

GLA Performance measurements

The GLA Performance measurement group contains measurements that provide performance information that is specific to the GLA application.

TxGlaSuccessMsgs

Measurement ID
15901

Measurement Group
GLA Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of GGRs successfully processed

Collection Interval
5 min

Peg Condition
When a GGA is transmitted following a successful query of the pSBR database

Measurement Scope
Server Group

Recovery

1. This number can be compared against RxGlaRequestProcessed to get a ratio of total input Requests to successfully processed Requests.

RxGlaResponseMsgQueuePeak

Measurement ID
15907

Measurement Group
GLA Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Peak utilization of **GLA**'s response queue that handles **pSBR-B** replies.

Collection Interval
5 min

Peg Condition
Reception of a response Stack Event from pSBR-B.

Measurement Scope
Server Group

Recovery

1. This number provides an indication of short-term work-rate of the response task. If this value crosses 75%, it indicates that processing rates are increasing and additional capacity may need to be added to the DSR.
2. If the problem persists, it is recommended to contact My Oracle Support (MOS).

RxGlaResponseMsgQueueAvg

Measurement ID
15908

Measurement Group
GLA Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Average utilization of **GLA**'s response queue that handles **pSBR-B** replies.

Collection Interval
5 min

Peg Condition
Reception of a response Stack Event from pSBR-B.

Measurement Scope
Server Group

Recovery

1. This number provides an indication of sustained work-rate of the response task. If this value crosses 50%, it indicates that processing rates are increasing and additional capacity may need to be added to the DSR.
2. If the problem persists, it is recommended to contact My Oracle Support (MOS).

TxGlaSuccessMsgRatePeak

Measurement ID
15909

Measurement Group
GLA Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Peak rate of **GGR**s successfully processed

Collection Interval
5 min

Peg Condition
When a **GGA** is transmitted following a successful query of the **pSBR** database

Measurement Scope
Server Group

Recovery

1. This number provides an indication of peak success work-rate of **GLA**. If can be used to determine when GLA is processing more than a customer's work-rate.
2. If the problem persists, It is recommended to contact My Oracle Support (MOS).

TxGlaSuccessMsgRateAvg

Measurement ID
15910

Measurement Group
GLA Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Average rate of **GGR**s successfully processed

Collection Interval
5 min

Peg Condition
When a **GGA** is transmitted following a successful query of the **pSBR** database

Measurement Scope
Server Group

Recovery

1. This number provides an indication of sustained success work-rate of **GLA**. If can be used to determine when GLA is processing more than a customer's work-rate.
2. If the problem persists, It is recommended to contact My Oracle Support (MOS).

RxGlaFailureMsgs

Measurement ID
15914

Measurement Group
GLA Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of **GGR**s unsuccessfully processed due to any problem.

Collection Interval
5 min

Peg Condition
Any failure during processing

Measurement Scope
Server Group

Recovery

1. When non-zero, examine other failure measurements (RxGlaDecodeFailures, RxGlaDatabaseFailures, RxGlaDatabaseTimeouts) to isolate reasons for failures
2. Search the Event History for additional information to identify the specific failure.
3. If the problem persists, It is recommended to contact My Oracle Support (MOS).

IDIH measurements

The **IDIH** measurement report contains measurements that provide performance information that is specific to the IDIH feature.

EvIdihNumTtrsSent

Measurement ID
14104

Measurement Group
IDIH

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of TTRs that were sent from DSR to **DIH**.

Collection Interval
5 min

Peg Condition
Each time a **TTR** is successfully transmitted from DSR to DIH.

Measurement Scope
Site

Recovery

1. No action required

EvIdihNumTtrsDeliveryFailed

Measurement ID
14105

Measurement Group
IDIH

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of TTRs that could not be sent from DSR to **DIH** due to the failure of the **ComAgent** link.

Collection Interval
5 min

Peg Condition
Each time a **TTR** cannot be successfully transmitted from DSR to DIH.

Measurement Scope
Site

Recovery

1. Re-establish the ComAgent link to DIH.

TmIdihTraceSuspendedTime

Measurement ID
14106

Measurement Group
IDIH

Measurement Type
Duration

Measurement Dimension
Single

Description
The amount of time that trace limiting is active

Collection Interval
5 min

Peg Condition
Each time trace limiting is activated and stopped when trace limiting is de-activated.

Measurement Scope
Site

Recovery

1. No action required

TmIdihTraceThrottlingTime

Measurement ID
14107

Measurement Group
IDIH

Measurement Type
Duration

Measurement Dimension
Single

Description
The amount of time that trace throttling is active.

Collection Interval
5 min

Peg Condition
Each time trace throttling is activated and stopped when trace throttling is de-activated.

Measurement Scope
Site

Recovery

1. No action required

EvIdihThrottlingTtrsDiscarded

Measurement ID
14108

Measurement Group
IDIH

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of TTRs discarded due to trace throttling.

Collection Interval
5 min

Peg Condition
Each time a **TTR** is discarded due to trace throttling.

Measurement Scope
Site

Recovery

1. No action required

EvInvalidIdihTraceAvp

Measurement ID
14110

Measurement Group
IDIH

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of messages that contained IDIH-Trace AVPs within invalid values.

Collection Interval
5 min

Peg Condition
Every time that an IDIH-Trace AVP is received with a values that does not follow the defined format or names a trace that does not exist.

Measurement Scope

Recovery

1. If this AVP was present in a message from an external peer, verify that the peer is not intentionally modifying this AVP. (Peers may either copy the IDIH-Trace AVP unchanged, or remove it entirely, but may not modify it).
2. If this AVP was present in a message from a DA-MP peer, it is recommended to contact My Oracle Support (MOS).

EvNetworkTraceStarted

Measurement ID
14111

Measurement Group
IDIH

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of times that a network trace has been started.

Collection Interval
5 min

Peg Condition
Every time that a network trace is started

Measurement Scope

Recovery

1. No action required

IP Front End (IPFE) Exception measurements

The IPFE Exception measurement group is a set of measurements that provide information about exceptions and unexpected messages and events specific to the IPFE application. Measurements such as the following are included in this group.

PcapDroppedPackets

Measurement ID
5212

Measurement Group
IPFE Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
ARP/ICMP/ICMPv6 control packets dropped. The pcap library listens for packets on the network interfaces on behalf of the IPFE. If the network interface receives more packets than it can handle, the library will drop packets and increase a dropped packet counter.

Collection Interval
5 min

Peg Condition
This measurement is incremented by one each time the IPFE drops an ARP/ICMP/ICMPv6 control packet.

Measurement Scope
Network, NE, Server Group

Recovery

1. In the unlikely event that counts should appear for this measurement, network diagnostics should be performed.
2. For further assistance, It is recommended to contact My Oracle Support (MOS).

ThrottledPackets

Measurement ID
5226

Measurement Group
IPFE Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of packets dropped due to throttling

Collection Interval
5 min, 30 min, 60 min

Peg Condition
When a packet is dropped to limit excessive IPFE CPU

Measurement Scope
Network

Recovery

1. Increase DSR Capacity.

TsaBadDestPortSctp

Measurement ID
5228

Measurement Group
IPFE Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by TSA ID)

Description
The number of packets received that had a destination port outside of the responder port range and the initiator port range.

Collection Interval
5 minutes

Peg Condition
Incremented when a packet that has an out-of-range destination port is received

Measurement Scope
Network, NE, Server Group

Recovery

1. OAM validation should prevent a DA-MP from using an out-of-range port as a source port. Check the configuration of the peer node.

TsaBadDestPortTcp

Measurement ID
5227

Measurement Group
IPFE Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by TSA ID)

Description
The number of packets received that had a destination port outside of the responder port range and the initiator port range.

Collection Interval
5 minutes

Peg Condition
Incremented when a packet that has an out-of-range destination port is received

Measurement Scope
Network, NE, Server Group

Recovery

1. OAM validation should prevent a DA-MP from using an out-of-range port as a source port. Check the configuration of the peer node.

TsaUnexpctedSctp

Measurement ID
5225

Measurement Group
IPFE Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by TSA ID)

Description
Number of SCTP packets sent to a TSA configured as “TCP Only”.

Collection Interval
5 min

Peg Condition
Incremented when an SCTP packet is received for a TSA configured as “TCP Only”.

Measurement Scope
Network, NE, Server Group

Recovery

1. Check client configuration for clients attempting SCTP associations with a TCP-only TSA.

TsaUnexpctedTcp

Measurement ID
5224

Measurement Group
IPFE Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by TSA ID)

Description
Number of TCP packets sent to a TSA configured as “SCTP Only”.

Collection Interval
5 minutes

Peg Condition
Incremented when a TCP packet is received for a TSA configured as “SCTP Only”.

Measurement Scope
Network, NE, Server Group

Recovery

1. Check client configuration for clients attempting TCP connections on an SCTP-only TSA.

TxReject

Measurement ID
5209

Measurement Group
IPFE Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by TSA ID)

Description
Number of new associations rejected. The IPFE rejects new associations when there are no available applications servers for the target set address. The associated alarm, 5009 - No available servers in target set (refer to the *DSR Alarms and KPIs Reference* for details about this alarm), will also be issued.

Collection Interval
5 minutes

Peg Condition
This measurement is incremented by one each time the IPFE rejects a new association for a target set address.

Measurement Scope
Network, NE, Server Group

Recovery

1. Check the status of the application servers by navigating to the **Status & Manage** > **Server** page.

TxRejectSctp

Measurement ID
5222

Measurement Group
IPFE Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
New SCTP associations rejected.

Collection Interval
5 minutes

Peg Condition
Incremented when an SCTP association is rejected.

Measurement Scope
Network, NE, Server Group

Recovery

1. None required

IP Front End (IPFE) Performance measurements

The IPFE Performance measurement group contains measurements that provide performance information that is specific to the IPFE application. Counts for various expected/normal messages and events are included in this group. Measurements such as the following are included.

AsNewAssociations

Measurement ID
5204

Measurement Group
IPFE Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Application Server ID)

Description
New associations for each server.

Collection Interval
5 minutes

Peg Condition
This measurement is incremented by one each time the IPFE associates a client packet with an application server.

Measurement Scope
Network, NE, Server Group

Recovery

1. No action required

AsNewAssociationsSctp

Measurement ID
5217

Measurement Group
IPFE Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Application Server ID)

Description
New SCTP associations for each server.

Collection Interval
5 minutes

Peg Condition
Incremented when a new SCTP association is established for an application server.

Measurement Scope
Network, NE, Server Group

Recovery

1. No action required

IpfeNewAssociations

Measurement ID
5206

Measurement Group
IPFE Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
New associations for the IPFE.

Collection Interval
5 minutes

Peg Condition
This measurement is incremented by one each time the IPFE associates a client packet with an application server.

Measurement Scope
Network, NE, Server Group

Recovery

1. No action required

IpfeNewAssociationsSctp

Measurement ID
5219

Measurement Group
IPFE Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
New SCTP associations for the IPFE

Collection Interval
5 minutes

Peg Condition
Incremented when a new SCTP association is established through an IPFE.

Measurement Scope
Network, NE, Server Group

Recovery

1. None required

RxIpfeBytes

Measurement ID
5203

Measurement Group
Simple

Measurement Type
IPFE Performance

Measurement Dimension
Single

Description
The number of bytes received by the IPFE.

Collection Interval
5 minutes, 30 minutes, 60 minutes

Peg Condition
The measurement is incremented by one for each byte the IPFE receives.

Measurement Scope
Network, NE, Server Group

Recovery

1. No action required

RxIpfeBytesSctp

Measurement ID
5223

Measurement Group
IPFE Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of SCTP bytes received by the IPFE.

Collection Interval
5 minutes, 30 minutes, 60 minutes

Peg Condition
Incremented by the packet payload size when an SCTP packet is received by the IPFE.

Measurement Scope
Network, NE, Server Group

Recovery

1. No action required

RxIpfePackets

Measurement ID
5202

Measurement Group
IPFE Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Packets received by the IPFE

Collection Interval
5 minutes

Peg Condition
This measurement is incremented by one for each packet the IPFE receives.

Measurement Scope
Network, NE, Server Group

Recovery

1. No action required

RxTsaBytes

Measurement ID
5201

Measurement Group
IPFE Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TSA ID)

Description
Bytes received for each TSA.

Collection Interval
5 minutes

Peg Condition
This measurement is incremented by one each time a byte is received for a particular target set address.

Measurement Scope
Network, NE, Server Group

Recovery

1. No action required

RxTsaBytesSctp

Measurement ID
5214

Measurement Group
IPFE Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TSA ID)

Description
SCTP bytes received for each TSA

Collection Interval
5 minutes

Peg Condition
This measurement is incremented by one each time an SCTP byte is received for a particular target set address.

Measurement Scope
Network, NE, Server Group

Recovery

1. No action required

RxTsaPackets

Measurement ID
5200

Measurement Group
IPFE Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TSA ID)

Description
Packets received for each TSA

Collection Interval
5 minutes

Peg Condition
This measurement is incremented by one each time a packet is received for a particular TSA.

Measurement Scope
Network, NE, Server Group

Recovery

1. No action required

RxTsaPacketsSctp

Measurement ID
5213

Measurement Group
IPFE Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TSA ID)

Description
SCTP packets received for each TSA.

Collection Interval
5 minutes

Peg Condition
This measurement is incremented by one each time an SCTP packet is received for a particular TSA.

Measurement Scope
Network, NE, Server Group

Recovery

1. No action required

TsaNewAssociations

Measurement ID
5205

Measurement Group
IPFE Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TSA ID)

Description
New associations for each target set address

Collection Interval
5 minutes

Peg Condition
This measurement is incremented by one each time the IPFE associates a client packet with a target set address.

Measurement Scope
Network, NE, Server Group

Recovery

1. No action required

TsaNewAssociationsSctp

Measurement ID
5218

Measurement Group
IPFE Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TSA ID)

Description
New SCTP associations for each TSA.

Collection Interval
5 minutes

Peg Condition
Incremented when a new SCTP association is established for a TSA.

Measurement Scope
Network, NE, Server Group

Recovery

1. No action required

TxAsBytes

Measurement ID
5208

Measurement Group
IPFE Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Bytes sent for each server.

Collection Interval
5 minutes

Peg Condition
This measurement is incremented by one each time a byte is sent to a particular application server.

Measurement Scope
Network, NE, Server Group

Recovery

1. No action required

TxAsBytesSctp

Measurement ID
5221

Measurement Group
IPFE Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TSA ID)

Description
SCTP bytes sent for each server.

Collection Interval
5 minutes

Peg Condition
This measurement is incremented by one each time an SCTP byte is sent to a particular application server.

Measurement Scope
Network, NE, Server Group

Recovery

1. No action required

TxAsPackets

Measurement ID
5207

Measurement Group
IPFE Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Application Server ID)

Description
Packets sent for each server.

Collection Interval
5 minutes

Peg Condition
This measurement is incremented by one each time a packet is sent to a particular application server.

Measurement Scope
Network, NE, Server Group

Recovery

1. No action required

TxAsPacketsSctp

Measurement ID
5220

Measurement Group
IPFE Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Application Server ID)

Description
SCTP packets sent for each server.

Collection Interval
5 minutes

Peg Condition
This measurement is incremented by one each time an SCTP packet is sent to a particular application server.

Measurement Scope
Network, NE, Server Group

Recovery

1. No action required

License measurements

The License measurement report contains measurements providing information about network MPS and place association sessions for Policy DRA and Online Charging DRA.

NetworkElementMPS

Measurement ID
14091

Measurement Group
License

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Network element messages per second

Collection Interval
5 min

Peg Condition
Network element MPS for the time interval based on request and answer messages

Measurement Scope
Network

Recovery

1. No action required.

NetworkMPS

Measurement ID
14097

Measurement Group
License

Measurement Type
Simple

Measurement Dimension
Single

Description
Network messages per second for the entire network

Collection Interval
5 min

Peg Condition
Network messages per second based on request and answer messages

Measurement Scope
Network

Recovery

1. No action required.

NetworkOcdraSessions

Measurement ID
14099

Measurement Group
License

Measurement Type
Simple

Measurement Dimension
Single

Description
Average number of active sessions for OC-DRA for the entire network

Collection Interval
5 min

Peg Condition
Average number of active sessions for OC-DRA for every 5-minute interval

Measurement Scope
Network

1. No action required

NetworkPdraSessions

Measurement ID
14098

Measurement Group
License

Measurement Type
Simple

Measurement Dimension
Single

Description
Average number of active sessions for P-DRA for the entire network

Collection Interval
5 min

Peg Condition
Average number of active sessions for P-DRA for every 5-minute interval

Measurement Scope
Network

1. No action required

NetworkPeakMPS

Measurement ID
14092

Measurement Group
License

Measurement Type
Max

Measurement Dimension
Single

Description
Network peak messages per second for the entire network

Collection Interval
5 min

Peg Condition
Network peak MPS based on request and answer messages

Measurement Scope
Network

Recovery

1. No action required.

PlaceAssociationPdraSessions

Measurement ID
14093

Measurement Group
License

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Average number of active sessions per place association for Policy DRA

Collection Interval
5 min

Peg Condition
Average number of active sessions for every five minute interval per place association for Policy DRA

Measurement Scope
Network

Recovery

1. No action required.

PlaceAssociationPeakPdraSessions

Measurement ID
14094

Measurement Group
License

Measurement Type
Max

Measurement Dimension
Single

Description
Place association peak sessions for the entire network for Policy DRA

Collection Interval
5 min

Peg Condition
Place association peak sessions

Measurement Scope
Network

Recovery

1. No action required.

PlaceAssociationOcdraSessions

Measurement ID
14095

Measurement Group
License

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Average number of active sessions per place association for Online Charging DRA

Collection Interval
5 min

Peg Condition
Average number of active sessions for every five minute interval per place association for Online Charging DRA

Measurement Scope
Network

Recovery

1. No action required.

PlaceAssociationPeakOcdraSessions

Measurement ID
14096

Measurement Group
License

Measurement Type
Max

Measurement Dimension
Single

Description
Place association peak sessions for the entire network for Online Charging DRA

Collection Interval
5 min

Peg Condition
Place association peak sessions

Measurement Scope
Network

Recovery

1. No action required.

Link Exception measurements

The Link Exception measurement report contains measurements that provide information that is specific to links configured for the MP server.

EvLnkActAckTO

Measurement ID
9120

Measurement Group
Link Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (per link)

Description
The number of times the link timed out waiting for ASP-ACTIVE-ACK. An ASP-ACTIVE-ACK is sent by the SG in response to an ASP-ACTIVE message on the link. The link is not available for M3UA data signaling until the ASP-ACTIVE-ACK is received.

Collection Interval
30 min

Peg Condition
This measurement is incremented by one each time an ASP-ACTIVE has been sent for the link and the M3UA State Management ACK timer has expired, but no ASP-ACTIVE-ACK was received for the link.

Measurement Scope
NE, Server

Recovery

1. This measurement should have a zero value. You can view Link status from the GUI main menu under **SS7/Sigtran** > **Maintenance** > **Links**.
2. Check the event history log from the GUI main menu under **Alarms & Events** > **View History**. Look for Event ID 19229, which shows when the ASP-ACTIVE-ACK timeout occurs.

3. Verify that the far-end of the link on the SG is not undergoing maintenance.
4. Verify that the **State Management ACK Timer** period is not set too short.
5. Verify that the IP network between the MP server and the SG is performing up to expectations.
6. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

RxLnkUnsolInactAck

Measurement ID
9121

Measurement Group
Link Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (per link)

Description
The number of times an unsolicited ASP-INACTIVE-ACK was received on the link. ASP-INACTIVE-ACK may be sent unsolicited by the SG to indicate that the specified link is no longer able to process M3UA data signaling. The MP server will begin attempts to bring the link back into the signaling state matching its administrative state. For example, if the link is **Enabled**, the MP server will attempt to restore M3UA data signaling on the link by sending an ASP-ACTIVE and waiting for an ASP-ACTIVE-ACK.

Collection Interval
30 min

Peg Condition
This measurement is incremented by one each time an unsolicited ASP-INACTIVE-ACK is received on the link.

Measurement Scope
NE, Server

Recovery

1. This measurement should have a zero value. A non-zero value means that the far-end of the link has stopped processing M3UA data. You can view Link status from the GUI main menu under **SS7/Sigtran** > **Maintenance** > **Links**.
2. Check the event history log from the GUI main menu under **Alarms & Events** > **View History**, looking for Event ID 19230. Event ID 19230 will show when the unsolicited ASP-INACTIVE-ACK was received.
3. Verify whether the far-end of the link is undergoing maintenance.
4. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

RxLnkM3uaERROR

Measurement ID
9123

Measurement Group
Link Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (per link)

Description
The number of times an M3UA ERROR message was received for the link. M3UA ERROR message are sent to indicate invalid M3UA signaling.

Collection Interval
30 min

Peg Condition
This measurement is incremented by one each time an M3UA ERROR message is received and that ERROR message can be attributed to a specific link (i.e., the ERROR message contains a valid routing context, or no routing context is needed).

Measurement Scope
NE, Server

Recovery

1. This measurement should have a value of zero. A non-zero value indicates a problem with the M3UA signaling sent by the MP server.
2. Look for Event ID 19235 from the GUI main menu under **Alarms & Events** > **View History**. **Event ID 19235** provides information on the reason for the receipt of the ERROR message.
3. If the ERROR reason in Event ID 19235 indicates a problem with routing context (i.e., error code 0x19), verify that the MP server link set and the SG are configured to agree on the routing context values that each M3UA signaling link uses.
4. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

RxLnkInvalidM3ua

Measurement ID
9144

Measurement Group
Link Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (per link)

Description
The number of invalid M3UA messages received on the link. Invalid M3UA messages are messages that violate the M3UA protocol, but which can be attributed to a specific link (i.e., a valid routing context exists or no routing context is necessary).

Collection Interval
30 min

Peg Condition
This measurement is incremented by one each time an invalid M3UA message is received for the link.

Measurement Scope
NE, Server

Recovery

1. This measurement should have a value of zero. A non-zero value indicates a problem with the M3UA signaling received by the MP server.
2. Look for Event ID 19231 from the GUI main menu under **Alarms & Events** > **View History**. Event ID 19231 provides information on the reason the M3UA message was rejected.
3. If the ERROR reason in Event ID 19231 indicates a problem with the routing context (i.e., error code 0x19), verify that the MP server link set and the SG are configured to agree on the routing context values that each M3UA signaling link uses.
4. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

Link Performance measurements

The Link Performance measurement report contains measurements that provide performance information that is specific to links configured for the MP server.

Note: ASPSM messages and some M3UA ERROR messages cannot be mapped to a link and are not counted in these measurements.

TxLnkMSU

Measurement ID
9113

Measurement Group
Link Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (per link)

Description
The number of MSUs sent on the link, including all M3UA messages, both DATA and non-DATA.

> **Note:** ASPSM messages and some M3UA ERROR messages cannot be mapped to a link and are therefore not counted in this measurement.

Collection Interval
30 min

Peg Condition
This measurement is incremented by one each time an M3UA message is sent on the link.

Measurement Scope
NE, Server

Recovery

1. No action required

RxLnkMSU

Measurement ID
9114

Measurement Group
Link Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (per link)

Description
The number of MSUs received on the link. MSUs includes all M3UA messages, both DATA and non-DATA. Note: ASPSM messages and some M3UA ERROR messages cannot be mapped to a link and are therefore not counted in this measurement.

Collection Interval
30 min

Peg Condition
This measurement is incremented by one each time an M3UA message is received on the link.

Measurement Scope
NE, Server

Recovery

1. No action required.

TxLnkMSUOctets

Measurement ID
9115

Measurement Group
Link Performance

Measurement Type
Arrayed (per link)

Measurement Dimension
Simple

Description
The number of MSU octets sent on the link, including all M3UA messages, both DATA and non-DATA.

> **Note:** ASPSM messages and some M3UA ERROR messages cannot be mapped to a link and are therefore not counted in this measurement.

Collection Interval
30 min

Peg Condition
This measurement is incremented by the number of octets in the MSU (not including SCTP, IP, or Ethernet headers) each time an M3UA message is sent on the link.

Measurement Scope
NE, Server

Recovery

1. No action required.

RxLnkMSUOctets

Measurement ID
9116

Measurement Group
Link Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (per link)

Description
The number of MSU octets received on the link – MSU octets includes all M3UA messages, both DATA and non-DATA. Note: ASPSM messages and some M3UA ERROR messages cannot be mapped to a link and are therefore not counted in this measurement.

Collection Interval
30 min

Peg Condition
This measurement is incremented by the number of octets in the MSU (not including SCTP, IP, or Ethernet headers) each time an M3UA message is received on the link.

Measurement Scope
NE, Server

Recovery

1. No action required.

Link Set Performance measurements

The Link Set Performance measurement report contains measurements that provide performance information that is specific to link sets configured for the MP server.

TxLnkSetMSU

Measurement ID
9124

Measurement Group
Link Set Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (per link set)

Description
The number of MSUs sent on the link set , including all M3UA DATA messages sent on all links in the link set.

Collection Interval
30 min

Peg Condition
This measurement is incremented by one each time an M3UA DATA message is sent on a link in the link set.

Measurement Scope
NE, Server

Recovery

1. No action required.

RxLnkSetMSU

Measurement ID
9125

Measurement Group
Link Set Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (per link set)

Description
The number of MSUs sent on the link set, including all M3UA DATA messages received on all links in the link set.

Collection Interval
30 min

Peg Condition
This measurement is incremented by one each time an M3UA DATA message is received on a link in the link set.

Measurement Scope
NE, Server

Recovery

1. No action required.

TxLnkSetMSUOctets

Measurement ID
9126

Measurement Group
Link Set Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (per link set)

Description
The number of MSU octets sent on the link set, including all M3UA DATA octets sent on all links in the link set. Octets for SCTP, IP, and Ethernet headers are not included.

Collection Interval
30 min

Peg Condition
This measurement is incremented by the number of octets in the M3UA DATA message each time an M3UA DATA message is sent on a link in the link set.

Measurement Scope
NE, Server

Recovery

1. No action required.

RxLnkSetMSUOctets

Measurement ID
9127

Measurement Group
Link Set Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (per link set)

Description
The number of MSU octets received on the link set, including all M3UA DATA octets received on all links in the link set. Octets for SCTP, IP, and Ethernet headers are not included.

Collection Interval
30 min

Peg Condition
This measurement is incremented by the number of octets in the M3UA DATA message each time an M3UA DATA message is received on a link in the link set.

Measurement Scope
NE, Server

Recovery

1. No action required.

Link Set Usage measurements

The Link Set Usage measurement report contains measurements that provide usage information that is specific to link sets configured for the MP server.

TmM3RLLinksetUnavail

Measurement ID
9090

Measurement Group
Link Set Usage

Measurement Type
Duration

Measurement Dimension
Arrayed (by Linkset)

Description
Total time (in seconds) that all links in the link set were unavailable to M3RL during the measurement interval, regardless of whether the links were automatically or manually made unavailable.

Collection Interval
30 min

Peg Condition
M3RL must maintain an accurate time and measurement of the number of seconds during the collection period that the Link Set's state is **Unavailable**. This measurement is associated with the duration (in seconds) that Alarm 19202 - Link Set Unavailable (refer to the *DSR Alarms and KPIs Reference* for details about this alarm) is asserted during the collection period.

Start of duration measurement for Link Set "X" criteria:

1. Alarm 19202 is asserted for Link Set "X."
2. Start of new collection period AND Alarm 19202 for Linkset "X" is already asserted (during a previous collection interval).

Stop of duration measurement for Link Set "X" criteria:

1. Alarm 19202 for Linkset "X" is cleared (i.e, Link Set becomes **Available**).
2. End of collection interval.

Measurement Scope

Recovery

1. This value provides a measure of the availability of a Link Set. No action required.

Link Usage measurements

The Link Usage measurement report contains measurements that provide usage information that is specific to links configured for the MP server.

TmLnkMOOS

Measurement ID
9117

Measurement Group
Link Usage

Measurement Type
Duration

Measurement Dimension
Arrayed (per link)

Description
The number of seconds the link is manual out of service during the reporting period. A link is manual out of service when the link is in the **Disabled** administrative state.

Collection Interval
Time is accumulated for this measurement when the link administrative state is set to **Disabled**.

> **Note:** The link is not considered to be manually out of service if the link is in the **Enabled** administrative state even if the association that hosts the link is manually out of service.

Peg Condition
30 min

Measurement Scope
NE, Server

Recovery

1. If a non-zero value in this field is unexpected (i.e., no link maintenance is known to have occurred), the link status can be viewed from the GUI under **SS7/Sigtran** > **Maintenance** > **Links**.
2. Also, look in the GUI main menu under **Alarms & Events** > **View History** in the event history for Event 19234 - Local link maintenance state change (refer to the *DSR Alarms and KPIs Reference* for details about this event). Event 19234 records each change in the link's administrative state. If the link was known to be under maintenance, this value represents the number of seconds during the reporting period that the link was in the **Disabled** administrative state.

TmLnkOOS

Measurement ID
9118

Measurement Group
Link Usage

Measurement Type
Duration

Measurement Dimension
Arrayed (per link)

Description
The number of seconds the link is out of service for any reason during the reporting period. A link may be out of service due to the following conditions:

- Maintenance activity – link is **Disabled** or link's association is **Disabled** or **Blocked**.
- Failure of the link to receive ASP-ACTIVE-ACK.
- Receipt of unsolicited ASP-INACTIVE-ACK from the SG.
- The link's association is not in the **Normal** status – failed to establish SCTP connection, failed to receive ASP-UP-ACK, received unsolicited ASP-DOWN-ACK

Collection Interval
30 min

Peg Condition
Time is accumulated for this measurement when the link status reason is not **Normal**.

Measurement Scope
NE, Server

Recovery

1. This measurement should have a value of zero. If the link or the link's association is known to be under maintenance, then a non-zero value in this measurement is expected.
2. Otherwise, the link status can be viewed from the GUI main menu under **SS7/Sigtran** > **Maintenance** > **Links**.
3. Also look in the event history from the GUI main menu under **Alarms & Events** > **View History** for events related to this link or the link's association.
4. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

TmLnkAvailable

Measurement ID
9119

Measurement Group
Link Usage

Measurement Type
Duration

Measurement Dimension
Arrayed (per link)

Description
The number of seconds the link is in service during the reporting period. The link is considered to be in service if the link's status reason is **Normal**. An in-service link is available for M3UA DATA signaling.

Collection Interval
30 min

Peg Condition
Time is accumulated for this measurement when the link status reason is **Normal**.

Measurement Scope
NE, Server

Recovery

1. If all is well, this value should equal the length of the reporting period, meaning that the link was active for the entire reporting period. If the link-available time is not equal to the reporting period, it could be due to one of the following conditions:
   - Link maintenance. The measurements **TmLnkMOOS** and **TmLnkOOS** should have a non-zero values. See the actions for TmLnkMOOS.
   - Link failure. The measurement **TmLnkOOS** should have a non-zero value. See the actions forTmLnkOOS.
   - The link was added during the reporting period. The report indicates that the data is incomplete for the reporting period.
2. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

EvLnkManClose

Measurement ID
9145

Measurement Group
Link Usage

Measurement Type
Simple

Measurement Dimension

Description
The number of times a link was closed due to manual action. This count indicates the number of times that a link transitioned from ASP-ACTIVE to ASP-INACTIVE as a direct result of someone changing the link administrative state from **Enabled** to **Disabled**

Collection Interval
30 min

Peg Condition
This measurement is incremented by one each time the link administrative state is changed from **Enabled** to **Disabled**, causing a protocol state transition from ASP-ACTIVE to ASP-INACTIVE.

Measurement Scope
NE, Server

Recovery

1. If the link is known to be under maintenance, then no further action is necessary. If the link was not known to be under maintenance, then link status can be viewed from the GUI main menu under **SS7/Sigtran** > **Maintenance** > **Links**.
2. View the event history from the GUI main menu under **Alarms & Events** > **View History** looking for **Event ID 19234**. **Event ID 19234** shows the manual link state transitions and contains a time-stamp of when the change occurred.
3. The security logs from the GUI main menu under **Security Logs** can be searched using the time-stamp from the event history log to determine which login performed the manual state change on the link.
4. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

MD-IWF Exception measurements

The MD-IWF Exception measurement report contains measurements providing information about transaction processing exceptions that are specific to the MAP-Diameter IWF Application running on a SS7-MP.

TxMdIwfSs7TransmitFailure

Measurement ID
15808

Measurement Group
MD-IWF Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of outgoing SS7 messages to the SS7 network that could not be routed (e.g. queue full).

Collection Interval
5 min

Peg Condition
Each time MD-IWF attempts to send a MAP message to the SS7 network (via the SS7 stack), but the message could not be routed.

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance if this measurement is being pegged frequently.

RxMdIwfOrphanMapResponse

Measurement ID
15809

Measurement Group
MD-IWF Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of orphan MAP Response messages received.

Collection Interval
5 min

Peg Condition
Each time the MD-IWF Application received a MAP response message for which no Pending Transaction record exists.

Measurement Scope
Site

Recovery

1. If this measurement is being pegged frequently, the configurable MAP Response timer may be set too low. The MAP Response Timeout value can be viewed via **Main Menu** > **MAP-Diameter IWF** > **Configuration** > **MD-IWF Option**.
2. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

EvMdIwfMapResponseTimeout

Measurement ID
15810

Measurement Group
MD-IWF Exception

Measurement Type
Single

Measurement Dimension
Simple

Description
The number of timeouts waiting for MAP Response.

Collection Interval
5 min

Peg Condition
Each time the MD-IWF Application sent a MAP request message to the SS7 network, but timed out waiting for the MAP response

Measurement Scope
Site

Recovery

1. Diameter-to-MAP timeouts are most likely caused by excessive SS7 network delays. It is possible that the MAP Response Timeout value is set too low.
2. The configured MAP Response Timeout value can be viewed via the NO GUI **Main Menu** > **MAP-Diameter IWF** > **Configuration** > **MD-IWF Options**.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

RxMdIwfDiamNon2xxxAnswer

Measurement ID
15821

Measurement Group
MD-IWF Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Diameter Non-2xxx Answers received.

Collection Interval
5 min

Peg Condition
Each time MD-IWF receives a Diameter Answer message from a DA-MP where the result-Code value is non-2xxx

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if this measurement is being pegged frequently.

RxMdIwfOrphanDiamAnswer

Measurement ID
15822

Measurement Group
MD-IWF Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of orphan Diameter Answer messages received.

Collection Interval
5 min

Peg Condition
Each time MD-IWF receives a Diameter Answer message for which no Pending Transaction record exists

Measurement Scope
Site

Recovery

1. When MD-IWF sends a Diameter Request message to a DA-MP, it allocated a PTR and starts a timer (value is user configurable). The pending transaction is abandoned if a Diameter Answer response is not received within the user-configurable time limit. If this event is occurring frequently, the timer may be set too low. The Diameter Response Timeout value can be viewed via the **Main Menu** > **MAP-Diameter IWF** > **Configuration** > **MD-IWF Options** NO GUI Screen.
2. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

EvMdIwfDiamAnswerTimeout

Measurement ID
15823

Measurement Group
MD-IWF Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of timeouts following message sent to DA-MP.

Collection Interval
5 min

Peg Condition
Each time D-IWF sends a Diameter Request message to the DA-MP, but times out waiting for the Diameter Answer

Measurement Scope
Site

Recovery

1. MAP-to-Diameter timeouts could be caused by delays in the Diameter network. It is possible that the Diameter Response Timeout value is set too low.
2. The configured Diameter Response Timeout value can be viewed via the NO GUI **Main Menu** > **MAP-Diameter IWF** > **Configuration** > **MD-IWF Options**.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

RxMdIwfDiamAnswerUnexpectedDaMp

Measurement ID
15824

Measurement Group
MD-IWF Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Diameter Answer messages received from unexpected DA-MP.

Collection Interval
5 min

Peg Condition
Each time MD-IWF receives Diameter Answer from an unexpected DA-MP.

Measurement Scope
Site

Recovery

1. This error is not expected to occur. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

TxMdIwfFailComAgentEnqueue

Measurement ID
15825

Measurement Group
MD-IWF Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of times MD-IWF failed to enqueue a Diameter message to ComAgent.

Collection Interval
5 min

Peg Condition
Each time MD-IWF attempts to send a Diameter message to a DA-MP via ComAgent, but is unable to enqueue the message.

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance if this measurement is being pegged frequently.

RxMdIwfComAgentError

Measurement ID
15826

Measurement Group
MD-IWF Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Diameter Request messages sent to DA-MP that results in ComAgent error / timeout or in DM-IWF NACK

Collection Interval
5 min

Peg Condition
Each time MD-IWF sends a Diameter Request message to DM-IWF that results in a ComAgent error / timeout or in a DM-IWF NACK.

Measurement Scope
Site

Recovery

1. No action required.

RxMdIwfDiamPduPoolEmpty

Measurement ID
15857

Measurement Group
MD-IWF Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of messages discarded when Diameter PDU pool is exhausted.

Collection Interval
5 min

Peg Condition
Each time MD-IWF discards a message due to Diameter PDU pool exhaustion

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance if this measurement is being pegged frequently.

EvMdIwfInterwrkFail

Measurement ID
15829

Measurement Group
MD-IWF Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The total number of interworking attempts that failed for any reason (internal or because of something from the far end).

Collection Interval
5 min

Peg Condition
Each time an interworking attempt by MD-IWF fails.

Note: If a translation involves a Dialog Continuation and multiple messages are exchanged to perform the translation (i.e. TC-Begin, multiple TC-Continue, TC-End), then this is counted as a single interworking attempt.

Note: A Diameter-initiated interworking attempt fails if the final Diameter Answer sent back has a non-2xxx result code. A MAP-initiated interworking attempt fails if the final MAP response message is an abort, error, or reject. It is also a failure if the configured Diameter Exception or MAP Exception is carried out.

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance if this measurement is being pegged frequently.

EvMdIwfInterwrkFailAddrTrans

Measurement ID
15830

Measurement Group
MD-IWF Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of interworking attempts that failed while attempting Address Translation (either Map-to-Diameter or Diameter-to-Map).

Collection Interval
5 min

Peg Condition
Each time a failure occurs when MD-IWF attempts to perform address translation.

Note: Address Translation involves converting between Diameter addresses (i.e. Orig- and Dest- Host & Realm) and SS7 addresses (i.e. CgPa, CdPa, OPC, DPC).

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance if this measurement is being pegged frequently.

EvMdIwfInterwrkFailMsgTrans

Measurement ID
15831

Measurement Group
MD-IWF Exception

Measurement Type
Single

Measurement Dimension
Simple

Description
The number of interworking attempts that failed while attempting message translation.

Collection Interval
5 min

Peg Condition
Each time a failure occurs when MD-IWF attempts to perform message translation.

Note: Message Translation involves mapping between AVPs in a Diameter message and parameters in a MAP message.

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance if this measurement is being pegged frequently.

TxMdIwfDiamEdlEncodeFailure

Measurement ID
15832

Measurement Group
MD-IWF Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of times an EDL failure occurred while MD-IWF attempted to encode a Diameter message

Collection Interval
5 min

Peg Condition
This measurement is pegged each time MD-IWF attempts to encode a Diameter message to be sent to a DA-MP, but an EDL encode failure occurs. Event 33080 - EDL failure occurred while MD-IWF attempted to encode a Diameter message (refer to the *DSR Alarms and KPIs Reference* for details about this event) will be raised when this condition occurs.

Measurement Scope
Site

Recovery

1. If the encode failure is due to Diameter message size - the failure reason can be determined from Event 33080 - EDL failure occurred while MD-IWF attempted to encode a Diameter message (refer to the *DSR Alarms and KPIs Reference* for details about this event) - it may be necessary to increase the engineering configurable parameter (DiameterMaxMessageSize in table MapIwfLongConfig) for maximum Diameter message size.
2. It is recommended to contact My Oracle Support (MOS) for assistance if this measurement is being pegged frequently.

EvMdIwfInterwrkFailCongest

Measurement ID
15833

Measurement Group
MD-IWF Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of interworking attempts that failed due to MD-IWF Congestion.

Collection Interval
5 min

Peg Condition
Each time an interworking attempt by MD-IWF fails due to MD-IWF congestion.

Note: If a translation involves a Dialog Continuation and multiple messages are exchanged to perform the translation (i.e. TC-Begin, multiple TC-Continue, TC-End), then this is counted as a single interworking attempt.

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance if this measurement is being pegged frequently.

EvMdIwfInterwrkFailFarEndResponse

Measurement ID
15858

Measurement Group
MD-IWF Exception

Measurement Type
Single

Measurement Dimension
Simple

Description
Number of interworking attempts that failed due to error response received from far end

Collection Interval
This measurement is pegged each time an interworking attempt by MD-IWF fails due to receiving an error response from the far end. The error response could be a non-2xxx Diameter Answer, or a MAP U-Abort or Reject.

Note: An interworking attempt is defined in EvMdIwfInterwrkAttempt

Peg Condition
5 min

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance if this measurement is being pegged frequently.

EvMdIwfInterwrkFailDsrInitiated

Measurement ID
15859

Measurement Group
MD-IWF Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of interworking attempts that failed due to action initiated by MD-IWF (not due to far end)

Collection Interval
5 min

Peg Condition
This measurement is pegged each time an interworking attempt by MD-IWF fails due to an action initiated by MD-IWF (i.e. message translation failed, address translation failed, timeout occurred). This measurement does NOT include failures that are due to an error response received from the far end.

Note: An interworking attempt is defined in EvMdIwfInterwrkAttempt.

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance if this measurement is being pegged frequently.

EvMdIwfInterwrkFailSysError

Measurement ID
15834

Measurement Group
MD-IWF Exception

Measurement Type
Single

Measurement Dimension
Simple

Description
The number of interworking attempts that failed due to internal processing error.

Collection Interval
5 min

Peg Condition
Each time an interworking attempt by MD-IWF fails due to internal processing error.

Note: If a translation involves a Dialog Continuation and multiple messages are exchanged to perform the translation (i.e. TC-Begin, multiple TC-Continue, TC-End), then this is counted as a single interworking attempt.

Note: Examples of internal processing errors are ComAgent error, ComAgent congestion, and resource exhaustion.

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance if this measurement is being pegged frequently.

EvMdIwfMessageFailResExh

Measurement ID
15835

Measurement Group
MD-IWF Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of times a message could not processed due to resource exhaustion.

Collection Interval
5 min

Peg Condition
Each time a message cannot be processed by MD-IWF due to resource exhaustion.

Note: Examples of resource exhaustion are PTR exhaustion, PDU exhaustion, and queue full.

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance if this measurement is being pegged frequently.

EvMdIwfTransRejectByDiamExtNode

Measurement ID
15956

Measurement Group
MD-IWF Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of transactions where Diameter external node sends non-2xxx Answer to DSR, and MD-IWF sends error response to SS7

Collection Interval
5 min

Peg Condition
This measurement is pegged when a Diameter external node sends a non-2xxx Answer to DSR, which is then forwarded by DM-IWF (on DA-MP) to MD-IWF (on SS7-MP), and MD-IWF in turn sends an error response (Abort or Reject) to the SS7 network.

Measurement Scope
Site

Recovery

1. No action required

MD-IWF Performance measurements

The MD-IWF Performance measurement report contains measurements providing performance that is specific to the MAP-Diameter IWF Application running on a SS7-MP.

RxMdIwfSS7Msg

Measurement ID
15800

Measurement Group
MD-IWF Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of MAP messages received from the SS7 network.

Collection Interval
5 min

Peg Condition
Each time MD-IWF receives a MAP message from the SS7 network. This includes both request and response messages.

Measurement Scope
Site

Recovery

1. No action required.

TxMdIwfSS7Msg

Measurement ID
15801

Measurement Group
MD-IWF Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of MAP messages sent to SS7 network.

Collection Interval
5 min

Peg Condition
Each time MD-IWF sends a MAP message to the SS7 network. This includes both request and response messages.

Measurement Scope
Site

Recovery

1. No action required.

RxMdIwfMapRequestMsg

Measurement ID
15802

Measurement Group
MD-IWF Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of MAP request messages received from SS7 network.

Collection Interval
5 min

Peg Condition
Each time MD-IWF receives a MAP request message from the SS7 network.

Measurement Scope
Site

Recovery

1. No action required

TxMdIwfMapRequestMsg

Measurement ID
15855

Measurement Group
MD-IWF Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of MAP request messages to SS7 network

Collection Interval
5 min

Peg Condition
Each time MD-IWF sends a MAP request message to the SS7 network

Measurement Scope
Site

Recovery

1. No action required.

RxMdIwfMapResponseMsg

Measurement ID
15803

Measurement Group
MD-IWF Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of MAP response messages received from SS7 network.

Collection Interval
5 min

Peg Condition
Each time MD-IWF receives a MAP response message from the SS7 network

Measurement Scope
Site

Recovery

1. No action required.

TxMdIwfMapResponseMsg

Measurement ID
15856

Measurement Group
MD-IWF Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of MAP response messages sent to SS7 network.

Collection Interval
5 min

Peg Condition
Each time MD-IWF sends a MAP response message to the SS7 network. This measurement counts "success" responses, but doesn't count errors, rejects, or aborts.

Measurement Scope
Site

Recovery

1. No action required.

RxMdIwfDiamMsg

Measurement ID
15811

Measurement Group
MD-IWF Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Diameter messages from DA-MP.

Collection Interval
5 min

Peg Condition
Each time MD-IWF receives a Diameter message from a DA-MP. This includes both Request and Answer messages.

Measurement Scope
Site

Recovery

1. No action required.

TxMdIwfDiamMsg

Measurement ID
15812

Measurement Group
MD-IWF Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Diameter successfully sent to DA-MP.

Collection Interval
5 min

Peg Condition
Each time MD-IWF sends a Diameter message to a DA-MP. This includes both Request and Answer messages.

Measurement Scope
Site

Recovery

1. No action required.

RxMdIwfDiamRequestMsg

Measurement ID
15813

Measurement Group
MD-IWF Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Diameter Request messages received from DA-MP.

Collection Interval
5 min

Peg Condition
Each time MD-IWF receives a Diameter Request message from a DA-MP.

Measurement Scope
Site

Recovery

1. No action required.

RxMdIwfDiamAnswerMsg

Measurement ID
15814

Measurement Group
MD-IWF Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Diameter Answer messages received from DA-MP.

Collection Interval
5 min

Peg Condition
Each time MD-IWF receives a Diameter Answer message from a DA-MP.

Measurement Scope
Site

Recovery

1. No action required.

TxMdIwfDiamRequestMsg

Measurement ID
15815

Measurement Group
MD-IWF Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Diameter Request messages sent to DA-MP.

Collection Interval
5 min

Peg Condition
Each time MD-IWF sends a Diameter Request message to a DA-MP

Measurement Scope
Site

Recovery

1. No action required.

TxMdIwfDiamAnswerMsg

Measurement ID
15816

Measurement Group
MD-IWF Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Diameter Answer messages sent to DA-MP.

Collection Interval
5 min

Peg Condition
Each time MD-IWF sends a Diameter Answer message to a DA-MP.

Measurement Scope
Site

Recovery

1. No action required.

EvMdIwfInterwrkAttempt

Measurement ID
15827

Measurement Group
MD-IWF Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Total number of interworking attempts made. One attempt includes all of the messages within a transaction that are required to perform the interworking (not counting each message). A transaction can be Diameter-originated or MAP-originated

Collection Interval
5 min

Peg Condition
Each time MD-IWF attempts to translate a MAP message into a Diameter message or translate a Diameter message into a MAP message.

Note: If a translation involves a Dialog Continuation and multiple messages are exchanged to perform the translation (i.e. TC-Begin, multiple TC-Continue, TC-End), then this is counted as a single interworking attempt.

Measurement Scope
Site

Recovery

1. No action required.

EvMdIwfInterwrkSuccess

Measurement ID
15828

Measurement Group
MD-IWF Performance

Measurement Type
Single

Measurement Dimension
Simple

Description
The total number of interworking attempts that were completely successful where the final Diameter message sent back had a result code of 2xxx of the final MAP message was a result and not an abort, error, or reject.

Collection Interval
5 min

Peg Condition
Each time MD-IWF successfully completes an interworking attempt.

Note: If a translation involves a Dialog Continuation and multiple messages are exchanged to perform the translation (i.e. TC-Begin, multiple TC-Continue, TC-End), then this is counted as a single interworking attempt.

Note: A Diameter-initiated interworking attempt is successful if the final Diameter Answer sent back has a result code of 2xxx. A MAP-initiated interworking attempt is successful if the final MAP response message is a result and not an abort, error, or reject.

Measurement Scope
Site

Recovery

1. No action required.

RxMdIwfIngressMsgCount

Measurement ID
15836

Measurement Group
MD-IWF Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The total number of messages received by MD-IWF, including MAP messages received from the SS7 network and Diameter messages received from DA-MPs.

Collection Interval
5 min

Peg Condition
Each time MD-IWF receives a message. This number includes MAP messages that are received from the SS7 network and Diameter messages that are received from DA-MPs.

Note: This measurement serves as a baseline for calculating measurements RxMdIwfIngressMsgRateAvg and RxMdIwfIngressMsgRatePeak as well as KPI Ingress Message Rate (refer to the *DSR Alarms and KPIs Reference* for details about this KPI).

Measurement Scope
Site

Recovery

1. No action required.

RxMdIwfIngressMsgRateAvg

Measurement ID
15837

Measurement Group
MD-IWF Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average MD-IWF ingress message rate, including MAP messages received from SS7 network and Diameter messages received from DA-MPs.

Collection Interval
5 min

Peg Condition
Each time KPI Ingress Message Rate (refer to the *DSR Alarms and KPIs Reference* for details about this KPI) samples RxMdIwfIngressMsgCount.

Measurement Scope
Site

Recovery

1. No action required.

RxMdIwfIngressMsgRatePeak

Measurement ID
15838

Measurement Group
MD-IWF Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The peak MD-IWF ingress message rate, including MAP messages received from SS7 network and Diameter messages received from DA-MPs.

Collection Interval
5 min

Peg Condition
Each time KPI Ingress Message Rate (refer to the *DSR Alarms and KPIs Reference* for details about this KPI) samples RxMdIwfIngressMsgCount.

Measurement Scope
Site

Recovery

1. No action required.

RxMap2DiamTransMsgCount

Measurement ID
15839

Measurement Group
MD-IWF Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The total number of MAP-to-Diameter transaction messages by MD-IWF.

Collection Interval
5 min

Peg Condition
Each time MD-IWF receives a MAP request message from the SS7 network and each subsequent message that MD-IWF receives in the MAP-to-Diameter transaction.

Note: For example, MD-IWF could receive a CancelLocationArg from the SS7 network, send a Diameter CLR to a DA-MP, receive a Diameter CLA from a DA-MP, and send a CancelLocationRes to the SS7 network. In this example, there are 2 messages that are pegged in the MAP-to-Diameter transaction.

Note: This measurement serves as a baseline for calculating measurements RxMap2DiamTransMsgRateAvg and RxMap2DiamTransMsgRatePeak as well as KPI MAP-to-Diameter Ingress Msg Rate found in KPI MAP-to-Diameter Trans Msg Rate (refer to the *DSR Alarms and KPIs Reference* for details about this KPI).

Measurement Scope
Site

Recovery

1. No action required.

RxMap2DiamTransMsgRateAvg

Measurement ID
15840

Measurement Group
MD-IWF Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average MAP-to-Diameter transaction messages rate.

Collection Interval
5 min

Peg Condition
Each time KPI MAP-to-Diameter Trans Msg Rate (refer to the *DSR Alarms and KPIs Reference* for details about this KPI) samples RxMap2DiamTransMsgCount.

Measurement Scope
Site

Recovery

1. No action required.

RxMap2DiamTransMsgRatePeak

Measurement ID
15841

Measurement Group
MD-IWF Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The peak MAP-to-Diameter transaction messages rate.

Collection Interval
5 min

Peg Condition
Each time KPI MAP-to-Diameter Trans Msg Rate (refer to the *DSR Alarms and KPIs Reference* for details about this KPI) samples RxMap2DiamTransMsgCount.

Measurement Scope
Site

Recovery

1. No action required.

RxDiam2MapTransMsgCount

Measurement ID
15842

Measurement Group
MD-IWF Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The total number of Diameter-to-MAP transaction messages received by MD-IWF.

Collection Interval
5 min

Peg Condition
Each time MD-IWF receives a Diameter Request message from a DA-MP and each subsequent message that MD-IWF receives in the Diameter-to-MAP transaction.

Note: For example, MD-IWF could receive a Diameter CLR message from the a DA-MP, send a CancelLocationArg to the SS7 Network, receive a CancelLocationRes from the SS7 network, and send a Diameter CLA to the DA-MP. In this example, there are 2 messages that are pegged in the MAP-to-Diameter transaction.

Note: This measurement serves as a baseline for calculating measurements RxDiam2MapTransMsgRateAvg and RxDiam2MapTransMsgRatePeak as well as KPI Diameter-to-MAP Trans Msg Rate (refer to the *DSR Alarms and KPIs Reference* for details about this KPI).

Measurement Scope
Site

Recovery

1. No action required.

RxDiam2MapTransMsgRateAvg

Measurement ID
15843

Measurement Group
MD-IWF Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average Diameter-to-MAP transaction message rate.

Collection Interval
5 min

Peg Condition
Each time KPI Diameter-to-MAP Trans Msg Rate (refer to the *DSR Alarms and KPIs Reference* for details about this KPI) samples RxDiam2MapTransMsgCount.

Measurement Scope
Site

Recovery

1. No action required.

RxDiam2MapTransMsgRatePeak

Measurement ID
15844

Measurement Group
MD-IWF Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The peak Diameter-to-MAP transaction message rate.

Collection Interval
5 min

Peg Condition
Each time KPI Diameter-to-MAP Trans Msg Rate (refer to the *DSR Alarms and KPIs Reference* for details about this KPI) samples RxDiam2MapTransMsgCount.

Measurement Scope
Site

Recovery

1. No action required.

RxMdIwfDiamTransMsgQueuePeak

Measurement ID
15845

Measurement Group
MD-IWF Performance

Measurement Type
Max

Measurement Dimension
Arrayed (by Task ID)

Description
The peak DiamTrans Task Message Queue utilization.

Collection Interval
5 min

Peg Condition
For each DiamTrans task, this peg represents the maximum DiamTrans Task Message Queue utilization sample taken during the collection interval.

Measurement Scope
Site

Recovery

1. No action required.

RxMdIwfDiamTransMsgQueueAvg

Measurement ID
15846

Measurement Group
MD-IWF Performance

Measurement Type
Average

Measurement Dimension
Arrayed (by Task ID)

Description
The average DiamTrans Task Message Queue utilization.

Collection Interval
5 min

Peg Condition
For each DiamTrans task, this peg represents the average DiamTrans Task Message Queue utilization sample taken during the collection interval.

Measurement Scope
Site

Recovery

1. No action required.

RxMdIwfMapTransMsgQueuePeak

Measurement ID
15847

Measurement Group
MD-IWF Performance

Measurement Type
Max

Measurement Dimension
Arrayed (by Task ID)

Description
The peak MapTrans Task Message Queue utilization.

Collection Interval
5 min

Peg Condition
For each MapTrans task, this peg represents the maximum MapTrans Task Message Queue utilization sample taken during the collection interval.

Measurement Scope
Site

Recovery

1. No action required.

RxMdIwfMapTransMsgQueueAvg

Measurement ID
15848

Measurement Group
MD-IWF Performance

Measurement Type
Average

Measurement Dimension
Arrayed (by Task ID)

Description
The average MapTrans Task Message Queue utilization.

Collection Interval
5 min

Peg Condition
For each MapTrans task, this peg represents the average MapTrans Task Message Queue utilization sample taken during the collection interval

Measurement Scope
Site

Recovery

1. No action required.

RxMdIwfDampInterfaceMsgQueuePeak

Measurement ID
15849

Measurement Group
MD-IWF Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The peak DampInterface Task Message Queue utilization.

Collection Interval
5 min

Peg Condition
This peg represents the maximum DAMPInterface Task Message Queue utilization sample taken during the collection interval.

Measurement Scope
Site

Recovery

1. No action required.

RxMdIwfDampInterfaceMsgQueueAvg

Measurement ID
15850

Measurement Group
MD-IWF Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average DampInterface Task Message Queue utilization.

Collection Interval
5 min

Peg Condition
This peg represents the average DAMPInterface Task Message Queue utilization sample taken during the collection interval.

Measurement Scope
Site

Recovery

1. No action required.

EvMdIwfDiam2MapPtrUtilPeak

Measurement ID
15851

Measurement Group
MD-IWF Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The peak DiamToMap PTR utilization.

Collection Interval
5 min

Peg Condition
This peg represents the maximum DiamToMap PTR utilization sample taken during the collection interval.

Measurement Scope
Site

Recovery

1. No action required.

EvMdIwfDiam2MapPtrUtilAvg

Measurement ID
15852

Measurement Group
MD-IWF Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average DiamToMap PTR utilization.

Collection Interval
5 min

Peg Condition
This peg represents the average DiamToMap PTR utilization sample taken during the collection interval.

Measurement Scope
Site

Recovery

1. No action required

EvMdIwfMap2DiamPtrUtilPeak

Measurement ID
15853

Measurement Group
MD-IWF Performance

Measurement Type
Single

Measurement Dimension
Max

Description
The peak MapToDiam PTR utilization.

Collection Interval
5 min

Peg Condition
This peg represents the maximum MapToDiam PTR utilization sample taken during the collection interval.

Measurement Scope
Site

Recovery

1. No action required.

EvMdIwfMap2DiamPtrUtilAvg

Measurement ID
15854

Measurement Group
MD-IWF Performance

Measurement Type
Single

Measurement Dimension
Average

Description
The average MapToDiam PTR utilization.

Collection Interval
5 min

Peg Condition
This peg represents the average MapToDiam PTR utilization sample taken during the collection interval.

Measurement Scope
Site

Recovery

1. No action required

TmMdIwfMap2DiamPtrHoldTimeAvg

Measurement ID
15952

Measurement Group
MD-IWF Performance

Measurement Type
Average

Measurement Dimension
Single

Description
Average hold time (in milliseconds) of MAP-to-Diameter transactions processed by MD-IWF

Collection Interval
5 min

Peg Condition
The transaction hold time begins when a MAP-to-Diam Pending Transaction Record (PTR) is allocated and ends when the PTR is deallocated. This measurement is pegged when the PTR is deallocated.

Measurement Scope
Site

Recovery

1. No action required

TmMdIwfDiam2MapPtrHoldTimeAvg

Measurement ID
15955

Measurement Group
MD-IWF Performance

Measurement Type
Average

Measurement Dimension
Single

Description
Average hold time (in milliseconds) of Diameter-to-MAP transactions processed by MD-IWF

Collection Interval
5 min

Peg Condition
The transaction hold time begins when a Diam-to-MAP Pending Transaction Record (PTR) is allocated and ends when the PTR is deallocated. This measurement is pegged when the PTR is deallocated.

Measurement Scope
Site

Recovery

1. No action required

RxMdIwfMapTcBegin

Measurement ID
15888

Measurement Group
MD-IWF Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of TCAP Begin requests received.

Collection Interval
5 min

Peg Condition
Each time MD-IWF receives a TCAP Begin message from the SS7 network.

Measurement Scope
Site

Recovery

1. No action required

EvMdIwfTransSuccessByDiamExtNode

Measurement ID
15957

Measurement Group
MD-IWF Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of transactions where Diameter external node sends success (2xxx) Answer to DSR, and MD-IWF sends success response to SS7

Collection Interval
5 min

Peg Condition
This measurement is pegged when a Diameter external node sends a success (2xxx) Answer to DSR, which is then forwarded by DM-IWF (on DA-MP) to MD-IWF (on SS7-MP), and MD-IWF in turn sends a success response (not an Abort or Reject) to the SS7 network.

Measurement Scope
Site

Recovery

1. No action required

MD-IWF SS7 Performance measurements

The MD-IWF SS7 Performance measurement report contains measurements providing performance that is specific to the MAP-Diameter IWF Application running on a SS7-MP.

RxMdIwfMapRequestMsgByOpcode

Measurement ID
15804

Measurement Group
MD-IWF SS7 Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by MAP Op Code)

Description
The number of MAP request messages with Op Code "X" received from SS7 network.

Collection Interval
5 min

Peg Condition
Each time MD-IWF receives a MAP request message from the SS7 network

Measurement Scope
Site

Recovery

1. No action required.

RxMdIwfMapResponseMsgByOpcode

Measurement ID
15805

Measurement Group
MD-IWF SS7 Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by MAP Op Code)

Description
The number of MAP response messages with Op Code "X" received from SS7 network.

Collection Interval
5 min

Peg Condition
Each time MD-IWF receives a MAP response message from the SS7 network

Measurement Scope
Site

Recovery

1. No action required.

TxMdIwfMapRequestMsgByOpcode

Measurement ID
15806

Measurement Group
MD-IWF SS7 Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by MAP Op Code)

Description
The number of MAP request messages with Op Code "X" received from SS7 network.

Collection Interval
5 min

Peg Condition
Each time MD-IWF receives a MAP request message from the SS7 network

Measurement Scope
Site

Recovery

1. No action required.

TxMdIwfMapResponseMsgByOpcode

Measurement ID
15807

Measurement Group
MD-IWF SS7 Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by MAP Op Code)

Description
The number of MAP response messages with Op Code "X" received from SS7 network.

Collection Interval
5 min

Peg Condition
Each time MD-IWF receives a MAP response message from the SS7 network

Measurement Scope
Site

Recovery

1. No action required.

MD-IWF Diam Performance measurements

The MD-IWF Diam Performance measurement report contains measurements providing performance that is specific to the MAP-Diameter IWF Application running on a SS7-MP.

RxMdIwfDiamRequestMsgByCommandCode

Measurement ID
15817

Measurement Group
MD-IWF Diam Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Command Code ID)

Description
The number of Diameter Request messages with Command Code "X" received from DA-MP.

Collection Interval
5 min

Peg Condition
Each time MD-IWF receives a Diameter Request message from a DA-MP.

Measurement Scope
Site

Recovery

1. No action required.

RxMdIwfDiamAnswerMsgByCommandCode

Measurement ID
15818

Measurement Group
MD-IWF Diam Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Command Code ID)

Description
The number of Diameter Request messages with Command Code "X" received from DA-MP.

Collection Interval
5 min

Peg Condition
Each time MD-IWF receives a Diameter Request message from a DA-MP.

Measurement Scope
Site

Recovery

1. No action required.

TxMdIwfDiamRequestMsgByCommandCode

Measurement ID
15819

Measurement Group
MD-IWF Diam Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Command Code ID)

Description
The number of Diameter Request messages with Command Code "X" sent to DA-MP.

Collection Interval
5 min

Peg Condition
Each time MD-IWF sends a Diameter Request message to a DA-MP.

Measurement Scope
Site

Recovery

1. No action required.

TxMdIwfDiamAnswerMsgByCommandCode

Measurement ID
15820

Measurement Group
MD-IWF Diam Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Command Code ID)

Description
The number of Diameter Answer messages with Command Code "X" sent to DA-MP.

Collection Interval
5 min

Peg Condition
Each time MD-IWF sends a Diameter Answer message to a DA-MP.

Measurement Scope

Recovery

1. No action required.

Message Copy measurements

The Diameter Application Server (DAS) measurements reflect the **Message Copy** performance. These measurements allow the user to monitor the amount of traffic being copied and the percentage of times that messages were successfully (or unsuccessfully) copied. Measurements such as the following are included in this group:

- Number of messages being copied
- Number of errors in transmitting those copies (i.e., retransmits)
- Number of times a copy transaction failed
- Tx and **Message Copy** queue utilization

DASCopyAnswerRx

Measurement ID
10065

Measurement Group
DAS

Measurement Type
Simple

Measurement Dimension
Single

Description
The total number of DAS Copy Answers received.

Collection Interval
5 min

Peg Condition
This measurement is incremented each time an Answer response is received from a DAS peer.

Measurement Scope
Server Group

Recovery

1. No action required.

This measurement is an indication of the **Message Copy** response traffic load being processed by the MP.

DASCopyDiscarded

Measurement ID
10069

Measurement Group
DAS

Measurement Type
Simple

Measurement Dimension
Single

Description
Total number of **Message Copy** failures because of any error (no Answer received, the result code in the Answer didn't match provisioning).

Collection Interval
5 min

Peg Condition
This measurement is incremented each time a DAS Copy fails for any reason. Some failure reasons include (but are not limited to): no answer from peer, Application ID not supported at the peer, result code in the Answer incorrect/doesn't match provisioning.

Measurement Scope
Server Group

Recovery

1. Verify proper routing to the intended DAS peer is configured and in service (route list is properly configured), Diameter application is selecting intended route list.
2. Verify intended DAS peer is properly configured to receive the intended traffic and traffic load.
3. Verify no network issues exist between the **MP** and intended DAS peer.
4. It is recommended to contact My Oracle Support (MOS) for assistance.

DASCopyFailureMCCSNotProvisioned

Measurement ID
10089

Measurement Group
DAS

Measurement Type
Simple

Measurement Dimension
Single

Description
Total amount of DAS Copy failures due to the copied message not finding a provisioned MCCS.

Collection Interval
5 min

Peg Condition
This measurement is incremented each time the Copy Pending Transaction is discarded because the original message does not contain a valid MCCS, thus causing the copy action to fail.

Measurement Scope
Server Group

Recovery

1. Verify the MCCS configured with the trigger points and ensure proper provisioning.
2. If the problem persists, it is recommended to contact My Oracle Support (MOS).

DASCopyFailureMPCong

Measurement ID
10068

Measurement Group
DAS

Measurement Type
Simple

Measurement Dimension
Single

Description
Total number of DAS Copy Failures because the **MP** was congested.

Collection Interval
5 min

Peg Condition
When the **MP** declares congestion (declared CL1-CL3), the **Message Copy** function is disabled. Original messages marked for copy and held as a Pending Transactions are not copied and increment this measurement. If the Copy has been sent to the DAS peer, the Copy transaction will be allowed to complete. If the Copy transaction fails, another measurement will be incremented.

Either the **MP** is receiving traffic in excess of its rated capacity or the intended DAS peer is not responding in a timely fashion.

Measurement Scope
Server Group

Recovery

1. Reduce traffic being received by the MP.
2. Verify there are no network issues between the **MP** and the intended DAS peer.
3. Ensure the intended DAS peer has sufficient capacity to process the traffic being directed to it by the MP
4. It is recommended to contact My Oracle Support (MOS) for assistance.

DASCopyFailurePeerAppIdUnsup

Measurement ID
10059

Measurement Group
DAS

Measurement Type
Simple

Measurement Dimension
Single

Description
Total amount of DAS Copy Failures because the Diameter Application Layer has specified a route list with no peer for the application ID in the message.

Collection Interval
5 min

Peg Condition
This measurement is incremented each time the Copy Pending Transaction is discarded because a Diameter Request has been marked for copy by the application, but no connection in the provided Route List supports the Application ID in the request, causing the copy action to fail.

Measurement Scope
Server Group

Recovery

1. Verify the route list provisioning points to the intended DAS peer, and the intended DAS peer is responding with the desired Application ID.
2. It is recommended to contact My Oracle Support (MOS) for assistance.

DASCopyFailureSizeExceeded

Measurement ID
10058

Measurement Group
DAS

Measurement Type
Simple

Measurement Dimension
Single

Description
Total amount of DAS Copy failures due to the copied message size exceeding the maximum message size configured for the system.

Collection Interval
5 min

Peg Condition
This measurement is incremented each time the Copy Pending Transaction is discarded because a the message being copied to the DAS exceeded the system set maximum message size, thus causing the copy action to fail.

Measurement Scope
Server Group

Recovery

1. Verify the maximum message size set system wide is sufficient for handling the messages being processed.
2. It is recommended to contact My Oracle Support (MOS) for assistance.

DASCopyFailureRLNotProv

Measurement ID
10067

Measurement Group
DAS

Measurement Type
Simple

Measurement Dimension
Single

Description
Total number of DAS Copy Failures because the route list is not provisioned.

Collection Interval
5 min

Peg Condition
This measurement is incremented each time the Copy Pending Transaction fails because the indicated route list contained in the Diameter request does not match what has been provisioned as a system option or other provisioned route lists.

Measurement Scope
Server Group

Recovery

1. Review local provisioning that connections to intended DAS peer server(s) are in service and that no network issues exist in the path(s) to intended DAS peer server(s).
2. Review DAS peer provisioning to insure proper configuration.
3. It is recommended to contact My Oracle Support (MOS) for assistance.

DASCopyRetransmits

Measurement ID
10056

Measurement Group
DAS

Measurement Type
Simple

Measurement Dimension
Single

Description
Total number of DAS Copy retransmits.

Collection Interval
5 min

Peg Condition
This measurement is incremented each time any Copied Message is retransmitted to a DAS peer because a qualified Diameter Answer response has not been received within the Pending Answer Timer's timeout value to complete the pending transaction.

Measurement Scope
Server Group

Recovery

1. Verify proper routing to the intended DAS peer is configured and in service (route list is properly configured), Diameter application is selecting intended route list.
2. Verify intended DAS peer is properly configured to receive the intended traffic and traffic load.
3. Verify no network issues exist between the **MP** and intended DAS peer.
4. It is recommended to contact My Oracle Support (MOS) for assistance.

DASCopyRetransmitsExceeded

Measurement ID
10057

Measurement Group
DAS

Measurement Type
Simple

Measurement Dimension
Single

Description
Total number of times the DAS Copy retransmits exceeded the configured max number of retransmits.

Collection Interval
5 min

Peg Condition
This measurement is incremented each time a Copy Pending Transaction is discarded because the Copied Request has been retransmitted the configured number of times without receiving an Answer response from the DAS peer.

Measurement Scope
Server Group

Recovery

1. Verify proper routing to the intended DAS peer is configured and in service (route list is properly configured), Diameter application is selecting intended route list.
2. Verify intended DAS peer is properly configured to receive the intended traffic and traffic load.
3. Verify no network issues exist between the **MP** and intended DAS peer.
4. It is recommended to contact My Oracle Support (MOS) for assistance.

DASCopyTx

Measurement ID
10064

Measurement Group
DAS

Measurement Type
Simple

Measurement Dimension
Single

Description
The total number of DAS Copies forwarded.

Collection Interval
5 min

Peg Condition
This measurement is incremented each time a **Message Copy** is transmitted to a DAS peer.

Measurement Scope
Server Group

Recovery

1. No action required.

   This measurement is an indication of the **Message Copy** traffic load being processed by the MP.

DASCopyValidAnswer

Measurement ID
10066

Measurement Group
DAS

Measurement Type
Simple

Measurement Dimension
Single

Description
The total number of DAS Copy transactions completed (a Copy Pending Transaction has been paired with a qualified Answer from the DAS peer).

Collection Interval
5 min

Peg Condition
This measurement is incremented each time a Copy Pending Transaction is completed because a Diameter Copy Pending Transaction has been paired with a qualified Answer received from a DAS peer, completing the transaction.

Measurement Scope
Server Group

Recovery

1. Verify proper routing to the intended DAS peer is selected and in service.
2. desired answer result code is provisioned in the **Diameter** > **System Options**.
3. desired DAS peer is configured to return the answer result code provisioned in the **Diameter** > **System Options**.
4. It is recommended to contact My Oracle Support (MOS) for assistance.

TxMsgCopyQueueAve

Measurement ID
10048

Measurement Group
DAS

Measurement Type
Average

Measurement Dimension
Single

Description
The average **Message Copy** Queue utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a new **Message Copy** SysMetric sample is collected, then divided by the number of samples collected in the collection period.

Measurement Scope
Server Group

Recovery

1. No action required.

   This is a diagnostic indicator of the amount of traffic load being processed by the **Message Copy** feature.

TxMsgCopyQueueFullDiscard

Measurement ID
10084

Measurement Group
DAS

Measurement Type
Simple

Measurement Dimension
Single

Description
Total number of DAS Request messages discarded because the **Message Copy** queue was full.

Collection Interval
5 min

Peg Condition
This measurement is incremented each time a DAS Request is discarded because the **Message Copy** Tx queue was full, thus preventing a new DAS Request from being queued for transmit.

Measurement Scope
Server Group

Recovery

1. No action required.

   This is a diagnostic indicator of the amount of traffic load being processed by the **Message Copy** feature.

TxMsgCopyQueuePeak

Measurement ID
10047

Measurement Group
DAS

Measurement Type
Max

Measurement Dimension
Single

Description
The peak **Message Copy** Queue utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
This measurement is pegged when a new **Message Copy** SysMetric sample is collected and the sample exceeds the previously saved peak for the collection period. When a new collection period is begun, the peak is reset to 0.

Measurement Scope
Server Group

Recovery

1. No action required.

   This is a diagnostic indicator of the amount of traffic load being processed by the **Message Copy** feature.

Message Priority measurements

The Message Priority measurement group contains measurements that provide information on message priority assigned to ingress Diameter messages. Measurements such as these are included in this group.

- Totals for the number of Request messages set to priority X when received from a peer.
- Totals for the number of Request messages set to priority X as a result of PRT processing.

RxMsgPri0PeerRule

Measurement ID
10028

Measurement Group
Message Priority

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Request messages set to priority “0” as a result of PRT processing.

Collection Interval
5 min

Peg Condition
Each time DRL selects a peer routing rule for routing a Request message, the rule action is set to “Route to Peer”, and a Message Priority of “0” is assigned to the peer routing rule.

Measurement Scope
Server Group

Recovery

1. No action necessary.

RxMsgPri1PeerRule

Measurement ID
10029

Measurement Group
Message Priority

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Request messages set to priority “1” as a result of PRT processing.

Collection Interval
5 min

Peg Condition
Each time DRL selects a peer routing rule for routing a Request message, the rule action is set to “Route to Peer”, and a Message Priority of “1” is assigned to the peer routing rule.

Measurement Scope
Server Group

Recovery

1. No action necessary.

RxMsgPri2PeerRule

Measurement ID
10033

Measurement Group
Message Priority

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Request messages set to priority “2” as a result of PRT processing.

Collection Interval
5 min

Peg Condition
Each time DRL selects a peer routing rule for routing a Request message, the rule action is set to “Route to Peer”, and a Message Priority of “2” is assigned to the peer routing rule.

Measurement Scope
Server Group

Recovery

1. No action necessary.

RxMsgPri3PeerRule

Measurement ID
14078

Measurement Group
Message Priority

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Request messages set to priority 3 as a result of PRT processing.

Collection Interval
5 min

Peg Condition
Each time DRL selects a peer routing rule for routing a Request message, the rule action is set to Route to Peer, and a Message Priority of 3 is assigned to the peer routing rule.

Measurement Scope
Site

Recovery

1. No action necessary.

RxMsgPri4PeerRule

Measurement ID
14079

Measurement Group
Message Priority

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Request messages set to priority 4 as a result of PRT processing.

Collection Interval
5 min

Peg Condition
Each time DRL selects a peer routing rule for routing a Request message, the rule action is set to Route to Peer, and a Message Priority of 4 is assigned to the peer routing rule.

Measurement Scope
Site

Recovery

1. No action necessary.

RxMsgPri5PeerRule

Measurement ID
14080

Measurement Group
Message Priority

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Request messages set to priority 5 as a result of PRT processing.

Collection Interval
5 min

Peg Condition
Each time DRL selects a peer routing rule for routing a Request message, the rule action is set to Route to Peer, and a Message Priority of 5 is assigned to the peer routing rule.

Measurement Scope
Site

Recovery

1. No action necessary.

RxMsgPri6PeerRule

Measurement ID
14081

Measurement Group
Message Priority

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Request messages set to priority 6 as a result of PRT processing.

Collection Interval
5 min

Peg Condition
Each time DRL selects a peer routing rule for routing a Request message, the rule action is set to Route to Peer, and a Message Priority of 6 is assigned to the peer routing rule.

Measurement Scope
Site

Recovery

1. No action necessary.

RxMsgPri7PeerRule

Measurement ID
14082

Measurement Group
Message Priority

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Request messages set to priority 7 as a result of PRT processing.

Collection Interval
5 min

Peg Condition
Each time DRL selects a peer routing rule for routing a Request message, the rule action is set to Route to Peer, and a Message Priority of 7 is assigned to the peer routing rule.

Measurement Scope
Site

Recovery

1. No action necessary.

RxMsgPri8PeerRule

Measurement ID
14083

Measurement Group
Message Priority

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Request messages set to priority 8 as a result of PRT processing.

Collection Interval
5 min

Peg Condition
Each time DRL selects a peer routing rule for routing a Request message, the rule action is set to Route to Peer, and a Message Priority of 8 is assigned to the peer routing rule.

Measurement Scope
Site

Recovery

1. No action necessary.

RxMsgPri9PeerRule

Measurement ID
14084

Measurement Group
Message Priority

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Request messages set to priority 9 as a result of PRT processing.

Collection Interval
5 min

Peg Condition
Each time DRL selects a peer routing rule for routing a Request message, the rule action is set to Route to Peer, and a Message Priority of 9 is assigned to the peer routing rule.

Measurement Scope
Site

Recovery

1. No action necessary.

RxMsgPri10PeerRule

Measurement ID
14085

Measurement Group
Message Priority

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Request messages set to priority 10 as a result of PRT processing.

Collection Interval
5 min

Peg Condition
Each time DRL selects a peer routing rule for routing a Request message, the rule action is set to Route to Peer, and a Message Priority of 10 is assigned to the peer routing rule.

Measurement Scope
Site

Recovery

1. No action necessary.

RxMsgPri11PeerRule

Measurement ID
14086

Measurement Group
Message Priority

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Request messages set to priority 11 as a result of PRT processing.

Collection Interval
5 min

Peg Condition
Each time DRL selects a peer routing rule for routing a Request message, the rule action is set to Route to Peer, and a Message Priority of 11 is assigned to the peer routing rule.

Measurement Scope
Site

Recovery

1. No action necessary.

RxMsgPri12PeerRule

Measurement ID
14087

Measurement Group
Message Priority

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Request messages set to priority 12 as a result of PRT processing.

Collection Interval
5 min

Peg Condition
Each time DRL selects a peer routing rule for routing a Request message, the rule action is set to Route to Peer, and a Message Priority of 12 is assigned to the peer routing rule.

Measurement Scope
Site

Recovery

1. No action necessary.

RxMsgPri13PeerRule

Measurement ID
14088

Measurement Group
Message Priority

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Request messages set to priority 13 as a result of PRT processing.

Collection Interval
5 min

Peg Condition
Each time DRL selects a peer routing rule for routing a Request message, the rule action is set to Route to Peer, and a Message Priority of 13 is assigned to the peer routing rule.

Measurement Scope
Site

Recovery

1. No action necessary.

RxMsgPri14PeerRule

Measurement ID
14089

Measurement Group
Message Priority

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Request messages set to priority 14 as a result of PRT processing.

Collection Interval
5 min

Peg Condition
Each time DRL selects a peer routing rule for routing a Request message, the rule action is set to Route to Peer, and a Message Priority of 14 is assigned to the peer routing rule.

Measurement Scope
Site

Recovery

1. No action necessary.

RxMsgPri15PeerRule

Measurement ID
14090

Measurement Group
Message Priority

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Request messages set to priority 15 as a result of PRT processing.

Collection Interval
5 min

Peg Condition
Each time DRL selects a peer routing rule for routing a Request message, the rule action is set to Route to Peer, and a Message Priority of 15 is assigned to the peer routing rule.

Measurement Scope
Site

Recovery

1. No action necessary.

Message Processor (MP) Performance measurements

The **MP** Performance measurement report contains measurements that provide performance information for an **MP** server.

EvLongTimeoutPtrPoolAvg

Measurement ID
10295

Measurement Group
MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average Diameter Long Timeout PTR Buffer Pool utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The average of all Diameter Long Timeout PTR Buffer Pool utilization samples taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. If both the peak and average measurements for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP, then a Diameter problem may exist that is causing excessive Long Timeout traffic to be delivered to the MP. Looking at these measurements on a time of day basis may provide additional insight into potential network problems.
2. If the peak and average for an individual MP is significantly different than other MPs in the same Network Element then an MP-specific software problem may exist (e.g., a buffer pool leak).
3. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvLongTimeoutPtrPoolPeak

Measurement ID
10294

Measurement Group
MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The peak Diameter Long Timeout PTR Buffer Pool utilization (0-100%) measured during the collection interval.

A Long Timeout PTR is allocated for each Request message with a Pending Answer Timer value greater than 10 seconds that is forwarded to an upstream peer and is de-allocated when an Answer response is received and routed to a downstream peer. This measurement is useful for evaluating whether excessive traffic levels are being assigned to the Long Timeout pool. Assignment of traffic to this pool should be limited to Requests that are expected to have long response times.

Collection Interval
5 min

Peg Condition
The maximum Diameter Long Timeout PTR Buffer Pool utilization sample taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. If both the peak and average measurements for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP, then a Diameter problem may exist that is causing excessive Long Timeout traffic to be delivered to the MP. Looking at these measurements on a time of day basis may provide additional insight into potential network problems.
2. If the peak and average for an individual MP is significantly different than other MPs in the same Network Element then an MP-specific software problem may exist (e.g., a buffer pool leak).
3. If the problem persists, it is recommended to contact My Oracle Support (MOS).

EvPtrListAvg

Measurement ID
10211

Measurement Group
MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average **Diameter** PTR Buffer Pool utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The average of all Diameter PTR Buffer Pool utilization samples taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. If both the peak and average measurements for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an **MP** when the ingress message rate and/or Diameter process CPU utilization measurements are below the recommended maximum engineered capacity of an MP, then a network (IP or Diameter) problem may exist. Looking at these measurements on a time of day basis may provide additional insight into potential network problems.
2. If the peak and average for an individual **MP** is significantly different than other MPs in the same Network Element then an MP-specific software problem may exist (e.g., a buffer pool leak).

3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

EvPtrListPeak

Measurement ID
10210

Measurement Group
MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The peak Diameter PTR Buffer Pool utilization (0-100%) measured during the collection interval.

A PTR is allocated for each Request message that is forwarded to an upstream peer and is de-allocated when an Answer response is received and routed to a downstream peer. This measurement is useful for evaluating whether persistent network or upstream server problems exist. In general, PTR buffers are engineered to match the processing capacity of the MP. If network or upstream server problems exist, delaying pending transactions in the MP, then PTRs (and associated messages/PDUs) will sit in internal Diameter queues.

Collection Interval
5 min

Peg Condition
The maximum Diameter PTR Buffer Pool utilization sample taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. If both the peak and average measurements for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an **MP** when the ingress message rate and/or Diameter process CPU utilization measurements are below the recommended maximum engineered capacity of an MP, then a network (IP or Diameter) problem may exist. Looking at these measurements on a time of day basis may provide additional insight into potential network problems.
2. If the peak and average for an individual **MP** is significantly different than other MPs in the same Network Element then an MP-specific software problem may exist (e.g., a buffer pool leak).
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

MpEvRadiusRoutedMsgs

Measurement ID
14074

Measurement Group
MP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress RADIUS messages processed by DRL, including Rerouting and Message Copy.

Collection Interval
5 min

Peg Condition
This measurement should be incremented as per the following conditions.

- Ingress RADIUS Request processing resulting in a Request being routed upstream (with or without local DSR application processing of the Request)
- Ingress RADIUS Response processing resulting in forwarding of Answer/Response downstream (with or without local DSR application processing of the Response)
- Ingress Request processing resulting in Answer message sent by DSR to originator (with or without local DSR application processing of the Request)
- Ingress RADIUS Request discarded due to validation error or overload
- Ingress RADIUS Response discarded due to validation error
- Initial copy and transmit of a RADIUS Request to a DAS
- Ingress RADIUS Response triggering reroute of the pending Request message (including Answers from DAS for copied RADIUS Requests)
- RADIUS Request reroute due to connection failure or Answer/Response timeout (including reroute of copied Requests to DAS for same reasons)
- Ingress Answer from a DAS terminated by DSR due to RADIUS Request copy completion or termination

Note: This is the functional equivalent to RoutingMsgs but for ingress RADIUS (only) messages. Measurement RoutingMsgs measures all ingress equivalent messages (Diameter and RADIUS).

Measurement Scope
Network

Recovery

1. No action required.

RxAnswerMsgQueueAvg

Measurement ID
10215

Measurement Group
MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average Answer Message Queue utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The average of all Answer Message Queue utilization samples taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an **MP** over several collection intervals, then the number of MPs in the Network Element may need to be increased.
2. If the peak and average for an individual **MP** is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist or a Diameter peer and/or DNS routing mis-configuration problem may exist.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

RxAnswerMsgQueuePeak

Measurement ID
10214

Measurement Group
MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The peak Answer Message Queue utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The maximum Answer Message Queue utilization sample taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an **MP** over several collection intervals, then the number of MPs in the Network Element may need to be increased.
2. If the peak and average for an individual **MP** is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist or a Diameter peer and/or DNS routing mis-configuration problem may exist.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

RxRequestMsgQueueAvg

Measurement ID
10213

Measurement Group
MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average Request Message Queue utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The average of all Request Message Queue utilization samples taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an **MP** over several collection intervals, then the number of MPs in the Network Element may need to be increased.
2. If the peak and average for an individual **MP** is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist or a Diameter peer and/or DNS routing mis-configuration problem may exist.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

RxRequestMsgQueuePeak

Measurement ID
10212

Measurement Group
MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The peak Request Message Queue utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The maximum Request Message Queue utilization sample taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an **MP** over several collection intervals, then the number of MPs in the Network Element may need to be increased.
2. If the peak and average for an individual **MP** is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist or a Diameter peer and/or DNS routing mis-configuration problem may exist.

3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

TxRerouteQueueAvg

Measurement ID
10219

Measurement Group
MP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average Reroute Queue utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The average of all Reroute Queue utilization samples taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. An excessive amount of Request message rerouting may have been triggered by either connection failures or Answer timeouts. The status of connections should be examined from the **Diameter** > **Maintenance** > **Connections** page.
2. If no additional congestion alarms are asserted, the routing answer task may be experiencing a problem, preventing it from processing messages from its Reroute Queue. The alarm log should be examined using the **Alarms & Events** page.
3. If the problem persists, it is recommended to contact My Oracle Support (MOS).

TxRerouteQueuePeak

Measurement ID
10218

Measurement Group
MP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The peak Reroute Queue utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The maximum Reroute Queue utilization sample taken during the collection interval.

Measurement Scope
Server Group

Recovery

1. An excessive amount of Request message rerouting may have been triggered by either connection failures or Answer timeouts. The status of connections should be examined from the **Diameter** > **Maintenance** > **Connections** page.
2. If no additional congestion alarms are asserted, the routing answer task may be experiencing a problem, preventing it from processing messages from its Reroute Queue. The alarm log should be examined using the **Alarms & Events** page.
3. If the problem persists, it is recommended to contact My Oracle Support (MOS).

OAM.ALARM measurements

Table 4-4 OAM Alarm Measurements

Measurement Tag	Description	Collection Interval
Alarm.Crit	The number of critical alarms.	5 minutes
Alarm.Major	The number of major alarms.	5 minutes
Alarm.Minor	The number of minor alarms	5 minutes
Alarm.State	The alarm state.	5 minutes

OAM.SYSTEM measurements

Table 4-5 OAM System Measurements

Measurement Tag	Description	Collection Interval
System.CPU_UtilPct_Average	The average CPU usage from 0 to 100% (100% indicates that all cores are completely busy).	5 minutes
System.CPU_UtilPct_Peak	The peak CPU usage from 0 to 100% (100% indicates that all cores are completely busy).	5 minutes
System.Disk_UtilPct_Average	The average disk usage for the partition on which the COMCOL database resides.	5 minutes

Table 4-5 (Cont.) OAM System Measurements

Measurement Tag	Description	Collection Interval
System.Disk_UtilPct_Peak	The peak disk usage for the partition on which the COMCOL database resides.	5 minutes
System.RAM_UtilPct_Average	The average committed RAM usage as a percentage of the total physical RAM. This measurement is based on the Committed_AS measurement from Linux/proc/meminfo. This measurement can exceed 100% if the kernel has committed more resources than provided by physical RAM, in which case, swapping will occur.	5 minutes
System.RAM_UtilPct_Peak	The peak committed RAM usage as a percentage of the total physical RAM. This measurement is based on the Committed_AS measurement from Linux/proc/meminfo. This measurement can exceed 100% if the kernel has committed more resources than provided by physical RAM, in which case, swapping will occur.	5 minutes
System.ShMem_UtilPct_Average	The average shared memory usage as a percentage of the limit configured by shl.set.	5 minutes
System.ShMem_UtilPct_Peak	The peak shared memory usage as a percentage of the limit configured by shl.set.	5 minutes
System.SwapIn_Rate_Average	The average number of memory pages swapped in to memory from disk per second.	5 minutes
System.SwapIn_Rate_Peak	The peak number of memory pages swapped in to memory from disk per second.	5 minutes
System.SwapOut_Rate_Average	The average number of memory pages swapped out of memory from disk per second.	5 minutes
System.SwapOut_Rate_Peak	The peak number of memory pages swapped out of memory from disk per second.	5 minutes
System.Swap_UtilPct_Average	The average usage of swap space as a percentage of the total configured swap space.	5 minutes
System.Swap_UtilPct_Peak	The peak usage of swap space as a percentage of the total configured swap space.	5 minutes
System.CPU_CoreUtilPct_Average	The average CPU usage for each core. On an eight-core system, there will be eight sub-metrics showing the utilization of each core.	5 minutes

Table 4-5 (Cont.) OAM System Measurements

Measurement Tag	Description	Collection Interval
System.CPU_CoreUtilPct_Peak	The peak CPU usage for each core. On an eight-core system, there will be eight sub-metrics showing the utilization of each core.	5 minutes

OC-DRA Diameter Usage measurements

The **OC-DRA** Diameter Usage measurement report contains measurements that provide performance information that is specific to the OC-DRA Diameter protocol.

RxOcdraMsgRateAvg

Measurement ID
11364

Measurement Group
OC-DRA Diameter Usage

Measurement Type
Average

Measurement Dimension
Single

Description
Average OC-DRA Ingress Message Processing Rate

Collection Interval
5 min

Peg Condition
The average of all OC-DRA Ingress Message Rate KPI samples taken during the collection interval.

Measurement Scope
All

Recovery

1. Display and monitor the DSR Application message rate by selecting **Diameter** > **Maintenance** > **Applications**. Verify that the message rate is set as expected.
2. Application Routing might be mis-configured and is sending too much traffic to the DSR Application. Verify the configuration by selecting **Diameter** > **Configuration** > **Application Routing Rules**.
3. There might be an insufficient number of MPs configured to handle the network load. Monitor the traffic rate of each **MP** by selecting **Diameter** > **Status & Manage** > **KPIs**.

If MPs are in a congestion state, then the offered load to the server site is exceeding its capacity.

4. If the problem persists, it is recommended to contact My Oracle Support (MOS).

RxOcdraMsgRatePeak

Measurement ID
11365

Measurement Group
OC-DRA Diameter Usage

Measurement Type
Max

Measurement Dimension
Single

Description
Peak OC-DRA Ingress Message Processing Rate

Collection Interval
5 min

Peg Condition
The maximum of all OC-DRA Ingress Message Rate KPI samples taken during the collection interval.

Measurement Scope
All

Recovery

1. Display and monitor the DSR Application message rate by selecting **Diameter** > **Maintenance** > **Applications**. Verify that the message rate is set as expected.
2. Application Routing might be mis-configured and is sending too much traffic to the DSR Application. Verify the configuration by selecting **Diameter** > **Configuration** > **Application Routing Rules**.
3. There might be an insufficient number of MPs configured to handle the network load. Monitor the traffic rate of each **MP** by selecting **Diameter** > **Status & Manage** > **KPIs**.

   If MPs are in a congestion state, then the offered load to the server site is exceeding its capacity.
4. If the problem persists, it is recommended to contact My Oracle Support (MOS).

RxGyRoMsgsReceivedPerCmd

Measurement ID
11366

Measurement Group
OC-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Message Command Abbreviation i.e. CCR-I/U/T/E, CCA-I/U/T/E, RAR, RAA, UNK-REQ, UNK-ANS and "Total")

Description
The number of Gy/Ro Diameter Credit Control Application messages (including requests and answers) received by OC-DRA.

Collection Interval
5 min

Peg Condition
Each time OC-DRA received a Gy/Ro Diameter Credit Control Application message (i.e. CCR/CCA and RAR/RAA) for Online Charging message processing. This measurement is the summation of measurements RxGyRoReqRelayedPerCmd and RxGyRoReqFailedToRelayPerCmd for Diameter Requests. This measurement is the summation of measurements RxGyRoReqRelayedPerCmd and RxGyRoAnsDiscardedDrlQueueFullPerCmd.

Note: Due to the timing of when measurements are incremented and collected during a collection interval, this measurement may not be th exact sum of the measurements listed above.

Note: This measurement is pegged twice, once for the Diameter message command abbreviation and once for "Total".

Measurement Scope
All

Recovery

1. No action required.

RxGyRoReqRelayedPerCmd

Measurement ID
11368

Measurement Group
OC-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Message Command Abbreviation i.e. CCR-I/U/T/E, RAR, UNK-REQ and “Total”)

Description
The number of Gy/Ro Diameter Credit Control Application Request messages successfully relayed by OC-DRA.

Collection Interval
5 min

Peg Condition
Each time OC-DRA receives an Answer response (from the Peer) to a Gy/Ro Diameter Credit Control Application Request message successfully en-queued on DRL's Request Queue for Request message routing. This measurement is the summation of measurements RxGyRoAns2xxxFromPeerPerCmd and RxGyRoAnsNon2xxxFromPeerPerCmd.

Note: Due to the timing of when measurements are incremented and collected during a collection interval, this measurement may not be the exact sum of the measurements listed above.

Note: This measurement is pegged twice, once for the Diameter message command abbreviation and once for "Total".

Note: This measurement is not pegged when OC-DRA receives a locally generated Answer response due to DRL unsuccessfully relaying the request to a peer (e.g. an unavailable peer or invalid route specifications).

Measurement Scope
All

Recovery

1. No action required.

RxGyRoAnsRelayedPerCmd

Measurement ID
11369

Measurement Group
OC-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Message Command Abbreviation i.e. CCR-I/U/T/E, RAR, UNK-REQ and "Total")

Description
The number of Gy/Ro Diameter Credit Control Application Answer messages successfully relayed by OC-DRA.

Collection Interval
5 min

Peg Condition
Each time OC-DRA receives a Gy/Ro Diameter Credit Control Application Answer message and successfully en-queues it onto DRL's Answer Queue for Answer message routing.

Note: This measurement is pegged twice, once for the Diameter message command abbreviation and once for "Total".

Measurement Scope
All

Recovery

1. No action required.

RxGyRoAns2xxxFromPeerPerCmd

Measurement ID
11370

Measurement Group
OC-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Message Command Abbreviation i.e. CCR-I/U/T/E, RAR, UNK-REQ and "Total")

Description
The number of Gy/Ro Diameter Credit Control Application Request messages successfully relayed by OC-DRA that received Answers from the peer with a 2xxx (Success) Result-Code value.

Collection Interval
5 min

Peg Condition
Each time OC-DRA receives an Answer from the peer with a successful Result-Code AVP (one containing a value in the range of 2000 – 2999).

Note: This measurement is pegged twice, once for the Diameter message command abbreviation and once for "Total".

Measurement Scope
All

Recovery

1. No action required.

TmGyRoSessionDuration

Measurement ID
11427

Measurement Group
OC-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Histogram of normally terminated Gy/Ro session durations.

Collection Interval
5 min

Peg Condition
When a Gy/Ro session record is removed, the appropriate histogram instance shall be incremented by 1.

> **Note:** Binding-independent session records are stored only if session state applies to the session.

Measurement Scope
Network, Place Association, Resource Domain

Recovery

1. This measurement shows a histogram of Gy/Ro session lifetimes, providing information to assist in predicting the duration of a session SBR Database Reconfiguration.

   > **Note:** This measurement applies only to sessions for which session state is being maintained. Online Charging DRA does not maintain Gy/Ro session state unless Session State applies to the session.

   Histogram measurements consist of 101 array entries:

   - 0 – Overflow. Incremented if duration is greater than 9,830 minutes.
   - 1-5 – 1 minute buckets. Incremented for durations between 0 and 5 minutes.
   - 6-10 – 5 minute buckets. Incremented for durations between 0 and 30 minutes.
   - 11-15 – 10 minute buckets. Incremented for durations between 30 and 80 minutes.

- 16-20 – 30 minute buckets. Incremented for durations between 80 and 230 minutes.
- 21-100 – 120 minute buckets. Incremented for durations between 230 and 9,830 minutes.

A session SBR Database Reconfiguration cannot complete normally until all session records for all supported Diameter interfaces have migrated. As a result, the session duration histogram for each interface being used must be examined to determine which interface has the highest average session duration. This value can be used to predict the likely duration of the reconfiguration.

TmGyRoSessionRefresh

Measurement ID
11433

Measurement Group
OC-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Histogram of Gy/Ro session refresh durations.

Collection Interval
5 min

Peg Condition
When a Gy/Ro session record is refreshed, the appropriate histogram instance shall be incremented by 1. Gy/Ro sessions are refreshed during CCR-U and RAR processing.

Measurement Scope
Network, Place Association, Resource Domain

Recovery

1. This measurement shows a histogram of Gy/Ro session refresh durations, providing information to assist in setting the Stale Session Timeout for APNs that use this interface. If the Stale Session Timeout for an APN using the Gy/Ro interface is set too short, the session audit will remove the session prematurely, possibly causing signaling failures for subsequent in-session request processing needing topology hiding translations.

   Note: This measurement applies only sessions for which session state is being maintained. Online Charging DRA does not maintain Gy/Ro session state unless Session State applies to the session.

   Histogram measurements consist of 101 array entries:

- 0 – Overflow. Incremented if duration is greater than 9,830 minutes.
- 1-5 – 1 minute buckets. Incremented for durations between 0 and 5 minutes.
- 6-10 – 5 minute buckets. Incremented for durations between 0 and 30 minutes.
- 11-15 – 10 minute buckets. Incremented for durations between 30 and 80 minutes.
- 16-20 – 30 minute buckets. Incremented for durations between 80 and 230 minutes.
- 21-100 – 120 minute buckets. Incremented for durations between 230 and 9,830 minutes.

OC-DRA Diameter Exception measurements

The **OC-DRA** Diameter Exception measurement report contains measurements that provide performance information that is specific to the OC-DRA Diameter protocol.

RxPcaTransactionsRejected

Measurement ID
11317

Measurement Group
P-DRA Diameter Exception, OC-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of transactions rejected by Policy and Charging DSR Application.

Collection Interval
5 min

Peg Condition
Each time the Policy and Charging Application (PCA) initiates an Answer response with a non-successful Result-Code (one containing a non-2xxx value) or discards an ingress Request message for any of the following reasons:

- OC-DRA is Unavailable or Disabled
- Diameter Protocol Error Detected
- OC-DRA specific errors due to absence of mandatory Diameter Credit Control Application AVP(s) used for routing
- Diameter Request discarded during Congestion
- Diameter Message Routing failure due to DRL's Request Queue Full

- Communication Agent Error (i.e., Queue Full)
- Unexpected SBR Error
- Online Charging Session not found when required for routing

Note: This measurement is only pegged once for an ingress Request message.

Measurement Scope
Server Group

Recovery

1. This measurement gives an indication if any Gy/Ro Diameter Credit Control Application Request messages were NOT successfully relayed by OC-DRA. OC-DRA can fail to relay Gy/Ro Diameter Credit Control Application Request messages for various reasons as stated above for "Peg Condition".
2. This measurement is the summation of the following measurements which should be inspected within the same collection interval to further determine the specific cause of failure:
   - TxGyRoAnsGenByOcdraPerCmd
   - TxGyRoAnsGenByDrlPerCmd
   - RxGyRoReqDiscardedCongestionPerCmd

Note: Due to the timing of when measurements are incremented and collected during a collection interval, this measurement may not be the exact sum of the measurements listed above.

RxGyRoReqFailedToRelayPerCmd

Measurement ID
11395

Measurement Group
OC-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Request Command Abbreviation, i.e., CCR-I/U/T/E, RAR, UNK-REQ and "Total")

Description
The number of Gy/Ro Diameter Credit Control Application Request messages OC-DRA failed to relay.

Collection Interval
5 min

Peg Condition
Each time the Policy and Charging DSR Application (PCA) initiates an Answer response with a non-successful Result-Code (one containing a non-2xxx value) or discards an ingress Request message for any of the following reasons:

- OC-DRA functionality is Unavailable or Disabled
- Diameter Protocol Error Detected
- OC-DRA specific errors due to absence of mandatory Diameter Credit Control Application AVP(s) used for routing
- Diameter Request discarded during Congestion
- Diameter Message Routing failure due to DRL's Request Queue Full
- Communication Agent Error (i.e., Queue Full)
- Unexpected SBR Error
- Online Charging Session not found when required for routing
- Diameter Routing Layer failed to relay the Diameter Request (e.g., an unavailable peer or invalid route specification)

Note: This measurement is only pegged once for an ingress Request message.

Measurement Scope
Server Group

Recovery

1. This measurement gives an indication if any Gy/Ro Diameter Credit Control Application Request messages were NOT successfully relayed by OC-DRA. OC-DRA can fail to relay Gy/Ro Diameter Credit Control Application Request messages for various reasons as stated above for “Peg Condition”.
2. This measurement is the summation of the following measurements which should be inspected within the same collection interval to further determine the specific cause of failure:
   - TxGyRoAnsGenByOcdraPerCmd
   - TxGyRoAnsGenByDrlPerCmd
   - RxGyRoReqDiscardedCongestionPerCmd

Note: Due to the timing of when measurements are incremented and collected during a collection interval, this measurement may not be the exact sum of the measurements listed above.

RxGyRoAnsNon2xxxFromPeerPerCmd

Measurement ID
11396

Measurement Group
OC-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Request Command Abbreviation i.e. CCR-I/U/T/E, RAR and "Total")

Description
The number of Gy/Ro Diameter Credit Control Application Request messages successfully relayed by OC-DRA that received an Answer from the peer with a non-2xxx (Non-successful) Result-Code value.

Collection Interval
5 min

Peg Condition
Each time OC-DRA receives an Answer from the peer with a non-successful Result-Code AVP (one containing a value that is not in the range of 2000 – 2999).

Note: This measurement is pegged twice, once for the Diameter message command abbreviation and once for "Total".

Measurement Scope
All

Recovery

1. No action required.

RxGyRoAnsDiscardedDrlQueueFullPerCmd

Measurement ID
11398

Measurement Group
OC-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Request Command Abbreviation i.e. CCR-I/U/T/E, RAR, UNK-REQ, and "Total")

Description
The number of Gy/Ro Diameter Credit Control Application Answer messages discarded by OC-DRA due to DRL's Answer queue being full.

Collection Interval
5 min

Peg Condition
Each time a Gy/Ro based Diameter Credit Control Application Answer message is discarded after OC-DRA failed to en-queue it on to DRL's Answer queue for routing due to it being full.

Note: This measurement is pegged twice, once for the Diameter message command abbreviation and once for "Total."

Measurement Scope
All

Recovery

1. This measurement indicates that overall DA-MP congestion is occurring and the need for additional processing capacity at the PCA DA-MP.
2. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP over several collection intervals, then the number of MPs in the Network Element may need to be increased.
3. If the peak and average for an individual MP is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist or a Diameter peer and/or DNS routing mis-configuration problem may exist.
4. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

TxGyRoAnsGenByDrlPerCmd

Measurement ID
11400

Measurement Group
OC-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Request Command Abbreviation i.e. CCR-I/U/T/E, RAR, UNK-REQ, and "Total")

Description
The number of Gy/Ro Diameter Credit Control Application Answer messages received by OC-DRA that were generated by DRL.

Collection Interval
5 min

Peg Condition
Each time OC-DRA receives a Gy/Ro Diameter Credit Control Application Request message that was generated by DRL as a result of encountering a routing failure or an operator instruction (e.g., PRT rule) which requires abandoning transaction routing and sending an Answer response.

Note: This measurement is pegged twice, once for the Diameter message command abbreviation and once for "Total."

Measurement Scope
All

Recovery

1. No action required.

TxGyRoAnsGenByOcdraPerCmd

Measurement ID
11401

Measurement Group
OC-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (i.e. CCR-I/U/T/E, RAR, UNK-REQ, and "Total")

Description
The number of Diameter Answer messages generated by OC-DRA after encountering a failure and abandoning processing of Gy/Ro Diameter Credit Control Application Request messages.

Collection Interval
5 min

Peg Condition
Each time OC-DRA abandons the processing of a Gy/Ro Diameter Credit Control Application Request message due to a failure and generates an Answer response. Processing failures include the following:

- OC-DRA is Unavailable or Disabled
- Diameter Protocol Error Detected
- OC-DRA specific errors due to absence of mandatory Diameter Credit Control Application AVP(s) used for routing
- Diameter Message Routing failure due to DRL's Request Queue Full
- Communication Agent Error (i.e., Queue Full)

- Unexpected SBR Error
- Online Charging Session not found when required for routing

> **Note:** This measurement is only pegged once for an ingress Request message.

Measurement Scope
All

Recovery

1. This measurement gives an indication of OC-DRA abandoning the processing of Gy/Ro Diameter Credit Control Application Request messages and generating Answer responses due to the various reasons stated in "Peg Condition". To determine the specific cause of failure, inspect TxGyRoAnsGenPerErrCode that is pegged in the same collection interval and follow its Customer Action.

TxGyRoAnsGenPerErrCode

Measurement ID
11402

Measurement Group
OC-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by 3-digit error code defined in Policy DRA Error Resolution Procedures and "Total")

Description
The number of Gy/Ro Diameter Credit Control Application Request messages that OC-DRA abandoned processing due to a failure and generated an Answer response.

Collection Interval
5 min

Peg Condition
Each time OC-DRA abandons the processing of Gy/Ro Diameter Credit Control Application request message due to a failure and generates an Answer response. Processing failures include the following:

- OC-DRA is Unavailable or Disabled
- Diameter Protocol Error Detected
- OC-DRA specific errors due to absence of mandatory Diameter Credit Control Application AVP(s) used for routing
- Diameter Message Routing failure due to DRL's Request Queue Full
- Communication Agent Error (i.e., Queue Full)

- Unexpected SBR Error
- Online Charging Session not found when required for routing

> **Note:** This measurement is only pegged once for an ingress Request message.

Measurement Scope
All

Recovery

1. This measurement represents an exception condition in which Gy/Ro Diameter Credit Control Application Request messages are being received and rejected due to the various reasons stated in "Peg Condition". A Diameter Answer response including an Error-Message AVP is generated for each Diameter Request message that is rejected.
2. This measurement shows the distribution of Gy/Ro Diameter Credit Control Application Request messages that OC-DRA generated a Diameter Answer with error response across the range of 3-digit error codes defined in Policy DRA Error Resolution Procedures to determine the specific cause of failure and resolution using the 3-digit error codes.

TxGyRoCcrInitAnsGenPerErrCode

Measurement ID
11403

Measurement Group
OC-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by 3-digit error code defined in Policy DRA Error Resolution Procedures)

Description
The number of Gy/Ro Credit-Control-Request messages with the CC-Request-Type AVP set to INITIAL_REQUEST (CCR-I) that OC-DRA abandoned processing due to a failure and generated an Answer response.

Collection Interval
5 min

Peg Condition
Each time OC-DRA abandons the processing of a Gy/Ro Credit-Control-Request message with the CC-Request-Type AVP set to INITIAL_REQUEST (CCR-I) due to a failure and generates an Answer response Processing failures include the following:

- OC-DRA is Unavailable or Disabled
- Diameter Protocol Error Detected

- OC-DRA specific errors due to absence of mandatory Diameter Credit Control Application AVP(s) used for routing
- Diameter Message Routing failure due to DRL's Request Queue Full
- Communication Agent Error (i.e., Queue Full)
- Unexpected SBR Error
- Online Charging Session not found when required for routing

Measurement Scope
All

Recovery

1. This measurement represents an exception condition in which Gy/Ro Diameter Credit-Control-Request messages with the CC-Request-Type AVP set to INITIATE_REQUEST (CCR-I) are being received and rejected due to the various reasons stated above for "Peg Condition". A Diameter Answer response including an Error-Message AVP is generated for each Diameter Request message that is rejected.
2. This measurement shows the distribution of Gy/Ro Diameter CCR-I messages that OC-DRA generated a Diameter Answer with error response across the range of 3-digit error codes defined in Policy DRA Error Resolution Procedures to determine the specific cause of failure and resolution using the 3-digit error codes.

TxGyRoCcrUpdateAnsGenPerErrCode

Measurement ID
11404

Measurement Group
OC-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by 3-digit error code defined in Policy DRA Error Resolution Procedures)

Description
The number of Gy/Ro Credit-Control-Request messages with the CC-Request-Type AVP set to UPDATE_REQUEST (CCR-U) that OC-DRA abandoned processing due to a failure and generated an Answer response.

Collection Interval
5 min

Peg Condition
Each time OC-DRA abandons the processing of a Gy/Ro Credit-Control-Request message with the CC-Request-Type AVP set to UPDATE_REQUEST (CCR-U) due to a failure and generates an Answer response. Processing failures include the following:

- OC-DRA is Unavailable or Disabled

- Diameter Protocol Error Detected
- OC-DRA specific errors due to absence of mandatory Diameter Credit Control Application AVP(s) used for routing
- Diameter Message Routing failure due to DRL's Request Queue Full
- Communication Agent Error (i.e., Queue Full)
- Unexpected SBR Error
- Online Charging Session not found when required for routing

Measurement Scope
All

Recovery

1. This measurement represents an exception condition in which Gy/Ro Diameter Credit-Control-Request messages with the CC-Request-Type AVP set to UPDATE_REQUEST (CCR-U) are being received and rejected due to the various reasons stated in "Peg Condition". A Diameter Answer response including an Error-Message AVP is generated for each Diameter Request message that is rejected.
2. This measurement shows the distribution of Gy/Ro Diameter CCR-U messages that OC-DRA generated a Diameter Answer with error response across the range of 3-digit error codes defined in Policy DRA Error Resolution Procedures to determine the specific cause of failure and resolution using the 3-digit error codes.

TxGyRoCcrTermAnsGenPerErrCode

Measurement ID
11405

Measurement Group
OC-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by 3-digit error code defined in Policy DRA Error Resolution Procedures)

Description
The number of Gy/Ro Credit-Control-Request messages with the CC-Request-Type AVP set to TERMINATION_REQUEST (CCR-T) that OC-DRA abandoned processing due to a failure and generated an Answer response.

Collection Interval
5 min

Peg Condition
Each time OC-DRA abandons the processing of a Gy/Ro Credit-Control-Request message with the CC-Request-Type AVP set to TERMINATION_REQUEST (CCR-T) due to a failure and generates an Answer response. Processing failures include the following:

- OC-DRA is Unavailable or Disabled
- Diameter Protocol Error Detected
- OC-DRA specific errors due to absence of mandatory Diameter Credit Control Application AVP(s) used for routing
- Diameter Message Routing failure due to DRL's Request Queue Full
- Communication Agent Error (i.e., Queue Full)
- Unexpected SBR Error
- Online Charging Session not found when required for routing

Measurement Scope
All

Recovery

1. This measurement represents an exception condition in which Gy/Ro Diameter Credit-Control-Request messages with the CC-Request-Type AVP set to TERMINATION_REQUEST (CCR-T) are being received and rejected due to the various reasons stated in "Peg Condition". A Diameter Answer response including an Error-Message AVP is generated for each Diameter Request message that is rejected.
2. This measurement shows the distribution of Gy/Ro Diameter CCR-U messages that OC-DRA generated a Diameter Answer with error response across the range of 3-digit error codes defined in Policy DRA Error Resolution Procedures to determine the specific cause of failure and resolution using the 3-digit error codes.

TxGyRoCcrEventAnsGenPerErrCode

Measurement ID
11406

Measurement Group
OC-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by 3-digit error code defined in Policy DRA Error Resolution Procedures)

Description
The number of Gy/Ro Credit-Control-Request messages with the CC-Request-Type AVP set to EVENT_REQUEST (CCR-E) that OC-DRA abandoned processing due to a failure and generated an Answer response.

Collection Interval
5 min

Peg Condition
Each time OC-DRA abandons the processing of a Gy/Ro Credit-Control-Request message with the CC-Request-Type AVP set to EVENT_REQUEST (CCR-E) due to a failure and generates an Answer response. Processing failures include the following:

- OC-DRA is Unavailable or Disabled
- Diameter Protocol Error Detected
- OC-DRA specific errors due to absence of mandatory Diameter Credit Control Application AVP(s) used for routing
- Diameter Message Routing failure due to DRL's Request Queue Full
- Communication Agent Error (i.e., Queue Full)
- Unexpected SBR Error

Measurement Scope
All

Recovery

1. This measurement represents an exception condition in which Gy/Ro Diameter Credit-Control-Request messages with the CC-Request-Type AVP set to EVENT_REQUEST (CCR-E) are being received and rejected due to the various reasons stated in “Peg Condition”. A Diameter Answer response including an Error-Message AVP is generated for each Diameter Request message that is rejected.
2. This measurement shows the distribution of Gy/Ro Diameter CCR-E messages that OC-DRA generated a Diameter Answer with error response across the range of 3-digit error codes defined in Policy DRA Error Resolution Procedures to determine the specific cause of failure and resolution using the 3-digit error codes.

TxGyRoRarAnsGenPerErrCode

Measurement ID
11407

Measurement Group
OC-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by 3-digit error code defined in Policy DRA Error Resolution Procedures)

Description
The number of Gy/Ro Re-Auth-Request (RAR) messages that OC-DRA abandoned processing due to a failure and generated an Answer response.

Collection Interval
5 min

Peg Condition
Each time OC-DRA abandons the processing of a Gy/Ro Re-Auth-Request (RAR) message due to a failure and generates an Error Answer response. Processing failures include the following:

- OC-DRA is Unavailable or Disabled
- Diameter Protocol Error Detected
- OC-DRA specific errors due to absence of mandatory Diameter Credit Control Application AVP(s) used for routing
- Diameter Message Routing failure due to DRL's Request Queue Full
- Communication Agent Error (i.e., Queue Full)
- Unexpected SBR Error
- Online Charging Session not found when required for routing

Measurement Scope
All

Recovery

1.

2. This is measurement represents an exception condition in which Gy/Ro Diameter Re-Auth-Request (RAR) messages are being received and rejected due to the various reasons stated in "Peg Condition". A Diameter Answer response including an Error-Message AVP is generated for each Diameter Request message that is rejected.
3. This measurement shows the distribution of Gy/Ro Diameter RAR messages that OC-DRA generated a Diameter Answer with error response across the range of 3-digit error codes defined in Policy DRA Error Resolution Procedures to determine the specific cause of failure and resolution using the 3-digit error codes.

TxGyRoUnkCmdAnsGenPerErrCode

Measurement ID
11408

Measurement Group
OC-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by 3-digit error code defined in Policy DRA Error Resolution Procedures)

Description
The number of unsupported Diameter Request messages that OC-DRA abandoned processing due to a failure and generated an Answer response.

Collection Interval
5 min

Peg Condition
Each time OC-DRA abandons the processing of an unsupported Request message due to a failure and generates an Error Answer response. Processing failures include the following:

- OC-DRA is Unavailable or Disabled
- Diameter Protocol Error Detected
- OC-DRA specific errors due to absence of mandatory Diameter Credit Control Application AVP(s) used for routing
- Diameter Message Routing failure due to DRL's Request Queue Full

Measurement Scope
All

Recovery

1. This measurement represents an exception condition in which an unknown Diameter Request messages are being received and rejected due to the various reasons stated in “Peg Condition”. A Diameter Answer response including an Error-Message AVP is generated for each Diameter Request message that is rejected.
2. This measurement shows the distribution of unknown Diameter messages that OC-DRA generated a Diameter Answer with error response across the range of 3-digit error codes defined in Policy DRA Error Resolution Procedures to determine the specific cause of failure and resolution using the 3-digit error codes.

TxPcaAnsGenPerErrCode

Measurement ID
11409

Measurement Group
OC-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by 3-digit error code defined in Policy DRA Error Resolution Procedures and "Total")

Description
The number of Diameter Request messages that PCA abandoned processing due to a failure and generated an Answer response.

Collection Interval
5 min

Peg Condition
Each time PCA abandons the processing of a Request message due to a failure and generates an Error Answer response. Processing failures include the following:

- A PCA function is Unavailable or Disabled
- Diameter Protocol Error Detected

> **Note:** This measurement is pegged twice, once for the 3-digit error code and once for "Total."

Measurement Scope
All

Recovery

1. This measurement represents an exception condition in which Diameter Request messages are being received and rejected due to the various reasons stated in “Peg Condition”. A Diameter Answer response including an Error-Message AVP is generated for each Diameter Request message that is rejected.
2. This measurement shows the distribution of Diameter Request messages that PCA generated a Diameter Answer with error response across the range of 3-digit error codes defined in Policy DRA Error Resolution Procedures to determine the specific cause of failure and resolution using the 3-digit error codes.

RxPcaAnsRelayedUnsupportedAppId

Measurement ID
11410

Measurement Group
OC-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Diameter Answer messages relayed by PCA containing an Application-Id AVP value that is not supported.

Collection Interval
5 min

Peg Condition
Each time PCA receives a Diameter Answer message containing an Application-Id value that is not supported and forwards it to DRL for routing.

Measurement Scope
All

Recovery

1. This measurement represents an exception condition in which a Diameter Answer messages are being received containing an Auth-Application-Id AVP value that is not supported by the Policy and Charging DSR Application. Each Diameter Answer containing an unsupported Application-ID is sent without modification to the downstream peer that initiation the Diameter transaction. This condition causes the generation of Event 22701 Protocol Error In Diameter Answer. Refer to the *DSR Alarms and KPIs Reference* for details about Event 22701.
2. The Policy and Charging DSR Application receiving a Diameter Answer message containing an unsupported Auth-Application-Id AVP value that represents an abnormal/unexpected condition since it only requests to receive Answers for Diameter Request messages containing Auth-Application-Ids that it supports.
3. It is recommended to contact the My Oracle Support (MOS) for assistance if needed.

RxOcdraReqNoCcRequestType

Measurement ID
11411

Measurement Group
OC-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Gy/Ro Credit-Control-Request messages received by OC-DRA that did not contain the CC-Request-Type AVP.

Collection Interval
5 min

Peg Condition
Each time OC-DRA receives a Gy/Ro Credit-Control-Request message that does not contain the CC-Request-Type AVP.

Measurement Scope
All

Recovery

1. This measurement represents an exception condition in which Gy/Ro Diameter Credit-Control-Request messages are being received containing no CC-Request-Type AVP. Each Diameter Request containing a missing CC-Request-Type AVP is rejected using "CCR-Type-AVP is missing from CCR message" error condition. This condition causes the generation of Event 22700 Protocol Error In Diameter Request. Refer to the *DSR Alarms and KPIs Reference* for details about Event 22700.

RxOcdraUnsupportedCcRequestType

Measurement ID
11412

Measurement Group
OC-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Gy/Ro Credit-Control-Request/Answer messages received by OC-DRA that contained an unsupported CC-Request-Type AVP value.

Collection Interval
5 min

Peg Condition
Each time OC-DRA receives a Gy/Ro Credit-Control-Request/Answer message that contains and unsupported CC-Request-Type AVP value.

Measurement Scope
All

Recovery

1. This measurement represents an exception condition in which Gy/Ro Diameter Credit-Control-Request messages are being received containing an invalid CC-Request-Type AVP value. Each Diameter Request containing an invalid CC-Request-Type AVP is rejected using "Invalid AVP value in request" error condition. This condition causes the generation of Event 22700 Protocol Error In Diameter Request. Refer to the *DSR Alarms and KPIs Reference* for details about Event 22700.

RxOcdraStackEventDiscardedCaFailure

Measurement ID
11413

Measurement Group
OC-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of stack events discarded by ComAgent due to ComAgent failures.

Collection Interval
5 min

Peg Condition
Each time OC-DRA sends a stack event and it is discarded due to a ComAgent failure as indicated by the returned ComAgent Error Response Stack error code

Measurement Scope
All

Recovery

1. This measurement represents an exception condition in which ComAgent Error Response Stack events are being received indicating that ComAgent has experienced communication failure when OC-DRA sends Policy and Charging SBR Request stack events to the Session SBR. Each Policy and Charging SBR Request stack event is discarded.
2. This condition also causes Event 22704 Communication Agent Error to be generated indicating the error code of the received ComAgent Error Response Stack event. Refer to the *DSR Alarms and KPIs Reference* for details about Event 22700.
3. The following ComAgent measurements should be inspected within the same collection interval to further determine the specific reason for the stack event being discarded:

   - CAHSTxDscrdCongSR
   - CAHSTxDscrdUnkwnRsrc
   - CAHSTxDscrdIntErrSR

   Refer to the Recovery steps for any/all of these measurements that were pegged in the same collection interval.
4. Check Alarm 19832 ComAgent Reliable Transaction Failed in the *DSR Alarms and KPIs Reference*, as well as measurements CAHSTxDscrdCongSR, CAHSTxDscrdUnkwnRsrc, CAHSTxDscrdIntErrSR for detailed error causes.

RxOcdraStackEventDiscardedUnsupported

Measurement ID
11414

Measurement Group
OC-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of SBR Stack Events discarded by OC-DRA that contained an unsupported Event Type value.

Collection Interval
5 min

Peg Condition
Each time OC-DRA discards a stack event received from the SBR that contained an unsupported Event Type value.

Measurement Scope
All

Recovery

1. This measurement represents an exception condition in which SBR Response messages are being received containing an invalid Online Charging Event Type value. Each Diameter Request containing an invalid Online Charging Event Type value is discarded
2. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

RxGyRoCcrInitNoMsisdn

Measurement ID
11415

Measurement Group
OC-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Gy/Ro CCR-I messages that OC-DRA failed to extract the MSISDN from the Subscription-Id Grouped AVP or the User-Name AVP.

Collection Interval
5 min

Peg Condition
Each time OC-DRA fails to extract the MSISDN from a Gy/Ro Credit-Control-Request message with the CC-Request-Type AVP set to INITIAL_REQUEST (CCR-I) when session state is to be maintained

Measurement Scope
All

Recovery

1. This measurement represents an exception condition in which Gy/Ro CCR-I messages are being received without containing an MSISDN in the Subscription-Id Grouped AVP or User-Name AVP. Each Gy/Ro CCR-I Request not containing an MSISDN in the Subscription-Id Grouped AVP or User-Name AVP is sent without modification to the OCS.

2. If session state is stored for this transaction, the MSISDN will be stored as “Not Present”.

RxGyRoCcrInitNoDestHostMultOcsPoolMode

Measurement ID
11416

Measurement Group
OC-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Gy/Ro CCR-I messages received without a Destination-Host when OC-DRA is operating in Multiple OCS Pools mode.

Collection Interval
5 min

Peg Condition
Each time a Gy/Ro Credit-Control-Request message with the CC-Request-Type AVP set to INITIAL_REQUEST (CCR-I) is received without a Destination-Host when OC-DRA is operating in Multiple OCS Pools mode.

Measurement Scope
All

Recovery

1. This measurement represents an exception condition in which Gy/Ro CCR-I messages are being received without containing a Destination-Host when OC-DRA is operating in Multiple OCS Pools Mode for Regionalized Routing. Each Gy/Ro CCR-I Request message not containing a Destination-Host when OC-DRA is operating in Multiple OCS Pools Mode is sent without modification to the OCS.
2. When OC-DRA is configured to operate in Multiple OCS Pools Mode for Regionalize Routing, it relies on RBAR and mechanisms like Mediation to be invoked prior to PCA OC-DRA invocation to populate a Destination-Host and/or Destination-Realm AVPs for session initiation Requests (CCR-Is). The Destination-Host is used to represent a pool of OCS servers that can serve the Request. The Request is routed via the Diameter Routing Layer where the Peer Routing Table (PRT) rules will be used to route the Request to one of the OCS serverrs within the pool using priorities/weights configured in the Route List selected via the Peer Routing Table (PRT).
3. RBAR and mechanisms like Mediation should be verified to be properly configured and invoked prior to PCA invocation.
4. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

RxGyRoCcrEventNoDestHostMultOcsPoolMode

Measurement ID
11417

Measurement Group
OC-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Gy/Ro CCR-E messages received without a Destination-Host when OC-DRA is operating in Multiple OCS Pools mode

Collection Interval
5 min

Peg Condition
Each time a Gy/Ro Credit-Control-Request message with the CC-Request-Type AVP set to EVENT_REQUEST (CCR-E) is received without a Destination-Host when OC-DRA is operating in Multiple OCS Pools mode.

Measurement Scope
All

Recovery

1. This measurement represents an exception condition in which Gy/Ro CCR-E messages are being received without containing a Destination-Host when OC-DRA is operating in Multiple OCS Pools Mode for Regionalized Routing. Each Gy/Ro CCR-E Request message not containing a Destination-Host when OC-DRA is operating in Multiple OCS Pools Mode is sent without modification to the OCS.
2. When OC-DRA is configured to operate in Multiple OCS Pools Mode for Regionalize Routing, it relies on RBAR and mechanisms like Mediation to be invoked prior to PCA OC-DRA invocation to populate a Destination-Host and/or Destination-Realm AVPs for session initiation Requests (CCR-Is). The Destination-Host is used to represent a pool of OCS servers that can serve the Request. The Request is routed via the Diameter Routing Layer where the Peer Routing Table (PRT) rules will be used to route the Request to one of the OCS servers within the pool using priorities/weights configured in the Route List selected via the Peer Routing Table (PRT).
3. RBAR and mechanisms like Mediation should be verified to be properly configured and invoked prior to PCA invocation.
4. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

RxGyRoInSessionReqNoDestHost

Measurement ID
11418

Measurement Group
OC-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of in-session Gy/Ro Diameter Credit Control Application Request messages received by OC-DRA without a Destination-Host.

Collection Interval
5 min

Peg Condition
Each time OC-DRA receives an in-session Gy/Ro Diameter Request message (i.e. CCR-U/T and RAR) that does not contain a Destination-Host.

Measurement Scope
All

Recovery

1. This measurement represents an exception condition in which in-session Gy/Ro Diameter Request messages (i.e. CCR-U/T and RAR) are being received without a Destination-Host. Session data is retrieved from the SBR for each in-session Gy/Ro Diameter Request message not containing a Destination-Host. If session data is found, a Destination-Host AVP is populated with the true server name and inserted into the Diameter Request and the Diameter Request is relayed. If session data is not found, the Diameter Request is rejected using "Session Not Found" error condition.
2. This condition may occur for any of the following reasons that require OC-DRA to be configured to store session state:
   - A client is not capable of learning the OCS server name from the CCA-I
   - The OCS server is not capable of learning the name of a client from the CCR-I
3. Verify that session state is properly configured if either client or OCS server is not capable in learning each other's hostname.

RxOcdraSessionUnkToPeer

Measurement ID
11419

Measurement Group
OC-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Gy/Ro Diameter Answer messages received by OC-DRA from the peer with a Result-Code value 5002 (DIAMETER_UNKNOWN_SESSION_ID).

Collection Interval
5 min

Peg Condition
Each time OC-DRA receives a Gy/Ro Diameter Answer message from the peer with a Result-Code value 5002 (DIAMETER_UNKNOWN_SESSION_ID).

Measurement Scope
All

Recovery

1. This measurement represents an exception condition in which Gy/Ro Diameter Answer messages are being received by OC-DRA containing a Result-Code value 5002 (DIAMETER_UNKNOWN_SESSION_ID).
2. Each Gy/Ro Diameter Answer message received containing a Result-Code value 5002 is sent without modification to the peer that originated the Diameter Request.
3. If a Gy/Ro CCA-U or RAA message is received containing a Result-Code value 5002, OC-DRA will remove the session from the Session SBR if session state applies.

RxOcdraAnsweringOcsNotConfigured

Measurement ID
11420

Measurement Group
OC-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of answering OCS servers not configured locally.

Collection Interval
5 min

Peg Condition
Each time OC-DRA receives a session initiation answer from an OCS server whose FQDN is not configured at the Policy and Charging SOAMP

Measurement Scope
All

Recovery

1. This measurement represents an exception condition in which an Online Charging session initiation response is being received from an OCS server that is not configured at the Policy and Charging SOAMP. Each Online Charging session initiation response (i.e., CCA-I) received from an unknown OCS server is relayed without modification to the downstream peer that initiated the Diameter transaction. However, session state is not stored for the Online Charging session. This condition causes Alarm 22730 Policy and Charging Configuration Error to be asserted. Refer to the *DSR Alarms and KPIs Reference* for details on Alarm 22730.
2. Determine whether the OCS server has been configured in **Policy and Charging** > **Configuration** > **Online Charging PDRA** > **OCSs** at the Policy and Charging site where Alarm 22730 has been asserted. If the OCS is not configured at the site, configure it using **Policy and Charging** > **Configuration** > **Online Charging PDRA** > **OCSs [Insert]**.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

OC-DRA Congestion Exception measurements

The **OC-DRA** Congestion Exception measurement report contains measurements that provide performance information specific to the OC-DRA Diameter protocol.

RxGyRoReqDiscardedCongestionPerCmd

Measurement ID
11397

Measurement Group
OC-DRA Congestion Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Request Command Abbreviation i.e. CCR-I/U/T/E, RAR, and "Total")

Description
The number of Gy/Ro Diameter Credit Control Application Request messages discarded due to congestion.

Collection Interval

Peg Condition
Each time a Gy/Ro Diameter Credit Control Application Request message is discarded due to congestion.

Note: This measurement is pegged twice, once for the 3-digit error code and once for "Total".

Measurement Scope
All

Recovery

1. This measurement represents an exception condition in which Gy/Ro Diameter Credit Control Application Request messages are discarded due to congestion. This condition causes Event 22707 Diameter Message Processing Failure to be generated. Refer to the *DSR Alarms and KPIs Reference* for details on Event 22707

PCA NGN-PS Exception measurements

PcaNgnPsBindingSbrDrop

Measurement ID
11464

Measurement Group
PCA NGN-PS Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
NGN-PS related stack events to be sent to an active Binding SBR that are unsuccessful because of ComAgent errors. The number of NGN-PS related stack events sent to an active Binding SBR rejected.

Collection Interval
5 min

Peg Condition
The measurement shall be pegged each an NGN-PS related stack event to be forwarded to an active binding SBR is rejected due to ComAgent errors.

Measurement Scope
All

Recovery

1. Check measurements CAHSTxDscrdCongSR, CAHSTxDscrdUnkwnRsrc, CAHSTxDscrdIntErrSR, and event 19832 from the *Alarms and KPIs Reference* for detailed error causes.

PcaNgnPsSessionSbrDrop

Measurement ID
11465

Measurement Group
PCA NGN-PS Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of NGN-PS related stack events sent to an active Session SBR rejected.

Collection Interval
5 min

Peg Condition
This measurement is pegged each time an NGN-PS related stack event to be forwarded to an active session SBR is rejected due to ComAgent errors.

Measurement Scope
All

Recovery

1. Check measurements CAHSTxDscrdCongSR, CAHSTxDscrdUnkwnRsrc, CAHSTxDscrdIntErrSR, and event 19832 from the *Alarms and KPIs Reference* for detailed error causes.

RxPcaNgnPsDrop

Measurement ID
11462

Measurement Group
PCA NGN-PS Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of PCA ingress NGN-PS messages discarded or rejected.

Collection Interval
5 min

Peg Condition
This measurement is pegged each time PCA discards or rejects an NGN-PS message.

Measurement Scope
All

Recovery

1. This measurement indicates that a DA-MP may be experiencing congestion. Additional processing capacity at the PCA DA-MP may be needed.

PCA NGN-PS Performance measurements

RxPcaNgnPs

Measurement ID
11461

Measurement Group
PCA NGN-PS Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of PCA ingress NGN-PS messages.

Collection Interval
5 min

Peg Condition
This measurement is pegged each time PCA receives a Diameter message from any PCA-supported Diameter interface (Gx/Gxx, Rx, Gx-Prime, Gy/Ro) that has been assigned NGN-PS priority.

Measurement Scope
All

Recovery

1. No action required.

P-DRA Diameter Usage measurements

The **P-DRA**Diameter Usage measurement report contains measurements that provide performance information that is specific to the P-DRA Diameter protocol.

RxPdraCcrInitMsgs

Measurement ID
10800

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of CCR Initial messages received by PDRA.

Collection Interval
5 min

Peg Condition
The measurement shall be incremented each time the application receives a CCR Initial message.

Measurement Scope
All

Recovery

1. No action necessary.

RxPdraCcrUpdateMsgs

Measurement ID
10801

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of CCR Update messages received by PDRA.

Collection Interval
5 min

Peg Condition
The measurement shall be incremented each time the application receives a CCR Update message.

Measurement Scope
All

Recovery

1. No action necessary.

RxPdraCcrTerminateMsgs

Measurement ID
10802

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of CCR Termination messages received by PDRA.

Collection Interval
5 min

Peg Condition
The measurement shall be incremented each time the application receives a CCR Termination message.

Measurement Scope
All

Recovery

1. No action necessary.

RxCcrInitNoImsiMsgs

Measurement ID
10803

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of CCR Initial messages without IMSI.

Collection Interval
5 min

Peg Condition
The measurement shall be incremented each time P-DRA processes a CCR Initial message in which IMSI is not present.

Measurement Scope
All

Recovery

1. No action necessary.

RxPdraRarGxMsgs

Measurement ID
10804

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of **RAR** messages received by PDRA for **Gx** interface.

Collection Interval
5 min

Peg Condition
The measurement shall be incremented each time the application receives a RAR message for Gx interface.

Measurement Scope
All

Recovery

1. No action necessary.

RxPdraRarRxMsgs

Measurement ID
10805

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of **RAR** messages received by **PDRA** for **Rx** interface.

Collection Interval
5 min

Peg Condition
The measurement shall be incremented each time the application receives a RAR message for Rx interface.

Measurement Scope
All

Recovery

1. No action necessary.

RxPdraAarMsgs

Measurement ID
10806

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of **AAR** messages received by PDRA.

Collection Interval
5 min

Peg Condition
The measurement shall be incremented each time the application receives an AAR message.

Measurement Scope
All

Recovery

1. No action necessary.

RxPdraStrMsgs

Measurement ID
10807

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of **STR** messages received by PDRA.

Collection Interval
5 min

Peg Condition
The measurement shall be incremented per interface each time the application receives a STR message.

Measurement Scope
All

Recovery

1. No action necessary.

PdraGxTopoHidingApplied

Measurement ID
10809

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of messages received on Gx interface on which topology hiding has been applied by P-DRA.

Collection Interval
5 min

Peg Condition
The measurement shall be incremented each time topology hiding is applied when a message from Gx interface is processed by the application.

Measurement Scope
All

Recovery

1. No action necessary.

PdraRxTopoHidingApplied

Measurement ID
10810

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of messages received on Rx interface on which topology hiding has been applied by P-DRA.

Collection Interval
5 min

Peg Condition
The measurement shall be incremented each time topology hiding is applied when a message from Rx interface is processed by the application.

Measurement Scope
All

Recovery

1. No action necessary.

RxPdraMsgRateAvg

Measurement ID
10819

Measurement Group
P-DRA Diameter Usage

Measurement Type
Average

Measurement Dimension
Single

Description
Average Diameter ingress message processing rate of P-DRA during the collection interval.

Collection Interval
5 min

Peg Condition
This peg is periodically updated based on average rate of the Diameter ingress messages being processed by P-DRA calculated over the collection interval.

Measurement Scope
All

Recovery

1. No action necessary.

RxPdraMsgRatePeak

Measurement ID
10820

Measurement Group
P-DRA Diameter Usage

Measurement Type
Max

Measurement Dimension
Single

Description
Peak Diameter ingress message processing rate of P-DRA during the collection interval.

Collection Interval
5 min

Peg Condition
This peg is periodically updated based on maximum rate of the Diameter ingress messages being processed by P-DRA calculated over the collection interval.

Measurement Scope
All

Recovery

1. No action necessary.

RxPdra5002FromPcrf

Measurement ID
10868

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of 5002 DIAMETER_UNKNOWN_SESSION_ID responses received from a PCRF

Collection Interval
5 min

Peg Condition
This peg is incremented by one each time a **PCRF** responds to a Diameter request with a 5002 response code.

Measurement Scope
All

Recovery

1. No action necessary.

RxPdra5002FromPolicyClient

Measurement ID
10894

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of 5002 DIAMETER_UNKNOWN_SESSION_ID responses received from a policy client.

Collection Interval
5 min

Peg Condition
This peg is incremented by one each time a policy client responds to a Diameter request with a 5002 response code.

Measurement Scope
All

Recovery

1. No action necessary.

TxPdraGxRarRelease

Measurement ID
11300

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Gx RAR requests initiated by P-DRA for the purpose of releasing a session as a result of an error in the P-DRA.

Collection Interval
5 min

Peg Condition
The measurement shall be pegged each time a P-DRA DA-MP server sends a P-DRA initiated RAR request to a policy client for the purpose of releasing a session due to an error in the P-DRA

Measurement Scope
All

Recovery

1. Check **Alarms & Events** > **View History GUI** for pSBR Event 22711 - Policy SBR Database Error (refer to the *DSR Alarms and KPIs Reference* for details about this event) for more details about the possible cause of the error.
2. It is recommended to contact My Oracle Support (MOS) for support as needed.

RxPdraGxpCcrInitMsgs

Measurement ID
11330

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Gx-Prime CCR Initial messages processed by P-DRA against binding key priorities.

Collection Interval
5 min

Peg Condition
Each time a Gx-Prime CCR-I message is processed by P-DRA.

Measurement Scope
All

Recovery

1. No action required.

RxPdraGxpCcrUpdateMsgs

Measurement ID
11331

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Gx-Prime CCR Update messages received by P-DRA.

Collection Interval
5 min

Peg Condition
Each time the P-DRA Application receives a Gx-Prime CCR Update message.

Measurement Scope
All

Recovery

1. No action required.

RxPdraGxpCcrTerminateMsgs

Measurement ID
11332

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Gx-Prime CCR Termination messages received by P-DRA.

Collection Interval
5 min

Peg Condition
Each time the P-DRA Application receives a Gx-Prime CCR Termination message.

Measurement Scope
All

Recovery

1. No action required.

PdraGxpTopoHidingApplied

Measurement ID
11333

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Gx-Prime CC Request messages on which topology hiding is applied.

Collection Interval
5 min

Peg Condition
Each time a Gx-Prime CC request message is processed by the P-DRA application and topology hiding is applied on the message.

Measurement Scope
All

Recovery

1. No action required.

RxPdraFindingBindingSuccess

Measurement ID
11334

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Arrayed (bucketed by binding key priority number from 1 to 5)

Description
Number of binding-dependent (Gx-Prime CCR Initial and AAR) messages processed by P-DRA against binding key priorities.

Collection Interval
5 min

Peg Condition
Each time a Gx-Prime CCR-I message is processed by P-DRA.

Note: The number is sorted and stored in 5 buckets:

- Bucket 1 holds the number of Gx-Prime CCR-I or AAR messages that lead to successful binding record findings corresponding to the binding keys with the highest (1) priority.
- Bucket 2 (or 3, or 4) holds the number of Gx-Prime CCR-I or AAR messages that lead to successful binding record findings corresponding to the configured binding keys with priority 2 (or 3, or 4).
- Bucket 5 holds the number of Gx-Prime CCR-I or AAR messages that lead NO binding record finding after exhausting all binding keys.

Measurement Scope
All

Recovery

1. No action required.

RxPdraRarGxpMsgs

Measurement ID
11335

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Gx-Prime RAR messages processed by P-DRA.

Collection Interval
5 min

Peg Condition
Each time a Gx-Prime RAR message is processed by P-DRA.

Measurement Scope
All

Recovery

1. No action required.

RxBindCapApn2PcrfPool

Measurement ID
11340

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Arrayed (by APN)

Description
The number of times a given **APN** is successfully mapped to **PCRF** pool.

Collection Interval
5 min

Peg Condition
Each time a binding capable session initiation request is successfully mapped to a PCRF Pool (a configured APN), regardless of whether or not the rule matching results in the selection of a PCRF Pool or a PCRF Sub-Pool.

Measurement Scope
Network Element, Server Group, Resource Domain, Place, Place Association

Recovery

1. This measurement shows the distribution of binding capable session initiation requests across the range of configured APNs.
2. It is recommended to contact My Oracle Support (MOS).

RxBindCap2PcrfSubPool

Measurement ID

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Arrayed (by PCRF Sub-Pool Selection Rule)

Description
The number of binding capable session initiation requests that were mapped to a PCRF Sub-Pool by a given PCRF Sub-Pool Selection Rule.

Collection Interval
5 min

Peg Condition
Each time a binding capable session initiation request is successfully mapped to a PCRF Sub-Pool as a result of a given PCRF Sub-Pool Selection Rule, regardless of whether the request is routed to the Sub-Pool or routed elsewhere due to an existing binding.

Measurement Scope
Network Element, Server Group, Resource Domain, Place, Place Association

Recovery

1. This measurement shows the distribution of binding capable session initiation requests for which a new binding would route to a PCRF Sub-Pool across the set of PCRF Sub-Pool Selection Rules.
2. It is recommended to contact My Oracle Support (MOS).

RxBindCapPcrfPool2Prt

Measurement ID
11342

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Arrayed (by PCRF Pool or Sub-Pool)

Description
The number of binding capable session initiation requests that are routed using a PRT table chosen as a result of PCRF Pool or PCRF Sub-Pool mapping to the PRT.

Collection Interval
5 min

Peg Condition
Each time a binding capable session initiation request is routed using a PRT table selected on the basis of the PCRF Pool or Sub-Pool, regardless of whether or not the request was routed successfully.

Measurement Scope
Network Element, Server Group, Resource Domain, Place, Place Association

Recovery

1. This measurement shows the distribution of binding capable session initiation requests that are routed using a given Peer Routing Table at each site.
2. It is recommended to contact My Oracle Support (MOS).

RxPdraAsrMsgs

Measurement ID
10808

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of **ASR** messages received by PDRA.

Collection Interval
5 min

Peg Condition
The measurement shall be incremented each time the application receives an ASR message.

Measurement Scope
All

Recovery

1. No action necessary.

TxPdraGxRarQuery

Measurement ID
10899

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Gx RAR messages initiated by P-DRA for the purposes of querying for session existence at the policy client.

Collection Interval
5 min

Peg Condition
The measurement shall be incremented by one each time a P-DRA DA-MP server sends a P-DRA initiated RAR request to a policy client for the purpose of querying the policy client for session existence.

Measurement Scope
All

Recovery

1. If this value is consistently non-zero, it may indicate that the stale session timing is configured to be too short. The stale session timer for a given session is configured in **Policy DRA** > **Configuration** > **Access Point Names** if the session is associated with a configured APN, or **Policy DRA** > **Configuration** > **Network-Wide Options** if the session is not associated with an APN, or associated with an APN that is not configured.
2. If the problem persists, it is recommended to contact My Oracle Support (MOS).

TmImsiBindingDuration

Measurement ID
11421

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Histogram of IMSI binding durations.

Collection Interval
5 min

Peg Condition
When an ImsiApnAnchorKey binding is removed due to removal of the last session reference associated with that binding, the appropriate histogram instance shall be incremented by 1.

If an ImsiApnAnchorKey record is removed when the only session references are in one of the "early" states (i.e. Early Master or Early Slave), this measurement must not be incremented, to prevent skewing the data with binding capable sessions that were never successfully established.

Measurement Scope
Network, Place Association, Resource Domain

Recovery

1. This measurement shows a histogram of subscriber binding lifetimes, providing information to assist in predicting the duration of a binding SBR Database Reconfiguration.

   The histogram shows the durations of IMSI bindings. A given subscriber (IMSI) may have more than one binding. A binding may have more than one session associated with it.

   Histogram measurements consist of 101 array entries:

   - 0 – Overflow. Incremented if duration is greater than 9,830 minutes.
   - 1-5 – 1 minute buckets. Incremented for durations between 0 and 5 minutes.
   - 6-10 – 5 minute buckets. Incremented for durations between 0 and 30 minutes.
   - 11-15 – 10 minute buckets. Incremented for durations between 30 and 80 minutes.
   - 16-20 – 30 minute buckets. Incremented for durations between 80 and 230 minutes.
   - 21-100 – 120 minute buckets. Incremented for durations between 230 and 9,830 minutes.

TmGxSessionDuration

Measurement ID
11422

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Histogram of normally terminated Gx session durations.

Collection Interval
5 min

Peg Condition
When a Gx session record is removed, the appropriate histogram instance shall be incremented by 1.

Measurement Scope
Network, Place Association, Resource Domain

Recovery

1. This measurement shows a histogram of Gx session lifetimes, providing information to assist in predicting the duration of a session SBR Database Reconfiguration.

   Histogram measurements consist of 101 array entries:

   - 0 – Overflow. Incremented if duration is greater than 9,830 minutes.
   - 1-5 – 1 minute buckets. Incremented for durations between 0 and 5 minutes.
   - 6-10 – 5 minute buckets. Incremented for durations between 0 and 30 minutes.
   - 11-15 – 10 minute buckets. Incremented for durations between 30 and 80 minutes.
   - 16-20 – 30 minute buckets. Incremented for durations between 80 and 230 minutes.
   - 21-100 – 120 minute buckets. Incremented for durations between 230 and 9,830 minutes.

   A session SBR Database Reconfiguration cannot complete normally until all session records for all supported Diameter interfaces have migrated. As a result, the session duration histogram for each interface being used must be examined to determine which interface has the highest average session duration. This value can be used to predict the likely duration of the reconfiguration.

TmGxSessionRefresh

Measurement ID
11428

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Histogram of Gx session refresh durations.

Collection Interval
5 min

Peg Condition
When a Gx session record is refreshed, the appropriate histogram instance shall be incremented by 1. Gx sessions are refreshed during RAA processing.

Measurement Scope
Network, Place Association, Resource Domain

Recovery

1. This measurement shows a histogram of Gx session refresh durations, providing information to assist insetting the Stale Session Timeout for APNs that use this interface. If the Stale Session Timeout for an APN using the Gx interface is set too short, the session audit will send an RAR to the Policy Client that created the session to ask if it is still valid. Having the Stale Session Timeout set too short results in increased RAR traffic between the Policy DRA and the Policy Clients.

   Histogram measurements consist of 101 array entries:

   - 0 – Overflow. Incremented if duration is greater than 9,830 minutes.
   - 1-5 – 1 minute buckets. Incremented for durations between 0 and 5 minutes.
   - 6-10 – 5 minute buckets. Incremented for durations between 0 and 30 minutes.
   - 11-15 – 10 minute buckets. Incremented for durations between 30 and 80 minutes.
   - 16-20 – 30 minute buckets. Incremented for durations between 80 and 230 minutes.
   - 21-100 – 120 minute buckets. Incremented for durations between 230 and 9,830 minutes.

TmGxxSessionDuration

Measurement ID
11423

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Histogram of normally terminated Gxx session durations.

Collection Interval
5 min

Peg Condition
When a Gxx session record is removed, the appropriate histogram instance shall be incremented by 1.

Measurement Scope
Network, Place Association, Resource Domain

Recovery

1. This measurement shows a histogram of Gxx session lifetimes, providing information to assist in predicting the duration of a session SBR Database Reconfiguration.

Histogram measurements consist of 101 array entries:

- 0 – Overflow. Incremented if duration is greater than 9,830 minutes.
- 1-5 – 1 minute buckets. Incremented for durations between 0 and 5 minutes.
- 6-10 – 5 minute buckets. Incremented for durations between 0 and 30 minutes.
- 11-15 – 10 minute buckets. Incremented for durations between 30 and 80 minutes.
- 16-20 – 30 minute buckets. Incremented for durations between 80 and 230 minutes.
- 21-100 – 120 minute buckets. Incremented for durations between 230 and 9,830 minutes.

A session SBR Database Reconfiguration cannot complete normally until all session records for all supported Diameter interfaces have migrated. As a result, the session duration histogram for each interface being used must be examined to determine which interface has the highest average session duration. This value can be used to predict the likely duration of the reconfiguration.

TmGxxSessionRefresh

Measurement ID
11429

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Histogram of Gxx session refresh durations.

Collection Interval
5 min

Peg Condition
When a Gxx session record is refreshed, the appropriate histogram instance shall be incremented by 1. Gxx sessions are refreshed during RAA processing.

Measurement Scope
Network, Place Association, Resource Domain

Recovery

1. This measurement shows a histogram of Gxx session refresh durations, providing information to assist insetting the Stale Session Timeout for APNs that use this interface. If the Stale Session Timeout for an APN using the Gxx interface is set too short, the session audit will send an RAR to the Policy Client that created the

session to ask if it is still valid. Having the Stale Session Timeout set too short results in increased RAR traffic between the Policy DRA and the Policy Clients.

Histogram measurements consist of 101 array entries:

- 0 – Overflow. Incremented if duration is greater than 9,830 minutes.
- 1-5 – 1 minute buckets. Incremented for durations between 0 and 5 minutes.
- 6-10 – 5 minute buckets. Incremented for durations between 0 and 30 minutes.
- 11-15 – 10 minute buckets. Incremented for durations between 30 and 80 minutes.
- 16-20 – 30 minute buckets. Incremented for durations between 80 and 230 minutes.
- 21-100 – 120 minute buckets. Incremented for durations between 230 and 9,830 minutes.

TmRxSessionDuration

Measurement ID
11424

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Histogram of normally terminated Rx session durations.

Collection Interval
5 min

Peg Condition
When an Rx session record is removed, the appropriate histogram instance shall be incremented by 1.

Note: Binding-dependent session records are stored only if topology hiding applies to the AF that created the session.

Measurement Scope
Network, Place Association, Resource Domain

Recovery

1. This measurement shows a histogram of Rx session lifetimes, providing information to assist in predicting the duration of a session SBR Database Reconfiguration.

Note: This measurement applies only to sessions for which session state is being maintained. Policy DRA does not maintain Rx session state unless Topology Hiding applies to the session.

Histogram measurements consist of 101 array entries:

- 0 – Overflow. Incremented if duration is greater than 9,830 minutes.
- 1-5 – 1 minute buckets. Incremented for durations between 0 and 5 minutes.
- 6-10 – 5 minute buckets. Incremented for durations between 0 and 30 minutes.
- 11-15 – 10 minute buckets. Incremented for durations between 30 and 80 minutes.
- 16-20 – 30 minute buckets. Incremented for durations between 80 and 230 minutes.
- 21-100 – 120 minute buckets. Incremented for durations between 230 and 9,830 minutes.

A session SBR Database Reconfiguration cannot complete normally until all session records for all supported Diameter interfaces have migrated. As a result, the session duration histogram for each interface being used must be examined to determine which interface has the highest average session duration. This value can be used to predict the likely duration of the reconfiguration.

TmRxSessionRefresh

Measurement ID
11430

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Histogram of Rx session refresh durations.

Collection Interval
5 min

Peg Condition
When an Rx session record is refreshed, the appropriate histogram instance shall be incremented by 1. Rx sessions are refreshed during RAA processing.

Measurement Scope
Network, Place Association, Resource Domain

Recovery

1. This measurement shows a histogram of Rx session refresh durations, providing information to assist in setting the Stale Session Timeout for APNs that use this interface. If the Stale Session Timeout for an APN using the Rx interface is set too short, the session audit will remove the session prematurely, possibly causing signaling failures for subsequent in-session request processing needing topology hiding translations.

   Note: This measurement applies only to sessions for which session state is being maintained. Policy DRA does not maintain Rx session state unless Topology Hiding applies to the session.

   Histogram measurements consist of 101 array entries:

   - 0 – Overflow. Incremented if duration is greater than 9,830 minutes.
   - 1-5 – 1 minute buckets. Incremented for durations between 0 and 5 minutes.
   - 6-10 – 5 minute buckets. Incremented for durations between 0 and 30 minutes.
   - 11-15 – 10 minute buckets. Incremented for durations between 30 and 80 minutes.
   - 16-20 – 30 minute buckets. Incremented for durations between 80 and 230 minutes.
   - 21-100 – 120 minute buckets. Incremented for durations between 230 and 9,830 minutes.

TmGxPrimeSessionDuration

Measurement ID
11425

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Histogram of normally terminated Gx-Prime session durations.

Collection Interval
5 min

Peg Condition
When a Gx-Prime session record is removed, the appropriate histogram instance shall be incremented by 1.

Note: Binding-dependent session records are stored only if topology hiding applies to the AF that created the session.

Measurement Scope
Network, Place Association, Resource Domain

Recovery

1. This measurement shows a histogram of Gx-Prime session lifetimes, providing information to assist in predicting the duration of a session SBR Database Reconfiguration.

   Note: This measurement applies only to sessions for which session state is being maintained. Policy DRA does not maintain Gx-Prime session state unless Topology Hiding applies to the session.

   Histogram measurements consist of 101 array entries:

   - 0 – Overflow. Incremented if duration is greater than 9,830 minutes.
   - 1-5 – 1 minute buckets. Incremented for durations between 0 and 5 minutes.
   - 6-10 – 5 minute buckets. Incremented for durations between 0 and 30 minutes.
   - 11-15 – 10 minute buckets. Incremented for durations between 30 and 80 minutes.
   - 16-20 – 30 minute buckets. Incremented for durations between 80 and 230 minutes.
   - 21-100 – 120 minute buckets. Incremented for durations between 230 and 9,830 minutes.

   A session SBR Database Reconfiguration cannot complete normally until all session records for all supported Diameter interfaces have migrated. As a result, the session duration histogram for each interface being used must be examined to determine which interface has the highest average session duration. This value can be used to predict the likely duration of the reconfiguration.

TmGxPrimeSessionRefresh

Measurement ID
11431

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Histogram of Gx-Prime session refresh durations.

Collection Interval
5 min

Peg Condition
When a Gx-Prime session record is refreshed, the appropriate histogram instance shall be incremented by 1. Gx-Prime sessions are refreshed during RAA processing.

> **Note:** Binding-dependent session records are stored only if topology hiding applies to the AF that created the session.

Measurement Scope
Network, Place Association, Resource Domain

Recovery

1. This measurement shows a histogram of Gx-Prime session refresh durations, providing information to assist in setting the Stale Session Timeout for APNs that use this interface. If the Stale Session Timeout for an APN using the Gx-Prime interface is set too short, the session audit will remove the session prematurely, possibly causing signaling failures for subsequent in-session request processing needing topology hiding translations.

   > **Note:** This measurement applies only sessions for which session state is being maintained. Policy DRA does not maintain Gx-Prime session state unless Topology Hiding applies to the session.

   Histogram measurements consist of 101 array entries:

   - 0 – Overflow. Incremented if duration is greater than 9,830 minutes.
   - 1-5 – 1 minute buckets. Incremented for durations between 0 and 5 minutes.
   - 6-10 – 5 minute buckets. Incremented for durations between 0 and 30 minutes.
   - 11-15 – 10 minute buckets. Incremented for durations between 30 and 80 minutes.
   - 16-20 – 30 minute buckets. Incremented for durations between 80 and 230 minutes.
   - 21-100 – 120 minute buckets. Incremented for durations between 230 and 9,830 minutes.

TmS9SessionDuration

Measurement ID
11426

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Histogram of normally terminated S9 session durations.

Collection Interval
5 min

Peg Condition
When an S9 session record is removed, the appropriate histogram instance shall be incremented by 1.

Measurement Scope
Network, Place Association, Resource Domain

Recovery

1. This measurement shows a histogram of S9 session lifetimes, providing information to assist in predicting the duration of a session SBR Database Reconfiguration.

   Histogram measurements consist of 101 array entries:

   - 0 – Overflow. Incremented if duration is greater than 9,830 minutes
   - 1-5 – 1 minute buckets. Incremented for durations between 0 and 5 minutes.
   - 6-10 – 5 minute buckets. Incremented for durations between 0 and 30 minutes.
   - 11-15 – 10 minute buckets. Incremented for durations between 30 and 80 minutes.
   - 16-20 – 30 minute buckets. Incremented for durations between 80 and 230 minutes.
   - 21-100 – 120 minute buckets. Incremented for durations between 230 and 9,830 minutes.

   A session SBR Database Reconfiguration cannot complete normally until all session records for all supported Diameter interfaces have migrated. As a result, the session duration histogram for each interface being used must be examined to determine which interface has the highest average session duration. This value can be used to predict the likely duration of the reconfiguration.

TmS9SessionRefresh

Measurement ID
11432

Measurement Group
P-DRA Diameter Usage

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Histogram of S9 session refresh durations.

Collection Interval
5 min

Peg Condition
When an S9 session record is refreshed, the appropriate histogram instance shall be incremented by 1. S9 sessions are refreshed during RAA processing.

Measurement Scope
Network, Place Association, Resource Domain

Recovery

1. This measurement shows a histogram of S9 session refresh durations, providing information to assist in setting the Stale Session Timeout for APNs that use this interface. If the Stale Session Timeout for an APN using the S9 interface is set too short, the session audit will send an RAR to the Policy Client that created the session to ask if it is still valid. Having the Stale Session Timeout set too short results in increased RAR traffic between the Policy DRAand the Policy Clients.

   Histogram measurements consist of 101 array entries:

   - 0 – Overflow. Incremented if duration is greater than 9,830 minutes
   - 1-5 – 1 minute buckets. Incremented for durations between 0 and 5 minutes.
   - 6-10 – 5 minute buckets. Incremented for durations between 0 and 30 minutes.
   - 11-15 – 10 minute buckets. Incremented for durations between 30 and 80 minutes.
   - 16-20 – 30 minute buckets. Incremented for durations between 80 and 230 minutes.
   - 21-100 – 120 minute buckets. Incremented for durations between 230 and 9,830 minutes.

P-DRA Diameter Exception measurements

The **P-DRA** Diameter Exception measurement report contains measurements that provide performance information that is specific to the P-DRA Diameter protocol.

BindCorrFailedUsingDefaultAPN

Measurement ID
11469

Measurement Group
P-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of times a binding correlation attempt using a non-specific subscriber binding key and default APN failed to retrieve a binding.

Collection Interval
5 min

Peg Condition
Each time a binding could not be retrieved from the SBR database using a non-specific binding key (such as IMSI or MSISDN) and the default APN configured, when the binding dependent session initiation request contains no APN. If both IMSI and MSISDN are configured in the binding key priority table, this measurement can be incremented twice for one binding dependent session initiation request.

Note: This measurement applies when Policy DRA is working in Multi Pool Mode.

Note: If a lower priority key results in a successful binding retrieval, the binding dependent session initiation request may be route successfully to the bound PCRF. This exception measurement does not satisfactorily indicate a Binding Not Found error condition and/or a Diameter routing failure.

Measurement Scope
Both

This measurement represents an exception condition in which the binding key priority is configured to use IMSI, MSISDN, or both, there is a Default APN configuration present that is used when the binding dependent session request has no APN value, but the binding lookup attempt results in a failure. This condition causes binding correlation to fail for the MSISDN or IMSI key types. If not other key is present int he request message and/or configured for correlation, the request is rejected using the Binding Not Found error condition. This condition causes Alarm 22730 Policy and Charging Configuration Error to be generated.

Recovery

1. Determine if one or more AF(s) is not including an APN (Called-Station-ID AVP) in the binding dependent session initiation request messages for subscribers for which the binding dependent sessions initiation request messages for subscribers for which the binding capable sessions were created using an APN other than the one that is currently configured as the Default APN in the Network-Wide Options GUI screen. If this condition is found to be true, the Default APN configuration needs to be correct.

2. Determine if one or more AF(s) is not including an APN (Called-Station-ID AVP) in the binding dependent session initiation request messages for subscribers for which the binding dependent sessions initiation request messages for subscribers for which the binding capable sessions were created using more than one APN, one of which may currently be configured as the Default APN in the Network-Wide Options GUI screen. If this condition is found to be true, it is recommended to switch to Single Pool Mode.

PcaOcDrop

Measurement ID
11463

Measurement Group
P-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of PCA originated messages rejected by DA-MP overload control..

Collection Interval
5 min

Peg Condition
The measurement is pegged each time a PCA-generated RAR is rejected due to DRL queue full or DA-MP OC.

Measurement Scope
All

Recovery

1. This measurement indicates that a DA-MP may be experiencing congestion. Additional processing capacity at the PCA DA-MP may be needed.

RxBindCapPcrfPoolNotMapped

Measurement ID
11343

Measurement Group
P-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of binding capable session initiation requests that were destined for a PCRF Pool or Sub-Pool for which no PRT table was configured.

Collection Interval
5 min

Peg Condition
Each time a new binding attempt is supposed to be routed to a PCRF Pool or Sub-Pool for which no PRT table is configured at the site where the routing is occurring.

Measurement Scope
Network Element, Server Group, Resource Domain, Place, Place Association

Recovery

1. This measurement represents an exception condition in which a PCRF Pool or Sub-Pool has been configured for use at the NOAMP, but no PRT table has been configured at one or more sites to route requests to that PCRF Pool or Sub-Pool. Consider whether a PRT table should be configured at the Network Element to which this measurement applies
2. It is recommended to contact My Oracle Support (MOS).

RxBindCapMissingApn

Measurement ID
11345

Measurement Group
P-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of binding capable session initiation requests containing no APN.

Collection Interval
5 min

Peg Condition
Each time a binding capable session initiation request is received containing no APN (i.e. no Called-Station-ID AVP).

Note: This condition also causes Alarm 22730 - Policy and Charging Configuration Error (refer to the *DSR Alarms and KPIs Reference* for details about this alarm) to be asserted.

Measurement Scope
Network Element, Server Group, Resource Domain, Place, Place Association

Recovery

1. This measurement represents an exception condition in which binding capable session initiation request are being received with no APN value. Each binding capable session initiation request containing a missing APN is rejected using the Missing Or Unconfigured APN error condition.
2. It is recommended to contact It is recommended to contact .

RxBindCapUnknownApn

Measurement ID
11344

Measurement Group
P-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of binding capable session initiation requests containing an unconfigured APN.

Collection Interval
5 min

Peg Condition
Each time a binding capable session initiation request is received containing an APN that is not configured at the Policy DRA NOAMP.

Note: This condition also causes Alarm 22730 - Policy and Charging Configuration Error (refer to the *DSR Alarms and KPIs Reference* for details about this alarm) to be asserted.

Measurement Scope
Network Element, Server Group, Resource Domain, Place, Place Association

Recovery

1. This measurement represents an exception condition in which binding capable session initiation request are being received from unknown APN values. Each binding capable session initiation request containing an unconfigured APN is rejected using the Missing Or Unconfigured APN error condition.
2. It is recommended to contact My Oracle Support (MOS).

RxBindDepUnknownApn

Measurement ID
11346

Measurement Group
P-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of attempts to correlate a binding dependent session initiation request using a non-specific binding correlation key (i.e., IMSI or MSISDN), but containing an unconfigured APN.

Collection Interval
5 min

Peg Condition
Each time an attempt is made to find a binding using either IMSI or MSISDN, but the binding dependent session initiation request contains an APN that is not configured at the Policy DRA NOAMP. If both IMSI and MSISDN are configured in the binding key priority table, this measurement can be incremented twice for one binding dependent session initiation request.

> **Note:** This condition also causes Alarm 22730 - Policy DRA Configuration Error to be asserted. Refer to the *DSR Alarms and KPIs Reference* for details about this alarm.

Measurement Scope
Network Element, Server Group, Resource Domain, Place, Place Association

Recovery

1. This measurement represents an exception condition in which the binding key priority is configured to use IMSI, MSISDN, or both, but the binding dependent session initiation request has an APN value that is not configured. This condition causes binding correlation to fail for the MSISDN or IMSI key types. If no other key is present and configured for correlation, the request is rejected using the Binding Not Found error condition.
2. It is recommended to contact My Oracle Support (MOS).

RxBindDepMissingApn

Measurement ID
11347

Measurement Group
P-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of attempts to correlate a binding dependent session initiation request using a non-specific binding correlation key (i.e. IMSI or MSISDN), but containing no APN

Collection Interval
5 min

Peg Condition
Each time an attempt is made to find a binding using either IMSI or MSISDN, but the binding dependent session initiation request contains no APN. If both IMSI and MSISDN are configured in the binding key priority table, this measurement can be incremented twice for one binding dependent session initiation request.

> **Note:** This condition also causes Alarm 22730 - Policy and Charging Configuration Error (refer to the *DSR Alarms and KPIs Reference* for details about this alarm) to be asserted.

Measurement Scope
Network Element, Server Group, Resource Domain, Place, Place Association

Recovery

1. This measurement represents an exception condition in which the binding key priority is configured to use IMSI, MSISDN, or both, but the binding dependent session initiation request has no APN value. This condition causes binding correlation to fail for the MSISDN or IMSI key types. If no other key is present and configured for correlation, the request is rejected using the Binding Not Found error condition.
2. It is recommended to contact My Oracle Support (MOS).

RxBindCapUnknownPcrf

Measurement ID
11348

Measurement Group
P-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of binding capable session initiation answers coming from an unconfigured PCRF.

Collection Interval
5 min

Peg Condition
Each time a binding capable session initiation answer for a new binding is received from a PCRF that is not configured at the Policy DRA SOAM.

> **Note:** This condition also causes Alarm 22730 - Policy and Charging Configuration Error (refer to the *DSR Alarms and KPIs Reference* for details about this alarm) to be asserted.

Measurement Scope
Network Element, Server Group, Resource Domain, Place, Place Association

Recovery

1. This measurement represents an exception condition in which binding capable session initiation answers for new bindings are being received from unknown PCRF FQDNs. When this occurs, the binding capable session answered by the unconfigured PCRF is torn down by an RAR containing a Session-Release-Cause AVP send from the Policy DRA.
2. Refer to Alarm 22730 - Policy and Charging Configuration Error in the *DSR Alarms and KPIs Reference* for further information.
3. It is recommended to contact My Oracle Support (MOS).

RxPcaRARRouteLocalFailure

Measurement ID
11460

Measurement Group
P-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of times the locally generated RAR could not be route

Collection Interval
5 min

Peg Condition
Each time the locally generated RAR fails to be routed out.

Measurement Scope
Both

Recovery

1. None

RxPcaTransactionsRejected

Measurement ID
11317

Measurement Group
P-DRA Diameter Exception, OC-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of transactions rejected by Policy and Charging DSR Application.

Collection Interval
5 min

Peg Condition
Each time the Policy and Charging Application (PCA) initiates an Answer response with a non-successful Result-Code (one containing a non-2xxx value) or discards an ingress Request message for any of the following reasons:

- OC-DRA is Unavailable or Disabled
- Diameter Protocol Error Detected
- OC-DRA specific errors due to absence of mandatory Diameter Credit Control Application AVP(s) used for routing
- Diameter Request discarded during Congestion
- Diameter Message Routing failure due to DRL's Request Queue Full
- Communication Agent Error (i.e., Queue Full)
- Unexpected SBR Error
- Online Charging Session not found when required for routing

Note: This measurement is only pegged once for an ingress Request message.

Measurement Scope
Server Group

Recovery

1. This measurement gives an indication if any Gy/Ro Diameter Credit Control Application Request messages were NOT successfully relayed by OC-DRA. OC-DRA can fail to relay Gy/Ro Diameter Credit Control Application Request messages for various reasons as stated above for “Peg Condition”.

2. This measurement is the summation of the following measurements which should be inspected within the same collection interval to further determine the specific cause of failure:

   - TxGyRoAnsGenByOcdraPerCmd
   - TxGyRoAnsGenByDrlPerCmd
   - RxGyRoReqDiscardedCongestionPerCmd

   Note: Due to the timing of when measurements are incremented and collected during a collection interval, this measurement may not be the exact sum of the measurements listed above.

RxPdraRequestProtocolErr

Measurement ID
10823

Measurement Group
P-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of invalid Request messages received from **DRL**. Invalid request message includes - unsupported command codes, unsupported application Id, missing or invalid **AVP**s. The AARs without Dest-Host AVP are still valid AARs and shall be pegged.

Collection Interval
5 min

Peg Condition
The measurement shall be incremented by one each time an invalid diameter request message is received by P-DRA.

Measurement Scope
All

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance.

RxStackEventDiscardedCaFailure

Measurement ID
10866

Measurement Group
P-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of stack events discarded by **ComAgent** due to ComAgent failure.

Collection Interval
5 min

Peg Condition
The measurement shall be incremented by one each time a stack event is discarded by ComAgent due to a ComAgent failure as indicated by a returned stack event error code of all available error codes.

Measurement Scope
All

Recovery

1. Check ComAgent Event 19832 - Communication Agent Reliable Transaction Failed (refer to the *DSR Alarms and KPIs Reference* for details about this event) and ComAgent measurements CAHSTxDscrdCongSR, CAHSTxDscrdUnkwnRsrc, and CAHSTxDscrdIntErrSR for detailed error causes.
2. If the problem persists, it is recommended to contact My Oracle Support (MOS) for assistance.

TxAaxMsgDiscardedDueToDrlQueueFull

Measurement ID
10829

Measurement Group
P-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of AAR/AAA messages discarded by P-DRA due to DRL queue being full.

Collection Interval
5 min

Peg Condition
The measurement shall be incremented by one each time a AAR/AAA message is discarded by the application because DRL queue is full.

Measurement Scope
All

Recovery

1. No action required.

TxAsxMsgDiscardedDueToDrlQueueFull

Measurement ID
10871

Measurement Group
P-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of ASR messages discarded by P-DRA due to DRL queue being full.

Collection Interval
5 min

Peg Condition
The measurement shall be incremented by one each time a ASR message is discarded by the application because DRL queue is full.

Measurement Scope
All

Recovery

1. No action required.

TxCcxMsgDiscardedDueToDrlQueueFull

Measurement ID
10825

Measurement Group
P-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of **CCR/CCA** messages discarded by P-DRA due to **DRL** queue being full.

Collection Interval
5 min

Peg Condition
The measurement shall be incremented by one each time a **CCR/CCA** message is discarded by the application because **DRL** queue is full.

Measurement Scope
All

Recovery

1. No action required.

TxGxpCcxMsgDiscardedDrlQueueFull

Measurement ID
11338

Measurement Group
P-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Gx-Prime CCR/CCA messages discarded by P-DRA due to DRL queue being full.

Collection Interval
5 min

Peg Condition
Each time a Gx-Prime CCR/CCA message is discarded by the P-DRA application because DRL queue is full.

Measurement Scope
All

Recovery

1. It is recommended to contact My Oracle Support (MOS).

TxPdraAnswersGeneratedConfigErr

Measurement ID
11311

Measurement Group
P-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Diameter Answers generated by P-DRA due to configuration errors when processing session initiation requests.

Collection Interval
5 min

Peg Condition
This measurement is pegged each time when P-DRA generates an error Anser in processing a session initiation request due to

- No PCRF being configured at the site where the request is processed OR
- No PCRF ID being found in PCRF table OR
- The APN contained in the request message not configured.

The measurement is pegged also each time when P-DRA generates an error Answer in processing a binding dependent session initiation request if the APN in te request is not configured in the Policy DRA and the site is configured to correlate on IMSI, MSISDN, or both and no other binding correlation key is successfully used for correlation.

Note: In binding dependent request cases, this measurement is raised only when the Binding Not Found condition applies, the APN is unconfigured, and an IMSI or MSISDN was used as a possible correlation key.

Measurement Scope
All

Recovery

1. Check the P-DRA System OAM GUI Main Menu: **Policy DRA** > **Configuration** > **PCRFs** to ensure PCRFs are configured properly.
2. If there is an unconfigured PCRF, it means that the binding capable session initiation request was routed to a PCRF that is not configured in **Policy DRA** > **Configuration** > **PCRFs** at the site where the request was received. This indicates a mismatch between the PCRF's configuration and the routing configuration. If the PCRF is a valid choice for the request, configure the PCRF in **Policy DRA** > **Configuration** > **PCRFs**. If the PCRF is not valid for the request, correct the routing table or tables that included the PCRF.

   See also RxBindCapUnknownPcrf.
3. If there is an unconfigured APN and if the APN string is valid, configure the APN at the NOAMP using the **Policy DRA** > **Configuration** > **Access Point Names** screen. If the APN string is not valid, investigate the policy client to determine why it is sending policy session initiation requests using the invalid APN.

   See also RxBindCapUnknownApn and RxBindDepUnknownApn.

4. If there is a missing APN, investigate the policy client to determine why it is sending policy session initiation requests with no APN.

   See also RxBindCapMissingApn and RxBindDepMissingApn

5. If there are no PCRFs configured, configure PCRFs at the SOAM GUI for the site using **Policy DRA** > **Configuration** > **PCRFs**.

6. If needed, it is recommended to contact My Oracle Support (MOS) for further assistance.

TxPdraAnswersGeneratedForDiameterErr

Measurement ID
10833

Measurement Group
P-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Diameter answers generated by P-DRA due to error in received Diameter messages from DRL.

Collection Interval
5 min

Peg Condition
The measurement shall be incremented by one each time a diameter answer message is generated by P-DRA due to error in received Diameter messages from DRL. The errors encountered may be:

- Diameter protocol errors
- P-DRA application specific errors due to absence of some optional AVP(s) in the Diameter request

Measurement Scope
All

Recovery

1. No action required.

TxPdraAnswersGeneratedForPsbrErrResp

Measurement ID
10832

Measurement Group
P-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Diameter Answer messages generated by P-DRA because of pSBR stack event error response.

Collection Interval
5 min

Peg Condition
The measurement shall be incremented by one each time a diameter answer message is generated by P-DRA because of pSBR stack event error response.

Measurement Scope
All

Recovery

1. No action required.

TxPdraErrAnsGeneratedCAFailure

Measurement ID
10834

Measurement Group
P-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of Diameter answers generated by P-DRA due to ComAgent failure.

Collection Interval
5 min

Peg Condition
The measurement shall be incremented by one each time a diameter answer message is generated by P-DRA due to comagent routing failure.

Measurement Scope
All

Recovery

1. No action required.

TxRaxMsgDiscardedDueToDrlQueueFull

Measurement ID
10827

Measurement Group
P-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of RAR/RAA messages discarded by P-DRA due to DRL queue being full.

Collection Interval
5 min

Peg Condition
The measurement shall be incremented by one each time a RAR/RAA message is discarded by the application because DRL queue is full. The measurement shall be incremented by one each time a CCR/CCA message is discarded by the application because DRL queue is full.

Measurement Scope
All

Recovery

1. No action required.

TxStxMsgDiscardedDueToDrlQueueFull

Measurement ID
10831

Measurement Group
P-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of STR/STA messages discarded by P-DRA due to DRL queue being full.

Collection Interval
5 min

Peg Condition
The measurement shall be incremented by one each time a STR/STA message is discarded by the application because DRL queue is full.

Measurement Scope
All

Recovery

1. No action required.

P-DRA Congestion Exception measurements

The **P-DRA**Congestion Exception measurement report contains measurements that provide performance information that is specific to the P-DRA Diameter protocol.

RxCcrMsgDiscardedDueToCongestion

Measurement ID
10824

Measurement Group
P-DRA Congestion Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of CCR messages discarded by P-DRA due to congestion.

Collection Interval
5 min

Peg Condition
The measurement shall be incremented by one each time a CCR message is discarded by P-DRA due to congestion.

Measurement Scope
All

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance.

RxRarMsgDiscardedDueToCongestion

Measurement ID
10826

Measurement Group
P-DRA Congestion Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of RAR messages discarded by P-DRA due to congestion.

Collection Interval
5 min

Peg Condition
The measurement shall be incremented by one each time an RAR message is discarded by P-DRA due to congestion.

Measurement Scope
Network, NE, Server

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance.

RxAarMsgDiscardedDueToCongestion

Measurement ID
10828

Measurement Group
P-DRA Congestion Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of AAR messages discarded by P-DRA due to congestion.

Collection Interval
5 min

Peg Condition
The measurement shall be incremented by one each time an AAR message is discarded by P-DRA due to congestion.

Measurement Scope
All

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance.

RxStrMsgDiscardedDueToCongestion

Measurement ID
10830

Measurement Group
P-DRA Congestion Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of STR messages discarded by P-DRA due to congestion.

Collection Interval
5 min

Peg Condition
The measurement shall be incremented by one each time an STR message is discarded by P-DRA due to congestion.

Measurement Scope
All

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance.

RxGxpCcrMsgDiscardedDueToCongestion

Measurement ID
11339

Measurement Group
P-DRA Diameter Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of **Gx-Prime** CCR messages discarded by P-DRA due to P-DRA internal congestion.

Collection Interval
5 min

Peg Condition
Each time a Gx-Prime CCR message is discarded by the P-DRA application due to P-DRA internal congestion.

Measurement Scope
All

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance.

RxAsrMsgDiscardedDueToCongestion

Measurement ID
10870

Measurement Group
P-DRA Congestion Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of ASR messages discarded by P-DRA due to P-DRA congestion.

Collection Interval
5 min

Peg Condition
The measurement shall be incremented by one each time an ASR message is discarded by P-DRA due to congestion.

Measurement Scope
All

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance.

P-DRA Site Diameter Usage measurements

The **P-DRA** Site Diameter Usage measurement report contains measurements that provide performance information that is specific to the P-DRA Diameter protocol.

RxSuspectBindingRuleMatchIncrCount

Measurement ID
11336

Measurement Group
P-DRA Site Diameter Usage

Measurement Type
Simple

Measurement Dimension
Arrayed (by Suspect Binding Removal Rule ID)

Description
The number of times a Suspect Binding Removal Rule matched to a supported Diameter message and the Rule is not configured as "Remove Immediately."

Collection Interval
5 min

Peg Condition
Each time a Suspect Binding Removal Rule match has occurred and the rule is not configured to remove the Binding immediately.

Measurement Scope
All

Recovery

1. No action required.

RxSuspectBindingRuleMatchRmvImt

Measurement ID
11337

Measurement Group
P-DRA Site Diameter Usage

Measurement Type
Simple

Measurement Dimension
Arrayed (by Suspect Binding Removal Rule ID)

Description
The number of times a Suspect Binding Removal Rule matched to a supported Diameter message and the Rule is configured as "Remove Immediately."

Collection Interval
5 min

Peg Condition
Each time a Suspect Binding Removal Rule match has occurred and the rule is configured to remove the binding immediately.

Measurement Scope
All

Recovery

1. No action required.

Peer Node Performance measurements

The Peer Node measurement group is a set of measurements that provide performance information that is specific to a Peer Node. These measurements will allow you to determine how many messages are successfully forwarded and received to/from each Peer Node. Measurements such as the following are included in this group.

EvPeerAvpDeleted

Measurement ID
14077

Measurement Group
Peer Node Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Peer Node ID)

Description
The number of Diameter AVPs deleted by an AVP Removal List.

Collection Interval
5 min

Peg Condition
When DRL deletes one instance of an AVP from either a Request or Answer message based upon an AVP Removal List assigned to the Peer Node.

Measurement Scope
Site

Recovery

1. No action required.

RxPeerAnswers

Measurement ID
10078

Measurement Group
Peer Node Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Peer Node ID)

Description
Number of routable Answer messages received from Peer-X.

Collection Interval
5 min

Peg Condition
When DRL receives an Answer message event from DCL with a valid Transport Connection ID owned by Peer-X.

Measurement Scope
Server Group

Recovery

1. No action required.

RxPeerRequests

Measurement ID
10077

Measurement Group
Peer Node Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Peer Node ID)

Description
Number of routable Request messages received from Peer-X.

Collection Interval
5 min

Peg Condition
When DRL receives a Request message event from DCL with a valid Transport Connection ID owned by Peer-X.

Measurement Scope
Server Group

Recovery

1. No action required.

TxPeerAnswers

Measurement ID
10076

Measurement Group
Peer Node Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Peer Node ID)

Description
Number of routable Answer messages sent to Peer-X.

Collection Interval
5 min

Peg Condition
When DRL successfully queues an Answer message for Peer-X to DCL.

Measurement Scope
Server Group

Recovery

1. No action required.

TxPeerRequests

Measurement ID
10075

Measurement Group
Peer Node Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Peer Node ID)

Description
Number of routable Request messages sent to Peer-X.

Collection Interval
5 min

Peg Condition
When DRL successfully queues a Request message for Peer-X to DCL.

Measurement Scope
Server Group

Recovery

1. No action required.

Peer Routing Rules measurements

The Peer Routing Rules measurement report is a set of measurements associated with the usage of Peer Routing Rules. These measurements allow you to determine which

Peer Routing Rules are most commonly used and the percentage of times that messages were successfully (or unsuccessfully) routed using the Route List.

RxPrtSelected

Measurement ID
10079

Measurement Group
Peer Routing Rules

Measurement Type
Simple

Measurement Dimension
Arrayed (PRT ID)

Description
Number of times that a peer routing rule from PRT-X was selected for routing a Request message.

Collection Interval
5 min

Peg Condition
When the **DRL** selects a peer routing rule from PRT-X for routing a message.

Measurement Scope
Site

Recovery

1. No action required.

RxRuleDuplicatePriority

Measurement ID
10083

Measurement Group
Peer Routing Rules

Measurement Type
Simple

Measurement Dimension
Arrayed (by Peer Routing Rule ID)

Description
The number of times that the Peer Routing Rule was selected for routing a message but another Peer Routing Rule had the same priority and was ignored.

Collection Interval
5 min

Peg Condition
When the DSR searches the Peer Routing Rules and finds more than one highest priority Peer Routing Rule with the same priority that matches the search criteria. The measurement is associated with the Peer Routing Rule that is selected for routing.

Measurement Scope
Server Group

Recovery

1. If one or more MPs in a server site have failed, the traffic will be distributed between the remaining MPs in the server site. **MP** server status can be monitored from the **Status & Manage** > **Server** page.
2. The mis-configuration of Diameter peers may result in too much traffic being distributed to the MP. The ingress traffic rate of each **MP** can be monitored from the **Status & Manage** > **KPIs** page. Each **MP** in the server site should be receiving approximately the same ingress transaction per second.
3. There may be an insufficient number of MPs configured to handle the network traffic load. The ingress traffic rate of each **MP** can be monitored from the **Status & Manage** > **KPIs** page. If all MPs are in a congestion state then the offered load to the server site is exceeding its capacity.
4. A software defect may exist resulting in PDU buffers not being deallocated to the pool. This alarm should not normally occur when no other congestion alarms are asserted. The alarm log should be examined using the **Alarms & Events** page.
5. If the problem persists, it is recommended to contact My Oracle Support (MOS).

RxRuleFwdFailActionSendAns

Measurement ID
10082

Measurement Group
Peer Routing Rules

Measurement Type
Simple

Measurement Dimension
Arrayed (by Peer Routing Rule ID)

Description
The number of times that the Peer Routing Rule was selected for routing a Request message and the message was not successfully routed because the Peer Routing Rule's action is Send Answer.

Collection Interval
5 min

Peg Condition
When the DSR selects a Peer Routing Rule to route a Request message and the Peer Routing Rule's action is Send Answer.

Measurement Scope
Server Group

Recovery

1. No action required.

RxRuleFwdFailAll

Measurement ID
10081

Measurement Group
Peer Routing Rules

Measurement Type
Simple

Measurement Dimension
Arrayed (by Peer Routing Rule ID)

Description
The number of times that the Peer Routing Rule was selected for routing a Request message and the message was not successfully routed for any reason other than "Send Answer" and "Abandon with No Answer".

Collection Interval
5 min

Peg Condition
When the DSR selects a Peer Routing Rule to route a Request message and one of the following conditions are met:

1. The Peer Routing Rule's action is Send Answer.
2. The Route List associated with the Peer Routing Rule has an Operational Status of Unavailable.
3. The DSR attempts to route the call but exhausts all routes associated with the Route List and sends an Answer response 3002 (DIAMETER_UNABLE_TO_DELIVER) .

The Route List measurement is associated with the Route List selected for routing.

Measurement Scope
Site

Recovery

1. If a Peer Routing Rule has been configured with the action Send Answer, then every time this Peer Routing Rule is selected for routing a message, this measurement will be incremented. A Peer Routing Rule's action can be viewed using the **Diameter** > **Configuration** > **Peer Routing Rules** page.
2. If a Peer Routing Rule has been configured with the action Route to Peer, then every time this Peer Routing Rule is selected for routing a message, the Route List associated with this Peer Routing Rule will be used for routing the message. The

Peer Routing Rule's Route List can be viewed using the **Diameter** > **Configuration** > **Peer Routing Rules** page.

RxRuleSelected

Measurement ID
10080

Measurement Group
Peer Routing Rules

Measurement Type
Simple

Measurement Dimension
Arrayed (by Peer Routing Rule ID)

Description
The number of times that the Peer Routing Rule was selected for routing a Request message.

Collection Interval
5 min

Peg Condition
When the DSR selects a Peer Routing Rule for routing a message.

Measurement Scope
Server Group

Recovery

1. No action required.

TxMsgPrtMarkedForCpy

Measurement ID
14013

Measurement Group
Peer Routing Rules

Measurement Type
Simple

Measurement Dimension
Arrayed (by Peer Routing Rule ID)

Description
The number of Request messages set to a valid MCCS and marked for Message Copy

Collection Interval
5 min

Peg Condition
Each time DRL selects a peer routing rule for routing a Request message, the rule action is set to "Route to Peer" and a MCCS is assigned to the peer routing rule.

Measurement Scope

Recovery

1. No action required.

Provisioning Interface measurements

The provisioning Interface measurement group is a set of measurements associated with the usage of provisioning rules. These measurements allow the user to determine which provisioning rules are most commonly used and the percentage of times messages were successfully (or unsuccessfully) routed.

Table 4-6 Application Routing Rule Measurements

Measurement Tag	Description	Collection Interval
ProvConnectsAttempted	The total number of client initiated connect attempts to establish a connection with the server.	5 min
ProvConnectsAccepted	The total number of client initiated connect attempts that have been accepted.	5 min
ProvConnectsDenied	The total number of client initiated connect attempts that have been denied due to clients not running on an authorized server, maximum number of allowed connections already established, or the provisioning interface is disabled.	5 min
ProvConnectsFailed	The total number of client initiated connect attempts that failed due to errors during initialization.	5 min
ProvConnectionIdleTimeouts	The total number of connections that have timed out and terminated due to idleness.	5 min
ProvMsgsReceived	The total number of provisioning messages that have been received from all sources (except import files).	5 min
ProvMsgsSuccessful	The total number of provisioning messages that have been successfully processed and a success response sent to the requestor.	5 min
ProvMsgsFailed	The total number of provisioning messages that have failed to be processed due to errors and a failure response sent to the requestor.	5 min
ProvMsgsSent	The total number of provisioning messages for which a response has been sent to the requestor.	5 min

Table 4-6 (Cont.) Application Routing Rule Measurements

Measurement Tag	Description	Collection Interval
ProvMsgsDiscarded	The total number of provisioning messages that have been discarded (instead of sending a reply to the requestor) due to the connection being shutdown, server being shutdown, server's role switching from active to standby, or transaction not becoming durable within the allowed amount of time.	5 min
ProvMsgsImported	The total number of provisioning messages that have been received from a file import operation.	5 min
ProvTxnCommitted	The total number of transactions that have been successfully committed to the database (memory and on disk) on the active server of the primary SDS site.	5 min
ProvTxnWriteMutexTimeouts	The total number of write transactions that have failed to be processed due to timing out while waiting to acquire the write transaction mutex.	5 min
ProvTxnFailed	The total number of transactions that have failed to be started, committed, or aborted due to errors.	5 min
ProvTxnAborted	The total number of transactions that have been successfully aborted.	5 min
ProvTxnTotal	The total number of transactions that have been attempted. It is the sum of ProvTxnCommitted, ProvTxnTimeouts, ProvTxnAborted, and ProvTxnFailed counters.	5 min
ProvTxnDurabilityTimeouts	The total number of committed, non-durable transaction that have failed to become durable within the amount of time specified by Transaction Durability Timeout.	5 min
ProvRelayMsgsSent	The total number of relayed provisioning messages sent to the remote system.	5 min
ProvRelayMsgsSuccessful	The total number of relayed provisioning messages that have been successfully processed on the remote system.	5 min
ProvRelayMsgsFailed	The total number of relayed provisioning messages that have failed to be processed due to errors on the remote system.	5 min
ProvImportsSuccessful	The number of files imported successfully.	5 min
ProvImportsFailed	The number of files that failed to be imported due to errors.	5 min

Table 4-6 (Cont.) Application Routing Rule Measurements

Measurement Tag	Description	Collection Interval
ProvExportsSuccessful	The number of successful file export requests.	5 min
ProvExportsFailed	The number of file export requests that failed due to errors.	5 min
ProvDnSplitCreated	Number of MSISDN records successfully created by a Split Activation starting its PDP.	5 min
ProvDnSplitRemoved	Number of MSISDN records successfully removed by a Split Completing its PDP.	5 min
ProvNpaSplitStarted	Number of NPA split records successfully starting a PDP.	5 min
ProvNpaSplitCompleted	Number of NPA split records successfully completing a PDP.	5 min
ProvRemoteAuditMsgsSent	Number of IMSI and MSISDN records audited.	5 min
ProvRelayTimeLag	Time in seconds between timestamps of last record PdbRelay processed and latest entry in the Command Log.	5 min
ProvDbException	Number of DB Exception errors.	5 min
ProvRoutingEntityPeak	Peak value calculated by adding count of following Routing entities. • IMSI • MSISDN • NAI User • Wildcard NAI User Prefix • IMSI Prefix • MSISDN Prefix **Note:** While fetching the measurement report for this group from the OAM GUI/MMI, the interval should always be 5 minutes and not greater than that.	5 min
RemoteAuditStarted	Number of started remote audit requests.	5 min
RemoteAuditCompleted	Number of successfully completed remote audit requests.	5 min

ProvConnectsAttempted

Measurement ID

Measurement Group
Provisioning Rules

Measurement Type
Simple

Description
The total number of client initiated connect attempts to establish a connection with the server.

Collection Interval
5 min

Peg Condition

Measurement Scope
PROV Group

Recovery

1. No action required.

ProvConnectsAccepted

Measurement ID

Measurement Group
Provisioning Rules

Measurement Type
Simple

Description
The total number of client initiated connect attempts that have been accepted.

Collection Interval
5 min

Peg Condition

Measurement Scope
PROV Group

Recovery

1. No action required.

ProvConnectsDenied

Measurement ID

Measurement Group
Provisioning Rules

Measurement Type
Simple

Description
The total number of client initiated connect attempts that have been denied due to clients not running on an authorized server, maximum number of allowed connections already established, or the provisioning interface is disabled.

Collection Interval
5 min

Peg Condition

Measurement Scope
PROV Group

Recovery

1. No action required.

ProvConnectsFailed

Measurement ID

Measurement Group
Provisioning Rules

Measurement Type
Simple

Description
The total number of client initiated connect attempts that failed due to errors during initialization.

Collection Interval
5 min

Peg Condition

Measurement Scope
PROV Group

Recovery

1. No action required.

ProvConnectionIdleTimeouts

Measurement ID

Measurement Group
Provisioning Rules

Measurement Type
Simple

Description
Total number of connections that have timed out and terminated due to idleness.

Collection Interval
5 min

Peg Condition

Measurement Scope
PROV Group

Recovery

1. No action required.

ProvMsgsReceived

Measurement ID

Measurement Group
Provisioning Rules

Measurement Type
Simple

Description
The total number of PROVISIONING messages that have been received from all sources (except import files).

Collection Interval
5 min

Peg Condition

Measurement Scope
PROV Group

Recovery

1. No action required.

ProvMsgsSuccessful

Measurement ID

Measurement Group
Provisioning Rules

Measurement Type
Simple

Description
The total number of PROVISIONING messages that have been successfully processed and a success response sent to the requestor.

Collection Interval
5 min

Peg Condition

Measurement Scope
PROV Group

Recovery

1. No action required.

ProvMsgsFailed

Measurement ID

Measurement Group
Provisioning Rules

Measurement Type
Simple

Description
The total number of PROVISIONING messages that have failed to process due to errors and a failure response sent to the requestor.

Collection Interval
5 min

Peg Condition

Measurement Scope
PROV Group

Recovery

1. No action required.

ProvMsgsSent

Measurement ID

Measurement Group
Provisioning Rules

Measurement Type
Simple

Description
The total number of PROVISIONING messages that have been sent and a response sent to the requestor.

Collection Interval
5 min

Peg Condition

Measurement Scope
PROV Group

Recovery

1. No action required.

ProvMsgsDiscarded

Measurement ID

Measurement Group
Provisioning Rules

Measurement Type
Simple

Description
The total number of PROVISIONING messages that have been discarded (instead of sending a reply to the requestor) due to the connection being shutdown, server being shutdown, server's role switching from active to standby, or transaction not becoming durable within the allowed amount of time.

Collection Interval
5 min

Peg Condition

Measurement Scope
PROV Group

Recovery

1. No action required.

ProvMsgsImported

Measurement ID

Measurement Group
Provisioning Rules

Measurement Type
Simple

Description
The total number of PROVISIONING messages that have been received from a file import operation.

Collection Interval
5 min

Peg Condition

Measurement Scope
PROV Group

Recovery

1. No action required.

ProvTxnCommitted

Measurement ID

Measurement Group
Provisioning Rules

Measurement Type
Simple

Description
The total number of transactions that have been successfully committed to the database (memory and on disk) on the active server of the primary SDS site.

Collection Interval
5 min

Peg Condition

Measurement Scope
PROV Group

Recovery

1. No action required.

ProvTxnWriteMutexTimeouts

Measurement ID

Measurement Group
Provisioning Rules

Measurement Type
Simple

Description
The total number of write transactions that have failed to be processed due to timing out while waiting to acquire the write transaction mutex.

Collection Interval
5 min

Peg Condition

Measurement Scope
PROV Group

Recovery

1. No action required.

ProvTxnFailed

Measurement Group: Provisioning Rules

Measurement Type: Simple

Description: The total number of transactions that have failed to be started, committed, or aborted due to errors.

Collection Interval: 5 min

Peg Condition:

Measurement Scope: PROV Group

Recovery:

1. No action required.

ProvTxnAborted

Measurement ID

Measurement Group
Provisioning Rules

Measurement Type
Simple

Description
The total number of transactions that have been successfully aborted.

Collection Interval
5 min

Peg Condition

Measurement Scope
PROV Group

Recovery

1. No action required.

ProvTxnTotal

Measurement ID

Measurement Group
Provisioning Rules

Measurement Type
Simple

Description
The total number of transactions that have been attempted. It is the sum of ProvTxnCommitted, ProvTxnTimeouts, ProvTxnAborted, and ProvTxnFailed counters.

Collection Interval
5 min

Peg Condition

Measurement Scope
PROV Group

Recovery

1. No action required.

ProvTxnDurabilityTimeouts

Measurement ID

Measurement Group
Provisioning Rules

Measurement Type
Simple

Description
The total number of committed, non-durable transaction that have failed to become durable within the amount of time specified by Transaction Durability Timeout.

Collection Interval
5 min

Peg Condition

Measurement Scope
PROV Group

Recovery

1. No action required.

ProvRelayMsgsSent

Measurement ID

Measurement Group
Provisioning Rules

Measurement Type
Simple

Description
The total number of relayed PROVISIONING messages sent to the remote system.

Collection Interval
5 min

Peg Condition

Measurement Scope
PROV Group

Recovery

1. No action required.

ProvRelayMsgsSuccessful

Measurement ID

Measurement Group
Provisioning Rules

Measurement Type
Simple

Description
The total number of relayed PROVISIONING messages that have been successfully processed on the remote system.

Collection Interval
5 min

Peg Condition

Measurement Scope
PROV Group

Recovery

1. No action required.

ProvRelayMsgsFailed

Measurement ID

Measurement Group
Provisioning Rules

Measurement Type
Simple

Description
The total number of relayed PROVISIONING messages that have failed to be processed due to errors on the remote system.

Collection Interval
5 min

Peg Condition

Measurement Scope
PROV Group

Recovery

1. No action required.

ProvImportsSuccessful

Measurement ID

Measurement Group
Provisioning Rules

Measurement Type
Simple

Description
The number of files imported successfully.

Collection Interval
5 min

Peg Condition

Measurement Scope
PROV Group

Recovery

1. No action required.

ProvImportsFailed

Measurement ID

Measurement Group
Provisioning Rules

Measurement Type
Simple

Description
The number of files that failed to be imported due to errors.

Collection Interval
5 min

Peg Condition

Measurement Scope
PROV Group

Recovery

1. No action required.

ProvExportsSuccessful

Measurement ID

Measurement Group
Provisioning Rules

Measurement Type
Simple

Description
The number of successful CSV/XML file export requests.

Collection Interval
5 min

Peg Condition

Measurement Scope
PROV Group

Recovery

1. No action required.

ProvExportsFailed

Measurement ID

Measurement Group
Provisioning Rules

Measurement Type
Simple

Description
The number of CSV/XML file export requests that failed due to errors.

Collection Interval
5 min

Peg Condition

Measurement Scope
PROV Group

Recovery

1. No action required.

ProvDnSplitCreated

Measurement ID

Measurement Group
Provisioning Rules

Measurement Type
Simple

Description
Number of DN records successfully created by an Active Split.

Collection Interval
5 min

Peg Condition

Measurement Scope
PROV Group

Recovery

1. No action required.

ProvDnSplitRemoved

Measurement ID

Measurement Group
Provisioning Rules

Measurement Type
Simple

Description
Number of DN records successfully removed by a Split Completing its PDP.

Collection Interval
5 min

Peg Condition

Measurement Scope
PROV Group

Recovery

1. No action required.

ProvNpaSplitStarted

Measurement ID

Measurement Group
Provisioning Rules

Measurement Type
Simple

Description
Number of NPA split records successfully starting a PDP.

Collection Interval
5 min

Peg Condition

Measurement Scope
PROV Group

Recovery

1. No action required.

ProvNpaSplitCompleted

Measurement ID

Measurement Group
Provisioning Rules

Measurement Type
Simple

Description
Number of NPA split records successfully completing a PDP.

Collection Interval
5 min

Peg Condition

Measurement Scope
PROV Group

Recovery

1. No action required.

ProvRemoteAuditMsgsSent

Measurement ID

Measurement Group
Provisioning Rules

Measurement Type
Simple

Description
Number of IMSI and MSISDN records audited.

Collection Interval
5 min

Peg Condition

Measurement Scope
PROV Group

Recovery

1. No action required.

ProvRelayTimeLag

Measurement ID

Measurement Group
Provisioning Rules

Measurement Type
Simple

Description
Time in seconds between timestamps of last record PdbRelay processed and latest entry in the Command Log.

Collection Interval
5 min

Peg Condition

Measurement Scope
PROV Group

Recovery

1. No action required.

ProvDbException

Measurement ID

Measurement Group
Provisioning Rules

Measurement Type
Simple

Description
Number of DB Exception errors.

Collection Interval
5 min

Peg Condition

Measurement Scope
PROV Group

Recovery

1. No action required.

ProvRoutingEntityPeak

Measurement ID

Measurement Group
Licensing

Measurement Type
Simple

Description
Peak value calculated by adding count of following Routing entities.

- IMSI
- MSISDN
- NAI User
- Wildcard NAI User Prefix
- IMSI Prefix
- MSISDN Prefix
- External Identifier

> **Note:** While fetching the measurement report for this group from the OAM GUI/MMI, the interval should always be 5 minutes and not greater than that.

Collection Interval
5 min

Peg Condition

Measurement Scope
Licensing Group

Recovery

1. No action required.

RemoteAuditCompleted

Measurement ID

Measurement Group
Provisioning Rules

Measurement Type
Simple

Description
Number of successfully completed remote audit requests.

Collection Interval
5 min

Peg Condition

Measurement Scope
PROV Group

Recovery

1. No action required.

RemoteAuditStarted

Measurement ID

Measurement Group
Provisioning Rules

Measurement Type
Simple

Description
Number of started remote audit requests.

Collection Interval
5 min

Peg Condition

Measurement Scope
PROV Group

Recovery

1. No action required.

RD-IWF Performance measurements

The RD-IWF measurement group contains measurements that provide information about the messages that were received and processed (converted) by the RD-IWF.

RxIwfReceivedAll

Measurement ID
16612

Measurement Group
RD-IWF

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of messages received by the RD-IWF.

Collection Interval
5 min

Peg Condition
This measurement is incremented each time the RD-IWF is invoked for any message.

Measurement Scope
Site

Recovery

1. No action required.

RxIwfReceivedDEA

Measurement ID
16608

Measurement Group
RD-IWF

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of **DEA** messages received by the RD-IWF.

Collection Interval
5 min

Peg Condition
This measurement is incremented each time the RD-IWF is invoked for the **DEA**.

Measurement Scope
Site

Recovery

1. No action required.

RxIwfReceivedRadiusAccessReq

Measurement ID
16606

Measurement Group
RD-IWF

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of **DER**s with embedded RADIUS Access-Request messages received by the RD-IWF.

Collection Interval
5 min

Peg Condition
This measurement is incremented each time the RD-IWF is invoked for the **DER** with the embedded RADIUS Access-Request message.

Measurement Scope
Site

Recovery

1. No action required.

TxIwfConvertedDER

Measurement ID
16607

Measurement Group
RD-IWF

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of **DER** messages successfully converted by the RD-IWF.

Collection Interval
5 min

Peg Condition
This measurement is incremented each time the **DER** message is successfully converted by the RD-IWF.

Measurement Scope
Site

Recovery

1. No action required.

TxIwfGenRadiusAccessAccept

Measurement ID
16610

Measurement Group
RD-IWF

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Access-Accept messages generated by the RD-IWF.

Collection Interval
5 min

Peg Condition
This measurement is incremented each time the Access-Accept message is generated by the RD-IWF based on the **DEA**.

Measurement Scope
Site

Recovery

1. No action required.

TxIwfGenRadiusAccessChallenge

Measurement ID
16609

Measurement Group
RD-IWF

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Access-Challenge messages generated by the RD-IWF.

Collection Interval
5 min

Peg Condition
This measurement is incremented each time the Access-Challenge message is generated by the RD-IWF based on the **DEA**.

Measurement Scope
Site

Recovery

1. No action required.

TxIwfGenRadiusAccessReject

Measurement ID
16611

Measurement Group
RD-IWF

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Access-Reject messages generated by the RD-IWF.

Collection Interval
5 min

Peg Condition
This measurement is incremented each time the Access-Reject message is generated by the RD-IWF based on the **DEA**.

Measurement Scope
Site

Recovery

1. No action required.

Route Group Exception measurements

The Route Group Exception measurement group contains measurements that provide information about exceptions and unexpected events that are specific to the Route Groups for which traffic measurement is enable..

RouteGrpSelectedNoEgressConnFound

Measurement ID
14484

Measurement Group
Route Group Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of times Route Group was selected for routing a Request message, but no egress connection candidates were found.

Collection Interval
5 min

Peg Condition
Each time a Route Group was selected for routing a Request message, but no egress connection candidates were found.

Measurement Scope
Site

Recovery

1. No action necessary.

RouteGrpAnswerTimeout

Measurement ID
14485

Measurement Group
Route Group Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of times that an Answer response was not received from a peer before the maximum allowed time.

Collection Interval
5 min

Peg Condition
Each time a Pending Answer Time expires.

Measurement Scope
Site

Recovery

1. No action necessary.

Route Group Performance measurements

The Route Group Performance measurement group contains measurements that provide information that is specific to a Route Group.

RouteGrpTxReqPri0

Measurement ID
14463

Measurement Group
Route Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of Request messages sent with Priority 0

Collection Interval
5 min

Peg Condition
Each time a Request message with message priority 0 is successfully routed to an egress Diameter Connection for a selected Route Group.

Measurement Scope
Site

Recovery

1. No action necessary.

RouteGrpTxReqPri1

Measurement ID
14464

Measurement Group
Route Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of Request messages sent with Priority 1

Collection Interval
5 min

Peg Condition
Each time a Request message with message priority 1 is successfully routed to an egress Diameter Connection for a selected Route Group.

Measurement Scope
Site

Recovery

1. No action necessary.

RouteGrpTxReqPri2

Measurement ID
14465

Measurement Group
Route Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of Request messages sent with Priority 2

Collection Interval
5 min

Peg Condition
Each time a Request message with message priority 2 is successfully routed to an egress Diameter Connection for a selected Route Group.

Measurement Scope
Site

Recovery

1. No action necessary.

RouteGrpTxReqPri3

Measurement ID
14466

Measurement Group
Route Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of Request messages sent with Priority 3

Collection Interval
5 min

Peg Condition
Each time a Request message with message priority 3 is successfully routed to an egress Diameter Connection for a selected Route Group.

Measurement Scope
Site

Recovery

1. No action necessary.

RouteGrpTxReqPri4

Measurement ID
14467

Measurement Group
Route Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of Request messages sent with Priority 4

Collection Interval
5 min

Peg Condition
Each time a Request message with message priority 4 is successfully routed to an egress Diameter Connection for a selected Route Group.

Measurement Scope
Site

Recovery

1. No action necessary.

RouteGrpTxReqPri5

Measurement ID
14468

Measurement Group
Route Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of Request messages sent with Priority 5

Collection Interval
5 min

Peg Condition
Each time a Request message with message priority 5 is successfully routed to an egress Diameter Connection for a selected Route Group.

Measurement Scope
Site

Recovery

1. No action necessary.

RouteGrpTxReqPri6

Measurement ID
14469

Measurement Group
Route Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of Request messages sent with Priority 6

Collection Interval
5 min

Peg Condition
Each time a Request message with message priority 6 is successfully routed to an egress Diameter Connection for a selected Route Group.

Measurement Scope
Site

Recovery

1. No action necessary.

RouteGrpTxReqPri7

Measurement ID
14470

Measurement Group
Route Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of Request messages sent with Priority 7

Collection Interval
5 min

Peg Condition
Each time a Request message with message priority 7 is successfully routed to an egress Diameter Connection for a selected Route Group.

Measurement Scope
Site

Recovery

1. No action necessary.

RouteGrpTxReqPri8

Measurement ID
14471

Measurement Group
Route Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of Request messages sent with Priority 8

Collection Interval
5 min

Peg Condition
Each time a Request message with message priority 8 is successfully routed to an egress Diameter Connection for a selected Route Group.

Measurement Scope
Site

Recovery

1. No action necessary.

RouteGrpTxReqPri9

Measurement ID
14472

Measurement Group
Route Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of Request messages sent with Priority 9

Collection Interval
5 min

Peg Condition
Each time a Request message with message priority 9 is successfully routed to an egress Diameter Connection for a selected Route Group.

Measurement Scope
Site

Recovery

1. No action necessary.

RouteGrpTxReqPri10

Measurement ID
14473

Measurement Group
Route Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of Request messages sent with Priority 10

Collection Interval
5 min

Peg Condition
Each time a Request message with message priority 10 is successfully routed to an egress Diameter Connection for a selected Route Group.

Measurement Scope
Site

Recovery

1. No action necessary.

RouteGrpTxReqPri11

Measurement ID
14474

Measurement Group
Route Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of Request messages sent with Priority 11

Collection Interval
5 min

Peg Condition
Each time a Request message with message priority 11 is successfully routed to an egress Diameter Connection for a selected Route Group.

Measurement Scope
Site

Recovery

1. No action necessary.

RouteGrpTxReqPri12

Measurement ID
14475

Measurement Group
Route Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of Request messages sent with Priority 12

Collection Interval
5 min

Peg Condition
Each time a Request message with message priority 12 is successfully routed to an egress Diameter Connection for a selected Route Group.

Measurement Scope
Site

Recovery

1. No action necessary.

RouteGrpTxReqPri13

Measurement ID
14476

Measurement Group
Route Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of Request messages sent with Priority 13

Collection Interval
5 min

Peg Condition
Each time a Request message with message priority 13 is successfully routed to an egress Diameter Connection for a selected Route Group.

Measurement Scope
Site

Recovery

1. No action necessary.

RouteGrpTxReqPri14

Measurement ID
14477

Measurement Group
Route Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of Request messages sent with Priority 14

Collection Interval
5 min

Peg Condition
Each time a Request message with message priority 14 is successfully routed to an egress Diameter Connection for a selected Route Group.

Measurement Scope
Site

Recovery

1. No action necessary.

RouteGrpTxReqPri15

Measurement ID
14478

Measurement Group
Route Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of Request messages sent with Priority 15

Collection Interval
5 min

Peg Condition
Each time a Request message with message priority 15 is successfully routed to an egress Diameter Connection for a selected Route Group.

Measurement Scope
Site

Recovery

1. No action necessary.

RouteGrpRxAns2xxx

Measurement ID
14479

Measurement Group
Route Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of Answer messages received with Result-Code 2xxx

Collection Interval
5 min

Peg Condition
Each time a valid Diameter Answer message is received from an upstream peer that has a pending transaction record in DRL and Result-Code AVP value is in the range of 2000-2999.

Measurement Scope
Site

Recovery

1. No action necessary.

RouteGrpRxAnsNon2xxx

Measurement ID
14480

Measurement Group
Route Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of Answer messages received with Result-Code non-2xxx

Collection Interval
5 min

Peg Condition
Each time a valid Diameter Answer message is received from an upstream peer that has a pending transaction record in DRL and Result-Code AVP value is not in the range of 2000-2999.

Measurement Scope
Site

Recovery

1. No action necessary.

RouteGrpSelectedPrimaryWithinRL

Measurement ID
14481

Measurement Group
Route Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of times Route Group was selected as the Primary Route Group within a Route List.

Collection Interval
5 min

Peg Condition
Each time a Route List is selected for routing a Request message and if the selected Route Group is the current Active Route Group.

Measurement Scope
Site

Recovery

1. No action necessary.

RouteGrpTmResponseTimeUpstream

Measurement ID
14483

Measurement Group
Route Group Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Average Upstream transaction response time

Collection Interval
5 min

Peg Condition
Time interval for each transaction starts when DRL successfully queues a Reqest message go to DCL/RCL.

Measurement Scope
Site

Recovery

1. No action necessary.

Route List measurements

The Route List measurement report is a set of measurements associated with the usage of Route Lists. These measurements will allow the user to determine which Route Lists are most commonly used and the percentage of times that messages were successfully (or unsuccessfully) routed using the Route List.

RxRouteListFailure

Measurement ID
10071

Measurement Group
Route List

Measurement Type
Simple

Measurement Dimension
Arrayed (by Route List ID)

Description
The number of times that a Route List was selected for routing a Request message and the DSR was unable to successfully route the message. There are several reasons why a message cannot be routed using a Route List:

- The Operational Status of the Route List is Unavailable
- The peers in the active Route Group do not support the Application ID in the Request message
- The Answer response timer is expiring for messages routed through the active Route Group
- Message loop detection is being detected for the peers in the active Route Group

Collection Interval
5 min

Peg Condition
When the DSR selects a Route List to route a Request message and either the Route List's Operational Status is Unavailable or the DSR attempts to route the call but exhausts all routesassociated with the Route List and sends an Answer response 3002 (DIAMETER_UNABLE_TO_DELIVER).

The Route List measurement is associated with the Route List selected for routing.

Measurement Scope
Server Group

Recovery

1. Check the Route List settings using the **Diameter** > **Configuration** > **Route Lists** page.
2. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

RxRouteListSelected

Measurement ID
10070

Measurement Group
Route List

Measurement Type
Simple

Measurement Dimension
Arrayed (by Route List ID)

Description
Number of times that Route List was selected for routing a Request message.

Collection Interval
5 min

Peg Condition
When the DSR selects a Route List for routing a message.

The Route List measurement is associated with the Route List selected for routing.

Measurement Scope
Server Group

Recovery

1. No action required.

RxRouteListUnavailable

Measurement ID
10072

Measurement Group
Route List

Measurement Type
Simple

Measurement Dimension
Arrayed (by Route List ID)

Description
The number of Request messages from a downstream peer that were rejected by a Local Node because the selected Route List had an Operational Status of Unavailable.

Collection Interval
5 min

Peg Condition
Request message from a downstream peer is rejected by a Local Node because the selected Route List had an Operational Status of Unavailable. This occurs when the Route List was selected via a Peer Routing Rule or implicit routing but its Operational Status was Unavailable.

Measurement Scope
Server Group

Recovery

1. The operation status of the Route List should be verified using the **Diameter** > **Maintenance** > **Route Lists** page.
2. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

TmRouteListOutage

Measurement ID
10073

Measurement Group
Route List

Measurement Type
Simple

Measurement Dimension
Arrayed (by Route List ID)

Time (in seconds) that the Route List was unavailable. This will appear as an aggregate value retrieved from all DA-MPs in a Network Element.Description

Collection Interval
5 min

Peg Condition
The time duration interval starts when one of the following conditions occurs:

1. A new collection interval for the measurement begins and Alarm 22053 - Route List Unavailable (refer to the *DSR Alarms and KPIs Reference* for details about this alarm) is asserted.
2. Alarm 22053 - Route List Unavailable (refer to the *DSR Alarms and KPIs Reference* for details about this alarm) is asserted.

The time duration interval stops when one of the following conditions occurs:

1. The current collection interval for the measurement ends and Alarm 22053 - Route List Unavailable (refer to the *DSR Alarms and KPIs Reference* for details about this alarm) is asserted.
2. Alarm 22053 - Route List Unavailable (refer to the *DSR Alarms and KPIs Reference* for details about this alarm) is cleared.

When a time duration interval completes, the time measured is added to the total measurement value.

Measurement Scope

Recovery

1. The operation status of the Route List should be verified using the **Diameter** > **Maintenance** > **Route Lists** page.
2. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

Routing Usage measurements

The Routing Usage measurement report allows you to evaluate how ingress Request messages are being routed internally within the **Relay Agent**.

RxRoutedImplicitRealm

Measurement ID
14076

Measurement Group
Routing Usage

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Request messages routed via Destination-Realm Implicit Routing.

Collection Interval
5 min

Peg Condition
The request message is routed using Destination-Realm Implicit Routing.

The "connection measurement" is associated with the Connection from whom the Request message was received.

Measurement Scope
Site

Recovery

1. No action required.

RxRoutedIntraMPAttempt

Measurement ID
10063

Measurement Group
Routing Usage

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of attempts to route an ingress request message via intra-MP routing.

Collection Interval
5 min

Peg Condition
When the DSR selects a transport connection controlled by the local MP and successfully queues the Request message on the local message queue. The connection measurement is associated with the connection from which the Request message was received.

Measurement Scope
Server Group

Recovery

1. No action required.

RxRoutedPeerDirect

Measurement ID
10061

Measurement Group
Routing Usage

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Request messages implicitly routed directly to a peer.

Collection Interval
5 min

Peg Condition
When the DSR does not find a Peer Routing Rule that matches message content, the Destination-Host AVP is present and its value matches a FQDN of a peer, and the peer is available for egress routing. The connection measurement is associated with the connection from which the Request message was received.

Measurement Scope
Server Group

Recovery

1. No action required.

RxRoutedPeerRouteList

Measurement ID
10062

Measurement Group
Routing Usage

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Request messages implicitly routed to a peer via its alternate implicit route.

Collection Interval
5 min

Peg Condition
When the DSR does not find a Peer Routing Rule that matches message content, the Destination-Host AVP is present and its value matches a FQDN of a peer, the peer is Unavailable for egress routing, and the user-defined alternate implicit route for the peer contains a valid Route List. The connection measurement is associated with the connection from which the Request message was received.

Measurement Scope
Server Group

Recovery

1. No action required.

RxRoutedPrt

Measurement ID
10060

Measurement Group
Routing Usage

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of Request messages routed using Peer Routing Rules.

Collection Interval
5 min

Peg Condition
When the DSR selects the highest priority Peer Routing Rule which matches message content. The connection measurement is associated with the connection from which the Request message was received.

Measurement Scope
Server Group

Recovery

1. No action required.

SBR Audit measurements

The Session Binding Repository (SBR) Audit measurement report contains measurements that provide performance information that is specific to the SBR Binding Database.

SbrAbortMigratedSessionsTargeted

Measurement ID
11455

Measurement Group
SBR Audit

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of binding-capable sessions scheduled for removal due to Migration Abort Cleanup.

Collection Interval
5 min

Peg Condition
This measurement is incremented during SBR audits of the ImsiApnAnchorKey and Session tables when:

- A binding database reconfiguration is in the Abort administrative state and the binding audit finds an IMSI record that was placed using the Creation Signature for the Target Resource Domain or SBR Database. The measurement is incremented once for each sessionRef in the record when the session reference is successfully placed in the Session Integrity Service queue for removal.
- A session database reconfiguration is in the Abort administrative state and the session audit finds a binding capable Session record that was placed using the Creation Signature for the Target Resource Domain or SBR Database. The measurement is incremented once when the session is successfully placed in the Session Integrity Service queue for removal.

Measurement Scope
Network

Recovery

1. This measurement is only used when the network operator chooses to abort an SBR Reconfiguration Plan. The count indicates the number of sessions that were requested to be removed as a result of the migration abort cleanup.

   For a Policy DRA binding or session database reconfiguration, migration abort cleanup causes each migrated binding capable session to be scheduled for removal using the Session Integrity capability of PCA. An RAR message including a Session-Release-Cause AVP will be sent for each migrated session. If the policy client responds by sending an RAA followed by a CCR-T, the session will be removed from the P-DRA. When the policy client reestablishes the session, the record will be created using the Creation Signature of the Initial Resource Domain or SBR Database thereby reversing or backing out the migration.

This measurement gives a count of the number of binding capable sessions affected by migration abort cleanup.

SbrAbortMigratedOcSessionsDeleted

Measurement ID
11461

Measurement Group
SBR Audit

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of binding independent sessions deleted due to Migration Abort Cleanup.

Collection Interval
5 min

Peg Condition
This measurement is incremented during SBR audits of the OcSession table. When a session database reconfiguration is in the Abort administrative state and the session audit finds a binding independent Session record that was placed using the Creation Signature for the Target Resource Domain or SBR Database. The measurement is incremented once when the binding independent session is successfully deleted.

Measurement Scope
Network

Recovery

1. This measurement is only used when the network operator chooses to abort an SBR Reconfiguration Plan. The count indicates the number of sessions that were removed as a result of the migration abort cleanup.

   For an Online Charging DRA session database reconfiguration, migration abort cleanup causes each migrated Gy/Ro session to be removed. This may cause signaling failures which should cause the CTF to reestablish the sessions and thereby cause them to be successfully moved to the Initial SBR Database or Resource Domain.

   This measurement gives a count of the number of binding independent sessions deleted by migration abort cleanup.

SbrAcceleratedMigrationSessionsTargeted

Measurement ID
11436

Measurement Group
SBR Audit

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of binding-capable sessions scheduled for removal due to Accelerated Migration.

Collection Interval
5 min

Peg Condition
This measurement is incremented during SBR audits of the ImsiApnAnchorKey and Session tables:

- A binding database reconfiguration is in the Accelerate administrative state and the binding audit finds an IMSI record that was placed using the Creation Signature for the Initial Resource Domain or SBR Database. The measurement is incremented once for each sessionRef in the record when the invokeSessionIntegrityService stack event is sent to request removal of the binding capable session.
- A session database reconfiguration is in the Accelerate administrative state and the session audit finds a binding -capable Session record that was placed using the Creation Signature for the Initial Resource Domain or SBR Database. The measurement is incremented once when the Session Integrity Service is invoked to remove the binding-capable session.

Measurement Scope
Network, Place Association, Resource Domain

Recovery

1. No action required.

SbrImsiAuditDbErr

Measurement ID
10853

Measurement Group
SBR Audit

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ImsiAnchorKey audit failures due to DB errors

Collection Interval
5 min

Peg Condition
This peg is updated whenever an ImsiAnchorKey audit fails due to a DB error.

Measurement Scope
All

Recovery

1. No action necessary.

SbrMsisdnAuditDbErr

Measurement ID
10855

Measurement Group
SBR Audit

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of MsidnAlternateKey audit failures due to DB error.

Collection Interval
5 min

Peg Condition
This peg is updated whenever a MsidnAlternateKey audit fails due to DB error.

Measurement Scope
All

Recovery

1. No action necessary.

SbrIpv4AuditDbErr

Measurement ID
10857

Measurement Group
SBR Audit

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Ipv4AlternateKey audit failures due to DB error.

Collection Interval
5 min

Peg Condition
This peg is updated whenever a Ipv4AlternateKey audit fails due to a DB error.

Measurement Scope
All

Recovery

1. No action necessary.

SbrIpv6AuditDbErr

Measurement ID
10859

Measurement Group
SBR Audit

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Ipv6AlternateKey audit failures due to DB error.

Collection Interval
5 min

Peg Condition
This peg is updated whenever a Ipv6AlternateKey audit fails due to a DB error.

Measurement Scope
All

Recovery

1. No action necessary.

SbrSessionRecsAudited

Measurement ID
10860

Measurement Group
SBR Audit

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Session Records audited during the reporting interval.

Collection Interval
5 min

Peg Condition
This peg is incremented by one each time a Session record is audited.

Measurement Scope
All

Recovery

1. No action necessary.

SbrExpiredSessionsFound

Measurement ID
10861

Measurement Group
SBR Audit

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Expired Session Records found by audit during the reporting interval.

Collection Interval
5 min

Peg Condition
This peg is incremented by one each time a Session record is audited and found to be stale.

Measurement Scope
All

Recovery

1. No action necessary.

SbrImsiRecsAudited

Measurement ID
10862

Measurement Group
SBR Audit

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of IMSI Anchor Key Records audited during the reporting interval.

Collection Interval
5 min

Peg Condition
This peg is incremented by one each time an ImsiAnchorKey record is audited.

Measurement Scope
All

Recovery

1. No action necessary.

SbrStaleSessionRemoved

Measurement ID
10865

Measurement Group
SBR Audit

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of stale session records that are terminated by audit.

Collection Interval
5 min

Peg Condition
Every time a session record is audited that finds a time out.

Measurement Scope
All

Recovery

1. No action necessary.

SbrIpv4RecsAudited

Measurement ID
10867

Measurement Group
SBR Audit

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of IPv4 Alternate Key Records audited during the reporting interval.

Collection Interval
5 min

Peg Condition
This peg is incremented by one each time an Ipv4AlternateKey record is audited.

Measurement Scope
All

Recovery

1. No action necessary.

SbrIpv4RecsRemoved

Measurement ID
10869

Measurement Group
SBR Audit

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of IPv4 Alternate Key Records removed by audit during the reporting interval.

Collection Interval
5 min

Peg Condition
This peg is incremented by one each time an Ipv4AlternateKey record is removed by audit.

Measurement Scope
All

Recovery

1. No action necessary.

SbrIpv6RecsAudited

Measurement ID
10876

Measurement Group
SBR Audit

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of IPv6 Alternate Key Records audited during the reporting interval.

Collection Interval
5 min

Peg Condition
This peg is incremented by one each time an Ipv6AlternateKey record is audited.

Measurement Scope
All

Recovery

1. No action necessary.

SbrSessionAuditDbErr

Measurement ID
10877

Measurement Group
SBR Audit

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Session audit failures due to DB error.

Collection Interval
5 min

Peg Condition
This peg is updated whenever a Session audit fails due to DB error.

Measurement Scope
All

Recovery

1. No action necessary.

SbrSessionRefAuditDbErr

Measurement ID
10878

Measurement Group
SBR Audit

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of SessionRef audit failures due to DB errors.

Collection Interval
5 min

Peg Condition
This peg is updated whenever a SessionRef audit fails due to DB error.

Measurement Scope
All

Recovery

1. No action necessary.

SbrImsiAuditCaErr

Measurement ID
10881

Measurement Group
SBR Audit

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ImsiAnchorKey audit failures due to **ComAgent** errors

Collection Interval
5 min

Peg Condition
This peg is updated whenever an ImsiAnchorKey audit fails due to ComAgent error.

Measurement Scope
All

Recovery

1. Check ComAgent Event 19832 - Communication Agent Reliable Transaction Failed (refer to the *DSR Alarms and KPIs Reference* for details for this event) and ComAgent measurements CAHSTxDscrdCongSR, CAHSTxDscrdUnkwnRsrc, and CAHSTxDscrdIntErrSR for detailed error causes.
2. If the problem persists, it is recommended to contact My Oracle Support (MOS) for assistance.

SbrMsisdnAuditCaErr

Measurement ID
10882

Measurement Group
SBR Audit

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of MsidnAlternateKey audit failures due to a ComAgent error condition when the pSBR sends findSessionRef stack event to the active pSBR for the sessionReference record.

Collection Interval
5 min

Peg Condition
This peg is updated when a MsidnAlternateKey audit fails due to a ComAgent error.

Measurement Scope
All

Recovery

1. Check ComAgent Event 19832 - Communication Agent Reliable Transaction Failed (refer to the *DSR Alarms and KPIs Reference* for details about this event) and ComAgent measurements CAHSTxDscrdCongSR, CAHSTxDscrdUnkwnRsrc, and CAHSTxDscrdIntErrSR for detailed error causes.
2. If the problem persists, it is recommended to contact My Oracle Support (MOS) for assistance.

SbrIpv4AuditCaErr

Measurement ID
10883

Measurement Group
SBR Audit

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Ipv4AlternateKey audit failures due to a ComAgent error condition when the pSBR sends findSessionRef stack event to the active pSBR for the sessionReference record.

Collection Interval
5 min

Peg Condition
This peg is updated whenever a Ipv4AlternateKey audit fails due to ComAgent error.

Measurement Scope
All

Recovery

1. Check ComAgent Event 19832 - Communication Agent Reliable Transaction Failed (refer to the *DSR Alarms and KPIs Reference* for details for this event) and ComAgent measurements CAHSTxDscrdCongSR, CAHSTxDscrdUnkwnRsrc, and CAHSTxDscrdIntErrSR for detailed error causes.
2. If the problem persists, it is recommended to contact My Oracle Support (MOS) for assistance.

SbrIpv6AuditCaErr

Measurement ID
10884

Measurement Group
SBR Audit

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Ipv6AlternateKey audit failures due to a ComAgent error condition when the pSBR sends findSessionRef stack event to the active pSBR for the sessionReference record.

Collection Interval
5 min

Peg Condition
This peg is updated whenever a Ipv6AlternateKey audit fails due to ComAgent error.

Measurement Scope
All

Recovery

1. Refer to ComAgent Event 19832 - Communication Agent Reliable Transaction Failed (refer to the *DSR Alarms and KPIs Reference* for details about this event) and ComAgent measurements CAHSTxDscrdCongSR, CAHSTxDscrdUnkwnRsrc, and CAHSTxDscrdIntErrSR for detailed error causes.
2. If the problem persists, it is recommended to contact My Oracle Support (MOS) for assistance.

SbrIpv6RecsRemoved

Measurement ID
11031

Measurement Group
SBR Audit

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of IPv6 Alternate Key Records removed by audit during the reporting interval.

Collection Interval
5 min

Peg Condition
This peg is incremented by one each time an Ipv6AlternateKey record is removed by audit.

Measurement Scope
All

Recovery

1. No action necessary.

SbrMsisdnRecsAudited

Measurement ID
10896

Measurement Group
SBR Audit

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of MSISDN Alternate Key Records audited during the reporting interval.

Collection Interval
5 min

Peg Condition
This peg is incremented by one each time an MsisdnAlternateKey record is audited.

Measurement Scope
All

Recovery

1. No action necessary.

SbrMsisdnRecsRemoved

Measurement ID
10897

Measurement Group
SBR Audit

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of MSISDN Alternate Key Records removed by audit during the reporting interval.

Collection Interval
5 min

Peg Condition
This peg is incremented by one each time an MsisdnAlternateKey record is removed by audit.

Measurement Scope
All

Recovery

1. No action necessary.

SbrImsiRecsRemoved

Measurement ID
10898

Measurement Group
SBR Audit

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of IMSI Anchor Key Records removed by audit during the reporting interval.

Collection Interval
5 min

Peg Condition
This peg is incremented by one each time an ImsiAnchorKey record is removed by audit.

Measurement Scope
All

Recovery

1. No action necessary.

SbrImsiSrRemovedByAudit

Measurement ID
11354

Measurement Group
SBR Audit

Measurement Type
Simple

Measurement Dimension
Single

Description
A count of the number of IMSI binding sessionRefs removed by the binding audit.

Collection Interval
5 min

Peg Condition
Each time the binding audit decides to remove an IMSI binding sessionRef due the following conditions:

- PCRF Pooling is Enabled AND
  - The binding sessionRef has been in the database for at least 30 seconds AND
  - The binding sessionRef has no corresponding session in the session database

Measurement Scope
Network Element, Server Group, Resource Domain, Place, Place Association

Recovery

1. This measurement gives an indication of the number of IMSI bindings that for some reason were not removed when the associated Diameter session either failed or was terminated via signaling. This unexpected condition could occur if binding pSBR congestion load shedding prevented removal of the sessionRef from the binding record.
2. It is recommended to contact My Oracle Support (MOS).

SbrMsisdnSrRemovedByAudit

Measurement ID
11357

Measurement Group
SBR Audit

Measurement Type
Simple

Measurement Dimension
Single

Description
A count of the number of MSISDN binding sessionRefs removed by the binding audit.

Collection Interval
5 min

Peg Condition
Each time the binding audit decides to remove an MSISDN sessionRef because the binding sessionRef has no corresponding session in the session database.

Measurement Scope
Network Element, Server Group, Resource Domain, Place, Place Association

Recovery

1. This measurement gives an indication of the number of MSISDN bindings that for some reason were not removed when the associated Diameter session either failed or was terminated via signaling. This unexpected condition could occur if binding pSBR congestion load shedding prevented removal of the sessionRef from the binding record.
2. It is recommended to contact My Oracle Support (MOS).

SbrOcSessionsAudited

Measurement ID
11392

Measurement Group
SBR Audit

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Online Charging sessions audited.

Collection Interval
5 min

Peg Condition
Each time an Online Charging session record is audited.

Measurement Scope
All

Recovery

1. No action necessary.

SbrOcSessionsRemovedByAudit

Measurement ID
11394

Measurement Group
SBR Audit

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Online Charging sessions that were removed by an audit.

Collection Interval
5 min

Peg Condition
Each time an Online Charging session is removed by an audit because it was considered to be stale (i.e., session's age exceeds the configured Stale Session Timeout value).

Measurement Scope
All

Recovery

1. This measurement represents a condition in which Online Charging sessions which have not seen any activity for a duration exceeding the configured Stale Session Timeout value are deleted by an audit. Online Charging session's last touch timestamp is updated for each time it is access for routing Credit-Control-Request messages with CC-Request-Type AVP set to UPDATE_REQUEST (CCR-U) and Re-Auth-Request (RAR) messages.
2. Stale Session Timeout values are configurable on a per APN basis. Verify that the Stale Session Timeout values are properly configured by selecting **Main Menu** > **Policy and Charging** > **Configuration** > **Access Point Names** on the NOAMP GUI.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

SbrAcceleratedMigrationSessionsTargeted

Measurement ID
11436

Measurement Group
SBR Audit

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of binding capable sessions scheduled for removal due to Accelerated Migration.

Collection Interval
5 min

Peg Condition
This measurement is incremented during SBR audits of the ImsiApnAnchorKey and Session tables as follows:

- A binding database reconfiguration is in the Accelerate administrative state and the binding audit finds an IMSI record that was placed using the Creation Signature for the Initial Resource Domain or SBR Database. The measurement is incremented once for each sessionRef in the record when the invokeSessionIntegrityService stack event is sent to request removal of the binding capable session.
- A session database reconfiguration is in the Accelerate administrative state and the session audit finds a binding capable Session record that was placed using the Creation Signature for the Initial Resource Domain or SBR Database. The measurement is incremented once when the Session Integrity Service is invoked to remove the binding capable session.

Measurement Scope
Network, Place Association, Resource Domain

Recovery

1. This measurement is only used when the network operator chooses to accelerate an SBR Reconfiguration Plan. The count indicates the number of sessions that were removed or requested to be removed from a Policy DRA binding or session database or an Online Charging DRA session database as a result of the accelerated migration.

   For a Policy DRA binding or session database reconfiguration, accelerated migration causes each non-migrated binding capable session to be scheduled for removal using the Session Integrity capability of PCA. An RAR message including a Session-Release-Cause AVP will be sent for each non-migrated session. If the policy client responds by sending an RAA followed by a CCR-T, the session will be removed from the P-DRA. When the policy client reestablishes the session, the record will be successfully migrated.

   For an Online Charging DRA session database reconfiguration, accelerated migration causes each non-migrated Gy/Ro session to be removed, possibly resulting in signaling failures which should cause the CTF to reestablish the sessions and thereby cause them to be successfully migrated.

TxSbrAuditSEReqSent

Measurement ID
11437

Measurement Group
SBR Audit

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Binding Audit stack events sent to Session servers.

Collection Interval
5 min

Peg Condition
This measurement is incremented during SBR audits of the ImsiApnAnchorKey, MsisdnApnAlternateKey, Ipv4AlternateKeyV2, Ipv6AlternateKeyV2 tables each time a FindSessionRef stack event is sent for a session reference in the binding table being audited to the corresponding session SBR server.

Measurement Scope
Network, Place Association, Resource Domain

Recovery

1. No action required. This measurement is informational only.

TxSbrAuditSEReqSentRateAvg

Measurement ID
11438

Measurement Group
SBR Audit

Measurement Type
Average

Measurement Dimension
Single

Description
The average number of Binding Audit stack events sent per second to Session servers in the selected time interval.

Collection Interval
5 min

Peg Condition
This measurement accumulates the average rate (per second) of FindSessionRef stack events sent for session references in binding tables being audited.

Measurement Scope
Network, Place Association, Resource Domain

Recovery

1. No action required. This measurement is informational only.

TxSbrAuditSEReqSentRatePeak

Measurement ID
11439

Measurement Group
SBR Audit

Measurement Type
Max

Measurement Dimension
Single

Description
The maximum number of Binding Audit stack events sent per second to Session servers in the selected time interval.

Collection Interval
5 min

Peg Condition
This measurement accumulates the peak rate (per second) of FindSessionRef stack events sent for session references in binding tables being audited.

Measurement Scope
Network, Place Association, Resource Domain

Recovery

1. No action required. This measurement is informational only.

SBR Binding Performance measurements

The SBR Binding Performance measurement report contains measurements that provide performance information that is specific to the SBR Binding Database.

MaxSessPerApnExceeded

Measurement ID
11456

Measurement Group
SBR Binding Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (per APN)

Description
The number of times the maximum allowed bound session limit per APN is exceeded for a given APN.

Collection Interval
5 min

Peg Condition
This measurement is incremented by one each time the maximum allowed binding-capable session limit per APN is exceeded for a given APN:

Note: Session exceeded treatment is not needed while pegging this measurement. Determine the appropriate treatment (reject or route) based on the configuration. If treatment is changed in the middle of a measurement, it does not need to be considered.

Note: This measurement takes precedence over MaxSessionPerImsiExceeded when max sessions per APN is configured to 10.

Measurement Scope
Network

Recovery

1. This measurement gives indication that the maximum allowed session per IMSI per APN limit was exceeded. Verify that the maximum allowed sessions per IMSI value for this APN is set to the expected maximum number of binding capable sessions that a given subscriber should have for this APN. If the value is correct, no further action is necessary.

SbrNewBindingsCreated

Measurement ID
10835

Measurement Group
SBR Binding Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of new bindings created.

Collection Interval
5 min

Peg Condition
This peg is updated whenever a new binding is created.

Measurement Scope
Place Association

Recovery

1. No action necessary.

SbrUpdatedBindings

Measurement ID
10836

Measurement Group
SBR Binding Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of existing bindings updated but not deleted, i.e. the Session Reference removed is not the last one

Collection Interval
5 min

Peg Condition
This peg is updated whenever an existing binding is updated.

Measurement Scope
Place Association

Recovery

1. No action necessary.

SbrBindTermByAscSess

Measurement ID
10837

Measurement Group
SBR Binding Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number bindings (final) terminated due to termination of all associated sessions.

Collection Interval
5 min

Peg Condition
This peg is updated whenever a binding is terminated due to termination of all associated sessions.

Measurement Scope
Place Association

Recovery

1. No action necessary.

SbrAltKeyCreated

Measurement ID
10838

Measurement Group
SBR Binding Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of alternate key records created.

Collection Interval
5 min

Peg Condition
This peg is updated whenever an alternate key record is created.

Measurement Scope
Place Association

Recovery

1. No action necessary.

SbrAltKeyDel

Measurement ID
10839

Measurement Group
SBR Binding Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of alternate key records removed.

Collection Interval
5 min

Peg Condition
This peg is updated whenever an alternate key record is deleted.

Measurement Scope
Place Association

Recovery

1. No action necessary.

SbrMaxBindingAgeAtTerm

Measurement ID
10840

Measurement Group
SBR Binding Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The maximum binding (final) age when binding is terminated due to termination of all associated sessions.

Collection Interval
5 min

Peg Condition
The time interval starts when the binding becomes final and stops when binding is terminated due to termination of all associated sessions.

Measurement Scope
Place Association

Recovery

1. No action necessary.

SbrAvgBindingAgeAtTerm

Measurement ID
10885

Measurement Group
SBR Binding Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average binding (final) age when binding is terminated due to termination of all associated sessions.

Collection Interval
5 min

Peg Condition
The time interval starts when the binding becomes final and stops when binding is terminated due to termination of all associated sessions.

Measurement Scope
All

Recovery

1. No action necessary.

SbrAvgBindingDbRead

Measurement ID
10886

Measurement Group
SBR Binding Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average rate of Binding database reads per second

Collection Interval
5 min

Peg Condition
It is calculated based on the total number of sampled binding database reads during the collection interval.

Measurement Scope
All

Recovery

1. No action necessary.

SbrMaxBindingDbRead

Measurement ID
10886

Measurement Group
SBR Binding Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The maximum rate of Binding database reads

Collection Interval
5 min

Peg Condition
At the end of each sample period associated with the average binding database reads, if the maximum value exceeds the current value of this measurement, then the measurement will be updated with the current sample periods value.

Measurement Scope
All

Recovery

1. No action necessary.

SbrAvgBindingDbWrite

Measurement ID
10888

Measurement Group
SBR Binding Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average rate of Binding database writes per second

Collection Interval
5 min

Peg Condition
It is calculated based on the total number of sampled binding database writes during the collection interval.

Measurement Scope
All

Recovery

1. No action necessary.

SbrMaxBindingDbWrite

Measurement ID
10889

Measurement Group
SBR Binding Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The maximum rate of Binding database writes

Collection Interval
5 min

Peg Condition
At the end of each sample period associated with the average binding database writes, if the maximum value exceeds the current value of this measurement, then the measurement will be updated with the current sample periods value.

Measurement Scope
All

Recovery

1. No action necessary.

SbrLockCollisions

Measurement ID
11302

Measurement Group
SBR Binding Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of collisions that occurred periodically while acquiring a lock

Collection Interval
5 min

Peg Condition
Each time a collision occurs while acquiring a lock

Measurement Scope
All

Recovery

1. No action necessary.

TmSbrProcessingTime

Measurement ID
11303

Measurement Group
SBR Binding Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The time (in microseconds) to process an event on SBR. The measurement is to measure the average time (ms) taken for SBR to process the stack event received from P-DRA and send back the stack event response to P-DRA.

Collection Interval
5 min

Peg Condition
Each time a stack event is received from P-DRA and is sent back the response to P-DRA

Measurement Scope
All

Recovery

1. No action necessary.

SbrEarlySlaveBindingsCreated

Measurement ID
11349

Measurement Group
SBR Binding Performance

Measurement Type
The number of binding capable session initiation requests that were treated as slaves of an existing early binding. This gives an indication of the frequency at which the early binding logic is being executed.

Measurement Dimension
Simple

Description
Single

Collection Interval
5 min

Peg Condition
Each time a binding capable session initiation request is received and all of the following conditions are true:

- The CCR-I matches an existing binding that is in the Early state (i.e. there exists an EarlyMaster sessionRef for the IMSI and APN, or IMSI and PCRF Pool)
- The existing EarlyMaster sessionRef has not been in existence for longer than the Maximum Early Binding Lifetime configured in **Policy DRA** > **Configuration** > **Network-Wide Options**
- PCRF Pooling is Enabled

Measurement Scope
Network Element, Server Group, Resource Domain, Place, Place Association

Recovery

1. This measurement gives an indication of the frequency at which the early binding mechanism is being exercised.
2. It is recommended to contact My Oracle Support (MOS).

SbrFinalBindingsFollowed

Measurement ID
11351

Measurement Group
SBR Binding Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of binding capable session initiation requests that matched a final binding and were routed using the bound PCRF.

Collection Interval
5 min

Peg Condition
Each time a binding capable session initiation request is received and all of the following conditions are true:

- The CCR-I matches an existing binding that is in the Final state (i.e. there exists a Final sessionRef for the IMSI and APN, or IMSI and PCRF Pool)
- PCRF Pooling is Enabled

Measurement Scope
Network Element, Server Group, Resource Domain, Place, Place Association

Recovery

1. This measurement gives an indication of the frequency at which binding capable session initiation requests are routed according to existing bindings.
2. It is recommended to contact My Oracle Support (MOS).

SbrSlavePollingContinue

Measurement ID
11355

Measurement Group
SBR Binding Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
A count of the number of early binding polling attempts for which the poller was instructed to continue polling.

Collection Interval
5 min

Peg Condition
Each time an Early Binding Slave session polls the Early Binding Master and all of the following conditions are true:

- The Early Binding Master sessionRef still exists in the binding database and is in the EarlyMaster state.
- The Early Binding Slave sessionRef still exists in the binding database

- The Early Binding Master sessionRef has not been in existence for longer than the Maximum Early Binding Lifetime
- PCRF Pooling is Enabled

Measurement Scope
Network Element, Server Group, Resource Domain, Place, Place Association

Recovery

1. This measurement gives an indication of the frequency at slave pollers are asked to continue polling. If this value is equal to or higher than the SbrEarlySlaveBindingsCreated, the Early Binding Polling Interval configured in **Policy DRA** > **Configuration** > **Network-Wide Options** may be set to a duration too short, causing unnecessary polling attempts. If this value is very low relative to the SbrEarlySlaveBindingsCreated, the Early Binding Polling Interval may be set to a duration too long, causing unnecessary latency for slave sessions.
2. It is recommended to contact My Oracle Support (MOS).

SbrSlavePollingRouteToPcrf

Measurement ID
11356

Measurement Group
SBR Binding Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
A count of the number of early binding polling attempts for which the poller was instructed to route the request to a bound PCRF.

Collection Interval
5 min

Peg Condition
Each time an Early Binding Slave session polls the Early Binding Master and all of the following conditions are true:

- The Early Binding Master sessionRef still exists in the binding database and is in the Final state.
- The Early Binding Slave sessionRef still exists in the binding database
- PCRF Pooling is Enabled

Measurement Scope
Network Element, Server Group, Resource Domain, Place, Place Association

Recovery

1. This measurement gives an indication of the Early Binding Slave sessions whose master sessionRefs became Final and were therefore routed using the bound PCRF. If this value is lower than the SbrEarlySlaveBindingsCreated value, check the SBR Binding Exception measurement report for measurement SbrSlavePollingFail.
2. It is recommended to contact My Oracle Support (MOS).

SbrPolicyBindingRecsAvg

Measurement ID
11374

Measurement Group
SBR Binding Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average number of active SBR Binding sessions

Collection Interval
5 min

Peg Condition
The average of all SBR Policy Binding Records KPI samples taken during the collection interval (refer to the *DSR Alarms and KPIs Reference* for details about this KPI).

Measurement Scope
All

Recovery

1. No action necessary.

SbrPolicyBindingRecsPeak

Measurement ID
11375

Measurement Group
SBR Binding Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The maximum number of active SBR Binding sessions

Collection Interval
5 min

Peg Condition
The maximum of all SBR Policy Binding Records KPI samples taken during the collection interval (refer to the *DSR Alarms and KPIs Reference* for details about this KPI).

Measurement Scope
All

Recovery

1. No action necessary.

EvSuspectBindingEventIgnored

Measurement ID
12140

Measurement Group
SBR Binding Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Suspect Binding events that were ignored because they arrived within the Ignore Interval.

Collection Interval
5 min

Peg Condition
Each time a Suspect Binding Removal event is received within the "Suspect Binding Removal Events Ignore Interval" from the last counted suspect binding removal event.

Measurement Scope
All

Recovery

1. Modify the "Suspect Binding Removal Events Ignore Interval" value in **Policy and Charging** > **Configuration** > **Policy DRA** > **Network-Wide Options** if the measurement becomes too large.

EvSuspectBindingEventCountReset

Measurement ID
12141

Measurement Group
SBR Binding Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of times a Suspect Binding event resets the Suspect Binding Count because it arrived after the Reset Interval.

Collection Interval
5 min

Peg Condition
Each time asuspect binding removal event is received that does not increment the Suspect Binding Removal Count, because the time interval between this event and the last counted suspect binding removal event is larger than the configured Suspect Binding Removal Events Reset Interval.

Measurement Scope
All

Recovery

1. Adjust the "Suspect Binding Removal Events Reset Interval" value in **Policy and Charging** > **Configuration** > **Policy DRA** > **Network-Wide Options** if necessary.

EvSuspectBindingRemoved

Measurement ID
12142

Measurement Group
SBR Binding Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Remove Immediately, Threshold Exceeded, Total)

Description
The number of times a Suspect Binding was removed by a Remove Immediately Suspect Binding Event or if a Suspect Binding Event Count exceeded the configured "Suspect Binding Removal Events Threshold" value.

Collection Interval
5 min

Peg Condition
Each time the binding SBR receives a request from DA-MP to "remove" a suspect binding immediately, or if the Suspect Binding Count for any SessionRef record exceeds the Suspect Binding Removal Events Threshold value.

Note: This measurement is pegged twice, once for any reason listed above, and once for "Total."

Measurement Scope
All

Recovery

1. Adjust the "Suspect Binding Removal Events Threshold" value in **Policy and Charging** > **Configuration** > **Policy DRA** > **Network-Wide Options** if an unusually large number of measurements occur in a very short time period.

SBR Binding Exception measurements

The SBR Binding Exception measurement report contains measurements that provide performance information that is specific to the SBR Binding Database.

InitReqRejectedTreatmentConfigToRoute

Measurement ID
11457

Measurement Group
SBR Binding Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of times a binding capable session initiation request is not routed, even though session exceeded treatment is configured to route.

Collection Interval
5 min

Peg Condition
This measurement is incremented by one each time a binding capable session initiation request is not routed, even though session exceeded treatment is configured to route. These are scenarios in which session initiation request is not routed when session exceeded treatment is configured to route:

- Maximum sessions per APN limit is not reached yet but not slots are available
- Maximum sessions per APN limit is reached but binding state is early.

- Maximum sessions per APN limit is reached but the lifetime of existing session to be replaced is less than the Maximum Early Binding Lifetime (configured in **Policy DRA** > **Network-Wide Options**)

Measurement Scope
Network

Recovery

1. This measurement gives indication that binding-capable session initiation request is not routed even though session exceeded treatment is configured to route. These are scenarios in which session initiation request is not routed when session exceeded treatment is configured to route:

   - Maximum sessions per APN limit is not reached yet but no slots are available
   - Maximum sessions per APN limit is reached but binding state is early
   - Maximum sessions per APN limit is reached but the lifetime of existing session to be replaced is less than the Maximum Early Binding Lifetime (configured in **Policy DRA** > **Network-Wide Options**)

   Each time this measurement is pegged, P-DRA generates:

   - Error answer message using the Policy SBR Error result code. The Error-Message AVP contains a three-digit code that indicates the specific reason for the failure
   - Event 22719 with the reason in additional information

MaxSessionPerImsiExceeded

Measurement ID
11459

Measurement Group
SBR Binding Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of times the maximum allowed session per IMSI limit is exceeded.

Collection Interval
5 min

Peg Condition
This measurement is incremented by one each time the maximum allowed binding-capable session limit per IMSI is exceeded

Measurement Scope
Network

Recovery

1. This measurement gives indication that the maximum allowed session per IMSI limit is exceeded. An IMSI is only allowed to have up to 10 concurrent binding-capable sessions, regardless of limits that may be set for the maximum number of sessions per APN. This measurement is pegged when no per APN limit has been exceeded, yet the IMSI has already used up all 10 of its bound sessions. Verify that the per APN session limits are configured appropriately. If the limits are configured appropriately, verify that the IMSI is not creating session for more than the expected number of APNs. Each time this measurement is pegged, P-DRA generates an error answer message using the Policy SBR Error result code and three-digit code 521.

MaxSessPerApnExceededSisInvocationFail

Measurement ID
11458

Measurement Group
SBR Binding Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of times a bound session was replaced due to Maximum Sessions Per IMSI being exceeded for an APN, but no session release RAR could be sent for the replaced session due to SIS queue full condition.

Collection Interval
5 min

Peg Condition
This measurement is incremented by one each time a bound session is replaced with a new session because the maximum session per APN limit is exceeded but SIS invocation failed because of the SIS queue being full.

Measurement Scope
Network

Recovery

1. When a new binding-capable session inititation request would exceed the per-APN session limit, P-DRA may attempt to replace an existing bound session. A bound session may be replaced if it exists for more than early binding lifetime and it is not in the "early" state (Early Master or Early Slave). When a bound session is replaced, P-DRA attempts to send a session release RAR to the session's PCEF to ensure that the PCEF and PCRF are both aware that the session is no longer valid. This measurement is pegged when the attempt to send the session release RAR has failed due to resource exhaustion in the P-DRA system. If this measurement is pegged and neither of these conditions are true, it is recommended to contact My Oracle Support (MOS) for further assistance.

- Connectivity has been lost with one or more PCRFs from a P-DRA site
- A binding database reconfiguration is in progress and has been accelerated

SbrCreateBindDbErr

Measurement ID
10845

Measurement Group
SBR Binding Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of errors creating a binding record.

Collection Interval
5 min

Peg Condition
This peg is updated whenever there is an error in creating a binding record.

Measurement Scope
All

Recovery

1. No action necessary.

SbrUpdateBindDbErr

Measurement ID
10846

Measurement Group
SBR Binding Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of errors updating a binding record.

Collection Interval
5 min

Peg Condition
This peg is updated whenever there is an error in updating a binding record.

Measurement Scope
All

Recovery

1. No action necessary.

SbrRemoveBindDbErr

Measurement ID
10847

Measurement Group
SBR Binding Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of errors removing a suspect binding record.

Collection Interval
5 min

Peg Condition
This peg is updated whenever there is an error in removing a suspect binding record.

Measurement Scope
All

Recovery

1. No action necessary.

SbrCreateAltKeyDbErr

Measurement ID
10848

Measurement Group
SBR Binding Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of errors creating an alternate key record.

Collection Interval
5 min

Peg Condition
This peg is updated whenever there is an error in creating an alternate key record.

Measurement Scope
All

Recovery

1. No action necessary.

SbrRemoveAltKeyDbErr

Measurement ID
10849

Measurement Group
SBR Binding Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of errors removing an alternate key record.

Collection Interval
5 min

Peg Condition
This peg is updated whenever there is an error in removing an alternate key record.

Measurement Scope
All

Recovery

1. No action necessary.

SbrFindBindDbErr

Measurement ID
10880

Measurement Group
SBR Binding Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of errors when encountered for finding a binding record.

Collection Interval
5 min

Peg Condition
This peg is updated whenever there is an error in finding a binding record.

Measurement Scope
All

Recovery

1. No action necessary.

SbrEarlyTooLongSrRemoved

Measurement ID
11350

Measurement Group
SBR Binding Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
A count of the number of sessionRefs found to be in the EarlyMaster or EarlySlave state for longer than the Maximum Early Binding Lifetime.

Collection Interval
5 min

Peg Condition
Each time sessionRef is discovered that has been in an early state (i.e. EarlyMaster or EarlySlave) for longer than the Maximum Early Binding Lifetime and the following conditions are true:

- PCRF Pooling is Enabled AND
  - A binding capable session initiation request is received that matches an existing binding and the binding has been in the EarlyMaster state for longer than the Maximum Early Binding Lifetime OR

- A binding capable session initiation request is received and no slots are available for new sessionRefs, but at least one sessionRef has been in the EarlySlave state for longer than the Maximum Early Binding Lifetime OR
- A slave session polls a master sessionRef that has been in the EarlyMaster state for longer than the Maximum Early Binding Lifetime

Measurement Scope
Network Element, Server Group, Resource Domain, Place, Place Association

Recovery

1. This measurement gives an indication of the frequency at which binding sessionRefs are discovered in an early state for longer than expected. This unexpected condition could occur if the Maximum Early Binding Lifetime value is configured to be nearly equal to or shorter than the Diameter transaction timer. It could also occur if the binding pSBR was in congestion and load shedding prevented the session from being transitioned from the early state to a final state. In either case the "stuck" sessionRef is removed, preventing it from disrupting further signaling.
2. It is recommended to contact My Oracle Support (MOS).

SbrSlavePollingFail

Measurement ID
11352

Measurement Group
SBR Binding Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of binding capable session initiation requests that were not routed to polling failures. This includes the following: slave sessionRef not found, master sessionRef, master sessionRef found, but existed for longer than the Maximum Early Binding Lifetime.

Collection Interval
5 min

Peg Condition
Each time an Early Binding Slave session polls the Early Binding master and the following conditions are met:

- PCRF Pooling is Enabled AND
  - The Early Binding Master sessionRef no longer exists in the binding database OR

- The Early Binding Slave sessionRef no longer exists in the binding database OR
- The Early Binding Master sessionRef exists in the binding database in the EarlyMaster state, but has been in existence for longer than the Maximum Early Binding Lifetime

Measurement Scope
Network Element, Server Group, Resource Domain, Place, Place Association

Recovery

1. This measurement gives an indication of the Early Binding Slave sessions whose polling attempts did NOT result in a final binding to route towards. Each time this measurement is pegged, P-DRA generates an error answer message using the Binding Found But Unable To Route Diameter result code. The Error-Message AVP contains a 3-digit code that indicates the specific reason for the failure.
2. It is recommended to contact My Oracle Support (MOS).

SbrSuspectSrRemoved

Measurement ID
11353

Measurement Group
SBR Binding Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
A count of the number of binding sessionRefs removed as a result of the Suspect Binding mechanism.

Collection Interval
5 min

Peg Condition
Each time a binding sessionRef is removed by the suspect binding mechanism (i.e., due to inaccessibility of a PCRF for more than 30 seconds while signaling attempts are being performed).

Measurement Scope
Network Element, Server Group, Resource Domain, Place, Place Association

Recovery

1. This measurement gives an indication of the number of binding sessionRefs that were automatically removed from the Policy DRA binding database as a result of continued inability to route binding capable session initiation requests to a given PCRF.

2. It is recommended to contact My Oracle Support (MOS).

SBR Session Performance measurements

The Session Binding Repository (SBR) Session Binding Performance measurement report contains measurements that provide performance information specific to the SBR Session Database.

PcaNgnPsSessionSbrDrop

Measurement ID
11465

Measurement Group
PCA NGN-PS Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of NGN-PS related stack events sent to an active Session SBR rejected.

Collection Interval
5 min

Peg Condition
This measurement is pegged each time an NGN-PS related stack event to be forwarded to an active session SBR is rejected due to ComAgent errors.

Measurement Scope
All

Recovery

1. Check measurements CAHSTxDscrdCongSR, CAHSTxDscrdUnkwnRsrc, CAHSTxDscrdIntErrSR, and event 19832 from the *Alarms and KPIs Reference* for detailed error causes.

SbrSessionsCreated

Measurement ID
10841

Measurement Group
SBR Session Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of new sessions created.

Collection Interval
5 min

Peg Condition
This peg is updated whenever a new session is created.

Measurement Scope
All

Recovery

1. No action necessary.

SbrSessionsRefresh

Measurement ID
10842

Measurement Group
SBR Session Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of existing sessions refreshed.

Collection Interval
5 min

Peg Condition
This peg is updated whenever an existing session is refreshed.

Measurement Scope
All

Recovery

1. No action necessary.

SbrSessionsDeleted

Measurement ID
10843

Measurement Group
SBR Session Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of sessions removed.

Collection Interval
5 min

Peg Condition
This peg is updated whenever a session is deleted.

Measurement Scope
All

Recovery

1. No action necessary.

SbrAvgSessionAgeTermPerAPN

Measurement ID
10863

Measurement Group
SBR Session Performance

Measurement Type
Average

Measurement Dimension
Arrayed (by APN ID)

Description
The average time interval (in hours) per APN between the time when a session record is created and the time when it is successfully terminated.

Collection Interval
5 min

Peg Condition
The time interval starts when a session record is created as a result of createSession stack event and stops when the session record is terminated successfully as a result of removeSession stack event

Measurement Scope
All

Recovery

1. No action necessary.

SbrMaxSessionAgeTermPerAPN

Measurement ID
10864

Measurement Group
SBR Session Performance

Measurement Type
Average

Measurement Dimension
Arrayed (by APN ID)

Description
The maximum time interval (in hours) per APN between the time when a session record is created and the time when it is successfully terminated.

Collection Interval
5 min

Peg Condition
The time interval starts when a session record is created as a result of createSession stack event and stops when the session record is terminated successfully as a result of removeSession stack event

Measurement Scope
All

Recovery

1. No action necessary.

SbrAvgSessionDbRead

Measurement ID
10890

Measurement Group
SBR Session Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average rate of Session database reads per second

Collection Interval
5 min

Peg Condition
It is calculated based on the total number of sampled session database reads during the collection interval.

Measurement Scope
All

Recovery

1. No action necessary.

SbrMaxSessionDbRead

Measurement ID
10891

Measurement Group
SBR Session Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The maximum rate of Session database reads

Collection Interval
5 min

Peg Condition
At the end of each sample period associated with the average session database reads, if the maximum value exceeds the current value of this measurement, then the measurement will be updated with the current sample periods value

Measurement Scope
All

Recovery

1. No action necessary.

SbrAvgSessionDbWrite

Measurement ID
10892

Measurement Group
SBR Session Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average rate of session database writes per second

Collection Interval
5 min

Peg Condition
It is calculated based on the total number of sampled session database writes during the collection interval.

Measurement Scope
All

Recovery

1. No action necessary.

SbrMaxSessionDbWrite

Measurement ID
10893

Measurement Group
SBR Session Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The maximum rate of session database writes

Collection Interval
5 min

Peg Condition
At the end of each sample period associated with the average session database writes, if the maximum value exceeds the current value of this measurement, then the measurement will be updated with the current sample periods value.

Measurement Scope
All

Recovery

1. No action necessary.

SbrPendingRarLockCollisions

Measurement ID
11304

Measurement Group
SBR Session Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of collisions occured periodically while acquiring a lock to update PendingRar table.

Collection Interval
5 min

Peg Condition
Each time a collision occurs while acquiring a lock to update PendingRar table.

Measurement Scope
All

Recovery

1. No action necessary.

SbrPolicySessionRecsAvg

Measurement ID
11372

Measurement Group
SBR Session Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average number of active SBR Policy sessions

Collection Interval
5 min

Peg Condition
The average of all SBR Policy Session Records KPI samples taken during the collection interval (refer to the *DSR Alarms and KPIs Reference* for details about this KPI).

Measurement Scope
All

Recovery

1. No action necessary.

SbrPolicySessionRecsPeak

Measurement ID
11373

Measurement Group
SBR Session Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The maximum number of active SBR Policy sessions.

Collection Interval
5 min

Peg Condition
The maximum of all SBR Policy Session Records KPI samples taken during the collection interval (refer to the *DSR Alarms and KPIs Reference* for details about this KPI).

Measurement Scope
All

Recovery

1. No action necessary.

SbrOcSessionsCreated

Measurement ID
11376

Measurement Group
SBR Session Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of new Online Charging sessions created.

Collection Interval
5 min

Peg Condition
Each time a new Online Charging session is successfully created.

Measurement Scope
All

Recovery

1. No action necessary.

SbrOcSessionsRefreshed

Measurement ID
11377

Measurement Group
SBR Session Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of new Online Charging sessions refreshed

Collection Interval
5 min

Peg Condition
Each time a new Online Charging session is successfully refreshed.

Measurement Scope
All

Recovery

1. No action necessary.

SbrOcSessionsRemoved

Measurement ID
11378

Measurement Group
SBR Session Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of new Online Charging sessions removed.

Collection Interval
5 min

Peg Condition
Each time a new Online Charging session is successfully removed.

Measurement Scope
All

Recovery

1. No action necessary.

SbrAvgOcSessionDbReads

Measurement ID
11380

Measurement Group
SBR Session Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average rate of Online Charging Session database reads per second.

Collection Interval
5 min

Peg Condition
The average of all the SBR Online Charging Session DB Read Rate KPI samples taken during the collection interval.

Measurement Scope
All

Recovery

1. No action necessary.

SbrMaxOcSessionDbReads

Measurement ID
11381

Measurement Group
SBR Session Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The maximum rate of Online Charging Session database reads per second.

Collection Interval
5 min

Peg Condition
The maximum of all the SBR Online Charging Session DB Read Rate KPI samples taken during the collection interval.

Measurement Scope
All

Recovery

1. No action necessary.

SbrAvgOcSessionDbWrites

Measurement ID
11383

Measurement Group
SBR Session Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average rate of Online Charging Session database writes per second.

Collection Interval
5 min

Peg Condition
The average of all the SBR Online Charging Session DB Write Rate KPI samples taken during the collection interval.

Measurement Scope
All

Recovery

1. No action necessary.

SbrMaxOcSessionDbWrites

Measurement ID
11384

Measurement Group
SBR Session Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The maximum rate of Online Charging Session database writes per second.

Collection Interval
5 min

Peg Condition
The maximum of all the SBR Online Charging Session DB Write Rate KPI samples taken during the collection interval.

Measurement Scope
All

Recovery

1. No action necessary.

SbrAvgOcSessionAgeTermPerApn

Measurement ID
11385

Measurement Group
SBR Session Performance

Measurement Type
Average

Measurement Dimension
Arrayed (by APN ID)

Description
The average time (in hours) per APN between the time when an Online Charging session is created and the time when it is successfully terminated.

Collection Interval
5 min

Peg Condition
The average time interval for each Online Charging session starts when a session record is created as a result of createOcSession stack event and stops when the session record is terminated successfully as a result of removeOcSession stack event.

Measurement Scope
All

Recovery

1. No action necessary.

SbrMaxOcSessionAgeTermPerApn

Measurement ID
11386

Measurement Group
SBR Session Performance

Measurement Type
Max

Measurement Dimension
Arrayed (by APN ID)

Description
The maximum time (in hours) per APN between the time when an Online Charging session is created and the time when it is successfully terminated.

Collection Interval
5 min

Peg Condition
The maximum time interval for each Online Charging session starts when a session record is created as a result of createOcSession stack event and stops when the session record is terminated successfully as a result of removeOcSession stack event.

Measurement Scope
All

Recovery

1. No action necessary.

SbrOcSessionRecsAvg

Measurement ID
11441

Measurement Group
SBR Session Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average number of active SBR Online Charging sessions

Collection Interval
5 min

Peg Condition
The average of all SBR Online Charging Session Records KPI samples taken during the collection interval (refer to the *DSR Alarms and KPIs Reference* for details about this KPI).

Measurement Scope
All

Recovery

1. No action necessary.

SbrOcSessionRecsPeak

Measurement ID
11442

Measurement Group
SBR Session Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The maximum number of active SBR Online Charging sessions

Collection Interval
5 min

Peg Condition
The maximum of all SBR Online Charging Session Records KPI samples taken during the collection interval (refer to the *DSR Alarms and KPIs Reference* for details about this KPI).

Measurement Scope
All

Recovery

1. No action necessary.

RxInvokeSisPerRarType

Measurement ID
12150

Measurement Group
SBR Session Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Query, Release NoSessionRef, Release NoSessionId, Release DupSessionRef, Release DuplicateSession, Release CreateSessionRefFail, Release CreateSessionFail, Release CreateIpv4AltKeyFail, Release CreateIpv6AltKeyFail, Release CreateMsisdnAltKeyFail, Release PcrfNotConfig, Release UpdateBindingFail, Release CreateSessionNotSent, Release CreateBindingNotSent, Release SuspectRuleImmediate Release SuspectRuleThreshold, and RAR Total)

Description
The number of times that the Session Integrity Service received a request to invoke the Session Integrity Service for each RAR type.

Collection Interval
5 min

Peg Condition
Each time a request is received to invoke the Session Integrity Service via invokeSessionIntegrityService stack event for each RAR type.

Note: There will be a separate array value for each type of release.

Note: This measurement is pegged twice, once for RAR types and once for "Total."

Measurement Scope
All

Recovery

1. No action required.

TxInvokeSisResultPerResultCode

Measurement ID
12151

Measurement Group
SBR Session Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Success, Missing SessionRef, SessionRef Not Found, Session Not Found, PolicyClientHost Not Found, Invalid RAR Type, Pending Query RAR Queue Full, Pending Release RAR Queue Full, Unexpected DB Error, and Total)

Description
The number of times that the Session Integrity Service was invoked per result type.

Collection Interval
5 min

Peg Condition
Each time the invokeSessionIntegrityServiceResult response is sent out. The array element corresponding to the given result will be pegged.

Note: This measurement is pegged twice, once for result type and once for "Total."

Measurement Scope
All

Recovery

1. Modify the "Query RAR Queue Capacity Per Session Server Group" or "Release RAR Queue Capacity Per Session Server Group" in **Policy and Charging** > **Configuration** > **Policy DRA** > **Network-Wide Options**.

SBR Session Exception measurements

The Session Binding Repository (SBR) Session Exception measurement report contains measurements that provide performance information specific to the SBR Session Database.

PcaNgnPsSbrEventsDrop

Measurement ID
11466

Measurement Group
SBR Session Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of NGN-PS related stack events transmitted between Session SBR and Binding SBR rejected.

Collection Interval
5 min

Peg Condition
This measurement is pegged each time a stack event is transmitted between Session SBR and Binding SBR servers is rejected.

Measurement Scope
All

Recovery

1. No action required

SbrCreateSessDbErr

Measurement ID
10850

Measurement Group
SBR Session Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of errors creating a session record.

Collection Interval
5 min

Peg Condition
This peg is updated whenever there is an error in creating a session record.

Measurement Scope
All

Recovery

1. No action necessary.

SbrRefreshSessDbErr

Measurement ID
10851

Measurement Group
SBR Session Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of errors refreshing a session record.

Collection Interval
5 min

Peg Condition
This peg is updated whenever there is an error in refreshing a session record.

Measurement Scope
All

Recovery

1. No action necessary.

SbrRemSessDbErr

Measurement ID
10852

Measurement Group
SBR Session Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of errors terminating a session record.

Collection Interval
5 min

Peg Condition
This peg is updated whenever there is an error in terminating a session record.

Measurement Scope
All

Recovery

1. No action necessary.

SbrFindSessDbErr

Measurement ID
10879

Measurement Group
SBR Session Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of errors when encountered for finding a session record.

Collection Interval
5 min

Peg Condition
This peg is updated whenever there is an error in finding a session record.

Measurement Scope
All

Recovery

1. No action necessary.

SbrRemSessRarAttempts

Measurement ID
11301

Measurement Group
SBR Session Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of sessions removed as a result of no response being received in 8 consecutive attempts to query the policy client for existence of the session.

Collection Interval
5 min

Peg Condition
This peg is incremented by one each time a session is removed due to lack of response after the maximum number of attempts to query the policy client have been attempted.

Measurement Scope
Network

Recovery

1. A non-zero value in this field may indicate that a policy client has become inaccessible after creating Diameter sessions on the Policy DRA.

2. If a policy client was purposely removed from service, please disregard this measurement.

SbrCreateOcSessionDbErr

Measurement ID
11387

Measurement Group
SBR Session Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Online Charging session creation errors.

Collection Interval
5 min

Peg Condition
Each time a failure is encountered in creating an Online Charging Session record in the SBR Session database. Online Charging Session record failures include:

- Online Charging Session record already exists (i.e. retransmission)
- Database Access Failure

Measurement Scope
All

Recovery

1. No action necessary.

SbrFindOcSessionDbErr

Measurement ID
11388

Measurement Group
SBR Session Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Online Charging session query errors.

Collection Interval
5 min

Peg Condition
Each time a failure is encountered in finding an Online Charging Session record in the SBR Session database.

Measurement Scope
All

Recovery

1. No action necessary.

SbrOcSessionNotFound

Measurement ID
11389

Measurement Group
SBR Session Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Online Charging sessions not found.

Collection Interval
5 min

Peg Condition
Each time an Online Charging session record is not found in the SBR Session database.

Measurement Scope
All

Recovery

1. No action necessary.

SbrRefreshOcSessionDbErr

Measurement ID
11390

Measurement Group
SBR Session Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Online Charging session refresh errors.

Collection Interval
5 min

Peg Condition
Each time there is a failure in refreshing an Online Charging session record in the SBR Session database.

Measurement Scope
All

Recovery

1. No action necessary.

SbrRemoveOcSessionDbErr

Measurement ID
11391

Measurement Group
SBR Session Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Online Charging session removal errors.

Collection Interval
5 min

Peg Condition
Each time there is a failure in deleting an Online Charging Session record from the SBR Session database.

Measurement Scope
All

Recovery

1. No action necessary.

TxPendingRarDeletedExceedMax

Measurement ID
12158

Measurement Group
SBR Session Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (by Query, Release, and Total)

Description
The number of pending RARs (Query or Release) that have been removed due to exceeding the maximum send attempts allowed per Query or Release RAR.

Collection Interval
5 min

Peg Condition
Each time a RAR entry in the queue/table is removed for exceeding the maximum attempts value. This measurement is incremented by one for each Query or Release RAR entry removed due to exceeding the maximum Send Attempts per Query or Release RAR value.

Measurement Scope
All

Recovery

1. Modify the "Maximum Attempts Per Query RAR" or "Maximum Attempts Per Release RAR" in **Policy and Charging** > **Configuration** > **Policy DRA** > **Network-Wide Options**.

Server Exception measurements

EvError

Measurement ID
9901

Measurement Group
Server Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of error trace conditions. This indicates that an expected but abnormal path was taken in the software, which warrants further investigation.

By default, error tracing is disabled. Non-zero values in this measurement indicate that something is occurring that would have generated an error trace, were error tracing enabled. These error trace conditions should not affect service; situations that are service affecting will be covered by Alarms or Events.

Collection Interval
30 min

Peg Condition
Any time a software path is executed that contains an error trace, regardless of whether or not error tracing is enabled.

Measurement Scope
NE, Server

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance if any unexpected non-zero values in this measurement occur.

EvVital

Measurement ID
9900

Measurement Group
Server Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of vital trace conditions encountered. A vital trace indicates that an unexpected path was taken in the software, which warrants further investigation. These vital trace conditions should not affect service; situations that are service affecting will be covered by Alarms or Events.

During application start-up and shutdown, vital traces are used to show details that can aid in debugging of initialization and shutdown problems. These traces are always enabled and cannot be turned off.

It is a VITAL error condition for any other instance.

Collection Interval
30 min

Peg Condition
Any time a software path is executed that contains a vital trace

Measurement Scope
NE, Server

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance if any unexpected non-zero values in this measurement occur.

Server M3UA Exception measurements

The Server M3UA Exception measurement report contains measurements that provide information that is applies to the MP server as a whole.

TxM3uaERROR

Measurement ID
9110

Measurement Group
Server M3UA Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of M3UA ERROR messages sent by the MP server. M3UA ERROR message are sent to inform the originator of an M3UA message that the message cannot be processed due to some problem with the message syntax or semantics.

Collection Interval
30 min

Peg Condition
This measurement is incremented by one each time an ERROR message is sent.

Measurement Scope
NE, Server

Recovery

1. If all is well this measurement will have a zero value. If this measurement has a non-zero value, review the event history in the GUI under **Alarms & Events** > **View History**. Look for **Event ID 19231**, which provides details about the reason for sending the M3UA ERROR message.
2. If the error reason in **Event ID 19231** indicates a problem with the routing context, verify that the routing context used for the specified link is configured to match between the ASP and the SG.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

RxM3uaERROR

Measurement ID
9111

Measurement Group
Server M3UA Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of times M3UA ERROR messages are received by the MP server. M3UA ERROR messages are sent to inform the originator of an M3UA message that the message cannot be processed because of a problem with the message syntax or semantics.

Collection Interval
30 min

Peg Condition
This measurement is incremented by one each time an ERROR message is received.

Measurement Scope
NE, Server

Recovery

1. If all is well, this measurement will have a zero value. If this measurement has a non-zero value, review the event history in the GUI under **Alarms & Events** > **View History**. Look for Event ID 19235, which provides details about the reason for sending the M3UA ERROR message.
2. Event ID 19235 provides details about the reason for receiving the M3UA ERROR message. If the reason indicates a problem with the routing context, verify that the routing context used for the link specified in Event ID 19235 is configured to match between the ASP and the SG.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

M3UAStackQueueFull

Measurement ID
9168

Measurement Group
Server M3UA Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of messages that were discarded because the M3UA Stack Event Queue was full. This measurement is primarily intended to assist in evaluating the need for additional MP processing capacity at a Network Element.

Collection Interval
30 min

Peg Condition
Each time a M3UA Stack Event Queue message is discarded

Measurement Scope
NE, Server

Recovery

1. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP over several collection intervals, then the number of MPs in the Network Element may need to be increased.
2. If the peak and average for an individual MP is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

SCTPAggrQueueFull

Measurement ID
9174

Measurement Group
Server M3UA Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of egress messages that were discarded because the number of SCTP messages queued in all SCTP Single Association Writer Queues exceeded a maximum capacity.

Collection Interval
30 min

Peg Condition
Each time a SCTP Aggregate Association Writer Queue message is discarded

Measurement Scope
NE, Server

Recovery

1. An IP network or STP/SG problem may exist preventing SCTP from transmitting messages into the network on multiple Associations at the same pace that messages are being received from the network.
2. One or more SCTP Association Writer threads may be experiencing a problem preventing it from processing events from its event queue. Examine the alarm log from GUI main menu under **Alarms & Events** > **View Active**.

3. If one or more MPs in a server site have failed, the traffic will be distributed among the remaining MPs in the server site. You can monitor MP server status from **Status & Manage** > **Server**.
4. The misconfiguration of STP routing may result in too much traffic being distributed to the MP. You can monitor the ingress traffic rate of each MP from**Status & Manage** > **KPIs**. Each MP in the server site should be receiving approximately the same ingress transactions per second.
5. There may be an insufficient number of MPs configured to handle the network traffic load. You can monitor the ingress traffic rate of each MP from **Status & Manage** > **KPIs**. If all MPs are in a congestion state, then the offered load to the server site is exceeding its capacity.
6. If the problem persists, it is recommended to contact My Oracle Support (MOS).

ANSIDiscardsNoPDUBuffer

Measurement ID
9245

Measurement Group
Server M3UA Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress ANSI messages that were discarded because no ANSI PDU Buffers were available.

Collection Interval
30 min

Peg Condition
Each time an ANSI message is discarded

Measurement Scope
NE, Server

Recovery

1. If this measurement is greater than zero, a network (IP or SS7) problem might exist or an MP-specific software problem may exist (for example, a buffer pool leak).
2. If the problem persists, it is recommended to contact My Oracle Support (MOS).

ITUDiscardsNoPDUBuffer

Measurement ID
9245

Measurement Group
Server M3UA Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress messages that were discarded because no ITUI/IITUN PDU Buffers were available.

Collection Interval
30 min

Peg Condition
Each time an ITUI message is discarded

Measurement Scope
NE, Server

Recovery

1. If this measurement is greater than zero, a network (IP or SS7) problem might exist or an MP-specific software problem may exist (for example, a buffer pool leak).
2. If the problem persists, it is recommended to contact My Oracle Support (MOS).

Server M3UA Performance measurements

The Server M3UA Performance measurement report contains measurements that provide performance information that is applies to the MP server as a whole.

TxNonDataMsg

Measurement ID
9100

Measurement Group
Server M3UA Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
This measurement gives the level of non-DATA M3UA signaling that occurred on the MP server during the reporting period. The count includes all non-DATA M3UA messages (i.e., ASPSM, ASPTM, ERROR, DAUD). RKM messaging is not supported in this release

Collection Interval
30 min, Daily

Peg Condition
This measurement is incremented by one each time any of the following occur:

- An ASP-UP message is sent.
- An ASP-DOWN message is sent.
- An ASP-ACTIVE message is sent.
- An ASP-INACTIVE message is sent.
- An ERROR message is sent.
- A DAUD message is sent.
- A BEAT message is sent.
- A BEAT-ACK message is sent.

Measurement Scope
NE, Server

Recovery

1. No action required.

RxNonDataMsg

Measurement ID
9101

Measurement Group
Server M3UA Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
This includes all non-DATA M3UA messages (i.e., ASPSM, ASPTM, MGMT, SSNM). RKM messaging is not supported in this release.

Collection Interval
30 min

Peg Condition
This measurement is incremented by one each time any of the following occur:

- An ASP-UP-ACK message is received
- An ASP-DOWN-ACK message is received

- An ASP-ACTIVE-ACK message is received
- An ASP-INACTIVE-ACK message is received
- An ERROR message is received
- A DUNA message is received
- A DAVA message is received
- A DRST message is received
- A SCON message is received
- A DUPU message is received
- A BEAT message is received
- A BEAT-ACK message is received
- A NOTIFY message is received

Measurement Scope
NE, Server

Recovery

1. No action required.

TxNonDataOctets

Measurement ID
9102

Measurement Group
Server M3UA Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
This measurement gives the number of octets of non-DATA M3UA signaling that occurred on the MP server during the reporting period. The count includes all non-DATA M3UA messages (i.e., ASPSM, ASPTM, ERROR, DAUD). RKM messaging is not supported in this release. SCTP, IP, and Ethernet headers are not included in the octet counts.

Collection Interval
30 min

Peg Condition
This measurement is incremented by the number of octets in the message (not including SCTP, IP, or Ethernet headers) each time any of the following occur:

- An ASP-UP message is sent.
- An ASP-DOWN message is sent.
- An ASP-ACTIVE message is sent.
- An ASP-INACTIVE message is sent.
- An ERROR message is sent.
- A DAUD message is sent.
- A BEAT message is sent.
- A BEAT-ACK message is sent.

Measurement Scope
NE, Server

Recovery

1. No action required.

RxNonDataOctets

Measurement ID
9103

Measurement Group
Server M3UA Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
This measurement gives the number of octets of non-DATA M3UA signaling occurring on the MP server during the reporting period. This includes all non-DATA M3UA messages (i.e., ASPSM, ASPTM, MGMT, SSNM). RKM messaging is not supported in this release. SCTP, IP, and Ethernet headers are not included in the octet counts.

Collection Interval
30 min

Peg Condition
This measurement is incremented by the number of octets in the message (not including SCTP, IP, or Ethernet headers) each time any of the following occur:

- An ASP-UP-ACK message is received
- An ASP-DOWN-ACK message is received
- An ASP-ACTIVE-ACK message is received

- An ASP-INACTIVE-ACK message is received
- An ERROR message is received
- A DUNA message is received
- A DAVA message is received
- A DRST message is received
- A SCON message is received
- A DUPU message is received
- A BEAT message is received
- A BEAT-ACK message is received
- A NOTIFY message is received

Measurement Scope
NE, Server

Recovery

1. No action required.

M3UAStackQueuePeak

Measurement ID
9166

Measurement Group
Server M3UA Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The peak M3UA Network Management Event Queue utilization (0-100%) measured during the collection interval. This measurement is primarily intended to assist in evaluating the need for additional MP processing capacity at a Network Element.

Collection Interval
30 min

Peg Condition
The maximum M3UA Stack Event Queue utilization sample taken during the collection interval.

Measurement Scope
NE, Server

Recovery

1. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP over several collection intervals, then the number of MPs in the Network Element may need to be increased.
2. If the peak and average for an individual MP is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

M3UAStackQueueAvg

Measurement ID
9167

Measurement Group
Server M3UA Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average M3UA Stack Event Queue utilization (0-100%) measured during the collection interval. This measurement is primarily intended to assist in evaluating the need for additional MP processing capacity at a Network Element.

Collection Interval
30 min

Peg Condition
The average of all M3UA Stack Event Queue utilization samples taken during the collection interval.

Measurement Scope
NE, Server

Recovery

1. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP over several collection intervals, then the number of MPs in the Network Element may need to be increased.
2. If the peak and average for an individual MP is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

SCTPAggrQueuePeak

Measurement ID
9172

Measurement Group
Server M3UA Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The peak SCTP Aggregate Association Writer Queue utilization (0-100%) measured during the collection interval.

Collection Interval
30 min

Peg Condition
The maximum SCTP Aggregate Association Writer Queue utilization sample taken during the collection interval.

Measurement Scope
NE, Server

Recovery

1. An IP network or STP/SG problem may exist preventing SCTP from transmitting messages into the network on multiple Associations at the same pace that messages are being received from the network.
2. One or more SCTP Association Writer threads may be experiencing a problem preventing it from processing events from its event queue. Examine the alarm log from the GUI main menu under **Alarms & Events** > **View Active**.
3. If one or more MPs in a server site have failed, the traffic will be distributed among the remaining MPs in the server site. You can monitor MP server status from **Status & Manage** > **Server**.
4. The misconfiguration of STP routing may result in too much traffic being distributed to the MP. You can monitor the ingress traffic rate of each MP from **Status & Manage** > **KPIs**. Each MP in the server site should be receiving approximately the same ingress transaction per second.
5. There may be an insufficient number of MPs configured to handle the network traffic load. You can monitor the ingress traffic rate of each MP from **Status & Manage** > **KPIs**. If all MPs are in a congestion state, then the offered load to the server site is exceeding its capacity.
6. If the problem persists, it is recommended to contact My Oracle Support (MOS).

SCTPAggrQueueAvg

Measurement ID
9173

Measurement Group
Server M3UA Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average SCTP Aggregate Association Writer Queue utilization (0-100%) measured during the collection interval.

Collection Interval
30 min

Peg Condition
The average of all SCTP Aggregate Association Writer Queue utilization samples taken during the collection interval.

Measurement Scope
NE, Server

Recovery

1. An IP network or STP/SG problem may exist preventing SCTP from transmitting messages into the network on multiple Associations at the same pace that messages are being received from the network.
2. One or more SCTP Association Writer threads may be experiencing a problem preventing it from processing events from its event queue. Examine the alarm log from the GUI main menu under **Alarms & Events** > **View Active**.
3. If one or more MPs in a server site have failed, the traffic will be distributed among the remaining MPs in the server site. You can monitor MP server status from **Status & Manage** > **Server**.
4. The misconfiguration of STP routing may result in too much traffic being distributed to the MP. You can monitor the ingress traffic rate of each MP from **Status & Manage** > **KPIs**. Each MP in the server site should be receiving approximately the same ingress transaction per second.
5. There may be an insufficient number of MPs configured to handle the network traffic load. You can monitor the ingress traffic rate of each MP from **Status & Manage** > **KPIs**. If all MPs are in a congestion state, then the offered load to the server site is exceeding its capacity.
6. If the problem persists, it is recommended to contact My Oracle Support (MOS).

Server M3UA Usage measurements

The Server M3UA Usage measurement report contains measurements that provide usage information that is applies to the MP server as a whole.

TxASPSM

Measurement ID
9104

Measurement Group
Server M3UA Usage

Measurement Type
Simple

Measurement Dimension
Single

Description
This measurement gives the level of ASPSM M3UA signaling that occurs on the MP server during the reporting period.

Collection Interval
30 min

Peg Condition
This measurement is incremented by one each time any of the following occur:

- An ASP-UP message is sent.
- An ASP-DOWN message is sent.
- A BEAT message is sent.
- A BEAT-ACK message is sent.

Measurement Scope
NE, Server

Recovery

1. No action required.

RxASPSM

Measurement ID
9105

Measurement Group
Server M3UA Usage

Measurement Type
Simple

Measurement Dimension
Single

Description
This measurement gives the level of ASPSM M3UA signaling occurring on the MP server during the reporting period.

Collection Interval
30 min

Peg Condition
This measurement is incremented by one each time any of the following occur:

- An ASP-UP-ACK message is received
- An ASP-DOWN-ACK message is received
- A BEAT message is received
- A BEAT-ACK message is received

Measurement Scope
NE, Server

Recovery

1. No action required.

TxASPTM

Measurement ID
9106

Measurement Group
Server M3UA Usage

Measurement Type
Simple

Measurement Dimension
Single

Description
This measurement gives the level of ASPTM M3UA signaling that occurs on the MP server during the reporting period.

Collection Interval
30 min

Peg Condition
This measurement is incremented by one each time any of the following occur:

- An ASP-ACTIVE message is sent.
- An ASP-INACTIVE message is sent.

Measurement Scope
NE, Server

Recovery

1. No action required.

RxASPTM

Measurement ID
9107

Measurement Group
Server M3UA Usage

Measurement Type
Simple

Measurement Dimension
Single

Description
This measurement gives the level of ASPTM M3UA signaling occurring on the MP server during the reporting period.

Collection Interval
30 min

Peg Condition
This measurement is incremented by one each time any of the following occur:

- An ASP-ACTIVE-ACK message is received
- An ASP-INACTIVE-ACK message is received

Measurement Scope
NE, Server

Recovery

1. No action required.

TxDAUD

Measurement ID
9108

Measurement Group
Server M3UA Usage

Measurement Type
Simple

Measurement Dimension
Single

Description
This measurement indicates the level of auditing that occurs on the MP server during the reporting period. AUD message are sent periodically as an audit when the SG reports that a point code is unavailable or congested.

Collection Interval
30 min

Peg Condition
This measurement is incremented by one each time a DAUD message is sent.

Measurement Scope
NE, Server

Recovery

1. No action required.

RxSSNM

Measurement ID
9109

Measurement Group
Server M3UA Usage

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of **SSNM** messages received by the **MP** server. SSNM messages are sent from the SG as information about point code and user part status in the network. This measurement indicates the level of SSNM signaling occurring on the MP server during the reporting period.

Collection Interval
30 min

Peg Condition
This measurement is incremented by the number of octets in the message (not including SCTP, IP, or Ethernet headers) each time any of the following occur:

- A **DUNA** message is received
- A **DAVA** message is received
- A **DRST** message is received
- A **SCON** message is received
- A **DUPU** message is received

Measurement Scope
NE, Server

Recovery

1. No action required.

RxM3uaNOTIFY

Measurement ID
9112

Measurement Group
Server M3UA Usage

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of M3UA NOTIFY messages received by the MP server. M3UA NOTIFY messages are sent by the SG to indicate its view of the M3UA AS state. These messages do not cause any signaling behavior on the MP server.

Collection Interval
30 min

Peg Condition
This measurement is incremented by one each time a NOTIFY message is received.

Measurement Scope
NE, Server

Recovery

1. No action required.

Server MTP3 Exception measurements

The Server MTP3 Exception measurement report contains measurements that provide information about M3RL exceptions and unexpected messages and events.

TxM3RLDestUnknown

Measurement ID
9072

Measurement Group
Server MTP3 Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of egress messages M3RL discarded because no routing information exists for the RSP/Destination.

Collection Interval
5 min

Peg Condition
For each message discarded

Measurement Scope
NE, Server

Recovery

1. If a high number of these errors occurs, then an internal routing table problem exists. It is recommended to contact My Oracle Support (MOS) for assistance.

TxM3RLDestUnavail

Measurement ID
9073

Measurement Group
Server MTP3 Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of egress messages M3RL discarded because the RSP/Destination was Unavailable.

Collection Interval
5 min

Peg Condition
For each message discarded

Measurement Scope
NE, Server

Recovery

1. The RSP/Destination can be unavailable when the request is received from the User Part or while M3RL is buffering messages for a rerouting or changeover/changeback procedure.

TxM3RLDestCong

Measurement ID
9074

Measurement Group
Server MTP3 Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of egress messages M3RL discarded because the RSP/Destination's congestion level was higher than the message's priority.

Collection Interval
5 min

Peg Condition
For each message discarded

Measurement Scope
NE, Server

Recovery

1. This value provides a measure of how many egress messages M3RL discarded because the RSP/Destination's congestion level was higher than the message's priority. Network Management messages have the highest message priority. User Part message priorities are determined by the SCCP layer.

TxM3RLBufOverflow

Measurement ID
9075

Measurement Group
Server MTP3 Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of egress messages M3RL discarded because of an internal buffer overflow.

Collection Interval
5 min

Peg Condition
For each message discarded

Measurement Scope
NE, Server

Recovery

1. This condition should not occur but may be caused by an unusually high setting of the T1, T3, or T6 timers. The default value is 60ms but the user has the ability to set them as high as 2000ms. You can view and modify the current M3RL timer values via the GUI under **SS7/Sigtran** > **Configuration** > **MTP3 Options**.
2. An internal overflow condition may occur if the IP network is unstable causing M3RL to invoke multiple Changeover/Changeback procedures as links fail and recover. Verify that IP network connectivity exists between the MP server and the adjacent servers.
3. Check the event history logs for additional SS7 events or alarms from this MP server.
4. Verify that the adjacent server is not under maintenance.
5. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

RxM3RLInvalidDPC

Measurement ID
9082

Measurement Group
Server MTP3 Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
This value provides a measure of how many ingress messages are discarded because the DPC was not a True Point Code (TPC) or Capability Point Code (CPC) configured for the MP.

Collection Interval

Peg Condition
For each message discarded

Measurement Scope
NE, Server

Recovery

1. From the GUI main menu under **SS7/Sigtran** > **Configuration** > **Link Sets** verify that the LSP Point Code field is set to **All** if signaling can arrive for either CPC or TPC on this link set.
2. If this measurement is large, it may indicate a routing inconsistency between STP/SG and the MP. You can view the point codes of the MP from **SS7/Sigtran** > **Configuration** > **Local Signaling Points**.

RxM3RLInvalidSI

Measurement ID
9083

Measurement Group
Server MTP3 Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
This value provides a measure of how many ingress messages M3RL discarded because the Service Indicator received was not **0** (SNM) or **3** (SCCP).

Collection Interval
5 min

Peg Condition
For each message discarded

Measurement Scope
NE, Server

Recovery

1. This type of failure should never occur and usually indicates that the routing in the STP/SG or originator of the message is incorrect.

RxM3RLInvalidNI

Measurement ID
9084

Measurement Group
Server MTP3 Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
This value provides a measure of how many ingress messages M3RL discarded because the Network Indicator received was the same value configured for the MP.

Collection Interval
5 min

Peg Condition
For each message discarded

Measurement Scope
NE, Server

Recovery

1. If this measurement is large, it may indicate a routing inconsistency between the STP/SG and the MP. The NI values for the MP can be viewed via the GUI main menu under **SS7/Sigtran** > **Configuration** > **Local Signaling Points**. See the **SS7 Domain** column.

RxM3RLBufOverflow

Measurement ID
9085

Measurement Group
Server MTP3 Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
This value provides a measure of how many ingress messages M3RL discarded because of an internal buffer overflow.

Collection Interval
5 min

Peg Condition
For each message discarded

Measurement Scope
NE, Server

Recovery

1. This should never occur unless the MP is experiencing severe overload conditions and SCCP is unable to service its event queue.

M3RLStackQueueFull

Measurement ID
9162

Measurement Group
Server MTP3 Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of messages that were discarded because the M3RL Stack Event Queue was full. This measurement is primarily intended to assist in evaluating the need for additional MP processing capacity at a Network Element.

Collection Interval
5 min

Peg Condition
For Each M3RL Stack Event Queue message is discarded

Measurement Scope
NE, Server

Recovery

1. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP over several collection intervals, then the number of MPs in the Network Element may need to be increased.
2. If the peak and average for an individual MP is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

M3RLNetMgtQueueFull

Measurement ID
9165

Measurement Group
Server MTP3 Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of M3RL network management messages (SI=0) that were discarded because the M3RL Network Management Event Queue was full. This measurement is primarily intended to assist in evaluating the need for additional MP processing capacity at a Network Element.

Collection Interval
5 min

Peg Condition
Each time an M3RL Network Management Even Queue message is discarded

Measurement Scope
NE, Server

Recovery

1. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP over several collection intervals, then the number of MPs in the Network Element may need to be increased.
2. If the peak and average for an individual MP is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

Server MTP3 Performance measurements

TxM3RLDataMsgs

Measurement ID
9076

Measurement Group
Server MTP3 Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
This value provides a measure of how many egress DATA messages are sent from M3RL to M3UA. This measurement includes SCMG messages (which are DATA to the M3RL layer), but does not include SNM messages.

Collection Interval
5 min

Peg Condition
This counter is pegged each time a M3RL DATA message is sent to M3UA. This counter includes SCMG messages (which are DATA to the M3RL layer), but does not include SNM messages.

Measurement Scope
NE, Server

Recovery

1. No action required.

RxM3RLDataMsgs

Measurement ID
9086

Measurement Group
Server MTP3 Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
This value provides a measure of how many ingress DATA messages M3RL is processing from the network. This measurement includes SCMG messages (which are DATA to the M3RL layer), but does not include SSNM messages.

Collection Interval
5 min

Peg Condition
This counter is pegged each time a M3RL DATA message is receive at M3RL from M3UA. This counter includes SCMG messages (which are DATA to the M3RL layer), but does not include SSNM messages.

Measurement Scope
NE, Server

Recovery

1. No action required.

M3RLStackQueuePeak

Measurement ID
9160

Measurement Group
Server MTP3 Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The peak M3RL Stack Event Queue utilization (0-100%) measured during the collection interval. This measurement is primarily intended to assist in evaluating the need for additional MP processing capacity at a Network Element.

Collection Interval
5 min

Peg Condition
The maximum M3RL Stack Event Queue utilization sample taken during the collection interval.

Measurement Scope
NE, Server

Recovery

1. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP over several collection intervals, then the number of MPs in the Network Element may need to be increased.
2. If the peak and average for an individual MP is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

M3RLStackQueueAvg

Measurement ID
9161

Measurement Group
Server MTP3 Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average M3RL Stack Event Queue utilization (0-100%) measured during the collection interval. This measurement is primarily intended to assist in evaluating the need for additional MP processing capacity at a Network Element.

Collection Interval
5 min

Peg Condition
The average of all M3RL Stack Event Queue utilization samples taken during the collection interval.

Measurement Scope
NE, Server

Recovery

1. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP over several collection intervals, then the number of MPs in the Network Element may need to be increased.

2. If the peak and average for an individual MP is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

M3RLNetMgtQueuePeak

Measurement ID
9163

Measurement Group
Server MTP3 Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The peak M3RL Network Management Event Queue utilization (0-100%) measured during the collection interval. This measurement is primarily intended to assist in evaluating the need for additional MP processing capacity at a Network Element.

Collection Interval
5 min

Peg Condition
The maximum M3RL Network Management Event Queue utilization sample taken during the collection interval.

Measurement Scope
NE, Server

Recovery

1. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP over several collection intervals, then the number of MPs in the Network Element may need to be increased.
2. If the peak and average for an individual MP is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

M3RLNetMgtQueueAvg

Measurement ID
9164

Measurement Group
Server MTP3 Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average M3RL Network Management Event Queue utilization (0-100%) measured during the collection interval. This measurement is primarily intended to assist in evaluating the need for additional MP processing capacity at a Network Element.

Collection Interval
5 min

Peg Condition
The average of all M3RL Network Management Event Queue utilization samples taken during the collection interval.

Measurement Scope
NE, Server

Recovery

1. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP over several collection intervals, then the number of MPs in the Network Element may need to be increased.
2. If the peak and average for an individual MP is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

Server Resource Usage measurements

SS7ProcessPeak

Measurement ID
9150

Measurement Group
Server Resource Usage

Measurement Type
Max

Measurement Dimension
Single

Description
The peak SS7 Process CPU utilization (0-100%) measured during the collection interval. The SS7 Process is responsible for all SS7-related processing.

Collection Interval
5 min

Peg Condition
The maximum SS7 Process CPU utilization sample taken during the collection interval.

Measurement Scope
NE, Server

Recovery

1. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP over several collection intervals, then the number of MPs in the Network Element may need to be increased.
2. If the peak and average for an individual MP is significantly different than other MPs in the same Network Element, then an MP-specific hardware, software, or configuration problem may exist or an STP/SG routing misconfiguration problem may exist.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

SS7ProcessAvg

Measurement ID
9151

Measurement Group
Server Resource Usage

Measurement Type
Average

Measurement Dimension
Single

Description
The average SS7 Process CPU utilization (0-100%) measured during the collection interval. The SS7 process is responsible for all SS7-related processing.

Collection Interval
5 min

Peg Condition
The average of all SS7 Process CPU utilization samples taken during the collection interval.

Measurement Scope
NE, Server

Recovery

1. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of

an MP over several collection intervals, then the number of MPs in the Network Element may need to be increased.

2. If the peak and average for an individual MP is significantly different than other MPs in the same Network Element, then an MP-specific hardware, software, or configuration problem may exist or an STP/SG routing misconfiguration problem may exist.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

SS7RxMsgRatePeak

Measurement ID
9152

Measurement Group
Server Resource Usage

Measurement Type
Max

Measurement Dimension
Single

Description
The peak Ingress Message Rate (in messages per second) measured during the collection interval. The Ingress Message Rate is the number of non-SNM (SI > 0) messages that M3UA attempts to queue in the M3RL Stack Event Queue.

Collection Interval
5 min

Peg Condition
The maximum Ingress Message Rate (messages per second) sample taken during the collection interval

Measurement Scope
NE, Server

Recovery

1. This measurement is primarily intended to assist in evaluating the need for additional MP processing capacity at a Network Element.
2. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP over several collection intervals, then the number of MPs in the Network Element may need to be increased.
3. If the peak and average for an individual MP is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist or an STP/SG routing mis-configuration problem may exist
4. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

SS7RxMsgRateAvg

Measurement ID
9153

Measurement Group
Server Resource Usage

Measurement Type
Max

Measurement Dimension
Single

Description
The average Ingress Message Rate (messages per second) during the collection interval. The Ingress Message Rate is the number of non-SNM (SI > 0) messages that M3UA attempts to queue in the M3RL Stack Event Queue.

Collection Interval
5 min

Peg Condition
The average of all Ingress Message Rate samples taken during the collection interval.

Measurement Scope
NE, Server

Recovery

1. This measurement is primarily intended to assist in evaluating the need for additional MP processing capacity at a Network Element.
2. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP over several collection intervals, then the number of MPs in the Network Element may need to be increased.
3. If the peak and average for an individual MP is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist or an STP/SG routing mis-configuration problem may exist.
4. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

ItuiPDUUtilPeak

Measurement ID
9237

Measurement Group
Server Resource Usage

Measurement Type
Max

Measurement Dimension
Single

Description
The peak ITUI/ITUN PDU Buffer Pool utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The maximum SS7 ITUI/ITUN PDU Buffer Pool utilization sample taken during the collection interval.

Measurement Scope
NE, Server

Recovery

1. ITUI PDU is allocated to each ITUI message that arrives at an MP and is de-allocated when message processing completes. This measurement is useful for evaluating whether persistent network problems exist. In general PDU buffers are engineered for required SS7 domains and the processing capacity of the MP. If network problems exist, delaying the off-loading of egress messages from the MP, then PDUs/messages will sit in internal SS7 queues.
2. If both the peak and average measurements for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP when the Ingress Message Rate and/or SS7 Process CPU Utilization measurements are below the recommended maximum engineered capacity of an MP, then a network (IP or SS7) problem may exist. Looking at these measurements on a time of day basis may provide additional insight into potential network problems.
3. If the peak and average for an individual MP is significantly different than other MPs in the same Network Element then an MP-specific software problem may exist (e.g., a buffer pool leak).
4. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

ITUPDUUtilAvg

Measurement ID
9238

Measurement Group
Server Resource Usage

Measurement Type
Average

Measurement Dimension
Single

Description
The average ITUI/ITUN PDU Buffer Pool utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The average of all SS7 ITUI/ITUN PDU Buffer Pool utilization samples taken during the collection interval.

Measurement Scope
NE, Server

Recovery

1. ITUI PDU is allocated to each ITUI message that arrives at an MP and is de-allocated when message processing completes. This measurement is useful for evaluating whether persistent network problems exist. In general PDU buffers are engineered for required SS7 domains and the processing capacity of the MP. If network problems exist, delaying the off-loading of egress messages from the MP, then PDUs/messages will sit in internal SS7 queues.
2. If both the peak and average measurements for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP when the Ingress Message Rate and/or SS7 Process CPU Utilization measurements are below the recommended maximum engineered capacity of an MP, then a network (IP or SS7) problem may exist. Looking at these measurements on a time of day basis may provide additional insight into potential network problems.
3. If the peak and average for an individual MP is significantly different than other MPs in the same Network Element then an MP-specific software problem may exist (e.g., a buffer pool leak).
4. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

ANSIPDUUtilPeak

Measurement ID
9243

Measurement Group
Server Resource Usage

Measurement Type
Max

Measurement Dimension
Single

Description
The peak ANSI PDU Buffer Pool utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The maximum ANSI PDU buffer pool utilization sample taken during the collection interval.

Measurement Scope
NE, Server

Recovery

1. ANSI PDU is allocated to each ANSI message that arrives at an MP and is de-allocated when message processing completes. This measurement is useful for evaluating whether persistent network problems exist. In general PDU buffers are engineered for required SS7 domains and the processing capacity of the MP. If network problems exist, delaying the off-loading of egress messages from the MP, then PDUs/messages will sit in internal SS7 queues.
2. If both the peak and average measurements for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP when the Ingress Message Rate and/or SS7 Process CPU Utilization measurements are below the recommended maximum engineered capacity of an MP, then a network (IP or SS7) problem may exist. Looking at these measurements on a time of day basis may provide additional insight into potential network problems.
3. If the peak and average for an individual MP is significantly different than other MPs in the same Network Element then an MP-specific software problem may exist (e.g., a buffer pool leak).
4. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

AnsiPDUUtilAvg

Measurement ID
9244

Measurement Group
Server Resource Usage

Measurement Type
Average

Measurement Dimension
Single

Description
The average ANSI PDU Buffer Pool utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The average of all ANSI PDU buffer pool utilization samples taken during the collection interval.

Measurement Scope
NE, Server

Recovery

1. ANSI PDU is allocated to each ANSI message that arrives at an MP and is de-allocated when message processing completes. This measurement is useful for evaluating whether persistent network problems exist. In general PDU buffers are engineered for required SS7 domains and the processing capacity of the MP. If network problems exist, delaying the off-loading of egress messages from the MP, then PDUs/messages will sit in internal SS7 queues.
2. If both the peak and average measurements for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP when the Ingress Message Rate and/or SS7 Process CPU Utilization measurements are below the recommended maximum engineered capacity of an MP, then a network (IP or SS7) problem may exist. Looking at these measurements on a time of day basis may provide additional insight into potential network problems.
3. If the peak and average for an individual MP is significantly different than other MPs in the same Network Element then an MP-specific software problem may exist (e.g., a buffer pool leak).
4. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

Server SCCP Exception measurements

EvError

Measurement ID
9901

Measurement Group
Server SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of error trace conditions.

This indicates that an expected but abnormal path was taken in the software, which warrants further investigation. By default, error tracing is disabled. Non-zero values in this measurement indicate that something is occurring that would have generated an error trace, were error tracing enabled. These error trace conditions should not affect service; situations that are service affecting will be covered by Alarms or Events.

Collection Interval

Peg Condition
30 min

Measurement Scope
NE, Server

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance if any unexpected non-zero values in this measurement occur.

EvVital

Measurement ID
9900

Measurement Group
Server SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of vital trace conditions encountered. A vital trace indicates that an unexpected path was taken in the software, which warrants further investigation. These vital trace conditions should not affect service; situations that are service affecting will be covered by Alarms or Events.

During application start-up and shutdown, vital traces are used to show details that can aid in debugging of initialization and shutdown problems. These traces are always enabled and cannot be turned off.

It is a VITAL error condition for any other instance.

Collection Interval

Peg Condition
30 min

Measurement Scope
NE, Server

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance if any unexpected non-zero values in this measurement occur.

RxMaxTpsExceeded

Measurement ID
9149

Measurement Group
Server SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress SCCP messages that were discarded because of the Local MP Maximum TPS limit.

Collection Interval
30 min

Peg Condition
For each message discarded

Measurement Scope
NE, Server

Recovery

1. The MP is approaching or exceeding its engineered traffic handling capacity. If one or more MPs in a server site have failed, the traffic will be distributed among the remaining MPs in the server site. You can monitor MP server status from the GUI main menu under **Status & Manage** > **Server Status**.
2. The misconfiguration of STP routing may result in too much traffic being distributed to the MP. You can monitor the ingress traffic rate of each MP from the GUI main menu under **Status & Manage** > **KPIs**. Each MP in the server site should be receiving approximately the same ingress transaction per second.
3. There may be an insufficient number of MPs configured to handle the network traffic load. You can monitor the ingress traffic rate of each MP from the GUI main menu under **Status & Manage** > **KPIs**. If all MPs are in a congestion state then the offered load to the server site is exceeding its capacity.
4. The SS7 process may be experiencing problems. Examine the alarm log from the GUI main menu under **Alarms & Events**.
5. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

RxMPCongestion

Measurement ID
9175

Measurement Group
Server SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress SCCP messages that were discarded because of local MP congestion.

Collection Interval
30 min

Peg Condition
For each message discarded

Measurement Scope
NE, Server

Recovery

1. If one or more MPs in a server site have failed, the traffic will be distributed among the remaining MPs in the server site. You can monitor MP server status from the GUI main menu under **Status & Control** > **Server Status**.
2. The misconfiguration of STP routing may result in too much traffic being distributed to the MP. You can monitor the ingress traffic rate of each MP from the GUI main menu under **Status & Control** > **KPIs**. Each MP in the server site should be receiving approximately the same ingress transaction per second.
3. There may be an insufficient number of MPs configured to handle the network traffic load. You can monitor the ingress traffic rate of each MP from the GUI main menu under **Status & Control** > **KPIs**. If all MPs are in a congestion state then the offered load to the server site is exceeding its capacity.
4. The SS7 process may be experiencing problems. The alarm log should be examined from the GUI main menu under **Alarms & Events**.
5. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

RxSCCPInvalidDPC

Measurement ID
9055

Measurement Group
Server SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress messages SCCP discarded because the MTP point code was present but was not a TPC or CPC for the signaling standard of the message.

Collection Interval
30 min

Peg Condition
For each message discarded

Measurement Scope
NE, Server

Recovery

1. This count shows how many ingress messages SCCP discarded because the point code received in the MTP was not encoded correctly (same as TPC or CPC) for the signaling standard of the message. If a high number of these errors occurs, it indicates that an encoding error exists at the originator or that the originator of the message may be misconfigured. It is recommended to contact My Oracle Support (MOS) for assistance.

RxSCCPInvalidSSN

Measurement ID
9056

Measurement Group
Server SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress messages SCCP discarded because the CdPA/CgPA SSN was present but had an invalid value (SSN< 1 or SSN >254).

Collection Interval
30 min

Peg Condition
For each message discarded

Measurement Scope
NE, Server

Recovery

1. If a high number of these errors occurs, it indicates that an encoding error exists at the originator or that the originator of the message may be misconfigured.

RxSCCPInvalidMsg

Measurement ID
9057

Measurement Group
Server SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress messages SCCP discarded because the message type is not currently supported.

> **Note:** Only the following connectionless message types are supported: UDT, XUDT, UDTS, and XUDTS. Valid SCMG message types are SSA, SSP, and SST.

Collection Interval
30 min

Peg Condition
For each message discarded for an invalid Message Type

Measurement Scope
NE, Server

Recovery

1. If a high number of these errors occurs, then the originator of the message may be misconfigured.

RxSCCPInvalidHop

Measurement ID
9058

Measurement Group
Server SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of ingress messages SCCP discarded because of a **Hop Counter** violation associated with **CdPA `RI`=`route on GT`**.

Collection Interval
30 min

Peg Condition
For each message discarded

Measurement Scope
NE, Server

Recovery

1. If this error occurs, then either the originator of the message is setting the initial value too low or the STPs are rerouting the message too many times due to a possible **STP** routing misconfiguration. It is recommended to contact My Oracle Support (MOS) for assistance.

RxSCCPInvalidClass

Measurement ID
9059

Measurement Group
Server SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress messages SCCP discarded because of an invalid protocol class.

Note: Only classes 0 and 1 are supported.

Collection Interval
30 min

Peg Condition
For each message discarded for an invalid Protocol Class

Measurement Scope
NE, Server

Recovery

1. If a high number of these errors occurs, then the originator of the message may be misconfigured or the network is misconfigured causing mis-routing of messages.

RxSCCPInvalidGTI

Measurement ID
9060

Measurement Group
Server SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress messages SCCP discarded because an invalid Global Title Indicator (**GTI**) value was received. This only applies to messages received with `RI=route on GT`.

Note: `GTI=0` is invalid.

Collection Interval
30 min

Peg Condition
For each message discarded

Measurement Scope
NE, Server

Recovery

1. If a high number of these errors occurs, then the originator of the message may be misconfigured.

RxSCCPReassFAIL

Measurement ID
9306

Measurement Group
Server SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of times the reassembly procedure failed.

Collection Interval
30 min

Peg Condition
For each reassembly failure for ingress segmented **XUDT** message received from network

Measurement Scope
Network, NE, Server

Recovery

1. This value provides a measure of number of reassembly procedure failures encountered during the reporting interval.

2. Check for any related additional Events or Alarms from the server.

RxSCCPReassInternalFail

Measurement ID
9311

Measurement Group
Server SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of reassembly procedure failures due to internal error or resource limitation.

Collection Interval
30 min

Peg Condition
N/A

Measurement Scope
Network, NE, Server

Recovery

1. This value provides a measure of number of reassembly procedure failures encountered due to errors encountered on server, during the reporting interval.
2. Non-zero value for this measurement tag represents resource usage issues on the server. Check for any related additional Events or Alarms from the server.

RxSCCPReassOOSFail

Measurement ID
9310

Measurement Group
Server SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of reassembly procedure failures due to out-of-sequence segments received from network.

Collection Interval
30 min

Peg Condition
For each ongoing reassembly procedure failure as a result of out of order arrival of remaining segments.

Measurement Scope
Network, NE, Server

Recovery

1. This value provides a measure of number of reassembly procedure failures encountered due to "out of order arrival of remaining segments in a reassembly procedure" reason, during the reporting interval.
2. Non-zero value for this measurement tag represents sequencing issues in packet arrival from network or any other routing error or delays in network or on server. Check for any related additional Events or Alarms from the server.

RxSCCPReassTExp

Measurement ID
9309

Measurement Group
Server SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of reassembly procedure failures due to reassembly timer expiry.

Collection Interval
30 min

Peg Condition
For each reassembly procedure failures due to reassembly timer expiry

Measurement Scope
Network, NE, Server

Recovery

1. This value provides a measure of number of reassembly procedure failures encountered due to "Reassembly Timer Expiry" reason, during the reporting interval.
2. Non-zero value for this measurement tag represents latency issues in packet arrival from network or any other delay on server resulting in reassembly timer expiry. Check for any related additional Events or Alarms from the server.

RxSCCPSegmentOOS

Measurement ID
9308

Measurement Group
Server SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of **XUDT** segments received out-of-sequence from network.

Collection Interval
30 min

Peg Condition
On received XUDT segments with F bit set as 0 and received segments could not be attached to any open reassembly procedure (i.e., reassembly procedure was not started for this and no key found to associate the segments to a in-process reassembly)

Measurement Scope
Network, NE, Server

Recovery

1. This value provides a measure of number of segmented XUDT messages received with sequence delivery option but arrived out of sequence at **SCCP** Layer, during the reporting interval.
2. For these out of sequence received XUDT segments, there is no ongoing reassembly procedure to attach these segments.
3. Non-zero value for this measurement tag represents in-sequence routing or reassembly key uniqueness issue. Check for any related additional Events or Alarms from the server.

RxSCCPSgmntsPartReassFAIL

Measurement ID
9318

Measurement Group
Server SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of partially reassembled segments discarded due to any errors.

Collection Interval
30 min

Peg Condition
For each segmented XUDT message that was buffered and discarded due to reassembly procedure failure

Measurement Scope
Network, NE, Server

Recovery

1. This value provides cumulative measure of ingress segmented XUDT messages which were buffered but discarded due to reassembly procedure failure.

RxSCCPUnavailSSN

Measurement ID
9202

Measurement Group
Server SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of ingress messages (RI=SSN) SCCP discarded because the CdPA SSN (Local SSN for MPs TPC) was manually disabled.

Collection Interval
30 min

Peg Condition
For each message discarded

Measurement Scope
NE, Server

Recovery

1. This value provides a measure of how many ingress (RI=SSN) messages SCCP discarded because the affected Local Subsystem status was manually disabled. The Status of Local Subsystems (Local SCCP Users, LSUs) for a Local Signaling Point can be viewed via the GUI Main Menu: **SS7/SIGTRAN** > **Maintenance** > **Local SCCP Users**.

RxSCCPUnknownSSN

Measurement ID
9203

Measurement Group
Server SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of ingress messages (RI=SSN) SCCP discarded because the CdPA SSN (Local SSN for MPs TPC) is not configured for the MTP DPC's signaling domain

Collection Interval
30 min

Peg Condition
For each message discarded

Measurement Scope
NE, Server

Recovery

1. This value provides a measure of how many ingress (RI=SSN) messages SCCP discarded because the affected Local Subsystem is not configured for the MTP DPC's signaling domain. The Local Subsystems (Local SCCP User, LSUs) for a Local Signaling Point can be configured via the GUI Main Menu: **SS7/SIGTRAN** > **Configuration** > **Local SCCP Users [Insert]**.

RxSCCPXudtInvSgmnt

Measurement ID
9316

Measurement Group
Server SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of received XUDT segments resulted in protocol violation decode error.

Collection Interval
30 min

Peg Condition
For protocol decoding errors while parsing ingress segmented XUDT

Measurement Scope
Network, NE, Server

Recovery

1. This value provides a measure of malformed segmented XUDT messages received from the network.

SCCPGTTFailure

Measurement ID
9206

Measurement Group
Server SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Count of SCCP GTT Failures due to default GTT handling in SS7Stack.

Collection Interval
30 min

Peg Condition
Default GTT Processing by SS7 Stack, when Application did not implement "rt-on-gt" message handling

Measurement Scope
NE, Server

Recovery

1. This value provides a measure of how many "ri=rt-ongt" messages were subject to default Global Title Translation processing. This can occur when Application is using SS7 Stack for processing only "rt-on-ssn" messages OR "rt-on-gt" message handling is not implemented in Application.

SCCPStackQueueFull

Measurement ID
9159

Measurement Group
Server SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress SCCP messages that were discarded because the SCCP Stack Event Queue was full.

Collection Interval
30 min

Peg Condition
For each message discarded

Measurement Scope
NE, Server

Recovery

1. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP over several collection intervals, then the number of MPs in the Network Element may need to be increased.
2. If the peak and average for an individual MP are significantly different than other MPs in the same Network Element, then an MP-specific hardware, software, or configuration problem may exist.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

SCMGErrors

Measurement ID
9205

Measurement Group
Server SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of ingress/egress malformed or unsupported messages.

Collection Interval
30 min

Peg Condition
For each ingress/egress malformed or unsupported SCCP Management message

Measurement Scope
NE, Server

Recovery

1. This value provides a measure of how many malformed or unsupported SCCP management messages were discarded. Supported SCMG messages are SST, SSP and SSA. Any other SCCP Management message is pegged under this tag.

TxSCCPCongestion

Measurement ID
9053

Measurement Group
Server SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of egress messages SCCP discarded because the RSP/Destination's congestion level was higher than the message's priority.

Collection Interval
30 min

Peg Condition
For each message discarded

Measurement Scope
NE, Server

Recovery

1. You can view the remote RSPs/Destinations to SCCP and their congestion status from the GUI main menu under **SS7/Sigtran** > **Maintenance** > **Remote MTP3 Users**.

TxSCCPInvUserMsgs

Measurement ID
9068

Measurement Group
Server SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
SCCP User submitted an Invalid/malformed/unsupported message for egress routing (SCCP User->SCCP N-UnitDataReq)

Collection Interval
30 min

Peg Condition
For each message discarded

Measurement Scope
NE, Server

Recovery

1. This value provides a measure of how many egress SCCP User messages encountered validation failure on SCCP. If a high number of these errors occur, then it indicates an encoding error at the originator or the originator of the message may be mis-configured.

TxSCCPInvalidDPC

Measurement ID
9051

Measurement Group
Server SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of egress messages SCCP discarded because the CdPA signaling point code is present but is not valid for the signaling standard of the message.

Collection Interval
30 min

Peg Condition
For each message discarded

Measurement Scope
NE, Server

Recovery

1. If a high number of these errors occurs, it indicates that an encoding error exists at the originator or that the originator of the message may be misconfigured.

TxSCCPInvalidSSN

Measurement ID
9052

Measurement Group
Server SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of egress messages SCCP discarded because the CdPA/CgPA SSN was present but had an invalid value (SSN< 1 or SSN >254).

Collection Interval
30 min

Peg Condition
For each message discarded

Measurement Scope
NE, Server

Recovery

1. If a high number of these errors occurs, it indicates that an encoding error exists at the originator or that the originator of the message may be misconfigured.

TxSCCPSegmentFAIL

Measurement ID
9303

Measurement Group
Server SCCP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of times segmentation procedure failed.

Collection Interval
30 min

Peg Condition
On failure in completion of segmentation procedure for each large egress user data message.

Measurement Scope
Network, NE, Server

Recovery

1. This value provides a measure of number of segmentation procedure completion failures for large egress user data messages. Segmentation Error Procedure is executed on each such failure.

2. Check for any related additional Events or Alarms from the server.

TxSCCPUnavailDPC

Measurement ID
9063

Measurement Group
Server SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of egress messages SCCP discarded because the affected DPC status was marked prohibited/unavailable.

Collection Interval
30 min

Peg Condition
For each message discarded

Measurement Scope
NE, Server

Recovery

1. This value provides a measure of how many egress messages SCCP discarded because the RSP/Destination status was paused / prohibited at SCCP. Point code status is received from M3RL via the MTP-PAUSE and MTP-RESUME indications. The remote RSPs/Destinations known to SCCP and their status can be viewed via the GUI Main Menu: **SS7/SIGTRAN** > **Maintenance** > **Remote Signaling Points**.

TxSCCPUnavailSSN

Measurement ID
9065

Measurement Group
Server SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of egress messages SCCP discarded because the CdPA or Affected SSN was either marked prohibited/unavailable.

Collection Interval
30 min

Peg Condition
For each message discarded

Measurement Scope
NE, Server

Recovery

1. This value provides a measure of how many egress messages SCCP discarded because the Remote Subsystem status was Prohibited. Subsystem status is received from M3RL via the SS-STATUS indications or via SCMG SSA and SSP messages. The remote subsystems (RMUs) known to SCCP and their status can be viewed via the GUI Main Menu: **SS7/SIGTRAN** > **Maintenance** > **Remote MTP3 Users**.

TxSCCPUnknownDPC

Measurement ID
9064

Measurement Group
Server SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of egress messages SCCP discarded because the affected DPC in message is not configured or is unknown.

Collection Interval
30 min

Peg Condition
For each message discarded

Measurement Scope
NE, Server

Recovery

1. This value provides a measure of how many egress messages SCCP discarded because the RSP or affected DPC in the message is not configured and is unknown at SCCP. The remote RSPs/affected Destinations known to SCCP and their status can be viewed via the GUI Main Menu: **SS7/SIGTRAN** > **Maintenance** > **Remote Signaling Points**.

TxSCCPUnknownSSN

Measurement ID
9066

Measurement Group
Server SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Number of egress messages SCCP discarded because the CdPA or affected SSN was unknown.

Collection Interval
30 min

Peg Condition
For each message discarded

Measurement Scope
NE, Server

Recovery

1. This value provides a measure of how many egress messages SCCP discarded because the Subsystem was unknown to SCCP. The remote subsystems (RMUs) can be configured from the GUI Main Menu: **SS7/SIGTRAN** > **Configuration** > **Remote MTP3 Users** and their status can be viewed via the GUI Main Menu: **SS7/SIGTRAN** > **Maintenance** > **Remote MTP3 Users**.

Server SCCP Performance measurements

TxSCCPMsgs

Measurement ID
9050

Measurement Group
Server SCCP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Egress messages sent by SCCP to M3RL (SCCP->M3RL MTP-TRANSFER request). This value provides a measure of how many egress SCCP messages are being processed by the MP server.

Collection Interval
30 min

Peg Condition
For each message sent to M3RL

Measurement Scope
NE, Server

Recovery

1. No action required.

RxSCCPMsgs

Measurement ID
9054

Measurement Group
Server SCCP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Ingress messages received by SCCP from M3RL (M3RL> SCCP MTP TRANSFER indication).

Collection Interval
30 min

Peg Condition
For each message received from M3RL

Measurement Scope
NE, Server

Recovery

1. No action required.

TxSCCPUserMsgs

Measurement ID
9067

Measurement Group
Server SCCP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Egress messages sent by SCCP User to SCCP to M3RL (SCCPUser-> SCCP N-UnitDataReq->M3RL MTP-TRANSFER request)

Collection Interval
30 min

Peg Condition
For each message sent to M3RL

Measurement Scope
NE, Server

Recovery

1. This value provides a measure of how many egress SCCP User messages are being processed by the MP server.

TxSCMGMsgs

Measurement ID
9069

Measurement Group
Server SCCP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of valid egress SCMG messages.

Collection Interval
30 min

Peg Condition
For each valid message generated by SCMG

Measurement Scope
NE, Server

Recovery

1. This value provides a measure of egress SCCP Management messages This could be due to local or remote SCCP/SCCP Users status. The Status of Local or Remote Subsystems can be viewed via the GUI Main Menu: **SS7/SIGTRAN** > **Maintenance** > **Local SCCP Users** or **SS7/SIGTRAN** > **Maintenance** > **Remote MTP3 Users**.

TxMsgRatePeak

Measurement ID
9324

Measurement Group
Server SCCP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The peak Ingress Message Rate (in messages per second) measured during the collection interval. The Ingress Message Rate is the number of non-SNM (SI > 0) messages that M3UA attempts to queue in the M3RL Stack Event Queue.

Collection Interval
30 min

Peg Condition
The maximum Ingress Message Rate (messages per second) sample taken during the collection interval.

Measurement Scope
NE, Server

Recovery

1. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP over several collection intervals, then the number of MPs in the Network Element may need to be increased.
2. If the peak and average for an individual MP is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist or an STP/SG routing misconfiguration problem may exist.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

TxMsgRateAvg

Measurement ID
9323

Measurement Group
Server SCCP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average Egress Message Rate (messages per second) during the collection interval.

Collection Interval
30 min

Peg Condition
The average of all Ingress Message Rate samples taken during the collection interval.

Measurement Scope
NE, Server

Recovery

1. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP over several collection intervals, then the number of MPs in the Network Element may need to be increased.
2. If the peak and average for an individual MP is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist or an STP/SG routing misconfiguration problem may exist.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

RxSCCPUserMsgs

Measurement ID
9200

Measurement Group
Server SCCP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Ingress SCCP UDT/XUDT messages sent by SCCP to Configured and available SCCP Users using a local SSN (SCCP->SCCP User N-UnitDataInd)

Collection Interval
30 min

Peg Condition
For each UDT/XUDT message received for SCCP user and was delivered to SCCP user.

Measurement Scope
NE, Server

Recovery

1. This value provides a measure of how many ingress SCCP User (RI=SSN) messages are being forwarded to SCCP User application hosted by the MP server.

RxSCCPUserNoticeMsgs

Measurement ID
9201

Measurement Group
Server SCCP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Ingress SCCP UDTS/XUDTS (RI=SSN) messages converted into N-Notice-Ind by SCCP and sent to the configured and available SCCP Users using a local SSN (SCCP->SCCP User N-NoticeInd)

Collection Interval
30 min

Peg Condition
For each UDTs/XUDTs message received for SCCP user and a notification was delivered to SCCP user

Measurement Scope
NE, Server

Recovery

1. This value provides a measure of how many ingress SCCP UDTS/XUDTS (RI=SSN) messages were received and converted into N-Notice-Ind and forwarded to SCCP User application hosted by the MP server.
2. If a high number of these errors occur, then it indicates the remote SCCP/SCCP Application could not process the message as expected and resulted in executing sccp error handling procedure. It's normally associated with an event/alarm condition. If a high number of these errors occur, then check the event history under **Main Menu** > **Alarms & Events** > **View History**.

RxSCMGMsgs

Measurement ID
9204

Measurement Group
Server SCCP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of valid ingress SCMG messages.

Collection Interval
30 min

Peg Condition
For each valid message received for SCMG

Measurement Scope
NE, Server

Recovery

1. This value provides a measure of ingress SCCP Management messages. This could be due to local or remote SCCP/SCCP Users status. The Status of Local or Remote Subsystems can be viewed via the GUI Main Menu **SS7/SIGTRAN** > **Maintenance** > **Local SCCP Users** or **SS7/SIGTRAN** > **Maintenance** > **Remote MTP3 Users**.

SCCPStackQueuePeak

Measurement ID
9157

Measurement Group
Server SCCP Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The peak SCCP Stack Event Queue utilization (0-100%) measured during the collection interval. This measurement is primarily intended to assist in evaluating the need for additional MP processing capacity at a Network Element.

Collection Interval
30 min

Peg Condition
The maximum SCCP Stack Event Queue utilization sample taken during the collection interval.

Measurement Scope
NE, Server

Recovery

1. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP over several collection intervals, then the number of MPs in the Network Element may need to be increased.
2. If the peak and average for an individual MP are significantly different than other MPs in the same Network Element, then an MP-specific hardware, software, or configuration problem may exist.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

SCCPStackQueueAvg

Measurement ID
9158

Measurement Group
Server SCCP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average SCCP Stack Event Queue utilization (0-100%) measured during the collection interval. This measurement is primarily intended to assist in evaluating the need for additional MP processing capacity at a Network Element.

Collection Interval
30 min

Peg Condition
The average of all SCCP Stack Event Queue utilization samples taken during the collection interval.

Measurement Scope
NE, Server

Recovery

1. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP over several collection intervals, then the number of MPs in the Network Element may need to be increased.
2. If the peak and average for an individual MP is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist.

3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

TxSCCPLargeMsgs

Measurement ID
9300

Measurement Group
Server SCCP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of egress large user data messages for segmentation.

Collection Interval
30 min

Peg Condition
For each large user data message submitted by **SCCP** User for egress routing.

Measurement Scope
Network, NE, Server

Recovery

1. This value provides a measure of how many large user data messages are submitted to SCCP layer for egress routing during the reporting interval. This measurement peg value divided by the interval yields the average rate of large egress user data messages for the server.

TxSCCPSegmentsPerMsg

Measurement ID
9301

Measurement Group
Server SCCP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed-Bucketed (Index on number of segments created for each larger egress user data message)

Description
The number of segments created for each large egress user data message.

Collection Interval
30 min

Peg Condition
When the segmentation procedure is completed on each large egress user data packet, using “number of segments” as index.

Measurement Scope
Network, NE, Server

Recovery

1. Values in this arrayed measurement provides a measure of number of **XUDT** messages created each time a large user data messages is segmented by **SCCP** layer.
2. This arrayed measurement can be used for heuristics on segments created during the reporting interval and the SS7 traffic rate impact due to large egress user data size traffic.

TxSCCPSegmentSUCC

Measurement ID
9302

Measurement Group
Server SCCP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of times segmentation procedure completed successfully.

Collection Interval
30 min

Peg Condition
On successful completion of segmentation procedure for each large egress user data message (i.e. user data length is greater than **SCCP** Option Configured value).

Measurement Scope
Network, NE, Server

Recovery

1. This value provides a measure of number of successful segmentation procedure completion for large egress user data messages are successfully segmented and corresponding **XUDT** messages are forwarded by SCCP layer for egress routing during the reporting interval.

RxSCCPSgmntXudtMsgs

Measurement ID
9304

Measurement Group
Server SCCP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress segmented **XUDT** messages received from network.

Collection Interval
30 min

Peg Condition
For each segmented XUDT message received from network.

Measurement Scope
Network, NE, Server

Recovery

1. This value provides a measure of how many segmented XUDT messages are received by **SCCP** layer during the reporting interval. SCCP will execute reassembly procedure for each such received message.
2. This measurement peg value divided by the interval yields the average rate of new segmented XUDT messages received from the network.

RxSCCPReassSUCC

Measurement ID
9305

Measurement Group
Server SCCP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of times reassembly procedure successfully completed.

Collection Interval
30 min

Peg Condition
On successful completion of reassembly procedure using a number of ingress segmented **XUDT** messages.

Measurement Scope
Network, NE, Server

Recovery

1. This value provides a measure of number of successful reassembly procedure (using a number of ingress segmented XUDT messages) completion during the reporting interval. The reassembled user data is forwarded as single packet to **SCCP** User.

RxSCCPSgmntReassPerMsg

Measurement ID
9307

Measurement Group
Server SCCP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed-Bucketed (Index on number of segments reassembled)

Description
The number of segments reassembled to create one large ingress user data message.

Collection Interval
30 min

Peg Condition
This is an arrayed measurement with "number of **XUDT** segments assembled" as index. Peg this measurement using "number of XUDT segments assembled" as index, when reassembly procedure is completed using more than one ingress segmented XUDT message.

Measurement Scope
Network, NE, Server

Recovery

1. Values in this arrayed measurement provides a measure of number of segmented XUDT messages were reassembled for each reassembly procedure before forwarding a large user data messages to **SCCP** User.
2. This arrayed measurement can be used for heuristics on number of segments network used for segmenting large message during the reporting interval and the SS7 traffic rate impact due to segmented XUDT messages on overall SCCP processing rate.

RxSCCPRtGtFrwdAppl

Measurement ID
9312

Measurement Group
Server SCCP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Rt On Gt Messages forwarded to Local Application.

Collection Interval
30 min

Peg Condition
N/A

Measurement Scope
Network, NE, Server

Recovery

1. This value provides a measure of number of messages received with CDPA RI=GT and are forwarded to Local Application due to configured SCCP Option.

RxSCCPRtGtXudtSgmnt

Measurement ID
9313

Measurement Group
Server SCCP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Rt on Gt segmented XUDT messages received from network

Collection Interval
30 min

Peg Condition
N/A

Measurement Scope
Network, NE, Server

Recovery

1. This value provides a measure of number of Rt on Gt segmented XUDT messages received from the network.

RxSCCPRtSsnXudtSgmnt

Measurement ID
9314

Measurement Group
Server SCCP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Rt on Ssn segmented XUDT messages received from network.

Collection Interval
30 min

Peg Condition
N/A

Measurement Scope
Network, NE, Server

Recovery

1. This value provides a measure of number of Route on SSN segmented XUDT messages received from the network.

RxSCCPSegmentSrvcMsg

Measurement ID
9315

Measurement Group
Server SCCP Performance

Measurement Type
Single

Measurement Dimension
Simple

Description
The number of Segmented XUDTS messages received from network.

Collection Interval
30 min

Peg Condition
For each segmented XUDTS messages received from network

Measurement Scope
Network, NE, Server

Recovery

1. This value provides a measure of number of segmented XUDTS messages received from the network.

RxSCCPSgmntsReassSUCC

Measurement ID
9317

Measurement Group
Server SCCP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of XUDT segments reassembled successfully.

Collection Interval
30 min

Peg Condition
For each well-formed ingress segmented XUDT message resulting in a successful reassembly procedure

Measurement Scope
Network, NE, Server

Recovery

1. This value provides a measure of well-formed ingress segmented XUDT messages that are reassembled successfully.

Server TCAP Exception measurements

TCAPComponentQueueFull

Measurement ID
9235

Measurement Group
Server TCAP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Nnumber of egress components discarded during the reporting interval due to the MP server's internal TCAP component queue being full.

Collection Interval
30 min

Peg Condition
Each time the Dialogue Cleanup Timer expires

Measurement Scope
Site

Recovery

1. If this measurement has a non-zero value, look for Event 19267 in the Alarm History during the time period covered by the measurement reporting interval. If the event is found, refer to *Alarms and KPIs refrence* for information about Event 19267.
2. It is recommended to contact My Oracle Support (MOS) for assistance in determining the exact cause of the failure.

TCAPDialogueTimeout

Measurement ID
9234

Measurement Group
Server TCAP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of dialogues aborted by the local TCAP due to a dialogue timeout during the reporting interval.

Note: A dialogue timer is only started if the local TCAP application sends a `Begin` message that contains no components. The purpose of the dialogue timer is to prevent stale dialogues if the message never reaches the remote TCAP peer or if the remote TCAP peer never responds.

Collection Interval
30 min

Peg Condition
Each time the Dialogue Cleanup Timer expires

Measurement Scope
Network, NE, Server

Recovery

1. If this measurement has a non-zero value, look for Event 19267 - Dialogue removed by dialogue cleanup timer in the **Alarm History** during the time period covered by the measurement reporting interval.
2. If you can locate the corresponding event, see the appropriate event documentation for how to proceed.
3. It is recommended to contact My Oracle Support (MOS) for further assistance in determining the exact cause of the failure.

TCAPAbrtPeer

Measurement ID
9233

Measurement Group
Server TCAP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of dialogues aborted by the remote TCAP application using U-Abort during the reporting interval.

Collection Interval
30 min

Peg Condition
Each time the tcUAbortInd function is called due to receipt of a U-Abort from the remote TCAP peer

Measurement Scope
Network, NE, Server

Recovery

1. If this measurement has a non-zero value, look for Event 19269 in the GUI under **Alarm History** during the time period covered by the measurement reporting interval.
2. If you can locate the corresponding event, see the appropriate event documentation for how to proceed.
3. It is recommended to contact My Oracle Support (MOS) for further assistance in determining the exact cause of the failure.

TCAPAbrtTcu

Measurement ID
9232

Measurement Group
Server TCAP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of dialogues aborted by the local TCAP during the reporting interval due to a decision by the local TCAP application.

Collection Interval
30 min

Peg Condition
Each time the tcUAbortReq function is called

Measurement Scope
Network, NE, Server

Recovery

1. Look for related events in the GUI **Alarm History** log during the time period of the measurement reporting interval.
2. It is recommended to contact My Oracle Support (MOS) for further assistance in determining the exact cause of the failure.

TCAPAbrtPeerErr

Measurement ID
9231

Measurement Group
Server TCAP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of dialogues aborted by the remote TCAP application using P-Abort during the reporting interval.

Collection Interval
30 min

Peg Condition
Each time the tcPAbortInd function is called due to a receipt of a P-Abort from the remote TCAP peer

Measurement Scope
Network, NE, Server

Recovery

1. If this measurement has a non-zero value, look for Event 19264 or Event 19266 in the GUI under **Alarm History** during the time period covered by the measurement reporting interval.
2. If you can locate the corresponding event, see the appropriate event documentation for how to proceed.
3. It is recommended to contact My Oracle Support (MOS) for further assistance in determining the exact cause of the failure.

TCAPAbrtTcuErr

Measurement ID
9230

Measurement Group
Server TCAP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of dialogues aborted by the local TCAP during the reporting interval due to an error caused by the local TCAP application.

Collection Interval
30 min

Peg Condition
Each time the tcPAbortInd function is called due to an egress transaction, exception for abort due to the dialogue cleanup timer

Measurement Scope
Network, NE, Server

Recovery

1. If this measurement has a non-zero value, look for Event 19263 or Event 19265 in the GUI under **Alarm History** during the time period covered by the measurement reporting interval.

2. If you can locate the corresponding event, see the appropriate event documentation for how to proceed.
3. It is recommended to contact My Oracle Support (MOS) for further assistance in determining the exact cause of the failure.

TCAPDialogueTblFull

Measurement ID
9229

Measurement Group
Server TCAP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of dialogues (both ingress and egress) discarded during the reporting interval due to the MP server's internal TCAP dialogue table being full.

Collection Interval
30 min

Peg Condition
Each time a record cannot be added to the TcapDialogue table because the table is full

Measurement Scope
Network, NE, Server

Recovery

1. If the TCAP dialogue internal table reaches capacity, Alarm 19272 - TCAP active dialogue utilization will be raised with critical severity. Refer to the *DSR Alarms and KPIs Reference* for details about this alarm.

TCAPStackQueueFull

Measurement ID
9228

Measurement Group
Server TCAP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress events discarded during the reporting interval due to the MP server's TCAP internal event queue being full. Events could be incoming TCAP messages or N-Notice indications from SCCP.

Collection Interval
30 min

Peg Condition
Each time an event cannot be added to the TCAP task queue because the queue is full

Measurement Scope
Network, NE, Server

Recovery

1. If the TCAP internal event queue reaches capacity, Alarm 19274 - TCAP stack event queue utilization will be raised with critical severity. Refer to the *DSR Alarms and KPIs Reference* for details about this alarm.

TCAPOpCancelTcu

Measurement ID
9227

Measurement Group
Server TCAP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of egress operations that were cancelled by the local TCAP application during the reporting interval.

Collection Interval
30 min

Peg Condition
Each time the tcUCancelReq function is called

Measurement Scope
Network, NE, Server

Recovery

1. This measurement does not necessarily indicate an error condition. Look for events that may be related during the period of the measurement reporting interval for more details.
2. It is recommended to contact My Oracle Support (MOS) as needed for further assistance.

TCAPOpTimeout

Measurement ID
9226

Measurement Group
Server TCAP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of egress operations that timed out waiting for a response from the remote TCAP peer during the reporting interval.

Collection Interval
30 min

Peg Condition
Each time the tcLCancelInd function is called

Measurement Scope
Network, NE, Server

Recovery

1. If this measurement has a non-zero value, look for Event 19268 - Operation removed by invocation time expiry in the GUI **Alarm History** during the time period covered by the measurement reporting interval.
2. This error may be caused by failure to route the message by one of the underlying layers (e.g., SCCP). Refer to the *DSR Alarms and KPIs Reference* for details about Event 19268 for information about how to proceed.
3. It is recommended to contact My Oracle Support (MOS) for further assistance in determining the exact cause of the failure.

TCAPRetErrPeer

Measurement ID
9225

Measurement Group
Server TCAP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of egress components that resulted in a Return Error response by the remote TCAP peer during the reporting interval.

Collection Interval
30 min

Peg Condition
Each time the tcUErrorInd function is called

Measurement Scope
Network, NE, Server

Recovery

1. If this measurement has a non-zero value, look for Event 19275 - Return error from remote TCAP peer (refer to the *DSR Alarms and KPIs Reference* for details about this event) in the GUI **Alarm History** during the time period covered by the measurement reporting interval.
2. This error is likely caused by a malformed message or unexpected message that we sent to the remote TCAP peer. If you can locate the corresponding event, see the appropriate event documentation for how to proceed.
3. It is recommended to contact My Oracle Support (MOS) for further assistance in determining the exact cause of the failure.

TCAPRetErrTcu

Measurement ID
9224

Measurement Group
Server TCAP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress components that resulted in a Return Error response by the local TCAP application during the reporting interval.

Collection Interval
30 min

Peg Condition
Network, NE, Server

Measurement Scope

Recovery

1. Look for events in the GUI **Alarm History** during the time of the measurement reporting interval for more details related to why the component was discarded.
2. It is recommended to contact My Oracle Support (MOS) for further assistance in determining the exact cause of the failure.

TCAPRejPeer

Measurement ID
9223

Measurement Group
Server TCAP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of egress components rejected by the remote TCAP peer during the reporting interval.

Collection Interval
30 min

Peg Condition

Measurement Scope
Network, NE, Server

Recovery

1. If this measurement has a non-zero value, look for Event 19271 - Operation rejected by remote TCAP peer (refer to the *DSR Alarms and KPIs Reference* for details about this event) in the GUI **Alarm History** during the time period covered by the measurement reporting interval. This error is likely caused by a malformed message or unexpected message that we sent to the remote TCAP peer.
2. If you can locate the corresponding event, see the appropriate documentation for how to proceed.
3. It is recommended to contact My Oracle Support (MOS) for further assistance in determining the exact cause of the failure.

TCAPRejTcu

Measurement ID
9222

Measurement Group
Server TCAP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress components rejected by the local TCAP application during the reporting interval.

Collection Interval
30 min

Peg Condition
Each time the tcUrejectReq function is called

Measurement Scope
Network, NE, Server

Recovery

1. Look for events in the GUI **Alarm History** during the time of the measurement reporting interval for more details related to why the component was discarded.
2. It is recommended to contact My Oracle Support (MOS) for further assistance in determining the exact cause of the failure.

TCAPRejPeerErr

Measurement ID
9221

Measurement Group
Server TCAP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress components discarded due to a component error caused by the remote TCAP peer during the reporting interval.

Collection Interval
30 min

Peg Condition

Measurement Scope
Network, NE, Server

Recovery

1. If this measurement has a non-zero value, look for Events 19262 - Operation discarded due to malformed component received from remote TCAP peer or Event 19266 - Unexpected event received from remote TCAP peer (refer to the *DSR Alarms and KPIs Reference* for details about these events) in the GUI **Alarm History** during the time period covered by the measurement reporting interval. This error is likely caused by a malformed message or unexpected message from the remote TCAP peer.
2. If you can locate the corresponding event, see the appropriate event documentation for how to proceed.
3. It is recommended to contact My Oracle Support (MOS) for further assistance in determining the exact cause of the failure.

TCAPRejTcuErr

Measurement ID
9220

Measurement Group
Server TCAP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of egress components discarded due to a component error caused by the local TCAP application during the reporting interval.

Collection Interval
30 min

Peg Condition
Each time the tcLRejectInd function is called for an egress component

Measurement Scope
Network, NE, Server

Recovery

1. If this measurement has a non-zero value, look for Event 19265 - Unexpected event received from local TC User (refer to the *DSR Alarms and KPIs Reference* for details about this event) in the GUI **Alarm History** during the time period covered by the measurement reporting interval.
2. If you can locate the corresponding event, see the appropriate event documentation for how to proceed.
3. It is recommended to contact My Oracle Support (MOS) for further assistance in determining the exact cause of the failure.

TCAPComponentTblFull

Measurement ID
9219

Measurement Group
Server TCAP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of egress operations discarded due to the MP server's TCAP component internal table being full during the reporting interval.

Collection Interval
30 min

Peg Condition
Each time an Invoke component record cannot be created int he TcapComponent table because the table is full

Measurement Scope
Network, NE, Server

Recovery

1. If the TCAP component internal table reaches capacity, Alarm 19273 - TCAP active operation utilization will be raised with critical severity. Refer to the *DSR Alarms and KPIs Reference* for details about this alarm.

Ss7DeserializationFail

Measurement ID
9322

Measurement Group
Server TCAP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of MAP response message of which deserialization failed.

Collection Interval
30 min

Peg Condition

Measurement Scope
Network, NE, Server

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

Server TCAP Performance measurements

RxTCAPDialogues

Measurement ID
9210

Measurement Group
Server TCAP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress dialogues created on the MP server during the reporting interval.

Collection Interval
30 min

Peg Condition
Each time a TcapDialogue table record is successfully created as a result of a Begin message from the network.

Measurement Scope
Network, NE, Server

Recovery

1. This measurement shows the number of ingress dialogues (i.e., dialogues resulting from receipt of an ITU TCAP Begin message) created on the MP server during the reporting interval. RxTCAPDialogues divided by the reporting interval yields the average rate of ingress dialogues for the MP server.

TxTCAPDialogues

Measurement ID
9211

Measurement Group
Server TCAP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of egress dialogues created on the MP server during the reporting interval.

Collection Interval
30 min

Peg Condition
Each time a TcapDialogue table record is successfully created as a result of a tcBeginReq call from the TC User.

Measurement Scope
Network, NE, Server

Recovery

1. This measurement shows the number of egress dialogues (i.e. dialogues resulting from sending an ITU TCAP Begin message) created on the MP server during the reporting interval. TxTCAPDialogues divided by the reporting interval yields the average rate of egress dialogues for the MP server.

TxTCAPOperations

Measurement ID
9212

Measurement Group
Server TCAP Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of egress operations created on the MP server during the reporting interval.

Collection Interval
30 min

Peg Condition
Each time a TcapComponent table record is successfully created as a result of a tcInvokeReq call from the TC User.

Measurement Scope
Network, NE, Server

Recovery

1. The TxTCAPOperations measurement simply shows the number of egress operations (i.e. TCAP Invokes) created on the MP server during the reporting

interval. TxTCAPOperations divided by the reporting interval yields the average rate of egress operations for the MP server.

TCAPStackQueueAvg

Measurement ID
9213

Measurement Group
Server TCAP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average percent utilization during the reporting interval of the MP server's TCAP internal queue used to receive messages from the SCCP layer. The number is expressed as a percentage of the maximum size.

Collection Interval
30 min

Peg Condition
This measurement is driven by the TCAPEventQueue SysMetric exactly as is done for other layers of the stack.

Measurement Scope

Recovery

1. If the TCAP internal queue nears capacity, Alarm 19274 - TCAP stack event queue utilization will be raised with a severity corresponding to how near the queue utilization is to 100%. Refer to the *DSR Alarms and KPIs Reference* for details about this alarm.

TCAPStackQueuePeak

Measurement ID
9214

Measurement Group
Server TCAP Performance

Measurement Type
Minimum

Measurement Dimension
Single

Description
The peak percent utilization during the reporting interval of the MP server's TCAP internal queue used to receive messages from the SCCP layer. The number is expressed as a percentage of the maximum size.

Collection Interval
30 min

Peg Condition
This measurement is driven by the TCAPEventQueue SysMetric exactly as is done for other layers of the stack.

Measurement Scope

Recovery

1. If the TCAP internal queue nears capacity, Alarm 19274 - TCAP stack event queue utilization will be raised with a severity corresponding to how near the queue utilization is to 100%. Refer to the *DSR Alarms and KPIs Reference* for details about this alarm.

TCAPDialogueTblAvg

Measurement ID
9215

Measurement Group
Server TCAP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average percent utilization during the reporting interval of the MP server's TCAP dialogue internal table used to maintain dialogue state. The number is expressed as a percentage of the maximum size.

Collection Interval
30 min

Peg Condition
This measurement is driven by the TCAPDialogueTable SysMetric exactly as is done for the event queues.

Measurement Scope
Network, NE, Server

Recovery

1. If the TCAP dialogue internal table nears capacity, Alarm 19272 - TCAP active dialogue utilization will be raised with a severity corresponding to how near the queue utilization is to 100%. Refer to the *DSR Alarms and KPIs Reference* for details about this alarm.

TCAPDialogueTblPeak

Measurement ID
9216

Measurement Group
Server TCAP Performance

Measurement Type
Maximum

Measurement Dimension
Single

Description
The peak percent utilization during the reporting interval of the MP server's TCAP dialogue internal table used to maintain dialogue state. The number is expressed as a percentage of the maximum size.

Collection Interval
30 min

Peg Condition
This measurement is driven by the TCAPDialogueTable SysMetric exactly as is done for the event queues.

Measurement Scope
Network, NE, Server

Recovery

1. If the TCAP dialogue internal table nears capacity, Alarm 19272 - TCAP active dialogue utilization will be raised with a severity corresponding to how near the queue utilization is to 100%. Refer to the *DSR Alarms and KPIs Reference* for details about this alarm.

TCAPComponentTblAvg

Measurement ID
9217

Measurement Group
Server TCAP Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average percent utilization during the reporting interval of the MP server's TCAP component internal table used to maintain operation state. The number is expressed as a percentage of the maximum size.

Collection Interval
30 min

Peg Condition
This measurement is driven by the TCAP ComponentTable SysMetric exactly as is done for the event queues.

Measurement Scope
Network, NE, Server

Recovery

1. If the TCAP component internal table nears capacity, Alarm 19273 - TCAP active operation utilization will be raised with a severity corresponding to how near the queue utilization is to 100%. Refer to the *DSR Alarms and KPIs Reference* for details about this alarm.

TCAPComponentTblPeak

Measurement ID
9218

Measurement Group
Server TCAP Performance

Measurement Type
Maximum

Measurement Dimension
Single

Description
The peak percent utilization during the reporting interval of the MP server's TCAP component internal table used to maintain operation state. The number is expressed as a percentage of the maximum size.

Collection Interval
30 min

Peg Condition
This measurement is driven by the TCAP ComponentTable SysMetric exactly as is done for the event queues.

Measurement Scope
Network, NE, Server

Recovery

1. If the TCAP component internal table nears capacity, Alarm 19273 - TCAP active operation utilization will be raised with a severity corresponding to how near the queue utilization is to 100%. Refer to the *DSR Alarms and KPIs Reference* for details about this alarm.

SS7 Exception measurements

Ss7TxFailedCA

Measurement ID
9320

Measurement Group
SS7 Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of MAP response messages successfully transferred from SS7 TCAP layer to ComAgent layer

Collection Interval
30 min

Peg Condition
When TCAP layer successfully forwards message to Communication Agent

Measurement Scope
Network, NE, Server

Recovery

1. Values in this measurement provide a measure of number of TCAP messages send failed to Communication Agent. Non-zero value for this measurement tag represents resource usage issues on the server. Check for any related additional Events or Alarms from the server.

Ss7TxMpUnkDiscard

Measurement ID
9321

Measurement Group
SS7 Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
Unknown SS7 MP ID. Failed to transfer MAP response message. MP ID from origination transaction IDcan not be mapped to any SS7 MP in topology.

Collection Interval
30 min

Peg Condition
When TCAP layer fails to find other XG SS7 MP information in database

Measurement Scope
Network, NE, Server

Recovery

1. Values in this measurement provide a measure of number of TCAP messages discarded by TCAP layer when it is not able to find the XG SS7 MP information. Non-zero value for this measurement tag represents resource usage issues on the server. Check for any related additional Events or Alarms from the server.

SS7 Performance measurements

Ss7TxSuccCA

Measurement ID
9319

Measurement Group
SS7 Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of MAP response messages successfully transferred from SS7 TCAP layer to ComAgent layer

Collection Interval
30 min

Peg Condition
When TCAP layer successfully forwards message to Communication Agent

Measurement Scope
Network, NE, Server

Recovery

1. Values in this measurement provides a measure of number of TCAP messages forwarded to Communication Agent for routing to other XG SS7 Stack.

Task Performance measurements

The Task Performance measurement report contains measurements that provide task level performance information related to ingress statistics.

TaskRxDrop

Measurement ID
18380

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message to a task which was not accepted by task due to its congestion.

Measurement Scope
Site

Recovery

1. No action required.

TaskRxDropP0G

Measurement ID
18381

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages of priority 0 and color green discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message to a task which was not accepted by task due to congestion.

Measurement Scope
Site

Recovery

1. No action required.

TaskRxDropP0Y

Measurement ID
18397

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages of priority 0 and color yellow discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for the network element MPS for the time interval, based on request and answer messages.

Measurement Scope
Site

Recovery

1. No action required.

TaskRxDropP1G

Measurement ID
18382

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages of priority 1 and color green discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message to a task which was not accepted by task due to congestion.

Measurement Scope
Site

Recovery

1. No action required.

TaskRxDropP1Y

Measurement ID
18398

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages of priority 1 and color yellow discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for the network element MPS for the time interval, based on request and answer messages.

Measurement Scope
Site

Recovery

1. No action required.

TaskRxDropP2G

Measurement ID
18383

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages of priority 2 and color green discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message to a task which was not accepted by task due to congestion.

Measurement Scope
Site

Recovery

1. No action required.

TaskRxDropP2Y

Measurement ID
18399

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages of priority 2 and color yellow discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for the network element MPS for the time interval, based on request and answer messages.

Measurement Scope
Site

Recovery

1. No action required.

TaskRxDropP3G

Measurement ID
18384

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages of priority 3 and color green discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message to a task which was not accepted by task due to congestion.

Measurement Scope
Site

Recovery

1. No action required.

TaskRxDropP3Y

Measurement ID
18400

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages of priority 3 and color yellow discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for the network element MPS for the time interval, based on request and answer messages.

Measurement Scope
Site

Recovery

1. No action required.

TaskRxDropP4G

Measurement ID
18385

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages of priority 4 and color green discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message to a task which was not accepted by task due to congestion.

Measurement Scope
Site

Recovery

1. No action required.

TaskRxDropP4Y

Measurement ID
18401

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages of priority 4 and color yellow discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for the network element MPS for the time interval, based on request and answer messages.

Measurement Scope
Site

Recovery

1. No action required.

TaskRxDropP5G

Measurement ID
18386

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages of priority 5 and color green discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message to a task which was not accepted by task due to congestion.

Measurement Scope
Site

Recovery

1. No action required.

TaskRxDropP5Y

Measurement ID
18402

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages of priority 5 and color yellow discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for the network element MPS for the time interval, based on request and answer messages.

Measurement Scope
Site

Recovery

1. No action required.

TaskRxDropP6G

Measurement ID
18387

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages of priority 6 and color green discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message to a task which was not accepted by task due to congestion.

Measurement Scope
Site

Recovery

1. No action required.

TaskRxDropP6Y

Measurement ID
18403

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages of priority 6 and color yellow discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for the network element MPS for the time interval, based on request and answer messages.

Measurement Scope
Site

Recovery

1. No action required.

TaskRxDropP7G

Measurement ID
18388

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages of priority 7 and color green discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message to a task which was not accepted by task due to congestion.

Measurement Scope
Site

Recovery

1. No action required.

TaskRxDropP7Y

Measurement ID
18404

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages of priority 7 and color yellow discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for the network element MPS for the time interval, based on request and answer messages.

Measurement Scope
Site

Recovery

1. No action required.

TaskRxDropP8G

Measurement ID
18389

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages of priority 8 and color green discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message to a task which was not accepted by task due to congestion.

Measurement Scope
Site

Recovery

1. No action required.

TaskRxDropP8Y

Measurement ID
18405

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages of priority 8 and color yellow discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for the network element MPS for the time interval, based on request and answer messages.

Measurement Scope
Site

Recovery

1. No action required.

TaskRxDropP9G

Measurement ID
18390

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages of priority 9 and color green discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message to a task which was not accepted by task due to congestion.

Measurement Scope
Site

Recovery

1. No action required.

TaskRxDropP9Y

Measurement ID
18406

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages of priority 9 and color yellow discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for the network element MPS for the time interval, based on request and answer messages.

Measurement Scope
Site

Recovery

1. No action required.

TaskRxDropP10G

Measurement ID
18391

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages of priority 10 and color green discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message to a task which was not accepted by task due to congestion.

Measurement Scope
Site

Recovery

1. No action required.

TaskRxDropP10Y

Measurement ID
18407

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages of priority 10 and color yellow discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for the network element MPS for the time interval, based on request and answer messages.

Measurement Scope
Site

Recovery

1. No action required.

TaskRxDropP11G

Measurement ID
18392

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages of priority 11 and color green discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message to a task which was not accepted by task due to congestion.

Measurement Scope
Site

Recovery

1. No action required.

TaskRxDropP11Y

Measurement ID
18408

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages of priority 11 and color yellow discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for the network element MPS for the time interval, based on request and answer messages.

Measurement Scope
Site

Recovery

1. No action required.

TaskRxDropP12G

Measurement ID
18393

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages of priority 12 and color green discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message to a task which was not accepted by task due to congestion.

Measurement Scope
Site

Recovery

1. No action required.

TaskRxDropP12Y

Measurement ID
18409

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages of priority 12 and color yellow discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for the network element MPS for the time interval, based on request and answer messages.

Measurement Scope
Site

Recovery

1. No action required.

TaskRxDropP13G

Measurement ID
18394

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages of priority 13 and color green discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message to a task which was not accepted by task due to congestion.

Measurement Scope
Site

Recovery

1. No action required.

TaskRxDropP13Y

Measurement ID
18410

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages of priority 13 and color yellow discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for the network element MPS for the time interval, based on request and answer messages.

Measurement Scope
Site

Recovery

1. No action required.

TaskRxDropP14G

Measurement ID
18395

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages of priority 14 and color green discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message to a task which was not accepted by task due to congestion.

Measurement Scope
Site

Recovery

1. No action required.

TaskRxDropP14Y

Measurement ID
18411

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages of priority 14 and color yellow discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for the network element MPS for the time interval, based on request and answer messages.

Measurement Scope
Site

Recovery

1. No action required.

TaskRxDropP15G

Measurement ID
18396

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages of priority 15 and color green discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for each ingress message to a task which was not accepted by task due to congestion.

Measurement Scope
Site

Recovery

1. No action required.

TaskRxDropP15Y

Measurement ID
18412

Measurement Group
Task Performance

Measurement Type
Simple

Measurement Dimension
Arrayed by <TaskName>

Description
The number of Task ingress messages of priority 15 and color yellow discarded or rejected due to congestion.

Collection Interval
5 min

Peg Condition
This measurement is pegged for the network element MPS for the time interval, based on request and answer messages.

Measurement Scope
Site

Recovery

1. No action required.

Transport Exception measurements

The Transport Exception measurement group contains measurements that provide information about exceptions and unexpected events related to the Transport Manager.

RxTrFarEndClose

Measurement ID
9400

Measurement Group
Transport Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (per Transport)

Description
The number of times the far end closed the SCTP connection

Collection Interval
30 min

Peg Condition
Each time the far-end of the association closes the association by sending either SHUTDOWN or ABORT

Measurement Scope
NE, Server

Recovery

1. If the closing of the association was expected, no further action is necessary - the association will be recovered as soon as the far-end is ready to connect again.
2. If the closing of the association was not expected:
   a. Transport status can be viewed at **Main Menu** > **Transport Manager** > **Maintenance** > **Transport**.
   b. Look in the event history at **Main Menu** > **Alarms & Events** > **View History** Event 19404 - Far-end closed the Transport to determine exactly when the far-end closed the association.
   c. Look for other events for the association or MP server in the event history.
   d. Verify that IP connectivity still exists between the MP server and the SG.
   e. Verify whether the far-end of the association is undergoing maintenance.

EvTrManClose

Measurement ID
9401

Measurement Group
Transport Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (per Transport)

Description
The number of times the Transport was manually closed. This includes manual changes of the transport administrative state that cause the transport to transition from APP-UP to Disabled.

Collection Interval
30 min

Peg Condition
Each time a manual change is made to the transport administrative state from Enabled to Blocked or from Enabled to Disabled, causing the transport to transition our of APP-UP protocol state.

Note: This condition has a special meaning for SS7/M3UA where it is linked with ASP-UP.

Measurement Scope
NE, Server

Recovery

1. If the transport is known to be under maintenance, then no further action is necessary.

2. If the closing of the association was not expected:

   a. Transport status can be viewed at **Main Menu** > **Transport Manager** > **Maintenance** > **Transport**.

   b. Look in the event history at **Main Menu** > **Alarms & Events** > **View History** Event 19406 - Local Transport maintenance state change, which shows the manual transport state transitions and contains a time-stamp of when the change occurred.

   c. The security logs at **Main Menu** > **Log Files** > **Security Logs History** can be searched using the time-stamp from the event history log to determine which login performed the manual state change on the association.

   d. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

EvTrNoRespClose

Measurement ID
9402

Measurement Group
Transport Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (per Transport)

Description
The number of times the transport was closed due to lack of response from the far end, including lack of response to any signaling sent on the transport.

Collection Interval
30 min

Peg Condition
Each time an established Transport is closed by the MP server due to lack of response at the SCTP level from the far-end of the association.

Measurement Scope
NE, Server

Recovery

1. If all is well, this measurement should have a zero value. If non-zero, the association has been closed due to lack of response from the far-end. The MP server will begin periodic attempts to reconnect to the SG.

2. Otherwise:

   a. Transport status can be viewed at **Main Menu** > **Transport Manager** > **Maintenance** > **Transport**.

b. Look in the event history at **Main Menu** > **Alarms & Events** > **View History** Event 19405 - Transport closed due to a lack of response (refer to the *DSR Alarms and KPIs Reference* for details about this event.

c. Verify IP connectivity between the MP server and the SG.

d. Determine if the far-end of the association is congested, possibly causing slow response times on the association.

e. Check the IP network between the MP server and the SG for excessive retransmissions.

f. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

EvTrCnxFail

Measurement ID
9404

Measurement Group
Transport Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (per Transport)

Description

- The number of times the SCTP connection attempt failed on the transport. This includes only unsuccessful attempts to connect/accept SCTP connections. It does not include failure of established connections.
- The number of times open attempt on UDP socket in Listen Mode failed on the Transport.

Collection Interval
30 min

Peg Condition

- Each time an SCTP connect attempt fails
- Each time an UDP open attempt in Listen mode fails
- Each time an SCTP open attempt in Listen mode fails

Measurement Scope
NE, Server

Recovery

1. If all is well, this measurement should have a zero value. A non-zero value indicates that the MP server has attempted to connect to the Peer IP Address at least once and failed to establish the SCTP connection.

2. Otherwise:

   a. Transport status can be viewed at **Main Menu** > **Transport Manager** > **Maintenance** > **Transport**.

   b. Look in the event history at **Main Menu** > **Alarms & Events** > **View History** Event 19402 - Failed to connect Transport, which provides more details as to the actual cause of the failure.

   c. Verify that the Adjacent Node that represents the far-end of the association is configured with the correct IP address at **Main Menu** > **Transport Manager** > **Configuration** > **Adjacent Node**.

   d. Verify that the remote port configured at **Main Menu** > **Transport Manager** > **Configuration** > **Transport** for the association correctly identifies the port that the Adjacent Node is listening on for SCTP connections.

   e. Verify the IP network connectivity between the MP server and the Adjacent Node.

   f. If the SG must be configured to connect to the MP server's IP address and port, verify that the SG configuration matches the association configuration at **Main Menu** > **Transport Manager** > **Configuration** > **Transport**.

   g. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

TxTrSendFail

Measurement ID
9405

Measurement Group
Transport Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (per Transport)

Description
The number of times the SCTP/UDP send failed for signaling on the transport. This includes sending of any messages on an established transport or UDP socket.

Collection Interval
30 min

Peg Condition
Each time an attempt to send signaling DATA fails for any reason and the information being sent cannot be mapped to a specific transport

Measurement Scope
NE, Server

Recovery

1. If all is well, this measurement should have a zero value. A non-zero value indicates that an attempt to send a message to the far-end on this Transport has failed. Normally this happens if the far-end cannot keep up with the rate of messages being sent from all links on the association.
2. Otherwise:
   a. Transport status can be viewed at **Main Menu** > **Transport Manager** > **Maintenance** > **Transport**.
   b. Look in the event history at **Main Menu** > **Alarms & Events** > **View History** Event 19407 - Failed to send Transport DATA Message, which gives more information about exactly what caused the failure to send.
   c. Verify that the IP network between the MP server and the Adjacent Node is functioning as expected.
   d. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

RxTrRecvFailed

Measurement ID
9406

Measurement Group
Transport Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (per Transport)

Description
The number of times an SCTP/UDP receive attempt failed on the transport. Failure to receive message via SCTP may result in a message being discarded

Collection Interval
30 min

Peg Condition
Each time an SCTP receive fails when the far-end attempted to send data, but the data cannot be received due to an invalid message length

Measurement Scope
NE, Server

Recovery

1. If all is well, this measurement should have a zero value. A non-zero value indicates that the far-end is sending data that is malformed.
2. Otherwise:
   a. Transport status can be viewed at **Main Menu** > **Transport Manager** > **Maintenance** > **Transport**.

b. Look in the event history at **Main Menu** > **Alarms & Events** > **View History** Event 19403 - received malformed SCTP message (invalid length), which gives more information about exactly what caused the failure.

c. Try to bring the sockets back into alignment by manually Disabling and Enabling the Transport.

d. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

EvTrSockInitFail

Measurement ID
9407

Measurement Group
Transport Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (per Transport)

Description
The number of times the socket initialization failed.

Collection Interval
30 min

Peg Condition
Each time one or more socket options cannot be set according to the settings in the transport's configuration set

Measurement Scope
NE, Server

Recovery

1. If all is well, this measurement should have a zero value. A non-zero value indicates some problem with association setup prior to attempting to connect the association.
2. If this issue occurs, look in **Main Menu** > **Alarms & Events** > **View History** for Event 19401 - Failed to configure Transport, which provides details about exactly what part of the configuration failed.
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

TmSingleTransQueueFull

Measurement ID
9415

Measurement Group
Transport Exception

Measurement Type
Simple

Measurement Dimension
Arrayed (per Transport)

Description
The number of egress messages that were discarded because the single Transport Writer Queue was full.

Collection Interval
30 min

Peg Condition
Check whether the single peers transmit data queue limit has reached its max limit (1000). If max limit is reached or exceeded then peg the measurement and discard the low priority events.

Measurement Scope
NE, Server

Recovery

1. This measurements indicates that the Transport is backed up and there could be messages that will get discarded. If it's above the defined critical threshold, it results in generating Alarm 19408 - Single Transport Egress-Queue Utilization (refer to the *DSR Alarms and KPIs Reference* for details about this alarm).
2. The percent utilization of the MP's Transport Writer Queue is approaching its maximum capacity. If this problem persists and the queue reaches 100% utilization, all new egress messages from the Transport will be discarded.

   This alarm should not normally occur when no other congestion alarms are asserted. This may occur for a variety of reasons:

   a. An IP network or Adjacent node problem may exist preventing SCTP from transmitting messages into the network at the same pace that messages are being received form the network.

   b. The SCTP Association Writer process may be experiencing a problem preventing it from processing events from its event queue. The alarm log should be examined form **Main Menu** > **Alarms & Events**.

   c. If one or more MPs in a server site have failed, the traffic will be distributed amongst the remaining MPs in the server site. MP server status can be monitored form **Main Menu** > **Status & Control** > **Server Status**.

   d. The mis-configuration of Adjacent Node IP routing may result in too much traffic being distributed to the MP. Each MP in the server site should be receiving approximately the same ingress transaction per second.

   e. There may be an insufficient number of MPs configured to handle the network traffic load. The ingress traffic rate of each MP can be monitored from **Main Menu** > **Status & Control** > **KPI Display**. If all MPs are in a congestion state then the offered load to the server site is exceeding its capacity.

3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

EvSctpAdjPToDwn

Measurement ID
9424

Measurement Group
Transport Exception

Measurement Type
Max

Measurement Dimension
Arrayed (per Transport)

Description
The number of times a configured IP Address of an Adjacent Node goes from Available to Unavailable.

Collection Interval
30 min

Peg Condition
Each time reachability to a configured IP address of an Adjacent Node is lost, indicating a fault in the path to that address was detected.

Measurement Scope
NE, Server

Recovery

1. If all is well, this measurement should have a zero value. A non-zero value indicates a path fault to that address was detected.
2. Otherwise:
   a. Check the event history log at **Main Menu** > **Alarms & Events** > **View History**, looking for Event 19409 - Message Rejected by ACL Filtering which provide more details as to the actual cause of the failure.
   b. Verify the Adjacent Node that represents the far-end of the association is configured with the correct address at **Main Menu** > **Transport Manager** > **Configuration** > **Adjacent Node**.
   c. Verify the IP network connectivity between the MP server and the Adjacent Node's IP address using a ping or traceroute command
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

EvSctpTransRej

Measurement ID
9425

Measurement Group
Transport Exception

Measurement Type
Max

Measurement Dimension
Arrayed (per Transport)

Description
The number of times SCTP Transport has been rejected due to remote IP addresses validation failure based on SCTP Multihoming mode. This is valid only for SCTP Transports.

Collection Interval
30 min

Peg Condition
Each time the association has been rejected due to IP address validation failure in the SCTP INITs/INIT-ACKs transmitted by the Adjacent Node.

Measurement Scope
NE, Server

Recovery

1.

2. If all is well, this measurement should have a zero value. A non-zero value indicates that the Adjacent Node has attempted to connect to the Peer IP Address at least once and but the connection attempt was rejected because the IP addresses advertised by the Adjacent Node failed validation.

3. Otherwise:

   a. Transport status can be viewed at **Main Menu** > **Transport Manager** > **Maintenance** > **Transport**.

   b. Check the event history log at **Main Menu** > **Alarms & Events** > **View History**, looking for Events 19411 - SCTP Transport closed due to failure of multihoming validation or 19412 - SCTP Transport Transport Configuration Mismatch which provide more details as to the actual cause of the failure.

   c. Verify that the SCTP validation mode is as desired.

   d. Verify that the Adjacent Node that represents the far-end of the association is configured with the correct address at **Main Menu** > **Transport Manager** > **Configuration** > **Adjacent Node**.

   e. Verify that the remote port configured at **Main Menu** > **Transport Manager** > **Configuration** > **Transport** for the association correctly identifies the port that the Adjacent node is listening on for SCTOp connections.

   f. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

Transport Usage measurements

The Transport Usage measurement group contains measurements that provide information about the usage of the Transport Manager.

EvTrCnxSuccess

Measurement ID
9403

Measurement Group
Transport Usage

Measurement Type
Simple

Measurement Dimension
Arrayed (per Transport)

Description

- The number of times the SCTP connection was successfully established on the transport.
- The number of times the UDP socket in Listen Mode was opened successfully on the transport.

Collection Interval
30 min

Peg Condition

- Each time the SCTP association reaches the APP-UP protocol state (i.e. the connection is successfully ESTABLISHED)
- Each time the UDP socket in Listen Mode was opened successfully

Measurement Scope
NE, Server

Recovery

1. If the association is expected to have connected during the measurement reporting interval, no action is necessary.
2. Otherwise:
   a. Transport status can be viewed at **Main Menu** > **Transport Manager** > **Maintenance** > **Transport**.
   b. Look in the event history at **Main Menu** > **Alarms & Events** > **View History** events related to the association or the MP server to determine what may have caused the Transport to fail.
   c. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

TmTrEnaNotUp

Measurement ID
9410

Measurement Group
Transport Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (per Transport)

Description
The number of seconds during the reporting interval during which the transport was in the Enabled administrative state but was not in APP-UP protocol state. When the transport is Enabled, the desired protocol state is APP-UP. This measurement indicates the amount of time during the reporting interval for which the association was not in the desired protocol state.

Collection Interval
30 min

Peg Condition
Time shall be accumulated for this measurement during the collection interval when all of the following are true:

- the association is in the ENABLED administrative state
- the association is not in the ASP-UP protocol state for M3UA and APP-UP for other Plugins

Measurement Scope
NE, Server

Recovery

1. If all is well, this measurement should have a zero value. A non-zero value indicates that the MP server has attempted to connect to the Peer IP Address at least once and failed to establish the SCTP connection.
2. Otherwise:
   a. Association status can be viewed at **Main Menu** > **Transport Manager** > **Maintenance** > **Transport**.
   b. Verify that the Adjacent server that represents the far-end of the association is configured with the correct IP address at **Main Menu** > **Transport Manager** > **Configuration** > **Adjacent Node**.
   c. Verify that the remote port configured at **Main Menu** > **Transport Manager** > **Configuration** > **Transport** for the association correctly identifies the port that the SG is listening on for SCTP connections.

d. Verify the IP network connectivity between the MP server and the SG.

e. If the Adjacent Node must be configured to connect to the MP server's IP address and port, verify that the Adjacent Node configuration matches the association configuration at **Main Menu** > **Transport Manager** > **Maintenance** > **Transport**.

f. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

RxTmSctpBufAvg

Measurement ID
9411

Measurement Group
Transport Usage

Measurement Type
Average

Measurement Dimension
Arrayed (per Transport)

Description
The Average Value of the number of bytes in SCTP RX Window

Collection Interval
5 min

Peg Condition
Every Second, retrieve the Rx socket buffer occupancy by using the "getsockopt" functions and then calculates and peg the Average buffer occupancy, during the last 5 min window. To calculate the current RX Buffer Occupancy, we subtract the number of unused bytes in the buffer from the initial default RX buffer size set during setsockopt at the time of socket creation.

Measurement Scope
NE, Server

Recovery

1. No action required. This is debug statistical information retrieved from getsockopt (SO_RCVBUF) interface.

RxTmSctpBufPeak

Measurement ID
9412

Measurement Group
Transport Usage

Measurement Type
Max

Measurement Dimension
Arrayed (per Transport)

Description
The Peak Value of the number of bytes in SCTP RX Window

Collection Interval
5 min

Peg Condition
Every Second, retrieve the Rx socket buffer occupancy by using the "getsockopt" functions and then calculates and peg the Maximum buffer occupancy during the last 5 min window. To calculate the current RX Buffer Occupancy, we subtract the number of unused bytes in the buffer from the initial default RX buffer size set during setsockopt at the time of socket creation.

Measurement Scope

Recovery

1. No action required. This is debug statistical information retrieved from getsockopt (SO_RCVBUF) interface.

Transport Performance measurements

The Transport Performance measurement group contains measurements that provide information about performance related measurements for the Transport Manager.

TxTrOctets

Measurement ID
9408

Measurement Group
Transport Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Transport)

Description
The number of octets sent on the SCTP/UDP Transport. It does not include SCTP, UDP, IP, or Ethernet headers

Collection Interval
30 min

Peg Condition
Each time a DATA/non-DATA message is successfully sent on the transport (incremented by the number of octets in the message)

Measurement Scope
NE, Server

Recovery

1. No action required. This measurement indicates the level of signaling octets that have been sent over the association during the reporting interval.

RxTrOctets

Measurement ID
9409

Measurement Group
Transport Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Transport)

Description
The number of octets sent on the SCTP/UDP Transport. It does not include SCTP, UDP, IP, or Ethernet headers

Collection Interval
30 min

Peg Condition
Each time a DATA/non-DATA message is successfully received on the transport (incremented by the number of octets in the message)

Measurement Scope
NE, Server

Recovery

1. No action required. This measurement indicates the level of signaling octets that have been sent over the association during the reporting interval.

TmSingleTransQueuePeak

Measurement ID
9413

Measurement Group
Transport Performance

Measurement Type
Max

Measurement Dimension
Arrayed (by Transport)

Description
The peak single Transport Writer Queue utilization (0-100%) measured during the collection interval (averaged over 2 sec)

Collection Interval
5 min

Peg Condition
Transport's Queue is registered as a Stack Resource, StackResourceManager thread monitors and updates the maximum Transport Queue utilization sample taken during the collection interval for affected Transport

Measurement Scope
NE, Server

Recovery

1. Transport single queue utilization depicts the SCTP or UDP Transport Writer Queues utilization. This is a measure of how fast the Transport queue is being processed. It indicates the maximum depth of queue over the monitored interval. It is primarily intended to assist in evaluating the needed for additional MP processing capacity at a Network Element.
2. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP over several collection intervals, then the number of MPs in the Network Element may need to be increased.
3. If the peak and average for an individual MP is significantly different than other MPs in the same Network Element then an MP-specific hardware, software, or configuration problem may exist.
4. The percent utilization of the MP's Transport Writer Queue is approaching its maximum capacity. If this problem persists and the queue reaches 100% utilization, all new egress messages from the Transport will be discarded.
    a. An IP network or Adjacent node problem may exist preventing SCTP from transmitting messages into the network at the same pace that messages are being received form the network.
    b. The SCTP Association Writer process may be experiencing a problem preventing it from processing events from its event queue. The alarm log should be examined from **Main Menu** > **Alarms & Events**.
    c. If one or more MPs in a server site have failed, the traffic will be distributed amongst the remaining Mps in the server site. MP server status can be monitored from **Main Menu** > **Status & Control** > **Server Status**.
    d. The mis-configuration of Adjacent Node IP routing may result in too much traffic being distributed to the MP. Each MP in the server site should be receiving approximately the same ingress transaction per second.
    e. There may be an insufficient number of MPs configured to handle the network traffic load. The ingress traffic rate of each MP can be monitored from **Main Menu** > **Status & Control** > **KPI Display**. If all MPs are in a congestion state then the offered load to the server site is exceeding its capacity.
5. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

TmSingleTransQueueAvg

Measurement ID
9414

Measurement Group
Transport Performance

Measurement Type
Average

Measurement Dimension
Arrayed (by Transport)

Description
The average single Transport (SCTP/UDP) Writer Queue utilization (0-100%) measured during the collection interval (averaged over 2 sec)

Collection Interval
5 min

Peg Condition
Transport's Queue is registered as a Stack Resource, StackResourceManager thread monitors and updates the metric Average value for affected Transport

Measurement Scope
NE, Server

Recovery

1. This is a measure of how fast the Transport queue is being processed. It indicates the Average depth of queue over the monitored interval. It is primarily intended to assist in evaluating the need for additional MP processing capacity at a Network Element.
2. If both the peak and average measurement for multiple MPs within a Network Element are consistently near the recommended maximum engineered capacity of an MP over several collection intervals, then the number of MPs in the Network Element may need to be increased
3. If the peak and average for an individual MP are significantly different than other MPs in the same Network Element, then an MP-specific hardware, software, or configuration problem may exist
4. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

SctpTransPeerCWNDPeak

Measurement ID
9416

Measurement Group
Transport Performance

Measurement Type
Max

Measurement Dimension
Arrayed (per Transport)

Description
The peak value of congestion window size recorded for the peer of a SCTP transport during the collection interval

Collection Interval
30 min

Peg Condition
This Metric is registered as a Stack Resource, StackResourceManager thread monitors and updates the metric Peak value for affected Transport. SCTP status information will be retrieved from socket option "SCTP_STATUS" through sctp_opt_info API.

Measurement Scope
NE, Server

Recovery

1. This is debug information, which is retrieved from sctp socket option (SCTP_STATUS), It indicates Peak of congestion window recorded for the peer address.

SctpTransPeerCWNDAvg

Measurement ID
9417

Measurement Group
Transport Exception

Measurement Type
Average

Measurement Dimension
Arrayed (per Transport)

Description
The average of congestion window size recorded for the peer of a SCTP transport during the collection interval.

Collection Interval
30 min

Peg Condition
This Metric is registered as a Stack Resource, StackResourceManager thread monitors and updates the metric Average value for affected Transport. SCTP status information will be retrieved from socket option "SCTP_STATUS" through sctp_opt_info API.

Measurement Scope

Recovery

1. This is debug information, which is retrieved from sctp socket option (SCTP_STATUS); It indicates Average of congestion window recorded for the peer address.

SctpTransPeerSRTTPeak

Measurement ID
9418

Measurement Group
Transport Performance

Measurement Type
Max

Measurement Dimension
Arrayed (per Transport)

Description
The peak value of smoothed round trip time for the SCTP Transport address during the collection interval

Collection Interval
30 min

Peg Condition
This Metric is registered as a Stack Resource, StackResourceManager thread monitors and updates the metric Peak value for affected Transport. SCTP status information will be retrieved from socket option "SCTP_STATUS" through sctp_opt_info API.

Measurement Scope
NE, Server

Recovery

1. This is debug information, which is retrieved from sctp socket option (SCTP_STATUS).

SctpTransPeerSRTTAvg

Measurement ID
9419

Measurement Group
Transport Performance

Measurement Type
Average

Measurement Dimension
Arrayed (per Transport)

Description
The average value of smoothed round trip time for the SCTP Transport address during the collection interval.

Collection Interval
30 min

Peg Condition
This Metric is registered as a Stack Resource, StackResourceManager thread monitors and updates the metric Peak value for affected Transport. SCTP status information will be retrieved from socket option "SCTP_STATUS" through sctp_opt_info API.

Measurement Scope
NE, Server

Recovery

1. This is debug information, which is retrieved from sctp socket option (SCTP_STATUS).

SctpTransUnAckedDataPeak

Measurement ID
9420

Measurement Group
Transport Performance

Measurement Type
Max

Measurement Dimension
Arrayed (per Transport)

Description
The peak number of unacknowledged DATA chunks pending for the peer of a SCTP Transport address during the collection interval.

Collection Interval
30 min

Peg Condition
This Metric is registered as a Stack Resource, StackResourceManager thread monitors and updates the metric Peak value for affected Transport. SCTP status information will be retrieved from socket option "SCTP_STATUS" through sctp_opt_info API.

Measurement Scope
NE, Server

Recovery

1. This is debug information, which is retrieved from sctp socket option (SCTP_STATUS).

SctpTransUnAckedDataAvg

Measurement ID
9421

Measurement Group
Transport Performance

Measurement Type
Average

Measurement Dimension
Arrayed (per Transport)

Description
The average number of unacknowledged DATA chunks pending for the peer of a SCTP Transport address during the collection interval

Collection Interval
30 min

Peg Condition
This Metric is registered as a Stack Resource, StackResourceManager thread monitors and updates the metric Average value for affected Transport. SCTP status information will be retrieved from socket option "SCTP_STATUS" through sctp_opt_info API

Measurement Scope
NE, Server

Recovery

1. This is debug information, which is retrieved from sctp socket option (SCTP_STATUS).

SctpTransRTOPeak

Measurement ID
9422

Measurement Group
Transport Performance

Measurement Type
Average

Measurement Dimension
Arrayed (per Transport)

Description
The average value of retransmission timeout in use for the SCTP Transport address

Collection Interval
30

Peg Condition
This Metric is registered as a Stack Resource, StackResourceManager thread monitors and updates the metric Average value for affected Transport. SCTP status information will be retrieved from socket option "SCTP_STATUS" through sctp_opt_info API

Measurement Scope
NE, Server

Recovery

1. This is debug information, which is retrieved from sctp socket option (SCTP_STATUS).

SctpTransRTOAvg

Measurement ID
9423

Measurement Group
Transport Performance

Measurement Type
Average

Measurement Dimension
Arrayed (per Transport)

Description
The average value of retransmission timeout in use for the SCTP Transport address

Collection Interval
30 min

Peg Condition
This Metric is registered as a Stack Resource, StackResourceManager thread monitors and updates the metric Average value for affected Transport. SCTP status information will be retrieved from socket option "SCTP_STATUS" through sctp_opt_info API

Measurement Scope
NE, Server

Recovery

1. This is debug information, which is retrieved from sctp socket option (SCTP_STATUS).

Topology Hiding Performance measurements

The Topology Hiding Performance measurement report contains measurements providing information on the number of messages that the various topology hiding methods were applied.

TxPathTopology

Measurement ID
14020

Measurement Group
Topology Hiding Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
Number of messages given path topology hiding treatment on messages routed to an Untrusted Network

Collection Interval
5 min

Peg Condition
Each time Path TH treatment is applied to either a Request or Answer message at TH trigger points RTH and ATH respectively

Measurement Scope
Site

Recovery

1. No action required.

RxPathTopology

Measurement ID
14021

Measurement Group
Topology Hiding Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
Number of messages given path topology hiding treatment on messages received from an Untrusted Network

Collection Interval
5 min

Peg Condition
Each time Path TH treatment is applied to either a Request or Answer message at TH trigger points RTR and ATR respectively

Measurement Scope
Site

Recovery

1. No action required.

EvHssTopology

Measurement ID
14022

Measurement Group
Topology Hiding Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
Number of messages given S6a/S6d HSS topology hiding treatment

Collection Interval
5 min

Peg Condition
Each time S6a/S6d HSS TH treatment is applied to either a Request or Answer message at TH trigger points RTH, RTR, ATH, and ATR

Note: If S6a/S6d HSS TH treatment is applied to more than one AVP in a message, the counter is only incremented once

Measurement Scope
Site

Recovery

1. No action required.

EvMmeTopology

Measurement ID
14023

Measurement Group
Topology Hiding Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
Number of messages given MME/SGSN topology hiding treatment

Collection Interval
5 min

Peg Condition
Each time MME/SGSN TH treatment is applied to either a Request or Answer message at TH trigger points RTH, RTR, ATH, and ATR

> **Note:** If MME/SGSN TH treatment is applied to more than one AVP in a message, the counter is only incremented once

Measurement Scope
Site

Recovery

1. No action required.

EvMmeTopologyException

Measurement ID
14029

Measurement Group
Topology Hiding Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of messages given exception treatment while applying MME/SGSN topology hiding treatment

Collection Interval
5 min

Peg Condition
When MME/SGSN TH exception treatment is applied to either a Request or Answer message at TH trigger points RTH and ATH

Measurement Scope
Site

Recovery

1. Ensure that all MME/SGSN hostnames to be hidden are present in the MME/SGSN Configuration Set

EvHssTopologyException

Measurement ID
14031

Measurement Group
Topology Hiding Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of messages given exception treatment while applying S6a/S6d HSS topology hiding treatment

Collection Interval
5 min

Peg Condition
When S6a/S6d HSS TH exception treatment is applied to a Request message at TH trigger point RTH

Measurement Scope
Site

Recovery

1. Check the HSS Vendor and request the vendor to be RFC 6733 Compliant

EvPcrfTopology

Measurement ID
14034

Measurement Group
Topology Hiding Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of messages given S9 PCRF topology hiding treatment

Collection Interval
5 min

Peg Condition
When S9 PCRF TH treatment is applied to either a Request or Answer message TH trigger points RTH, RTR, ATH, and ATR

Measurement Scope
Site

Recovery

1. No action required.

EvPcrfTopologyMp

Measurement ID
14035

Measurement Group
Topology Hiding Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of messages given S9 PCRF topology hiding treatment

Collection Interval
5 min

Peg Condition
When S9 PCRF TH treatment is applied to either a Request or Answer message TH trigger points RTH, RTR, ATH, and ATR

Measurement Scope
Site

Recovery

1. No action required.

EvPcrfTopologyExceptionMp

Measurement ID
14036

Measurement Group
Topology Hiding Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of messages given exception treatment while applying S9 PCRF topology hiding treatment

Collection Interval
5 min

Peg Condition
When S9 PCRF TH treatment is applied to either a Request or Answer message at RTH, RTR, or ATH trigger points and "PCRF Actual Name Not Found" Action is invoked

Measurement Scope
Site

Recovery

1. Check with the PCRF Vendor and request them to be RFC 6733 Compliant if the format of the Session-ID AVP is not RFC 6733 compliant.
2. Check the configuration of TH Host Names and ensure that all PCRF host names to hidden are present in the S9 PCRF TH Configuration Set

EvPcrfTopologyException

Measurement ID
14037

Measurement Group
Topology Hiding Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of messages given exception treatment while applying S9 PCRF topology hiding treatment

Collection Interval
5 min

Peg Condition
When S9 PCRF TH treatment is applied to either a Request or Answer message at RTH, RTR, or ATH trigger points and "PCRF Actual Name Not Found" Action is invoked

Measurement Scope
Site

Recovery

1. Check with the PCRF Vendor and request them to be RFC 6733 Compliant if the format of the Session-ID AVP is not RFC 6733 compliant.
2. Check the configuration of TH Host Names and ensure that all PCRF host names to hidden are present in the S9 PCRF TH Configuration Set

EvAfTopology

Measurement ID
14038

Measurement Group
Topology Hiding Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Diameter Connection ID)

Description
The number of messages given S9 AF/pCSCF topology hiding treatment

Collection Interval
5 min

Peg Condition
When S9 AF/pCSCF TH treatment is applied to either a Request or Answer message at TH trigger points RTH, RTR, ATH, and ATR

Note: If S9 AF/pCSCF TH treatment is applied to more than one AVP in a message, the counter is only incremented once

Measurement Scope
Site

Recovery

1. No action required.

EvAfTopologyMp

Measurement ID
14039

Measurement Group
Topology Hiding Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of messages given S9 AF/pCSCF topology hiding treatment

Collection Interval
5 min

Peg Condition
When S9 AF/pCSCF TH treatment is applied to either a Request or Answer message at TH trigger points RTH, RTR, ATH, and ATR

> **Note:** If S9 AF/pCSCF TH treatment is applied to more than one AVP in a message, the counter is only incremented once

Measurement Scope
Site

Recovery

1. No action required.

EvAfTopologyExceptionMp

Measurement ID
14040

Measurement Group
Topology Hiding Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of messages given exception treatment while applying S9 AF/pCSCF topology hiding treatment

Collection Interval
5 min

Peg Condition
When S9 AF/pCSCF TH treatment is applied to either a Request or Answer message at TH trigger points RTH, RTR, or ATH and "AF/pCSCF Actual Name Not Found" Action is invoked

Measurement Scope
Site

Recovery

1. No action required.

EvAfTopologyException

Measurement ID
14041

Measurement Group
Topology Hiding Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of messages given exception treatment while applying S9 AF/pCSCF topology hiding treatment

Collection Interval
5 min

Peg Condition
When S9 AF/pCSCF TH treatment is applied to either a Request or Answer message at TH trigger points RTH, RTR, or ATH and "AF/pCSCF Actual Name Not Found" Action is invoked

Measurement Scope
Site

Recovery

1. No action required.

TxPathTopologyMp

Measurement ID
14024

Measurement Group
Topology Hiding Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of messages given path topology hiding treatment on messages routed to an Untrusted Network

Collection Interval
5 min

Peg Condition
Each time Path TH treatment is applied to either a Request or Answer message at TH trigger points RTH and ATH respectively

Measurement Scope
Site

Recovery

1. No action required.

RxPathTopologyMp

Measurement ID
14025

Measurement Group
Topology Hiding Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of messages given path topology hiding treatment on messages routed from an Untrusted Network

Collection Interval
5 min

Peg Condition
Each time Path TH treatment is applied to either a Request or Answer message at TH trigger points RTH and ATH respectively

Measurement Scope
Site

Recovery

1. No action required.

EvHssTopologyMp

Measurement ID
14026

Measurement Group
Topology Hiding Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by Connection ID)

Description
The number of messages given S6a/S6d HSS topology hiding treatment

Collection Interval
5 min

Peg Condition
Each time S6a/S6d HSS TH treatment is applied to either a Request or Answer message a TH trigger points RTH, RTR, ATH, and ATR

> **Note:** If S6a/S6d HSS TH treatment is applied to more than one AVP in a message, the counter is only incremented once

Measurement Scope
Site

Recovery

1. No action required.

EvMmeTopologyMp

Measurement ID
14027

Measurement Group
Topology Hiding Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of messages given MME/SGSN topology hiding treatment

Collection Interval
5 min

Peg Condition
Each time MME/SGSN TH treatment is applied to either a Request or Answer message a TH trigger points RTH, RTR, ATH, and ATR

> **Note:** If MME/SGSN TH treatment is applied to more than one AVP in a message, the counter is only incremented once

Measurement Scope
Site

Recovery

1. No action required.

EvMmeTopologyExceptionMp

Measurement ID
14028

Measurement Group
Topology Hiding Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of messages given exception treatment while applying MME/SGSN topology hiding treatment

Collection Interval
5 min

Peg Condition
Each time MME/SGSN TH treatment is applied to either a Request or Answer message a TH trigger points RTH and ATH trigger points

Measurement Scope
Site

Recovery

1. Ensure that all MME/SGSN hostnames to be hidden are present in the MME/SGSN Configuration Set

EvHssTopologyExceptionMp

Measurement ID
14030

Measurement Group
Topology Hiding Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of messages given exception treatment while applying S6a/S6d HSS topology hiding treatment

Collection Interval
5 min

Peg Condition
When S6a/S6d HSS TH excpetion treatment is applied to Request at RTH trigger point

Measurement Scope
Site

Recovery

1. Check with the HSS Vendor and request the vendor to be RFC 6733 Compliant.

TTG Performance measurements

The TTG Performance measurement report contains measurements that provide performance information that is specific to each local TTG.

TtgMaxLossExceeded

Measurement ID
14349

Measurement Group
TTG Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTG ID)

Description
The number of request messages that were not routed to the TTG because the maximum loss rate for the Route Group in the Route List was exceeded.

Collection Interval
5 min

Peg Condition
This measurement is updated when a Route Group is selected from a Route List and these criteria are met:

- TTG is assigned to the Route Group within the Route List
- TTG is owned by the local DSR Node
- Request message's Application-Id matches the Application-Id assigned to the local TTG
- TTG's Admin State = Enabled
- TTG's Current Loss Percent is greater than the TTG Max Loss Percent Threshold attribute value assigned to the Route Group within the Route List

Measurement Scope
Site

Recovery

1. No action required.

TtgSelectedP0

Measurement ID
14344

Measurement Group
TTG Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTG ID)

Description
The number of messages routed to the TTG with message priority 0.

Collection Interval
5 min

Peg Condition
This measurement is updated when a Route Group is selected from a Route List and these criteria are met:

- TTG is assigned to the Route Group within the Route List
- TTG is owned by the local DSR Node
- Request message's Application-Id matches the Application-Id assigned to the local TTG
- TTG's Admin State = Enabled
- TTG's Current Loss Percent is less than or equal to the TTG Max Loss Percent Threshold attribute value assigned to the Route Group within the Route List
- Message Priority = 0

Measurement Scope
Site

Recovery

1. No action required.

TtgSelectedP1

Measurement ID
14345

Measurement Group
TTG Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTG ID)

Description
The number of messages routed to the TTG with message priority 1.

Collection Interval
5 min

Peg Condition
This measurement is updated when a Route Group is selected from a Route List and these criteria are met:

- TTG is assigned to the Route Group within the Route List
- TTG is owned by the local DSR Node
- Request message's Application-Id matches the Application-Id assigned to the local TTG
- TTG's Admin State = Enabled
- TTG's Current Loss Percent is less than or equal to the TTG Max Loss Percent Threshold attribute value assigned to the Route Group within the Route List
- Message Priority = 1

Measurement Scope
Site

Recovery

1. No action required.

TtgSelectedP2

Measurement ID
14346

Measurement Group
TTG Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTG ID)

Description
The number of messages routed to the TTG with message priority 2.

Collection Interval
5 min

Peg Condition
This measurement is updated when a Route Group is selected from a Route List and these criteria are met:

- TTG is assigned to the Route Group within the Route List
- TTG is owned by the local DSR Node
- Request message's Application-Id matches the Application-Id assigned to the local TTG
- TTG's Admin State = Enabled
- TTG's Current Loss Percent is less than or equal to the TTG Max Loss Percent Threshold attribute value assigned to the Route Group within the Route List
- Message Priority = 2

Measurement Scope
Site

Recovery

1. No action required.

TtgSelectedP3

Measurement ID
14451

Measurement Group
TTG Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTG with message priority 3

Collection Interval
5 min

Peg Condition
Each time a Route Group is selected from a Route List and these criteria are met:

- TTG is assigned to the Route Group within the Route List
- TTG is owned by the local DSR Node
- Request message's Application ID matches the Application ID is assigned to the local TTG
- TTG's Admin State - Enabled

- TTG's Current Loss Percent is less than or equal to the TTG Max Loss Percent Threshold attribute value assigned to the Route Group within the Route List
- Message Priority = 3

Measurement Scope
Site

Recovery

1. No action necessary.

TtgSelectedP4

Measurement ID
14450

Measurement Group
TTG Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTG with message priority 4

Collection Interval
5 min

Peg Condition
Each time a Route Group is selected from a Route List and these criteria are met:

- TTG is assigned to the Route Group within the Route List
- TTG is owned by the local DSR Node
- Request message's Application ID matches the Application ID is assigned to the local TTG
- TTG's Admin State - Enabled
- TTG's Current Loss Percent is less than or equal to the TTG Max Loss Percent Threshold attribute value assigned to the Route Group within the Route List
- Message Priority = 4

Measurement Scope
Site

Recovery

1. No action necessary.

TtgSelectedP5

Measurement ID
14452

Measurement Group
TTG Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTG with message priority 5

Collection Interval
5 min

Peg Condition
Each time a Route Group is selected from a Route List and these criteria are met:

- TTG is assigned to the Route Group within the Route List
- TTG is owned by the local DSR Node
- Request message's Application ID matches the Application ID is assigned to the local TTG
- TTG's Admin State - Enabled
- TTG's Current Loss Percent is less than or equal to the TTG Max Loss Percent Threshold attribute value assigned to the Route Group within the Route List
- Message Priority = 5

Measurement Scope
Site

Recovery

1. No action necessary.

TtgSelectedP6

Measurement ID
14453

Measurement Group
TTG Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTG with message priority 6

Collection Interval
5 min

Peg Condition
Each time a Route Group is selected from a Route List and these criteria are met:

- TTG is assigned to the Route Group within the Route List
- TTG is owned by the local DSR Node
- Request message's Application ID matches the Application ID is assigned to the local TTG
- TTG's Admin State - Enabled
- TTG's Current Loss Percent is less than or equal to the TTG Max Loss Percent Threshold attribute value assigned to the Route Group within the Route List
- Message Priority = 6

Measurement Scope
Site

Recovery

1. No action necessary.

TtgSelectedP7

Measurement ID
14454

Measurement Group
TTG Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTG with message priority 7

Collection Interval
5 min

Peg Condition
Each time a Route Group is selected from a Route List and these criteria are met:

- TTG is assigned to the Route Group within the Route List
- TTG is owned by the local DSR Node
- Request message's Application ID matches the Application ID is assigned to the local TTG
- TTG's Admin State - Enabled
- TTG's Current Loss Percent is less than or equal to the TTG Max Loss Percent Threshold attribute value assigned to the Route Group within the Route List
- Message Priority = 7

Measurement Scope
Site

Recovery

1. No action necessary.

TtgSelectedP8

Measurement ID
14455

Measurement Group
TTG Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTG with message priority 8

Collection Interval
5 min

Peg Condition
Each time a Route Group is selected from a Route List and these criteria are met:

- TTG is assigned to the Route Group within the Route List
- TTG is owned by the local DSR Node
- Request message's Application ID matches the Application ID is assigned to the local TTG
- TTG's Admin State - Enabled
- TTG's Current Loss Percent is less than or equal to the TTG Max Loss Percent Threshold attribute value assigned to the Route Group within the Route List
- Message Priority = 8

Measurement Scope
Site

Recovery

1. No action necessary.

TtgSelectedP9

Measurement ID
14456

Measurement Group
TTG Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTG with message priority 9

Collection Interval
5 min

Peg Condition
Each time a Route Group is selected from a Route List and these criteria are met:

- TTG is assigned to the Route Group within the Route List
- TTG is owned by the local DSR Node
- Request message's Application ID matches the Application ID is assigned to the local TTG
- TTG's Admin State - Enabled
- TTG's Current Loss Percent is less than or equal to the TTG Max Loss Percent Threshold attribute value assigned to the Route Group within the Route List
- Message Priority = 9

Measurement Scope
Site

Recovery

1. No action necessary.

TtgSelectedP10

Measurement ID
14457

Measurement Group
TTG Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTG with message priority 10

Collection Interval
5 min

Peg Condition
Each time a Route Group is selected from a Route List and these criteria are met:

- TTG is assigned to the Route Group within the Route List
- TTG is owned by the local DSR Node
- Request message's Application ID matches the Application ID is assigned to the local TTG
- TTG's Admin State - Enabled
- TTG's Current Loss Percent is less than or equal to the TTG Max Loss Percent Threshold attribute value assigned to the Route Group within the Route List
- Message Priority = 10

Measurement Scope
Site

Recovery

1. No action necessary.

TtgSelectedP11

Measurement ID
14458

Measurement Group
TTG Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTG with message priority 11

Collection Interval
5 min

Peg Condition
Each time a Route Group is selected from a Route List and these criteria are met:

- TTG is assigned to the Route Group within the Route List
- TTG is owned by the local DSR Node
- Request message's Application ID matches the Application ID is assigned to the local TTG
- TTG's Admin State - Enabled
- TTG's Current Loss Percent is less than or equal to the TTG Max Loss Percent Threshold attribute value assigned to the Route Group within the Route List
- Message Priority = 11

Measurement Scope
Site

Recovery

1. No action necessary.

TtgSelectedP12

Measurement ID
14459

Measurement Group
TTG Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTG with message priority 12

Collection Interval
5 min

Peg Condition
Each time a Route Group is selected from a Route List and these criteria are met:

- TTG is assigned to the Route Group within the Route List
- TTG is owned by the local DSR Node
- Request message's Application ID matches the Application ID is assigned to the local TTG

- TTG's Admin State - Enabled
- TTG's Current Loss Percent is less than or equal to the TTG Max Loss Percent Threshold attribute value assigned to the Route Group within the Route List
- Message Priority = 12

Measurement Scope
Site

Recovery

1. No action necessary.

TtgSelectedP13

Measurement ID
14460

Measurement Group
TTG Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTG with message priority 13

Collection Interval
5 min

Peg Condition
Each time a Route Group is selected from a Route List and these criteria are met:

- TTG is assigned to the Route Group within the Route List
- TTG is owned by the local DSR Node
- Request message's Application ID matches the Application ID is assigned to the local TTG
- TTG's Admin State - Enabled
- TTG's Current Loss Percent is less than or equal to the TTG Max Loss Percent Threshold attribute value assigned to the Route Group within the Route List
- Message Priority = 13

Measurement Scope
Site

Recovery

1. No action necessary.

TtgSelectedP14

Measurement ID
14461

Measurement Group
TTG Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTG with message priority 14

Collection Interval
5 min

Peg Condition
Each time a Route Group is selected from a Route List and these criteria are met:

- TTG is assigned to the Route Group within the Route List
- TTG is owned by the local DSR Node
- Request message's Application ID matches the Application ID is assigned to the local TTG
- TTG's Admin State - Enabled
- TTG's Current Loss Percent is less than or equal to the TTG Max Loss Percent Threshold attribute value assigned to the Route Group within the Route List
- Message Priority = 14

Measurement Scope
Site

Recovery

1. No action necessary.

TtgSelectedP15

Measurement ID
14466

Measurement Group
TTG Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTG with message priority 15

Collection Interval
5 min

Peg Condition
Each time a Route Group is selected from a Route List and these criteria are met:

- TTG is assigned to the Route Group within the Route List
- TTG is owned by the local DSR Node
- Request message's Application ID matches the Application ID is assigned to the local TTG
- TTG's Admin State - Enabled
- TTG's Current Loss Percent is less than or equal to the TTG Max Loss Percent Threshold attribute value assigned to the Route Group within the Route List
- Message Priority = 15

Measurement Scope
Site

Recovery

1. No action necessary.

TtgSelectedPrimaryTtg

Measurement ID
14347

Measurement Group
TTG Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTG ID)

Description
The number of request messages routed to the TTG where the TTG is associated with the primary Route Group in the Route List.

Collection Interval
5 min

Peg Condition
This measurement is updated when a Route Group is selected from a Route List and these criteria are met:

- TTG is assigned to the Route Group within the Route List
- TTG is owned by the local DSR Node
- Request message's Application-Id matches the Application-Id assigned to the local TTG
- TTG's Admin State = Enabled
- TTG's Current Loss Percent is less than or equal to the TTG Max Loss Percent Threshold attribute value assigned to the Route Group within the Route List
- Route Group within Route List is the current Active Route Group for the Route List

Measurement Scope
Site

Recovery

1. No action required.

TtgSelectedSecondaryTtg

Measurement ID
14348

Measurement Group
TTG Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTG ID)

Description
The number of request messages routed to the TTG where the TTG is associated with a secondary Route Group in the Route List.

Collection Interval
5 min

Peg Condition
This measurement is updated when a Route Group is selected from a Route List and these criteria are met:

- TTG is assigned to the Route Group within the Route List
- TTG is owned by the local DSR Node
- Request message's Application-Id matches the Application-Id assigned to the local TTG
- TTG's Admin State = Enabled

- TTG's Current Loss Percent is less than or equal to the TTG Max Loss Percent Threshold attribute value assigned to the Route Group within the Route List
- Route Group within Route List is not the current Active Route Group for the Route List

Measurement Scope
Site

Recovery

1. No action required.

TtgTmLossRateRange1

Measurement ID
14340

Measurement Group
TTG Performance

Measurement Type
Duration

Measurement Dimension
Arrayed (by TTG ID)

Description
Duration of TTG Loss Percent Range1

Collection Interval
5 min

Peg Condition
When the DRL changes a local TTG's Current Loss Percent value, it shall:

- Save the time of the event in the TTG's RT-DB record called "Loss Start Time"
- Save the new Current Loss Percent value in the TTG's RT-DB record
- If the TTG's old Current Loss Percent value is not equal to 0, then:
  - Calculate the duration of the time that the TTG's Current Loss Percent was set to the previous value based upon "Loss Start Time" and the current time
  - Determine which TtgTmLossRateRange-X measurement to update based upon the previous TTG Current Loss Percent value and the system-wide LossRateMax1, LossRateMax2, and LossRateMax3 values
  - Update the selected TtgTmLossRateRange-X measurement with the calculated duration of time

Measurement Scope
Site

Recovery

1. No action required.

TtgTmLossRateRange2

Measurement ID
14341

Measurement Group
TTG Performance

Measurement Type
Duration

Measurement Dimension
Arrayed (by TTG ID)

Description
Duration of TTG Loss Percent Range2

Collection Interval
5 min

Peg Condition
When the DRL changes a local TTG's Current Loss Percent value, it shall:

- Save the time of the event in the TTG's RT-DB record called "Loss Start Time"
- Save the new Current Loss Percent value in the TTG's RT-DB record
- If the TTG's old Current Loss Percent value is not equal to 0, then:
  - Calculate the duration of the time that the TTG's Current Loss Percent was set to the previous value based upon "Loss Start Time" and the current time
  - Determine which TtgTmLossRateRange-X measurement to update based upon the previous TTG Current Loss Percent value and the system-wide LossRateMax1, LossRateMax2, and LossRateMax3 values
  - Update the selected TtgTmLossRateRange-X measurement with the calculated duration of time

Measurement Scope
Site

Recovery

1. No action required.

TtgTmLossRateRange3

Measurement ID
14342

Measurement Group
TTG Performance

Measurement Type
Duration

Measurement Dimension
Arrayed (by TTG ID)

Description
Duration of TTG Loss Percent Range3

Collection Interval
5 min

Peg Condition
When the DRL changes a local TTG's Current Loss Percent value, it shall:

- Save the time of the event in the TTG's RT-DB record called "Loss Start Time"
- Save the new Current Loss Percent value in the TTG's RT-DB record
- If the TTG's old Current Loss Percent value is not equal to 0, then:
  - Calculate the duration of the time that the TTG's Current Loss Percent was set to the previous value based upon "Loss Start Time" and the current time
  - Determine which TtgTmLossRateRange-X measurement to update based upon the previous TTG Current Loss Percent value and the system-wide LossRateMax1, LossRateMax2, and LossRateMax3 values
  - Update the selected TtgTmLossRateRange-X measurement with the calculated duration of time

Measurement Scope
Site

Recovery

1. No action required.

TtgTmLossRateRange4

Measurement ID
14343

Measurement Group
TTG Performance

Measurement Type
Duration

Measurement Dimension
Arrayed (by TTG ID)

Description
Duration of TTG Loss Percent Range4

Collection Interval
5 min

Peg Condition
When the DRL changes a local TTG's Current Loss Percent value, it shall:

- Save the time of the event in the TTG's RT-DB record called "Loss Start Time"
- Save the new Current Loss Percent value in the TTG's RT-DB record
- If the TTG's old Current Loss Percent value is not equal to 0, then:
  - Calculate the duration of the time that the TTG's Current Loss Percent was set to the previous value based upon "Loss Start Time" and the current time
  - Determine which TtgTmLossRateRange-X measurement to update based upon the previous TTG Current Loss Percent value and the system-wide LossRateMax1, LossRateMax2, and LossRateMax3 values
  - Update the selected TtgTmLossRateRange-X measurement with the calculated duration of time

Measurement Scope
Site

Recovery

1. No action required.

TTP Performance measurements

The TTP Performance measurement report contains measurements that provide performance information that is specific to each TTP.

TtpDivertedInP0G

Measurement ID
14328

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTP ID)

Description
The number of request messages routed to TTP which were diverted from another TTP, with message priority 0 and color green.

Collection Interval
5 min

Peg Condition
The TTP was selected as defined by the peg condition criteria defined for TtpSelected and all of these criteria are met:

- Transaction is marked as "TTP Diverted" in its PTR
- Message Priority = 0
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action required.

TtpDivertedInP0Y

Measurement ID
14331

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTP ID)

Description
The number of request messages routed to TTP which were diverted from another TTP, with message priority 0 and color yellow.

Collection Interval
5 min

Peg Condition
The TTP was selected as defined by the peg condition criteria defined for TtpSelected and all of these criteria are met:

- Transaction is marked as "TTP Diverted" in its PTR
- Message Priority = 0
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action required.

TtpDivertedInP1G

Measurement ID
14329

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTP ID)

Description
The number of request messages routed to TTP which were diverted from another TTP, with message priority 1 and color green.

Collection Interval
5 min

Peg Condition
The TTP was selected as defined by the peg condition criteria defined for TtpSelected and all of these criteria are met:

- Transaction is marked as "TTP Diverted" in its PTR
- Message Priority = 1
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action required.

TtpDivertedInP1Y

Measurement ID
14332

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTP ID)

Description
The number of request messages routed to TTP which were diverted from another TTP, with message priority 1 and color yellow.

Collection Interval
5 min

Peg Condition
The TTP was selected as defined by the peg condition criteria defined for TtpSelected and all of these criteria are met:

- Transaction is marked as "TTP Diverted" in its PTR
- Message Priority = 1
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action required.

TtpDivertedInP2G

Measurement ID
14330

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTP ID)

Description
The number of request messages routed to TTP which were diverted from another TTP, with message priority 2 and color green.

Collection Interval
5 min

Peg Condition
The TTP was selected as defined by the peg condition criteria defined for TtpSelected and all of these criteria are met:

- Transaction is marked as "TTP Diverted" in its PTR
- Message Priority = 2
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action required.

TtpDivertedInP2Y

Measurement ID
14333

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTP ID)

Description
The number of request messages routed to TTP which were diverted from another TTP, with message priority 2 and color yellow.

Collection Interval
5 min

Peg Condition
The TTP was selected as defined by the peg condition criteria defined for TtpSelected and all of these criteria are met:

- Transaction is marked as "TTP Diverted" in its PTR
- Message Priority = 2
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action required.

TtpDivertedinP3G

Measurement ID
14426

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTP which were diverted from another TTP with message priority 3 and color green

Collection Interval
5 min

Peg Condition
Each time the TTP is selected based on when a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which has an active TTP associated with the transaction meeting and these criteria are met:

- Transaction is mark as TTP Diverted in its PTR
- Message Priority = 3
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDivertedinP3Y

Measurement ID
14439

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTP which were diverted from another TTP with message priority 3 and color yellow

Collection Interval
5 min

Peg Condition
Each time the TTP is selected based on when a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which has an active TTP associated with the transaction meeting and these criteria are met:

- Transaction is mark as TTP Diverted in its PTR
- Message Priority = 3
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDivertedinP4G

Measurement ID
14427

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTP which were diverted from another TTP with message priority 4 and color green

Collection Interval
5 min

Peg Condition
Each time the TTP is selected based on when a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which has an active TTP associated with the transaction meeting and these criteria are met:

- Transaction is mark as TTP Diverted in its PTR
- Message Priority = 4
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDivertedinP4Y

Measurement ID
14440

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTP which were diverted from another TTP with message priority 4 and color yellow

Collection Interval
5 min

Peg Condition
Each time the TTP is selected based on when a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which has an active TTP associated with the transaction meeting and these criteria are met:

- Transaction is mark as TTP Diverted in its PTR
- Message Priority = 4
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDivertedinP5G

Measurement ID
14428

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTP which were diverted from another TTP with message priority 5 and color green

Collection Interval
5 min

Peg Condition
Each time the TTP is selected based on when a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which has an active TTP associated with the transaction meeting and these criteria are met:

- Transaction is mark as TTP Diverted in its PTR
- Message Priority = 5
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDivertedinP5Y

Measurement ID
14441

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTP which were diverted from another TTP with message priority 5 and color yellow

Collection Interval
5 min

Peg Condition
Each time the TTP is selected based on when a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which has an active TTP associated with the transaction meeting and these criteria are met:

- Transaction is mark as TTP Diverted in its PTR
- Message Priority = 5
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDivertedinP6G

Measurement ID
14429

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTP which were diverted from another TTP with message priority 6 and color green

Collection Interval
5 min

Peg Condition
Each time the TTP is selected based on when a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which has an active TTP associated with the transaction meeting and these criteria are met:

- Transaction is mark as TTP Diverted in its PTR
- Message Priority = 6
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDivertedinP6Y

Measurement ID
14442

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTP which were diverted from another TTP with message priority 6 and color yellow

Collection Interval
5 min

Peg Condition
Each time the TTP is selected based on when a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which has an active TTP associated with the transaction meeting and these criteria are met:

- Transaction is mark as TTP Diverted in its PTR
- Message Priority = 6
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDivertedinP7G

Measurement ID
14430

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTP which were diverted from another TTP with message priority 7 and color green

Collection Interval
5 min

Peg Condition
Each time the TTP is selected based on when a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing)

which has an active TTP associated with the transaction meeting and these criteria are met:

- Transaction is mark as TTP Diverted in its PTR
- Message Priority = 7
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDivertedinP7Y

Measurement ID
14443

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTP which were diverted from another TTP with message priority 7 and color yellow

Collection Interval
5 min

Peg Condition
Each time the TTP is selected based on when a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which has an active TTP associated with the transaction meeting and these criteria are met:

- Transaction is mark as TTP Diverted in its PTR
- Message Priority = 7
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDivertedinP8G

Measurement ID
14431

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTP which were diverted from another TTP with message priority 8 and color green

Collection Interval
5 min

Peg Condition
Each time the TTP is selected based on when a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which has an active TTP associated with the transaction meeting and these criteria are met:

- Transaction is mark as TTP Diverted in its PTR
- Message Priority = 8
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDivertedinP8Y

Measurement ID
14444

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTP which were diverted from another TTP with message priority 8 and color yellow

Collection Interval
5 min

Peg Condition
Each time the TTP is selected based on when a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which has an active TTP associated with the transaction meeting and these criteria are met:

- Transaction is mark as TTP Diverted in its PTR
- Message Priority = 8
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDivertedinP9G

Measurement ID
14432

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTP which were diverted from another TTP with message priority 9 and color green

Collection Interval
5 min

Peg Condition
Each time the TTP is selected based on when a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which has an active TTP associated with the transaction meeting and these criteria are met:

- Transaction is mark as TTP Diverted in its PTR
- Message Priority = 9

- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDivertedinP9Y

Measurement ID
14445

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTP which were diverted from another TTP with message priority 9 and color yellow

Collection Interval
5 min

Peg Condition
Each time the TTP is selected based on when a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which has an active TTP associated with the transaction meeting and these criteria are met:

- Transaction is mark as TTP Diverted in its PTR
- Message Priority = 9
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDivertedinP10G

Measurement ID
14433

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTP which were diverted from another TTP with message priority 10 and color green

Collection Interval
5 min

Peg Condition
Each time the TTP is selected based on when a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which has an active TTP associated with the transaction meeting and these criteria are met:

- Transaction is mark as TTP Diverted in its PTR
- Message Priority = 10
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDivertedinP10Y

Measurement ID
14446

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTP which were diverted from another TTP with message priority 10 and color yellow

Collection Interval
5 min

Peg Condition
Each time the TTP is selected based on when a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing)

which has an active TTP associated with the transaction meeting and these criteria are met:

- Transaction is mark as TTP Diverted in its PTR
- Message Priority = 10
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDivertedinP11G

Measurement ID
14434

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTP which were diverted from another TTP with message priority 11 and color green

Collection Interval
5 min

Peg Condition
Each time the TTP is selected based on when a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which has an active TTP associated with the transaction meeting and these criteria are met:

- Transaction is mark as TTP Diverted in its PTR
- Message Priority = 11
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDivertedinP11Y

Measurement ID
14447

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTP which were diverted from another TTP with message priority 11 and color yellow

Collection Interval
5 min

Peg Condition
Each time the TTP is selected based on when a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which has an active TTP associated with the transaction meeting and these criteria are met:

- Transaction is mark as TTP Diverted in its PTR
- Message Priority = 11
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDivertedinP12G

Measurement ID
14435

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTP which were diverted from another TTP with message priority 12 and color green

Collection Interval
5 min

Peg Condition
Each time the TTP is selected based on when a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which has an active TTP associated with the transaction meeting and these criteria are met:

- Transaction is mark as TTP Diverted in its PTR
- Message Priority = 12
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDivertedinP12Y

Measurement ID
14448

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTP which were diverted from another TTP with message priority 12 and color yellow

Collection Interval
5 min

Peg Condition
Each time the TTP is selected based on when a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which has an active TTP associated with the transaction meeting and these criteria are met:

- Transaction is mark as TTP Diverted in its PTR
- Message Priority = 12

- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDivertedinP13G

Measurement ID
14436

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTP which were diverted from another TTP with message priority 13 and color green

Collection Interval
5 min

Peg Condition
Each time the TTP is selected based on when a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which has an active TTP associated with the transaction meeting and these criteria are met:

- Transaction is mark as TTP Diverted in its PTR
- Message Priority = 13
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDivertedinP13Y

Measurement ID
14449

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTP which were diverted from another TTP with message priority 13 and color yellow

Collection Interval
5 min

Peg Condition
Each time the TTP is selected based on when a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which has an active TTP associated with the transaction meeting and these criteria are met:

- Transaction is mark as TTP Diverted in its PTR
- Message Priority = 13
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDivertedinP14G

Measurement ID
14437

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTP which were diverted from another TTP with message priority 14 and color green

Collection Interval
5 min

Peg Condition
Each time the TTP is selected based on when a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing)

which has an active TTP associated with the transaction meeting and these criteria are met:

- Transaction is mark as TTP Diverted in its PTR
- Message Priority = 14
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDivertedinP14Y

Measurement ID
14450

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTP which were diverted from another TTP with message priority 14 and color yellow

Collection Interval
5 min

Peg Condition
Each time the TTP is selected based on when a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which has an active TTP associated with the transaction meeting and these criteria are met:

- Transaction is mark as TTP Diverted in its PTR
- Message Priority = 14
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDivertedinP15G

Measurement ID
14438

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTP which were diverted from another TTP with message priority 15 and color green

Collection Interval
5 min

Peg Condition
Each time the TTP is selected based on when a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which has an active TTP associated with the transaction meeting and these criteria are met:

- Transaction is mark as TTP Diverted in its PTR
- Message Priority = 15
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDivertedinP15Y

Measurement ID
14451

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages routed to TTP which were diverted from another TTP with message priority 15 and color yellow

Collection Interval
5 min

Peg Condition
Each time the TTP is selected based on when a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected for Destination-Host Implicit Routing) which has an active TTP associated with the transaction meeting and these criteria are met:

- Transaction is mark as TTP Diverted in its PTR
- Message Priority = 15
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDivertedOutP0G

Measurement ID
14316

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTP ID)

Description
The number of request messages routed to TTP which were throttled/diverted, with message priority 0 and color green.

Collection Interval
5 min

Peg Condition
The TTP was selected as defined by the peg condition criteria defined for TtpSelected and all of these criteria are met:

- Transaction was diverted
- Message Priority = 0

- Message Color = Green

Measurement Scope
Site

Recovery

1. No action required.

TtpDivertedOutP0Y

Measurement ID
14319

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTP ID)

Description
The number of request messages routed to TTP which were throttled/diverted, with message priority 0 and color yellow.

Collection Interval
5 min

Peg Condition
The TTP was selected as defined by the peg condition criteria defined for TtpSelected and all of these criteria are met:

- Transaction was diverted
- Message Priority = 0
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action required.

TtpDivertedOutP1G

Measurement ID
14317

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTP ID)

Description
The number of request messages routed to TTP which were throttled/diverted, with message priority 1 and color green.

Collection Interval
5 min

Peg Condition
The TTP was selected as defined by the peg condition criteria defined for TtpSelected and all of these criteria are met:

- Transaction was diverted
- Message Priority = 1
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action required.

TtpDivertedOutP1Y

Measurement ID
14320

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTP ID)

Description
The number of request messages routed to TTP which were throttled/diverted, with message priority 1 and color yellow.

Collection Interval
5 min

Peg Condition
The TTP was selected as defined by the peg condition criteria defined for TtpSelected and all of these criteria are met:

- Transaction was diverted
- Message Priority = 1
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action required.

TtpDivertedOutP2G

Measurement ID
14318

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTP ID)

Description
The number of request messages routed to TTP which were throttled/diverted, with message priority 2 and color green.

Collection Interval
5 min

Peg Condition
The TTP was selected as defined by the peg condition criteria defined for TtpSelected and all of these criteria are met:

- Transaction was diverted
- Message Priority = 2
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action required.

TtpDivertedOutP2Y

Measurement ID
14321

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTP ID)

Description
The number of request messages routed to TTP which were throttled/diverted, with message priority 2 and color yellow.

Collection Interval
5 min

Peg Condition
The TTP was selected as defined by the peg condition criteria defined for TtpSelected and all of these criteria are met:

- Transaction was diverted
- Message Priority = 2
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action required.

TtpDivertedOutP3G

Measurement ID
14374

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 3 and color green routed to TTP which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was diverted
- Message Priority = 3
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

TtpDivertedOutP3Y

Measurement ID
14387

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 3 and color yellow routed to TTP which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTG. Additionally:

- Transaction was diverted
- Message Priority = 3
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

TtpDivertedOutP4G

Measurement ID
14375

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 4 and color green routed to TTP which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was diverted
- Message Priority = 4
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

TtpDivertedOutP4Y

Measurement ID
14388

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 4 and color yellow routed to TTP which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was diverted
- Message Priority = 4
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

TtpDivertedOutP5G

Measurement ID
14376

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 5 and color green routed to TTP which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was diverted
- Message Priority = 5

- Message Color = Green

Measurement Scope
Site

Recovery

1. None

TtpDivertedOutP5Y

Measurement ID
14389

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 5 and color yellow routed to TTP which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was diverted
- Message Priority = 5
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

TtpDivertedOutP6G

Measurement ID
14377

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 6 and color green routed to TTP which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was diverted
- Message Priority = 6
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

TtpDivertedOutP6Y

Measurement ID
14390

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 6 and color yellow routed to TTP which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was diverted
- Message Priority = 6
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

TtpDivertedOutP7G

Measurement ID
14378

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 7 and color green routed to TTP which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was diverted
- Message Priority = 7
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

TtpDivertedOutP7Y

Measurement ID
14391

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 7 and color yellow routed to TTP which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was diverted
- Message Priority = 7
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

TtpDivertedOutP8G

Measurement ID
14379

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 8 and color green routed to TTP which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was diverted
- Message Priority = 8
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

TtpDivertedOutP8Y

Measurement ID
14392

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 8 and color yellow routed to TTP which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was diverted
- Message Priority = 8
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

TtpDivertedOutP9G

Measurement ID
14380

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 9 and color green routed to TTP which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was diverted
- Message Priority = 9
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

TtpDivertedOutP9Y

Measurement ID
14393

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 9 and color yellow routed to TTP which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was diverted
- Message Priority = 9
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

TtpDivertedOutP10G

Measurement ID
14381

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 10 and color green routed to TTP which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was diverted
- Message Priority = 10

- Message Color = Green

Measurement Scope
Site

Recovery

1. None

TtpDivertedOutP10Y

Measurement ID
14394

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 10 and color yellow routed to TTP which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was diverted
- Message Priority = 10
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

TtpDivertedOutP11G

Measurement ID
14382

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 11 and color green routed to TTP which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was diverted
- Message Priority = 11
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

TtpDivertedOutP11Y

Measurement ID
14395

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 11 and color yellow routed to TTP which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was diverted
- Message Priority = 11
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

TtpDivertedOutP12G

Measurement ID
14383

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 12 and color green routed to TTP which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was diverted
- Message Priority = 12
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

TtpDivertedOutP12Y

Measurement ID
14396

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 12 and color yellow routed to TTP which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was diverted
- Message Priority = 12
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

TtpDivertedOutP13G

Measurement ID
14384

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 13 and color green routed to TTP which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was diverted
- Message Priority = 13
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

TtpDivertedOutP13Y

Measurement ID
14397

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 13 and color yellow routed to TTP which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was diverted
- Message Priority = 13
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

TtpDivertedOutP14G

Measurement ID
14385

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 14 and color green routed to TTP which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was diverted
- Message Priority = 14
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

TtpDivertedOutP14Y

Measurement ID
14398

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 14 and color yellow routed to TTP which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was diverted
- Message Priority = 14
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

TtpDivertedOutP15G

Measurement ID
14386

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 15 and color green routed to TTP which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was diverted
- Message Priority = 15

- Message Color = Green

Measurement Scope
Site

Recovery

1. None

TtpDivertedOutP15Y

Measurement ID
14399

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 15 and color yellow routed to TTP which were throttled/diverted

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was diverted
- Message Priority = 15
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

TtpDoicException

Measurement ID
14300

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTP ID)

Description
The number of DOIC Protocol Errors.

Collection Interval
5 min

Peg Condition
This measurement is incremented whenever event TtpEvDoicException is generated.

Measurement Scope
Site

Recovery

1. No action required.

TtpDropP0G

Measurement ID
14322

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTP ID)

Description
The number of transactions abandoned due to TTP throttling/diversion, with message priority 0 and color green.

Collection Interval
5 min

Peg Condition
The DRL abandoned routing of a transaction and all of these criteria are met:

- Last routing failure encountered was due to TTP diversion
- Message Priority = 0
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action required.

TtpDropP0Y

Measurement ID
14325

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTP ID)

Description
The number of transactions abandoned due to TTP throttling/diversion, with message priority 0 and color yellow.

Collection Interval
5 min

Peg Condition
The DRL abandoned routing of a transaction and all of these criteria are met:

- Last routing failure encountered was due to TTP diversion
- Message Priority = 0
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action required.

TtpDropP1G

Measurement ID
14323

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTP ID)

Description
The number of transactions abandoned due to TTP throttling/diversion, with message priority 1 and color green.

Collection Interval
5 min

Peg Condition
The DRL abandoned routing of a transaction and all of these criteria are met:

- Last routing failure encountered was due to TTP diversion
- Message Priority = 1
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action required.

TtpDropP1Y

Measurement ID
14326

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTP ID)

Description
The number of transactions abandoned due to TTP throttling/diversion, with message priority 1 and color yellow.

Collection Interval
5 min

Peg Condition
The DRL abandoned routing of a transaction and all of these criteria are met:

- Last routing failure encountered was due to TTP diversion
- Message Priority = 1
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action required.

TtpDropP2G

Measurement ID
14324

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTP ID)

Description
The number of transactions abandoned due to TTP throttling/diversion, with message priority 2 and color green.

Collection Interval
5 min

Peg Condition
The DRL abandoned routing of a transaction and all of these criteria are met:

- Last routing failure encountered was due to TTP diversion
- Message Priority = 2
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action required.

TtpDropP2Y

Measurement ID
14327

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTP ID)

Description
The number of transactions abandoned due to TTP throttling/diversion, with message priority 2 and color yellow.

Collection Interval
5 min

Peg Condition
The DRL abandoned routing of a transaction and all of these criteria are met:

- Last routing failure encountered was due to TTP diversion
- Message Priority = 2
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action required.

TtpDropP3G

Measurement ID
14400

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of transactions abandoned due to TTP throttling/diversion with message priority 3 and color green

Collection Interval
5 min

Peg Condition
Each time DRL abandoned routing of a transaction and these criteria are met:

- Last routing failure encountered was due to TTP diversion
- Message Priority = 3
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDropP3Y

Measurement ID
14413

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of transactions abandoned due to TTP throttling/diversion with message priority 3 and color yellow

Collection Interval
5 min

Peg Condition
Each time DRL abandoned routing of a transaction and these criteria are met:

- Last routing failure encountered was due to TTP diversion
- Message Priority = 3
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDropP4G

Measurement ID
14401

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of transactions abandoned due to TTP throttling/diversion with message priority 4 and color green

Collection Interval
5 min

Peg Condition
Each time DRL abandoned routing of a transaction and these criteria are met:

- Last routing failure encountered was due to TTP diversion
- Message Priority = 4
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDropP4Y

Measurement ID
14414

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of transactions abandoned due to TTP throttling/diversion with message priority 4 and color yellow

Collection Interval
5 min

Peg Condition
Each time DRL abandoned routing of a transaction and these criteria are met:

- Last routing failure encountered was due to TTP diversion
- Message Priority = 4
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDropP5G

Measurement ID
14402

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of transactions abandoned due to TTP throttling/diversion with message priority 5 and color green

Collection Interval
5 min

Peg Condition
Each time DRL abandoned routing of a transaction and these criteria are met:

- Last routing failure encountered was due to TTP diversion
- Message Priority = 5
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDropP5Y

Measurement ID
14415

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of transactions abandoned due to TTP throttling/diversion with message priority 5 and color yellow

Collection Interval
5 min

Peg Condition
Each time DRL abandoned routing of a transaction and these criteria are met:

- Last routing failure encountered was due to TTP diversion
- Message Priority = 5
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDropP6G

Measurement ID
14403

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of transactions abandoned due to TTP throttling/diversion with message priority 6 and color green

Collection Interval
5 min

Peg Condition
Each time DRL abandoned routing of a transaction and these criteria are met:

- Last routing failure encountered was due to TTP diversion
- Message Priority = 6
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDropP6Y

Measurement ID
14416

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of transactions abandoned due to TTP throttling/diversion with message priority 6 and color yellow

Collection Interval
5 min

Peg Condition
Each time DRL abandoned routing of a transaction and these criteria are met:

- Last routing failure encountered was due to TTP diversion
- Message Priority = 6
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDropP7G

Measurement ID
14404

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of transactions abandoned due to TTP throttling/diversion with message priority 7 and color green

Collection Interval
5 min

Peg Condition
Each time DRL abandoned routing of a transaction and these criteria are met:

- Last routing failure encountered was due to TTP diversion
- Message Priority = 7
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDropP7Y

Measurement ID
14417

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of transactions abandoned due to TTP throttling/diversion with message priority 7 and color yellow

Collection Interval
5 min

Peg Condition
Each time DRL abandoned routing of a transaction and these criteria are met:

- Last routing failure encountered was due to TTP diversion
- Message Priority = 7
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDropP8G

Measurement ID
14405

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of transactions abandoned due to TTP throttling/diversion with message priority 8 and color green

Collection Interval
5 min

Peg Condition
Each time DRL abandoned routing of a transaction and these criteria are met:

- Last routing failure encountered was due to TTP diversion
- Message Priority = 8
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDropP8Y

Measurement ID
14418

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of transactions abandoned due to TTP throttling/diversion with message priority 8 and color yellow

Collection Interval
5 min

Peg Condition
Each time DRL abandoned routing of a transaction and these criteria are met:

- Last routing failure encountered was due to TTP diversion
- Message Priority = 8
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDropP9G

Measurement ID
14406

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of transactions abandoned due to TTP throttling/diversion with message priority 9 and color green

Collection Interval
5 min

Peg Condition
Each time DRL abandoned routing of a transaction and these criteria are met:

- Last routing failure encountered was due to TTP diversion
- Message Priority = 9
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDropP9Y

Measurement ID
14419

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of transactions abandoned due to TTP throttling/diversion with message priority 9 and color yellow

Collection Interval
5 min

Peg Condition
Each time DRL abandoned routing of a transaction and these criteria are met:

- Last routing failure encountered was due to TTP diversion
- Message Priority = 9
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDropP10G

Measurement ID
14407

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of transactions abandoned due to TTP throttling/diversion with message priority 10 and color green

Collection Interval
5 min

Peg Condition
Each time DRL abandoned routing of a transaction and these criteria are met:

- Last routing failure encountered was due to TTP diversion
- Message Priority = 10
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDropP10Y

Measurement ID
14420

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of transactions abandoned due to TTP throttling/diversion with message priority 10 and color yellow

Collection Interval
5 min

Peg Condition
Each time DRL abandoned routing of a transaction and these criteria are met:

- Last routing failure encountered was due to TTP diversion
- Message Priority = 10
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDropP11G

Measurement ID
14408

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of transactions abandoned due to TTP throttling/diversion with message priority 11 and color green

Collection Interval
5 min

Peg Condition
Each time DRL abandoned routing of a transaction and these criteria are met:

- Last routing failure encountered was due to TTP diversion
- Message Priority = 11
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDropP11Y

Measurement ID
14421

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of transactions abandoned due to TTP throttling/diversion with message priority 11 and color yellow

Collection Interval
5 min

Peg Condition
Each time DRL abandoned routing of a transaction and these criteria are met:

- Last routing failure encountered was due to TTP diversion
- Message Priority = 11
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDropP12G

Measurement ID
14409

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of transactions abandoned due to TTP throttling/diversion with message priority 12 and color green

Collection Interval
5 min

Peg Condition
Each time DRL abandoned routing of a transaction and these criteria are met:

- Last routing failure encountered was due to TTP diversion
- Message Priority = 12
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDropP12Y

Measurement ID
14422

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of transactions abandoned due to TTP throttling/diversion with message priority 12 and color yellow

Collection Interval
5 min

Peg Condition
Each time DRL abandoned routing of a transaction and these criteria are met:

- Last routing failure encountered was due to TTP diversion
- Message Priority = 12
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDropP13G

Measurement ID
14410

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of transactions abandoned due to TTP throttling/diversion with message priority 13 and color green

Collection Interval
5 min

Peg Condition
Each time DRL abandoned routing of a transaction and these criteria are met:

- Last routing failure encountered was due to TTP diversion
- Message Priority = 13
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDropP13Y

Measurement ID
14423

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of transactions abandoned due to TTP throttling/diversion with message priority 13 and color yellow

Collection Interval
5 min

Peg Condition
Each time DRL abandoned routing of a transaction and these criteria are met:

- Last routing failure encountered was due to TTP diversion
- Message Priority = 13
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDropP14G

Measurement ID
14411

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of transactions abandoned due to TTP throttling/diversion with message priority 14 and color green

Collection Interval
5 min

Peg Condition
Each time DRL abandoned routing of a transaction and these criteria are met:

- Last routing failure encountered was due to TTP diversion
- Message Priority = 14
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDropP14Y

Measurement ID
14424

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of transactions abandoned due to TTP throttling/diversion with message priority 14 and color yellow

Collection Interval
5 min

Peg Condition
Each time DRL abandoned routing of a transaction and these criteria are met:

- Last routing failure encountered was due to TTP diversion
- Message Priority = 14
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDropP15G

Measurement ID
14412

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of transactions abandoned due to TTP throttling/diversion with message priority 15 and color green

Collection Interval
5 min

Peg Condition
Each time DRL abandoned routing of a transaction and these criteria are met:

- Last routing failure encountered was due to TTP diversion
- Message Priority = 15
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action necessary.

TtpDropP15Y

Measurement ID
14425

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of transactions abandoned due to TTP throttling/diversion with message priority 15 and color yellow

Collection Interval
5 min

Peg Condition
Each time DRL abandoned routing of a transaction and these criteria are met:

- Last routing failure encountered was due to TTP diversion
- Message Priority = 15
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action necessary.

TtpHandledDoicOverrideFlag

Measurement ID
14309

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTP ID)

Description
The number of request messages routed to TTP which were not diverted due to priority override.

Collection Interval
5 min

Peg Condition
The TTP was selected as defined by the peg condition criteria defined for TtpSelected and the transaction was not diverted because the Request message priority is greater than or equal to the TTP's Override Message Priority Threshold attribute value.

Measurement Scope
Site

Recovery

1. No action required.

TtpHandledP0G

Measurement ID
14310

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTP ID)

Description
The number of request messages routed to TTP which were not throttled, with message priority 0 and color green.

Collection Interval
5 min

Peg Condition
The TTP was selected as defined by the peg condition criteria defined for TtpSelected and all of these criteria are met:

- Transaction was not diverted
- Message Priority = 0
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action required.

TtpHandledP0Y

Measurement ID
14313

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTP ID)

Description
The number of request messages routed to TTP which were not throttled, with message priority 0 and color yellow.

Collection Interval
5 min

Peg Condition
The TTP was selected as defined by the peg condition criteria defined for TtpSelected and all of these criteria are met:

- Transaction was not diverted
- Message Priority = 0
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action required.

TtpHandledP1G

Measurement ID
14314

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTP ID)

Description
The number of request messages routed to TTP which were not throttled, with message priority 1 and color green.

Collection Interval
5 min

Peg Condition
The TTP was selected as defined by the peg condition criteria defined for TtpSelected and all of these criteria are met:

- Transaction was not diverted
- Message Priority = 1
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action required.

TtpHandledP1Y

Measurement ID
14314

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTP ID)

Description
The number of request messages routed to TTP which were not throttled, with message priority 1 and color yellow.

Collection Interval
5 min

Peg Condition
The TTP was selected as defined by the peg condition criteria defined for TtpSelected and all of these criteria are met:

- Transaction was not diverted
- Message Priority = 1
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action required.

TtpHandledP2G

Measurement ID
14312

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTP ID)

Description
The number of request messages routed to TTP which were not throttled, with message priority 2 and color green.

Collection Interval
5 min

Peg Condition
The TTP was selected as defined by the peg condition criteria defined for TtpSelected and all of these criteria are met:

- Transaction was not diverted
- Message Priority = 2
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action required.

TtpHandledP2Y

Measurement ID
14315

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTP ID)

Description
The number of request messages routed to TTP which were not throttled, with message priority 2 and color yellow.

Collection Interval
5 min

Peg Condition
The TTP was selected as defined by the peg condition criteria defined for TtpSelected and all of these criteria are met:

- Transaction was not diverted
- Message Priority = 2
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action required.

TtpHandledP3G

Measurement ID
14337

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 3 and color green routed to TTP which were not throttled

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was not diverted
- Message Priority = 3

- Message Color = Green

Measurement Scope
Site

Recovery

1. None

TtpHandledP3Y

Measurement ID
14338

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 3 and color yellow routed to TTP which were not throttled

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was not diverted
- Message Priority = 3
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

TtpHandledP4G

Measurement ID
14335

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTP ID)

Description
The number of request messages routed to TTP which were not throttled, with message priority 4 and color green.

Collection Interval
5 min

Peg Condition
The TTP was selected as defined by the peg condition criteria defined for TtpSelected and all of these criteria are met:

- Transaction was not diverted
- Message Priority = 4
- Message Color = Green

Measurement Scope
Site

Recovery

1. No action required.

TtpHandledP4Y

Measurement ID
14336

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTP ID)

Description
The number of request messages routed to TTP which were not throttled, with message priority 4 and color yellow.

Collection Interval
5 min

Peg Condition
The TTP was selected as defined by the peg condition criteria defined for TtpSelected and all of these criteria are met:

- Transaction was not diverted
- Message Priority = 4
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. No action required.

TtpHandledP5G

Measurement ID
14352

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 5 and color green routed to TTP which were not throttled

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was not diverted
- Message Priority = 5
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

TtpHandledP5Y

Measurement ID
14363

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 5 and color yellow routed to TTP which were not throttled

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was not diverted
- Message Priority = 5
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

TtpHandledP6G

Measurement ID
14353

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 6 and color green routed to TTP which were not throttled

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was not diverted
- Message Priority = 6
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

TtpHandledP6Y

Measurement ID
14364

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 6 and color yellow routed to TTP which were not throttled

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was not diverted
- Message Priority = 6
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

TtpHandledP7G

Measurement ID
14354

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 7 and color green routed to TTP which were not throttled

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was not diverted
- Message Priority = 7
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

TtpHandledP7Y

Measurement ID
14365

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 7 and color yellow routed to TTP which were not throttled

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was not diverted
- Message Priority = 7
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

TtpHandledP8G

Measurement ID
14355

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 8 and color green routed to TTP which were not throttled

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was not diverted
- Message Priority = 8

- Message Color = Green

Measurement Scope
Site

Recovery

1. None

TtpHandledP8Y

Measurement ID
14366

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 8 and color yellow routed to TTP which were not throttled

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was not diverted
- Message Priority = 8
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

TtpHandledP9G

Measurement ID
14356

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 9 and color green routed to TTP which were not throttled

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was not diverted
- Message Priority = 9
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

TtpHandledP9Y

Measurement ID
14367

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 9 and color yellow routed to TTP which were not throttled

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was not diverted
- Message Priority = 9
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

TtpHandledP10G

Measurement ID
14357

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 10 and color green routed to TTP which were not throttled

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was not diverted
- Message Priority = 10
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

TtpHandledP10Y

Measurement ID
14368

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 10 and color yellow routed to TTP which were not throttled

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was not diverted
- Message Priority = 10
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

TtpHandledP11G

Measurement ID
14358

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 11 and color green routed to TTP which were not throttled

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was not diverted
- Message Priority = 11
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

TtpHandledP11Y

Measurement ID
14369

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 11 and color yellow routed to TTP which were not throttled

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was not diverted
- Message Priority = 11
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

TtpHandledP12G

Measurement ID
14359

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 12 and color green routed to TTP which were not throttled

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was not diverted
- Message Priority = 12
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

TtpHandledP12Y

Measurement ID
14370

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 12 and color yellow routed to TTP which were not throttled

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was not diverted
- Message Priority = 12
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

TtpHandledP13G

Measurement ID
14360

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 13 and color green routed to TTP which were not throttled

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was not diverted
- Message Priority = 13

- Message Color = Green

Measurement Scope
Site

Recovery

1. None

TtpHandledP13Y

Measurement ID
14371

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 13 and color yellow routed to TTP which were not throttled

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was not diverted
- Message Priority = 13
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

TtpHandledP14G

Measurement ID
14361

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 14 and color green routed to TTP which were not throttled

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was not diverted
- Message Priority = 14
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

TtpHandledP14Y

Measurement ID
14372

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 14 and color yellow routed to TTP which were not throttled

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was not diverted
- Message Priority = 14
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

TtpHandledP15G

Measurement ID
14362

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 15 and color green routed to TTP which were not throttled

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was not diverted
- Message Priority = 15
- Message Color = Green

Measurement Scope
Site

Recovery

1. None

TtpHandledP15Y

Measurement ID
14373

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Number of request messages with message priority 15 and color yellow routed to TTP which were not throttled

Collection Interval
5 min

Peg Condition
Each time a Peer Node or Connection is selected from a Route Group (or a Peer node is selected for Destination-Host Implicit Routing) which is associated with a TTP. Additionally:

- Transaction was not diverted
- Message Priority = 15
- Message Color = Yellow

Measurement Scope
Site

Recovery

1. None

TtpHandledRateAvg

Measurement ID
14307

Measurement Group
TTP Performance

Measurement Type
Average

Measurement Dimension
Arrayed (by TTP ID)

Description
Average TTP request message routing rate (messages per second).

Collection Interval
5 min

Peg Condition
The TTP was selected as defined by the peg condition criteria defined for TtpSelected and the transaction was not diverted.

Measurement Scope
Site

Recovery

1. No action required.

TtpHandledRatePeak

Measurement ID
14306

Measurement Group
TTP Performance

Measurement Type
Max

Measurement Dimension
Arrayed (by TTP ID)

Description
Peak TTP request message routing rate (messages per second).

Collection Interval
5 min

Peg Condition
The TTP was selected as defined by the peg condition criteria defined for TtpSelected and the transaction was not diverted.

Measurement Scope
Site

Recovery

1. No action required.

TtpSelected

Measurement ID
14305

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTP ID)

Description
The number of request messages routed to TTP.

Collection Interval
5 min

Peg Condition
This measurement is updated when a Peer Node or Connection is selected from a Route Group (or a Peer Node is selected or Destination-Host Implicit Routing) which has an active TTP associated with the transaction meeting the following criteria:

- Request message's Application-Id matches the Application-Id assigned to the TTP
- FQDN assigned to the selected Peer Node/Connection matches the FQDN of the Peer Node assigned to the TTP
- TTP's Throttling Admin State = Enabled

Measurement Scope
Site

Recovery

1. No action required.

TtpTmLossRateRange1

Measurement ID
14301

Measurement Group
TTP Performance

Measurement Type
Duration

Measurement Dimension
Arrayed (by TTP ID)

Description
The duration of TTP Loss Percent Range1.

Collection Interval
5 min

Peg Condition
When the DRL changes a local TTG's Current Loss Percent value, it shall:

- Save the time of the event in the TTG's RT-DB record called "Loss Start Time"
- Save the new Current Loss Percent value in the TTG's RT-DB record
- If the TTG's old Current Loss Percent value is not equal to 0, then:

- Calculate the duration of time that the TTG's Current Loss Percent was set to the previous value based upon "Loss Start Time" and the current time
- Determine which TtgTmLossRateRange-X measurement to update based upon the previous TTG Current Loss Percent value and the system-wide LossRateMax1, LossRateMax2, and LossRateMax3 values
- Update the selected TtgTmLossRateRange-X measurement with the calculated duration of time

Measurement Scope
Site

Recovery

1. No action required.

TtpTmLossRateRange2

Measurement ID
14302

Measurement Group
TTP Performance

Measurement Type
Duration

Measurement Dimension
Arrayed (by TTP ID)

Description
The duration of TTP Loss Percent Range2.

Collection Interval
5 min

Peg Condition
When the DRL changes a local TTG's Current Loss Percent value, it shall:

- Save the time of the event in the TTG's RT-DB record called "Loss Start Time"
- Save the new Current Loss Percent value in the TTG's RT-DB record
- If the TTG's old Current Loss Percent value is not equal to 0, then:
  - Calculate the duration of time that the TTG's Current Loss Percent was set to the previous value based upon "Loss Start Time" and the current time
  - Determine which TtgTmLossRateRange-X measurement to update based upon the previous TTG Current Loss Percent value and the system-wide LossRateMax1, LossRateMax2, and LossRateMax3 values
  - Update the selected TtgTmLossRateRange-X measurement with the calculated duration of time

Measurement Scope
Site

Recovery

1. No action required.

TtpTmLossRateRange3

Measurement ID
14303

Measurement Group
TTP Performance

Measurement Type
Duration

Measurement Dimension
Arrayed (by TTP ID)

Description
The duration of TTP Loss Percent Range3.

Collection Interval
5 min

Peg Condition
When the DRL changes a local TTG's Current Loss Percent value, it shall:

- Save the time of the event in the TTG's RT-DB record called "Loss Start Time"
- Save the new Current Loss Percent value in the TTG's RT-DB record
- If the TTG's old Current Loss Percent value is not equal to 0, then:
  - Calculate the duration of time that the TTG's Current Loss Percent was set to the previous value based upon "Loss Start Time" and the current time
  - Determine which TtgTmLossRateRange-X measurement to update based upon the previous TTG Current Loss Percent value and the system-wide LossRateMax1, LossRateMax2, and LossRateMax3 values
  - Update the selected TtgTmLossRateRange-X measurement with the calculated duration of time

Measurement Scope
Site

Recovery

1. No action required.

TtpTmLossRateRange4

Measurement ID
14304

Measurement Group
TTP Performance

Measurement Type
Duration

Measurement Dimension
Arrayed (by TTP ID)

Description
The duration of TTP Loss Percent Range4.

Collection Interval
5 min

Peg Condition
When the DRL changes a local TTG's Current Loss Percent value, it shall:

- Save the time of the event in the TTG's RT-DB record called "Loss Start Time"
- Save the new Current Loss Percent value in the TTG's RT-DB record
- If the TTG's old Current Loss Percent value is not equal to 0, then:
  - Calculate the duration of time that the TTG's Current Loss Percent was set to the previous value based upon "Loss Start Time" and the current time
  - Determine which TtgTmLossRateRange-X measurement to update based upon the previous TTG Current Loss Percent value and the system-wide LossRateMax1, LossRateMax2, and LossRateMax3 values
  - Update the selected TtgTmLossRateRange-X measurement with the calculated duration of time

Measurement Scope
Site

Recovery

1. No action required.

TtpTmStaticThrottling

Measurement ID
14334

Measurement Group
TTP Performance

Measurement Type
Duration

Measurement Dimension
Arrayed (by TTP ID)

Description
The duration of time (in seconds) that TTP Static Throttling was being applied.

Collection Interval
5 min

Peg Condition
The time duration interval starts when any of these events occur:

- The TTP's Operational Reason is changed to "Static Rate Limit Exceeded"
- A new measurement collection interval begins and the TTP's Operational Reason is "Static Rate Limit Exceeded"

The time duration interval stops when any of these events occur:

- The TTP's Operational Reason is changed from "Static Rate Limit Exceeded" to any other value
- The current measurement collection interval ends

When a time duration interval completes, the time measured is added to the total measurement value.

Measurement Scope
Site

Recovery

1. No action required.

TtpUniqueOLRs

Measurement ID
14308

Measurement Group
TTP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by TTP ID)

Description
The number of unique **DOIC OLR**s successfully processed.

Collection Interval
5 min

Peg Condition
This measurement is updated when a DOIC OLR is accepted, applied to the associated TTP and the OLR's Sequence Number is greater than the TTP's Sequence Number.

Measurement Scope
Site

Recovery

1. No action required.

U-SBR Performance measurements

The U-SBR Performance measurement report contains measurements that provide performance information that is specific to the U-SBR.

GenericConcurrentUpdateStateMeas

Measurement ID
19854

Measurement Group
U-SBR Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by short name of the owner application)

Description
The total number of GenericConcurrentUpdateState events processed by the U-SBR server.

Collection Interval
5 min

Peg Condition
This measurement is incremented at the U-SBR server for each received GenericConcurrentUpdateState stack event.

Measurement Scope
Server Group

Recovery

1. No action required.

GenericCreateOrReadStateMeas

Measurement ID
19851

Measurement Group
U-SBR Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by short name of the owner application)

Description
The total number of GenericCreateOrReadState events processed by the U-SBR server.

Collection Interval
5 min

Peg Condition
This measurement is incremented at the U-SBR server for each received GenericCreateOrReadState stack event.

Measurement Scope
Server Group

Recovery

1. No action required.

GenericCreateStateMeas

Measurement ID
19850

Measurement Group
U-SBR Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by short name of the owner application)

Description
The total number of GenericCreateState events processed by the U-SBR server.

Collection Interval
5 min

Peg Condition
This measurement is incremented at the U-SBR server for each received GenericCreateState stack event.

Measurement Scope
Server Group

Recovery

1. No action required.

GenericDeleteStateMeas

Measurement ID
19855

Measurement Group
U-SBR Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by short name of the owner application)

Description
The total number of GenericDeleteState events processed by the U-SBR server.

Collection Interval
5 min

Peg Condition
This measurement is incremented at the U-SBR server for each received GenericDeleteState stack event.

Measurement Scope
Server Group

Recovery

1. No action required.

GenericErrMalformedRequestMeas

Measurement ID
19856

Measurement Group
U-SBR Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The total number of Generic State events that could not be decoded by the U-SBR server.

Collection Interval
5 min

Peg Condition
This measurement is incremented at the U-SBR server for each stack event result that included the GenericErrMalformedRequest code.

Measurement Scope
Server Group

Recovery

1. No action required.

GenericErrMeas

Measurement ID
19857

Measurement Group
U-SBR Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by short name of the owner application)

Description
The total number of GenericState events that could not be processed by the U-SBR Server and were replied to with a GenericErr code.

Collection Interval
5 min

Peg Condition
This measurement is incremented at the U-SBR server for each stack event result that included the GenericErr code.

Measurement Scope
Server Group

Recovery

1. No action required.

GenericErrRecObsoletedMeas

Measurement ID
19858

Measurement Group
U-SBR Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by short name of the owner application)

Description
The total number of GenericConcurrentUpdateState events that did not lead to updating the record.

Collection Interval
5 min

Peg Condition
This measurement is incremented at the U-SBR server for each stack event result that included the GenericErrRecObsoletedMeas code.

Measurement Scope
Server Group

Recovery

1. No action required.

GenericReadStateMeas

Measurement ID
19852

Measurement Group
U-SBR Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by short name of the owner application)

Description
The total number of GenericReadState events processed by the U-SBR server.

Collection Interval
5 min

Peg Condition
This measurement is incremented at the U-SBR server for each received GenericReadState stack event.

Measurement Scope
Server Group

Recovery

1. No action required.

GenericTotalRequests

Measurement ID
19859

Measurement Group
U-SBR Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by short name of the owner application)

Description
The total number of Generic state request events that were received by the U-SBR.

Collection Interval
5 min

Peg Condition
This measurement is incremented at the U-SBR server for each stack event request received.

Measurement Scope
Server Group

Recovery

1. No action required.

GenericUpdateStateMeas

Measurement ID
19853

Measurement Group
U-SBR Performance

Measurement Type
Simple

Measurement Dimension
Arrayed (by short name of the owner application)

Description
The total number of GenericUpdateState events processed by the U-SBR server.

Collection Interval
5 min

Peg Condition
This measurement is incremented at the U-SBR server for each received GenericUpdateState stack event.

Measurement Scope
Server Group

Recovery

1. No action required.

vSTP measurements

The vSTP measurement report contains measurements that provide information that is specific to vSTP.

VstpANSIDiscardsNoPDUBuffer

Measurement ID
21155

Measurement Group
VSTP Server Resource Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress messages that were discarded because no ANSI PDU Buffers were available.

Collection Interval
30 min

Peg Condition
The number of ingress messages that were discarded because no ANSI PDU Buffers were available.

Measurement Scope
Site

Recovery

1. A PDU is allocated to each message that arrives at a vSTP and is de-allocated when message processing completes. This measurement is useful for evaluating whether persistent network problems exist. In general, PDU buffers are engineered to match the processing capacity of the vSTP . If network problems exist, delaying the off-delaying of egress messages from the vSTP, then PDUs/messages will sit in internal SS7 queues. Under normal circumstances, the PDU Buffer Pool should never be 100% utilized.
2. If the measurement is greater than zero, then a network (IP or SS7) problem may exist or a vSTP-specific software problem may exist (such as a buffer pool leak).
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

VstpANSIPDUUtilAvg

Measurement ID
21154

Measurement Group
VSTP Server Resource Usages

Measurement Type
Max

Measurement Dimension
Single

Description
The average SS7 ANSI PDU Buffer Pool utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The average of all SS7 ANSI PDU Buffer Pool utilization samples taken during the collection interval

Measurement Scope
Site

Recovery

1. A PDU is allocated to each message that arrives at a vSTP and is de-allocated when message processing completes. This measurement is useful for evaluating whether persistent network problems exist. In general, PDU buffers are engineered to match the processing capacity of the vSTP . If network problems exist, delaying the off-delaying of egress messages from the vSTP, then PDUs/messages will sit in internal SS7 queues.
2. If both the peak and average measurements for multiple vSTPs within a Network Element are consistently near the recommended maximum engineered capacity of a vSTP when the ingress Message Rate and/or SS7 Process CPU Utilization measurement are below the recommended engineered capacity of a vSTP, then a network (IP or SS7) problem may exist. Looking at these measurements on a time of day basis may provide additional insight into potential network problems.
3. If the peak and average for an individual vSTP is significantly different than other vSTPs in the same Network ELement, then a vSTP-specific software problem may exist (such as a buffer pool leak).
4. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

VstpANSIPDUUtilPeak

Measurement ID
21153

Measurement Group
VSTP Server Resource Usages

Measurement Type
Max

Measurement Dimension
Single

Description
The peak SS7 ANSI PDU Buffer Pool utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The maximum SS7 ANSI PDU Buffer Pool utilization sample taken during the collection interval

Measurement Scope
Site

Recovery

1. A PDU is allocated to each message that arrives at a vSTP and is de-allocated when message processing completes. This measurement is useful for evaluating whether persistent network problems exist. In general, PDU buffers are engineered to match the processing capacity of the vSTP . If network problems exist, delaying the off-delaying of egress messages from the vSTP, then PDUs/messages will sit in internal SS7 queues.
2. If both the peak and average measurements for multiple vSTPs within a Network Element are consistently near the recommended maximum engineered capacity of a vSTP when the ingress Message Rate and/or SS7 Process CPU Utilization measurement are below the recommended engineered capacity of a vSTP, then a network (IP or SS7) problem may exist. Looking at these measurements on a time of day basis may provide additional insight into potential network problems.
3. If the peak and average for an individual vSTP is significantly different than other vSTPs in the same Network ELement, then a vSTP-specific software problem may exist (such as a buffer pool leak).
4. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

VstpConnRejectedUnknownPeer

Measurement ID
21028

Measurement Group
VSTP M3UA Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of times connections rejected from the unknown peer on the vSTP server.

Collection Interval
30 min

Peg Condition
Each time the association has been rejected due to IP address validation failure in the SCTP INITs/INIT-ACKs transmitted by the Adjacent Node

Measurement Scope
Site

Recovery

1. If all is well, this measurement will have a zero value. A non-zero value indicates that the Adjacent Node has attempted to connect to the Peer IP Address at least once, but the connection attempt was rejected because the IP addresses advertised by the Adjacent Node failed verification.
2. Look for event 70051 in the event history log at **Main Menu** > **Alarms & Events** > **View History**. Event 70051 provides more details about the cause of the failure.
3. Verify that the SCTP validation mode is as desired.
4. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpEvAsnCnxFail

Measurement ID
21094

Measurement Group
VSTP Association Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of times association failed

Collection Interval
30 min

Peg Condition
Each time an association failed

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpEvAsnCnxSuccess

Measurement ID
21093

Measurement Group
VSTP Association Usages

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of times association created successfully

Collection Interval
30 min

Peg Condition
Each time an association comes up successfully

Measurement Scope
Site

Recovery

1. No action required

VstpEvAsnFarEndClose

Measurement ID
21090

Measurement Group
VSTP Association Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of times far end closed the association

Collection Interval
30 min

Peg Condition
Each time the far end of the association closes the association by sending either SHUTDOWN or ABORT

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpEvAsnMaintClose

Measurement ID
21091

Measurement Group
VSTP Association Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of times association closed due to maintenance at the vSTP server

Collection Interval
30 min

Peg Condition
Each time a manual change is made to the association administrative state from Enabled to Blocked or from Enabled to Disabled, causing the association to transition out of the ASP-UP protocol state

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpEvAsnNoRespClose

Measurement ID
21092

Measurement Group
VSTP Association Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of times association closed due to lack of response from the far end

Collection Interval
30 min

Peg Condition
Each time there is a lack of response from a peer node (such as far end)

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpEvAsnSockOptionFail

Measurement ID
21097

Measurement Group
VSTP Association Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of times socket option set failed for an association.

Collection Interval
30 min

Peg Condition
Each time setting of socket option failed for an association

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpEvLnkMainCloseByPeer

Measurement ID
21196

Measurement Group
VSTP Link Usage

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of times a link was closed due to Asp-Inactive action. This count indicates the number of times that a link transitioned from ASP-ACTIVE to ASP-INACTIVE.

Collection Interval
30 min

Peg Condition
Each time the link administrative state is changed from Enabled to Disabled, causing a protocol state transition from ASP-ACTIVE to ASP-INACTIVE

Measurement Scope
Site

Recovery

1. If the link is known to be under maintenance, no further action is necessary.
2. Link status is viewed at **Main Menu** > **SS7/Sigtran** > **Maintenance** > **Links**
3. View the event history at **Main Menu** > **Alarms & Events** > **View History** looking for event 19234. Event 19234 shows the manual link state transitions and contains a time stamp of when the change occurred.
4. The security logs at **Main Menu** > **Security Log** > **View History** can be searched using the time stamp from the event history log to determine which login performed the manual state change on the link.
5. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpIngressMsgCount

Measurement ID
21029

Measurement Group
VSTP M3UA Usages

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress messages received on the vSTP server.

Collection Interval
30 min

Peg Condition
Each time a number of messages is received on M3UA

Measurement Scope
Site

Recovery

1. No action required.

VstpITUDiscardsNoPDUBuffer

Measurement ID
21152

Measurement Group
VSTP Server Resource Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress messages that were discarded because no ITUI/ITUN PDU Buffers were available.

Collection Interval
30 min

Peg Condition
The number of ingress messages that were discarded because no ITUI/ITUN PDU Buffers were available.

Measurement Scope
Site

Recovery

1. A PDU is allocated to each message that arrives at a vSTP and is de-allocated when message processing completes. This measurement is useful for evaluating whether persistent network problems exist. In general, PDU buffers are engineered to match the processing capacity of the vSTP . If network problems exist, delaying the off-delaying of egress messages from the vSTP, then PDUs/messages will sit in internal SS7 queues. Under normal circumstances, the PDU Buffer Pool should never be 100% utilized.
2. If the measurement is greater than zero, then a network (IP or SS7) problem may exist or a vSTP-specific software problem may exist (such as a buffer pool leak).
3. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

VstpITUPDUUtilAvg

Measurement ID
21151

Measurement Group
VSTP Server Resource Usages

Measurement Type
Average

Measurement Dimension
Single

Description
The average SS7 ITPDU Buffer Pool utilization (0-100%) measured during the collection interval.

Collection Interval
30 min

Peg Condition
The average SS7 ITUPDU Buffer Pool utilization sample taken during the collection interval.

Measurement Scope
Site

Recovery

1. A PDU is allocated to each message that arrives at a vSTP and is de-allocated when message processing completes. This measurement is useful for evaluating whether persistent network problems exist. In general, PDU buffers are engineered to match the processing capacity of the vSTP . If network problems exist, delaying the off-delaying of egress messages from the vSTP, then PDUs/messages will sit in internal SS7 queues.
2. If both the peak and average measurements for multiple vSTPs within a Network Element are consistently near the recommended maximum engineered capacity of a vSTP when the Ingress Message Rate and/or SS7 Process CPU Utilization measurements are below the recommended maximum engineered capacity of an vSTP, the a network (IP or SS7) problem may exist. Looking at these measurements on a time of day basis may provide additional insight into potential network problems.
3. If the peak and average for an individual vSTP is significantly different that other vSTPs in the same Network Element, then a vSTP-specific software problem may exist (such as a buffer pool peak).
4. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

VstpITUPDUUtilPeak

Measurement ID
21150

Measurement Group
VSTP Server Resource Usages

Measurement Type
Max

Measurement Dimension
Single

Description
The peak SS7 ITPDU Buffer Pool utilization (0-100%) measured during the collection interval.

Collection Interval
30 min

Peg Condition
The maximum SS7 ITUPDU Buffer Pool utilization sample taken during the collection interval.

Measurement Scope
Site

Recovery

1. A PDU is allocated to each message that arrives at a vSTP and is de-allocated when message processing completes. This measurement is useful for evaluating whether persistent network problems exist. In general, PDU buffers are engineered to match the processing capacity of the vSTP . If network problems exist, delaying the off-delaying of egress messages from the vSTP, then PDUs/messages will sit in internal SS7 queues.
2. If both the peak and average measurements for multiple vSTPs within a Network Element are consistently near the recommended maximum engineered capacity of a vSTP when the Ingress Message Rate and/or SS7 Process CPU Utilization measurements are below the recommended maximum engineered capacity of an vSTP, the a network (IP or SS7) problem may exist. Looking at these measurements on a time of day basis may provide additional insight into potential network problems.
3. If the peak and average for an individual vSTP is significantly different that other vSTPs in the same Network Element, then a vSTP-specific software problem may exist (such as a buffer pool peak).
4. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

VstpM2paAlignFailDueToAssocFail

Measurement ID
21416

Measurement Group
VSTP M2PA Link Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of M2PA alignment failures due to association failure.

Collection Interval
30 min

Peg Condition
Each time link alignment failed due to Association Failure

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpM2paAlignFailDueToOOSReceived

Measurement ID
21418

Measurement Group
VSTP M2PA Link Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of M2PA alignment failures due to the pee sending a Link Status Out of Service.

Collection Interval
30 min

Peg Condition
Each time link alignment failed due to OOS received.

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpM2paAlignFailDueToProtoError

Measurement ID
21417

Measurement Group
VSTP M2PA Link Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of M2PA alignment failures due to protocol error (all causes).

Collection Interval
30 min

Peg Condition
Each time link alignment failed due to protocol error

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpM2paLinkOutageDueToOOS

Measurement ID
21420

Measurement Group
VSTP M2PA Link Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of outages caused by receipt of a Link Status Out of Service at M2PA.

Collection Interval
30 min

Peg Condition
Each time there is a received Link Status Out of Service message at M2PA

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpM2paStackQueueAvg

Measurement ID
21436

Measurement Group
VSTP M2PA Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average vSTP M2PA Network Management Event Queue utilization (0-100%) measured during the collection interval.

Collection Interval
30 min

Peg Condition
The average of all vSTP M2PA Stack Event Queue utilization samples taken during the collection interval

Measurement Scope
Site

Recovery

1. This measurement is primarily intended to assist in evaluating the need for additional vSTP processing capacity at a Network Element.
2. If both the peak and average measurement for multiple vSTPs within a Network Element are consistently near the recommended maximum engineered capacity of a vSTP over several collection intervals, then the number of vSTPs in the Network Element may need to be increased.
3. If the peak and average for an individual vSTP is significantly different than other vSTPs in the same Network Element, then a vSTP-specific hardware, software, or configuration problem may exist.
4. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpM2paStackQueueFull

Measurement ID
21434

Measurement Group
VSTP M2PA Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of messages that were discarded because the vSTP M2PA Stack Event Queue was full.

Collection Interval
30 min

Peg Condition
The number of messages that were discarded because the M2PA Stack Event Queue was full

Measurement Scope
Site

Recovery

1. This measurement is primarily intended to assist in evaluating the need for additional vSTP processing capacity at a Network Element.
2. If both the peak and average measurement for multiple vSTPs within a Network Element are consistently near the recommended maximum engineered capacity of a vSTP over several collection intervals, then the number of vSTPs in the Network Element may need to be increased.
3. If the peak and average for an individual vSTP is significantly different than other vSTPs in the same Network Element, then a vSTP-specific hardware, software, or configuration problem may exist.
4. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpM2paStackQueuePeak

Measurement ID
21435

Measurement Group
VSTP M2PA Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The peak vSTP M2PA Network Management Event Queue utilization (0-100%) measured during the collection interval.

Collection Interval
30 min

Peg Condition
The maximum vSTP M2PA Stack Event Queue utilization sample taken during the collection interval

Measurement Scope
Site

Recovery

1. This measurement is primarily intended to assist in evaluating the need for additional vSTP processing capacity at a Network Element.
2. If both the peak and average measurement for multiple vSTPs within a Network Element are consistently near the recommended maximum engineered capacity of a vSTP over several collection intervals, then the number of vSTPs in the Network Element may need to be increased.
3. If the peak and average for an individual vSTP is significantly different than other vSTPs in the same Network Element, then a vSTP-specific hardware, software, or configuration problem may exist.
4. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpM2paT1TimerExpired

Measurement ID
21411

Measurement Group
VSTP M2PA Link Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of M2PA alignment failures due to T1 (ready) expiry.

Collection Interval
30 min

Peg Condition
Each time M2PA alignment failed due to T1 (ready) timer expiry

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpM2paT2TimerExpired

Measurement ID
21412

Measurement Group
VSTP M2PA Link Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of M2PA alignment failures due to T2 (alignment) expiry.

Collection Interval
30 min

Peg Condition
Each time M2PA alignment failed due to T2 (alignment) timer expiry

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpM2paT3TimerExpired

Measurement ID
21413

Measurement Group
VSTP M2PA Link Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of M2PA alignment failures due to T3 (proving) expiry.

Collection Interval
30 min

Peg Condition
Each time M2PA alignment failed due to T3 (proving) timer expiry

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpM2paT6TimerExpired

Measurement ID
21414

Measurement Group
VSTP M2PA Link Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of outages caused by T6 (remote congestion) expiry.

Collection Interval
30 min

Peg Condition
Each time there are outages caused by T6 (remote congestion) timer expiry

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpM2paT7TimerExpired

Measurement ID
21415

Measurement Group
VSTP M2PA Link Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of outages caused by T7 (excessive acknowledgement delay) expiry at M2PA.

Collection Interval
30 min

Peg Condition
Each time there are outages caused by T7 (excessive acknowledgement delay) timer expiry

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpM3rlMsgFromMTP3User

Measurement ID
21264

Measurement Group
VSTP MTP3 Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
Egress M3RL DATA Messages (at SCCP > M3UA interface). This measurement includes SCMG messages (which are DATA to the M3RL layer), but does not include SSNM messages.

Collection Interval
30 min

Peg Condition
Each time a User Data message is received from SCCP > M3RL > M3UA, which includes SCMG data messages as well.

Measurement Scope
Site

Recovery

1. No action required.

VstpM3RLNetMgtQueueAvg

Measurement ID
21428

Measurement Group
VSTP MTP3 Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average vSTP M3RL Network Management Event Queue utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The average of all vSTP M3RL Network Management Event Queue utilization samples taken during the collection interval

Measurement Scope
Site

Recovery

1. This measurement is primarily intended to assist in evaluating the need for additional vSTP processing capacity at a Network Element.
2. If both the peak and average measurement for multiple vSTPs within a Network Element are consistently near the recommended maximum engineered capacity of a vSTP over several collection intervals, then the number of vSTPs in the Network Element may need to be increased.
3. If the peak and average for an individual vSTP is significantly different than other vSTPs in the same Network Element, then a vSTP-specific hardware, software, or configuration problem may exist.
4. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpM3RLNetMgtQueueFull

Measurement ID
21429

Measurement Group
VSTP MTP3 Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of vSTP M3RL network management messages (SI=0) that were discarded because the M3RL Network Management Event Queue was full.

Collection Interval
5 min

Peg Condition
The number of M3RL network management messages (SI=0) that were discarded because the M3RL Network Management Event Queue was full.

Measurement Scope
Site

Recovery

1. This measurement is primarily intended to assist in evaluating the need for additional vSTP processing capacity at a Network Element.

2. If both the peak and average measurement for multiple vSTPs within a Network Element are consistently near the recommended maximum engineered capacity of a vSTP over several collection intervals, then the number of vSTPs in the Network Element may need to be increased.
3. If the peak and average for an individual vSTP is significantly different than other vSTPs in the same Network Element, then a vSTP-specific hardware, software, or configuration problem may exist.
4. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpM3RLNetMgtQueuePeak

Measurement ID
21427

Measurement Group
VSTP MTP3 Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The peak vSTP M3RL Network Management Event Queue utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The maximum vSTP M3RL Network Management Event Queue utilization sample taken during the collection interval

Measurement Scope
Site

Recovery

1. This measurement is primarily intended to assist in evaluating the need for additional vSTP processing capacity at a Network Element.
2. If both the peak and average measurement for multiple vSTPs within a Network Element are consistently near the recommended maximum engineered capacity of a vSTP over several collection intervals, then the number of vSTPs in the Network Element may need to be increased.
3. If the peak and average for an individual vSTP is significantly different than other vSTPs in the same Network Element, then a vSTP-specific hardware, software, or configuration problem may exist.
4. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpM3RLStackQueueAvg

Measurement ID
21425

Measurement Group
VSTP MTP3 Performance

Measurement Type
Average

Measurement Dimension
Arrayed

Description
The average vSTP M3RL Stack Event Queue utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The average of all vSTP M3RL Stack Event Queue utilization samples taken during the collection interval

Measurement Scope
Site

Recovery

1. This measurement is primarily intended to assist in evaluating the need for additional vSTP processing capacity at a Network Element.
2. If both the peak and average measurement for multiple vSTPs within a Network Element are consistently near the recommended maximum engineered capacity of a vSTP over several collection intervals, then the number of vSTPs in the Network Element may need to be increased.
3. If the peak and average for an individual vSTP is significantly different than other vSTPs in the same Network Element, then a vSTP-specific hardware, software, or configuration problem may exist.
4. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpM3RLStackQueueFull

Measurement ID
21426

Measurement Group
VSTP MTP3 Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of messages that were discarded because the vSTP M3RL Stack Event Queue was full.

Collection Interval
5 min

Peg Condition
The number of messages that were discarded because the vSTP M3RL Stack Event Queue was full.

Measurement Scope
Site

Recovery

1. This measurement is primarily intended to assist in evaluating the need for additional vSTP processing capacity at a Network Element.
2. If both the peak and average measurement for multiple vSTPs within a Network Element are consistently near the recommended maximum engineered capacity of a vSTP over several collection intervals, then the number of vSTPs in the Network Element may need to be increased.
3. If the peak and average for an individual vSTP is significantly different than other vSTPs in the same Network Element, then a vSTP-specific hardware, software, or configuration problem may exist.
4. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpM3RLStackQueuePeak

Measurement ID
21424

Measurement Group
VSTP MTP3 Performance

Measurement Type
Max

Measurement Dimension
Arrayed

Description
The peak vSTP M3RL Stack Event Queue utilization (0-100%) measured during the collection interval.

Collection Interval
5 min

Peg Condition
The maximum M3RL Stack Event Queue utilization sample taken during the collection interval

Measurement Scope
Site

Recovery

1. This measurement is primarily intended to assist in evaluating the need for additional vSTP processing capacity at a Network Element.
2. If both the peak and average measurement for multiple vSTPs within a Network Element are consistently near the recommended maximum engineered capacity of a vSTP over several collection intervals, then the number of vSTPs in the Network Element may need to be increased.
3. If the peak and average for an individual vSTP is significantly different than other vSTPs in the same Network Element, then a vSTP-specific hardware, software, or configuration problem may exist.
4. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpM3UAStackQueueAvg

Measurement ID
21431

Measurement Group
VSTP MTP3 Performance

Measurement Type
Average

Measurement Dimension
Single

Description
The average vSTP M3UA Network Management Event Queue utilization (0-100%) measured during the collection interval.

Collection Interval
30 min

Peg Condition
The average of all vSTP M3UA Stack Event Queue utilization samples taken during the collection interval.

Measurement Scope
Site

Recovery

1. This measurement is primarily intended to assist in evaluating the need for additional vSTP processing capacity at a Network Element.

2. If both the peak and average measurement for multiple vSTPs within a Network Element are consistently near the recommended maximum engineered capacity of a vSTP over several collection intervals, then the number of vSTPs in the Network Element may need to be increased.
3. If the peak and average for an individual vSTP is significantly different than other vSTPs in the same Network Element, then a vSTP-specific hardware, software, or configuration problem may exist.
4. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpM3UAStackQueueFull

Measurement ID
21432

Measurement Group
VSTP MTP3 Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of messages that were discarded because the vSTP M3UA Stack Event Queue was full.

Collection Interval
30 min

Peg Condition
The number of messages that were discarded because the M3UA Stack Event Queue was full

Measurement Scope
Site

Recovery

1. This measurement is primarily intended to assist in evaluating the need for additional vSTP processing capacity at a Network Element.
2. If both the peak and average measurement for multiple vSTPs within a Network Element are consistently near the recommended maximum engineered capacity of a vSTP over several collection intervals, then the number of vSTPs in the Network Element may need to be increased.
3. If the peak and average for an individual vSTP is significantly different than other vSTPs in the same Network Element, then a vSTP-specific hardware, software, or configuration problem may exist.
4. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpM3UAStackQueuePeak

Measurement ID
21430

Measurement Group
VSTP MTP3 Performance

Measurement Type
Max

Measurement Dimension
Single

Description
The peak vSTP M3UA Network Management Event Queue utilization (0-100%) measured during the collection interval.

Collection Interval
30 min

Peg Condition
The maximum vSTP M3UA Stack Event Queue utilization sample taken during the collection interval.

Measurement Scope
Site

Recovery

1. This measurement is primarily intended to assist in evaluating the need for additional vSTP processing capacity at a Network Element.
2. If both the peak and average measurement for multiple vSTPs within a Network Element are consistently near the recommended maximum engineered capacity of a vSTP over several collection intervals, then the number of vSTPs in the Network Element may need to be increased.
3. If the peak and average for an individual vSTP is significantly different than other vSTPs in the same Network Element, then a vSTP-specific hardware, software, or configuration problem may exist.
4. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpM3uaTxTaskAvg

Measurement ID
21438

Measurement Group
VSTP M3UA Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The average vSTP M3UA Tx Event Queue utilization (0-100%) measured during the collection interval.

Collection Interval
30 min

Peg Condition
The average vSTP M2PA Stack Event Queue utilization measured during the collection interval

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpM3uaTxTaskPeak

Measurement ID
21437

Measurement Group
VSTP M3UA Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The peak vSTP M3UA Tx Event Queue utilization (0-100%) measured during the collection interval.

Collection Interval
30 min

Peg Condition
The peak vSTP M2PA Stack Event Queue utilization measured during the collection interval

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpRxAsnErrorMsg

Measurement ID
21101

Measurement Group
VSTP Association Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of M3UA Error messages received on an association.

Collection Interval
30 min

Peg Condition
Each time an M3UA Error message received on an association

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpRxAsnInvalidM3ua

Measurement ID
21103

Measurement Group
VSTP Association Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of invalid m3UA messages received on this association. An invalid M3UA message is a message that violates the M3UA protocol.

Collection Interval
30 min

Peg Condition
Each time an invalid M3UA message is received on the association

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpRxAsnOctets

Measurement ID
21099

Measurement Group
VSTP Association Usage

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of octets received on an association.

Collection Interval
30 min

Peg Condition
Each time a number of octets are received on an association

Measurement Scope
Site

Recovery

1. No action required

VstpRxAsnRecvFail

Measurement ID
21096

Measurement Group
VSTP Association Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of times an association received failed for an association.

Collection Interval
30 min

Peg Condition
Each time a message receive failed for an association

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpRxASPActive

Measurement ID
21015

Measurement Group
VSTP M3UA Usages

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ASP-ACTIVE messages received by the vSTP server.

Collection Interval
30 min

Peg Condition
Each time an ASP-ACTIVE message is received

Measurement Scope
Site

Recovery

1. No action required.

VstpRxASPInactive

Measurement ID
21016

Measurement Group
VSTP M3UA Usages

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ASP-INACTIVE messages received by the vSTP server.

Collection Interval
30 min

Peg Condition
Each time an ASP-INACTIVE message is received

Measurement Scope
Site

Recovery

1. No action required.

VstpRxBufAvg

Measurement ID
21176

Measurement Group
VSTP Connection

Measurement Type
Average

Measurement Dimension
Arrayed

Description
The connection ingress buffer utilization average.

Collection Interval
5 min

Peg Condition
The output from Linux networking stack

Measurement Scope
Site

Recovery

1. No action required

VstpRxBufPeak

Measurement ID
21177

Measurement Group
VSTP Connection

Measurement Type
Max

Measurement Dimension
Arrayed

Description
The connection ingress buffer utilization peak.

Collection Interval
5 min

Peg Condition
The output from Linux networking stack

Measurement Scope
Site

Recovery

1. No action required

VstpRxDAUD

Measurement ID
21023

Measurement Group
VSTP M3UA Usages

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DAUD messages received by the vSTP server.

Collection Interval
30 min

Peg Condition
Each time a DAUD message is received

Measurement Scope
Site

Recovery

1. No action required.

VstpRxHeartbeat

Measurement ID
21012

Measurement Group
VSTP M3UA Usages

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of beat messages received by the vSTP server.

Collection Interval
30 min

Peg Condition
Each time a beat message is received

Measurement Scope
Site

Recovery

1. No action required.

VstpRxInvalidM3uaMsg

Measurement ID
21027

Measurement Group
VSTP M3UA Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of invalid M3UA messages received on this link. An invalid M3UA message is a message that violates the M3UA protocol.

Collection Interval
30 min

Peg Condition
Each time an invalid M3UA message received on the association

Measurement Scope
Site

Recovery

1. No action required.

VstpRxLinkTPSAvg

Measurement ID
21162

Measurement Group
VSTP Link Usage

Measurement Type
Average

Measurement Dimension
Arrayed

Description
The average ingress MSU received on a link

Collection Interval
5 min

Peg Condition
None

Measurement Scope
Site

Recovery

1. No action required.

VstpRxLinkTPSPeak

Measurement ID
21161

Measurement Group
VSTP Link Usage

Measurement Type
Max

Measurement Dimension
Arrayed

Description
The peak ingress MSU received on a link

Collection Interval
5 min

Peg Condition
None

Measurement Scope
Site

Recovery

1. No action required.

VstpRxLnkErrorMsg

Measurement ID
21190

Measurement Group
VSTP Link Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of times an M3UA ERROR message was received for the link. M3UA ERROR messages are sent to indicate invalid m3UA signaling.

Collection Interval
30 min

Peg Condition
Each time an M3UA ERROR message is received and that ERROR message can be attributed to a specific link (such as the ERROR message contains a valid routing context or no routing context is needed).

Measurement Scope
Site

Recovery

1. If all is well, this value has a value of zero. A non-zero value indicates a problem with M3UA signaling sent by the MP server.
2. Look for event 19235 in **Main Menu** > **Alarms & Events** > **View History**. Event 19235 provides more information as to the exact reason for receipt of the ERROR message.
3. If the ERROR reason in event 19235 indicates a problem with routing context (such as error code 0x19), verify that the MP server link set and the SG are configured such that they agree on the routing context values that are used by each M3UA signaling link.
4. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpRxLnkInvalidMsg

Measurement ID
21195

Measurement Group
VSTP Link Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of invalid M3UA messages received on the link. Invalid M3UA messages are messages that violate the M3UA protocol, but which can be attributed to a specific link.

Collection Interval
30 min

Peg Condition
Each time an invalid M3UA message is received for the link.

Measurement Scope
Site

Recovery

1. If all is well, this value has a value of zero. A non-zero value indicates a problem with M3UA signaling received by the MP server.
2. Look for event 19231 in **Main Menu** > **Alarms & Events** > **View History**. Event 19231 provides more information as to the exact reason for rejection of the ERROR message.
3. If the ERROR reason in event 19231 indicates a problem with routing context (such as error code 0x19), verify that the MP server link set and the SG are configured such that they agree on the routing context values that are used by each M3UA signaling link.
4. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpRxLnkMaxTpsExceeded

Measurement ID
21268

Measurement Group
VSTP Link Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of ingress messages M3RL discarded because of an internal link TPS overflow.

Collection Interval
30 min

Peg Condition
Each time an ingress data message is discarded due to link TPS exceeded

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

VstpRxLnkMgmtTpsExceeded

Measurement ID
21270

Measurement Group
VSTP Link Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of ingress management messages M3RL discarded because of an internal link TPS overflow.

Collection Interval
30 min

Peg Condition
Each time an ingress network management message is discarded due to link TPS exceeded

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

VstpRxLnkMSU

Measurement ID
21158

Measurement Group
VSTP Link Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of MSUs received on the link. It includes only DATA messages

Collection Interval
30 min

Peg Condition
Each time an M3UA or M2PA message is received on the link.

Measurement Scope
Site

Recovery

1. No action required

VstpRxLnkMSUOctets

Measurement ID
21186

Measurement Group
VSTP Link Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of MSU octets received on the link. MSU octets includes M3UA or M2PA DATA message.

Collection Interval
30 min

Peg Condition
Each time an M3UA or M2PA message is received on the link.

Measurement Scope
Site

Recovery

1. No action required

VstpRxLnkSetMSU

Measurement ID
21192

Measurement Group
VSTP Linkset Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of MSUs received on the link set. MSUs includes all M3UA or M2PA DATA messages received on all links in the link set.

Collection Interval
30 min

Peg Condition
Each time an M3UA or M2PA DATA message is received on a link in the link set

Measurement Scope
Site

Recovery

1. No action required.

VstpRxLnkSetMSUOctets

Measurement ID
21194

Measurement Group
VSTP Linkset Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of MSU octets received on the link set. MSU octets includes all M3UA or M2PA DATA octets received on all links in the link set. Octers for SCTP, IP, and Ethernet headers are not included.

Collection Interval
30 min

Peg Condition
Each time an M3UA or M2PA DATA message is received on a link in the link set

Measurement Scope
Site

Recovery

1. No action required.

VstpRxM2paDataAckMsg

Measurement ID
21442

Measurement Group
VSTP M2PA Link Performance

Measurement Type
Simple

Measurement Dimension
Simple

Description
All M2PA Data Acknowledgement messages received by the MP server on M2PA.

Collection Interval
30 min

Peg Condition
Each time a Data Acknowledgement messages received by MP server on M2PA

Measurement Scope
Site

Recovery

1. No action required.

VstpRxM2paDataMsg

Measurement ID
21402

Measurement Group
VSTP M2PA Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
All M2PA User Data messages received by the MP server, including MTP3 network management messages.

Collection Interval
30 min

Peg Condition
Each time a data message is received

Measurement Scope
Site

Recovery

1. No action required.

VstpRxM2paDataMsgDiscard

Measurement ID
21404

Measurement Group
VSTP M2PA Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
All Ingress User Data messages dropped by the MP server at M2PA.

Collection Interval
30 min

Peg Condition
Each time an ingress data message is dropped

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpRxM2paInvalidBsn

Measurement ID
21410

Measurement Group
VSTP M2PA Link Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of times invalid BSN received on the M2PA link..

Collection Interval
30 min

Peg Condition
Each time an invalid value of BSN Received in M2PA Data message

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpRxM2paInvalidFsn

Measurement ID
21409

Measurement Group
VSTP M2PA Link Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of times invalid FSN received on the M2PA link..

Collection Interval
30 min

Peg Condition
Each time an invalid value of FSN Received in M2PA Data message

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpRxM2paLinkBusy

Measurement ID
21406

Measurement Group
VSTP M2PA Link Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of link busy messages received by M2PA..

Collection Interval
30 min

Peg Condition
Each time a link busy message received on the link

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpRxM2paLinkOOS

Measurement ID
21408

Measurement Group
VSTP M2PA Link Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of link OOS messages received by M2PA..

Collection Interval
30 min

Peg Condition
Each time a link OOS message received on the link

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpRxM2paNonDataMsg

Measurement ID
21440

Measurement Group
VSTP M2PA Link Performance

Measurement Type
Simple

Measurement Dimension
Simple

Description
All M2PA Non-Data messages (such as M2PA Link Status) received by the MP server.

Collection Interval
30 min

Peg Condition
Each time an M2PA Non-Data message (such as Link Status Message) received by MP server

Measurement Scope
Site

Recovery

1. No action required.

VstpRxM3RLBufOverflow

Measurement ID
21258

Measurement Group
VSTP MTP3 Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress messages M3RL discarded because of an internal buffer overflow.

Collection Interval
5 min

Peg Condition
Each time a message is discarded because the message is pegged when internal buffer is overflow

Measurement Scope
Site

Recovery

1. This value provides a measure of how many ingress messages M3RL are discarded because of an internal buffer overflow. This should never occur unless the vSTP is experiencing severe overload conditions and SCCP is unable to service its event queue.

VstpRxM3RLChangeBack

Measurement ID
21262

Measurement Group
VSTP MTP3 Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of changeback messages received on the M3RL.

Collection Interval
5 min

Peg Condition
Each time a link is going up.

Measurement Scope
Site

Recovery

1. This value provides a measure of how many changeback messages M3RL is processing from the network.

VstpRxM3RLChangeOver

Measurement ID
21261

Measurement Group
VSTP MTP3 Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of changeover messages received on the M3RL.

Collection Interval
5 min

Peg Condition
Each time a link is going down.

Measurement Scope
Site

Recovery

1. This value provides a measure of how many changeover messages M3RL is processing from the network.

VstpRxM3RLDataMsgs

Measurement ID
21259

Measurement Group
VSTP MTP3 Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress M3RL DATA messages (at M3UA/M2PA > M3RL interface). This measurement includes SCMG messages (which are DATA to the M3RL later), but doe snot include SSNM messages.

Collection Interval
5 min

Peg Condition
Each time M3UA/M2PA sent a message to M3RL

Measurement Scope
Site

Recovery

1. This value provides a measure of how many ingress messages M3RL is processing from the network.

VstpRxM3RLMsgFromMTP3User

Measurement ID
21264

Measurement Group
VSTP MTP3 Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of egress M3RL DATA messages (at M3UA > SCCP interface). This measurement includes SCMG messages (which are DATA to the M3RL layer), but does not include SSNM messages.

Collection Interval
30 min

Peg Condition
Each time a data message is coming from an upper layer to a lower layer.

Measurement Scope
Site

Recovery

1. This value provides a measure of how many egress DATA messages M3RL is processing from the network.

VstpRxM3RLMsgToMTP3User

Measurement ID
21263

Measurement Group
VSTP MTP3 Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress M3RL DATA messages (at M3UA > SCCP interface). This measurement includes SCMG messages (which are DATA to the M3RL layer), but does not include SSNM messages.

Collection Interval
30 min

Peg Condition
Each time a data message is coming from a lower layer.

Measurement Scope
Site

Recovery

1. This value provides a measure of how many ingress DATA messages M3RL is processing from the network.

VstpRxM3uaDataMsg

Measurement ID
21001

Measurement Group
VSTP M3UA Usages

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of M3UA user DATA messages received by the vSTP.

Collection Interval
30 min

Peg Condition
Each time a User DATA message is received

Measurement Scope
Site

Recovery

1. No action required.

VstpRxM3uaDataMsgDiscarded

Measurement ID
21271

Measurement Group
VSTP M3UA Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of M3UA DATA messages received by server is discarded due to link is in Inactive or Down state.

Collection Interval
30 min

Peg Condition
Each time a link is in Inactive or Down state

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpRxM3uaDataOctets

Measurement ID
21003

Measurement Group
VSTP M3UA Usages

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of M3UA DATA received by the vSTP server. SCTP, IP, and Ethernet headers are not included in the octet counts.

Collection Interval
30 min

Peg Condition
Each time a User DATA message is received

Measurement Scope
Site

Recovery

1. No action required.

VstpRxM3uaError

Measurement ID
21025

Measurement Group
VSTP M3UA Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of M3UA ERROR messages received by the vSTP server. M3UA ERROR messages are sent to inform the originator of an M3UA message that the message cannot be processed due to some problem with the message syntax or semantics.

Collection Interval
30 min

Peg Condition
Each time a ERROR message is received

Measurement Scope
Site

Recovery

1. If all is well, this measurement will have a zero value. In case of a non-zero value, look for event 70058 using **Main Menu** > **Alarms & Events** > **View History**. Event 70058 provides details about the reason for receiving the M3UA ERROR message. If the error reason indicates a problem with routing context, verify that the routing context used for the link specified in event 70058 is configured to match between the ASP and the SG.
2. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpRxM3uaNonDataMsg

Measurement ID
21005

Measurement Group
VSTP M3UA Usages

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Non-DATA messages received by the vSTP server, including all non-DATA M3UA messages (such as ASPSM, ASPTM, RROR, SSNM, MGMT)

Collection Interval
30 min

Peg Condition
Each time:

- An ASP-UP-ACK message is received
- An ASP-DOWN-ACK message is received
- An ASP-ACTIVE-ACK message is received
- An ASP-INACTIVE-ACK message is received
- An ERROR message is received
- A SSNM message is received
- A BEAT-ACK message is received

Measurement Scope
Site

Recovery

1. No action required.

VstpRxM3uaNonDataOctets

Measurement ID
21007

Measurement Group
VSTP M3UA Usages

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Non-DATA octets received by the vSTP server, including all non-DATA M3UA messages (such as ASPSM, ASPTM, RROR, SSNM, MGMT). SCTP, IP, and Ethernet headers are not included in the octet counts.

Collection Interval
30 min

Peg Condition
Each time:

- An ASP-UP-ACK message is received
- An ASP-DOWN-ACK message is received
- An ASP-ACTIVE-ACK message is received
- An ASP-INACTIVE-ACK message is received
- An ERROR message is received
- A SSNM message is received

- A BEAT-ACK message is received
- A NOTIFY message is received

Measurement Scope
Site

Recovery

1. No action required.

VstpRxM3uaNotify

Measurement ID
21026

Measurement Group
VSTP M3UA Usages

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of M3UA NOTIFY messages sent by the vSTP server. M3UA NOTIFY messages are sent by the SG to indicate its view of the M3UA AS state.

Collection Interval
30 min

Peg Condition
Each time a NOTIFY message is sent

Measurement Scope
Site

Recovery

1. No action required.

VstpRxMgmtLinkTPSAvg

Measurement ID
21166

Measurement Group
VSTP Link Usage

Measurement Type
Average

Measurement Dimension
Arrayed

Description
The average ingress network management messages received on a link

Collection Interval
5 min

Peg Condition
None

Measurement Scope
Site

Recovery

1. No action required.

VstpRxMgmtLinkTPSPeak

Measurement ID
21165

Measurement Group
VSTP Link Usage

Measurement Type
Max

Measurement Dimension
Arrayed

Description
The peak ingress network management messages received on a link

Collection Interval
5 min

Peg Condition
None

Measurement Scope
Site

Recovery

1. No action required.

VstpRxMgmtLnkMsg

Measurement ID
21160

Measurement Group
VSTP Link Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of SSNM messages received on the link.

Collection Interval
30 min

Peg Condition
Each time an M3UA or M2PA Link Management message is received on the link.

Measurement Scope
Site

Recovery

1. No action required

VstpRxMgmtLnkMSUOctets

Measurement ID
21266

Measurement Group
VSTP Link Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of MSU octets received on the link. MSU octets includes all M3UA non-DATA SSNM messages.

Collection Interval
30 min

Peg Condition
Each time M3UA/M2PA receives any non-DATA message octets on the link

Measurement Scope
Site

Recovery

1. No action required.

VstpRxNetworkTestLnkMsg

Measurement ID
21444

Measurement Group
VSTP M2PA Link Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of Regular/Special network Test and Maintenance messages received on the link.

Collection Interval
30 min

Peg Condition
Each time a Regular/Special network Test and Maintenance message received by the MP server on the M2PA.

Measurement Scope
Site

Recovery

1. No action required.

VstpRxSCON

Measurement ID
21022

Measurement Group
VSTP M3UA Usages

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of SCON messages received by the vSTP server.

Collection Interval
30 min

Peg Condition
Each time a SCON message is received

Measurement Scope
Site

Recovery

1. No action required.

VstpRxSctpChunk

Measurement ID
21180

Measurement Group
VSTP Connection

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
SCTP total chunks on ingress

Collection Interval
5 min

Peg Condition
The output from Linux networking stack

Measurement Scope
Site

Recovery

1. No action required

VstpRxSctpDupTsn

Measurement ID
21178

Measurement Group
VSTP Connection

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Duplicate TSNs on ingress

Collection Interval
5 min

Peg Condition
The output from Linux networking stack

Measurement Scope
Site

Recovery

1. No action required

VstpRxSctpGapAck

Measurement ID
21179

Measurement Group
VSTP Connection

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
Gap acknowledgement on ingress

Collection Interval
5 min

Peg Condition
The output from Linux networking stack

Measurement Scope
Site

Recovery

1. No action required

VstpSccpGTTPERFD

Measurement ID
21200

Measurement Group
VSTP SCCP Usages

Measurement Type
Simple

Measurement Dimension
Single

Description
The total number of global title translations (GTTs) performed on MSUs that successfully completed GTT.

Collection Interval
30 min

Peg Condition
Each time GTT successfully completes

Measurement Scope
Site

Recovery

1. No action required.

VstpSccpGTTUN0NS

Measurement ID
21201

Measurement Group
VSTP SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The total of times that the specified type of translation in an MSU was not supported by the STP.

Collection Interval
30 min

Peg Condition
Each time GTT fails with Diagnostic 0

Measurement Scope
Site

Recovery

1. No action required.

VstpSccpGTTUN1NS

Measurement ID
21202

Measurement Group
VSTP SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The total of times that the specified type of translation in an MSU was not supported by the STP.

Collection Interval
30 min

Peg Condition
Each time GTT fails with Diagnostic 1

Measurement Scope
Site

Recovery

1. No action required.

VstpSccpMSSCCPFL

Measurement ID
21203

Measurement Group
VSTP SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of MSUs discarded due to an SCCP routing failure

Collection Interval
30 min

Peg Condition
Each time an MSU gets discarded due to SCCP routing failure

Measurement Scope
Site

Recovery

1. No action required.

VstpSccpMSUSCCPFLR

Measurement ID
21204

Measurement Group
VSTP SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The total number of MSUs discarded due to SCCP Conversion Failure

Collection Interval
30 min

Peg Condition
Each time an MSU gets discarded due to SCCP Conversion Failure

Measurement Scope
Site

Recovery

1. No action required.

VstpSccpSCCPLOOP

Measurement ID
21205

Measurement Group
VSTP SCCP Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The total number of times that a GTT translation matched a Point Code int he STP's loopset entries resulting in either a notify or discard of an SCCP message.

Collection Interval
30 min

Peg Condition
Each time a Discard of SCCP Message occurs or a NOTIFY is sent

Measurement Scope
Site

Recovery

1. No action required.

VstpSCCPStackQueueAvg

Measurement ID
21422

Measurement Group
VSTP SCCP Performance

Measurement Type
Average

Measurement Dimension
Arrayed

Description
The average vSTP SCCP Stack Event Queue utilization (0-100%) measured during the collection interval.

Collection Interval
30 min

Peg Condition
The average vSTP SCCP Stack Event Queue utilization sample taken during the collection interval

Measurement Scope
Site

Recovery

1. This measurement is primarily intended to assist in evaluating the need for additional vSTP processing capacity at a Network Element.
2. If both the peak and average measurement for multiple vSTPs within a Network Element are consistently near the recommended maximum engineered capacity of a vSTP over several collection intervals, then the number of vSTPs in the Network Element may need to be increased.
3. If the peak and average for an individual vSTP is significantly different than other vSTPs in the same Network Element, then a vSTP-specific hardware, software, or configuration problem may exist.
4. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpSCCPStackQueueFull

Measurement ID
21423

Measurement Group
VSTP SCCP Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of ingress SCCP messages that were discarded because the vSTP SCCP Stack Event Queue was full.

Collection Interval
30 min

Peg Condition
The number of ingress SCCP messages that were discarded because the vSTP SCCP Stack Event Queue was full.

Measurement Scope
Site

Recovery

1. This measurement is primarily intended to assist in evaluating the need for additional vSTP processing capacity at a Network Element.
2. If both the peak and average measurement for multiple vSTPs within a Network Element are consistently near the recommended maximum engineered capacity of a vSTP over several collection intervals, then the number of vSTPs in the Network Element may need to be increased.
3. If the peak and average for an individual vSTP is significantly different than other vSTPs in the same Network Element, then a vSTP-specific hardware, software, or configuration problem may exist.
4. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpSCCPStackQueuePeak

Measurement ID
21421

Measurement Group
VSTP SCCP Performance

Measurement Type
Max

Measurement Dimension
Arrayed

Description
The peak vSTP SCCP Stack Event Queue utilization (0-100%) measured during the collection interval.

Collection Interval
30 min

Peg Condition
The maximum vSTP SCCP Stack Event Queue utilization sample taken during the collection interval

Measurement Scope
Site

Recovery

1. This measurement is primarily intended to assist in evaluating the need for additional vSTP processing capacity at a Network Element.
2. If both the peak and average measurement for multiple vSTPs within a Network Element are consistently near the recommended maximum engineered capacity of a vSTP over several collection intervals, then the number of vSTPs in the Network Element may need to be increased.
3. If the peak and average for an individual vSTP is significantly different than other vSTPs in the same Network Element, then a vSTP-specific hardware, software, or configuration problem may exist.
4. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpSctpAdjIPToDwn

Measurement ID
21167

Measurement Group
VSTP Association Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of times configured IP address of an Adjacent Node goes from Available to Unavailable.

Collection Interval
30 min

Peg Condition
Each time the IP address of an Adjacent Node goes from Available to Unavailable

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpSctpTransPeerCWNDAvg

Measurement ID
21169

Measurement Group
VSTP Connection Performance

Measurement Type
Average

Measurement Dimension
Arrayed

Description
The average of congestion window size recorded for the peer of an SCTP transport during the collection interval.

Collection Interval
5 min

Peg Condition
None

Measurement Scope
Site

Recovery

1. No action required

VstpSctpTransPeerCWNDPeak

Measurement ID
21168

Measurement Group
VSTP Connection Performance

Measurement Type
Max

Measurement Dimension
Arrayed

Description
The peak value of congestion window size recorded for the peer of an SCTP transport during the collection interval.

Collection Interval
5 min

Peg Condition
None

Measurement Scope
Site

Recovery

1. No action required

VstpSctpTransPeerSRTTAvg

Measurement ID
21171

Measurement Group
VSTP Connection Performance

Measurement Type
Average

Measurement Dimension
Arrayed

Description
The average value of smoothed round trip time for the SCTP Transport address during the collection interval.

Collection Interval
5 min

Peg Condition
None

Measurement Scope
Site

Recovery

1. No action required

VstpSctpTransPeerSRTTPeak

Measurement ID
21170

Measurement Group
VSTP Connection Performance

Measurement Type
Max

Measurement Dimension
Arrayed

Description
The peak value of smoothed round trip time for the SCTP Transport address during the collection interval.

Collection Interval
5 min

Peg Condition
None

Measurement Scope
Site

Recovery

1. No action required

VstpSctpTransRTOAvg

Measurement ID
21175

Measurement Group
VSTP Connection Performance

Measurement Type
Average

Measurement Dimension
Arrayed

Description
The average value of retransmission timeout in use for the SCTP Transport address.

Collection Interval
5 min

Peg Condition
None

Measurement Scope
Site

Recovery

1. No action required

VstpSctpTransRTOPeak

Measurement ID
21174

Measurement Group
VSTP Connection Performance

Measurement Type
Max

Measurement Dimension
Arrayed

Description
The peak value of retransmission timeout in use for the SCTP Transport address.

Collection Interval
5 min

Peg Condition
None

Measurement Scope
Site

Recovery

1. No action required

VstpSctpTransUnAckedDataAvg

Measurement ID
21173

Measurement Group
VSTP Connection Performance

Measurement Type
Average

Measurement Dimension
Arrayed

Description
The average number of unacknowledged DATA chunks pending for the peer of an SCTP Transport address during the collection interval.

Collection Interval
5 min

Peg Condition
None

Measurement Scope
Site

Recovery

1. No action required

VstpSctpTransUnAckedDataPeak

Measurement ID
21172

Measurement Group
VSTP Connection Performance

Measurement Type
Max

Measurement Dimension
Arrayed

Description
The peak number of unacknowledged DATA chunks pending for the peer of an SCTP Transport address during the collection interval.

Collection Interval
5 min

Peg Condition
None

Measurement Scope
Site

Recovery

1. No action required

VstpTmAsnBlkNotDown

Measurement ID
21100

Measurement Group
VSTP Association Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of seconds during the reporting interval during which the association was in the Blocked administrative state, but was not in ASP-DOWN state.

Collection Interval
30 min

Peg Condition
Each time an association is in blocked state, but not in ASP-DOWN state

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpTmLnkAvailable

Measurement ID
21189

Measurement Group
VSTP Link Usage

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of seconds the link is in service during the reporting period. The link is considered to be in service if the link's status reason is Normal. An in-service is available for M3UA.

Collection Interval
30 min

Peg Condition
Each time the link status reason is Normal

Measurement Scope
Site

Recovery

1. If all is well, this value generally equals the length of the reporting period, meaning that the link was active for the entire reporting period.
2. If the link available time is not equal to the reporting period, it is due to:
   - link maintenance - measurements TmLnkMOOS and TmLnkOOS have non-zero values. Refer to the recovery steps for VstpTmLnkMOOS.
   - link failure - measurement TmLnkOOS has a non-zero value. Refer to the recovery steps for VstpTmLnkOOS.
   - link added during the reporting period - the report indicates that the data in incomplete for the reporting.
3. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpTmLnkMOOS

Measurement ID
21187

Measurement Group
VSTP Link Usage

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of seconds the link is manual out of service during the reporting period. A link is manual out of service when the link is in the Disabled administrative state.

Collection Interval
30 min

Peg Condition
Each time the link administrative state is set to Disabled

Measurement Scope
Site

Recovery

1. If a non-zero value in this field is unexpected (such as no link maintenance is known to have occurred), the link status can be viewed from **Main Menu** > **SS7/ Sigtran** > **Maintenance** > **Links**.
2. Look in the event history using **Main Menu** > **Alarms & Events** > **View History** for event 19234, which records each change in the link's administrative state.
3. If the link was known to be under maintenance, this value represents the number of seconds during the reporting period that the link was in the Disable administrative state.

VstpTmLnkOOS

Measurement ID
21188

Measurement Group
VSTP Link Usage

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of seconds the link is out of service during the reporting period.

Collection Interval
30 min

Peg Condition
Each time the link status reason is not Normal

Measurement Scope
Site

Recovery

1. If all is well, this measurement has a value of zero. This measurement represents the number of seconds during the reporting period that the link was out of service for any reason.
2. If the link of the link's association is known to be under maintenance, then a non-zero value in this measurement is expected.
3. Otherwise, the link status can be viewed from **Main Menu** > **SS7/Sigtran** > **Maintenance** > **Links**. Also, look in the event history using **Main Menu** > **Alarms & Events** > **View History** for events related to this link or the link's association.
4. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpTransportTxQueueFull

Measurement ID
21433

Measurement Group
VSTP Connection Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of egress messages that were discarded because the maximum number of messages queued in Transport Single Association Writer Queues exceeded a maximum capacity.

Collection Interval
30 min

Peg Condition
Check whether the single peers transmit data queue limit has reached its max limit. If the max limit is reached, then peg the measurement and discard the low priority events

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpTxAsnErrorMsg

Measurement ID
21102

Measurement Group
VSTP Association Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of M3UA Error messages sent on an association.

Collection Interval
30 min

Peg Condition
Each time an M3UA Error message sent on an association

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpTxAsnOctets

Measurement ID
21098

Measurement Group
VSTP Association Usage

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of octets sent on an association.

Collection Interval
30 min

Peg Condition
Each time a number of octets are sent on an association

Measurement Scope
Site

Recovery

1. No action required

VstpTxAsnSendFail

Measurement ID
21095

Measurement Group
VSTP Association Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of times SCTP send failed for an association

Collection Interval
30 min

Peg Condition
Each time a message fails to send on an association

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpTxASPActiveAck

Measurement ID
21014

Measurement Group
VSTP M3UA Usages

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ASP-ACTIVE-ACK messages sent by the vSTP server.

Collection Interval
30 min

Peg Condition
Each time an ASP-ACTIVE-ACK message is sent

Measurement Scope
Site

Recovery

1. No action required.

VstpTxASPDown

Measurement ID
21011

Measurement Group
VSTP M3UA Usages

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ASP-DOWN messages received by the vSTP server.

Collection Interval
30 min

Peg Condition
Each time an ASP-DOWN message is received

Measurement Scope
Site

Recovery

1. No action required.

VstpTxASPDownAck

Measurement ID
21009

Measurement Group
VSTP M3UA Usages

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ASP-DOWN-ACK messages sent by the vSTP server.

Collection Interval
30 min

Peg Condition
Each time an ASP-DOWN-ACK message is sent

Measurement Scope
Site

Recovery

1. No action required.

VstpTxASPInactiveAck

Measurement ID
21013

Measurement Group
VSTP M3UA Usages

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ASP-INACTIVE-ACK messages sent by the vSTP server.

Collection Interval
30 min

Peg Condition
Each time an ASP-INACTIVE-ACK message is sent

Measurement Scope
Site

Recovery

1. No action required.

VstpTxASPUp

Measurement ID
21010

Measurement Group
VSTP M3UA Usages

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ASP-UP messages received by the vSTP server.

Collection Interval
30 min

Peg Condition
Each time an ASP-UP message is received

Measurement Scope
Site

Recovery

1. No action required.

VstpTxASPUpAck

Measurement ID
21008

Measurement Group
VSTP M3UA Usages

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ASP-UP-ACK messages sent by the vSTP server.

Collection Interval
30 min

Peg Condition
Each time an ASP-UP-ACK message is sent

Measurement Scope
Site

Recovery

1. No action required.

VstpTxBufAvg

Measurement ID
21181

Measurement Group
VSTP Connection

Measurement Type
Average

Measurement Dimension
Arrayed

Description
Connection egress buffer utilization average

Collection Interval
5 min

Peg Condition
The output from Linux networking stack

Measurement Scope
Site

Recovery

1. No action required

VstpTxBufPeak

Measurement ID
21182

Measurement Group
VSTP Connection

Measurement Type
Max

Measurement Dimension
Arrayed

Description
Connection egress buffer utilization peak

Collection Interval
5 min

Peg Condition
The output from Linux networking stack

Measurement Scope
Site

Recovery

1. No action required

VstpTxConnQueueAvg

Measurement ID
21157

Measurement Group
VSTP Connection Performance

Measurement Type
Average

Measurement Dimension
Arrayed

Description
Egress connection message queue utilization average

Collection Interval
5 min

Peg Condition
None

Measurement Scope
Site

Recovery

1. No action required.

VstpTxConnQueuePeak

Measurement ID
21156

Measurement Group
VSTP Connection Performance

Measurement Type
Max

Measurement Dimension
Arrayed

Description
Egress connection message queue utilization peak

Collection Interval
5 min

Peg Condition
None

Measurement Scope
Site

Recovery

1. No action required.

VstpTxDAVA

Measurement ID
21018

Measurement Group
VSTP M3UA Usages

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DAVA messages sent by the vSTP server.

Collection Interval
30 min

Peg Condition
Each time a DAVA message is sent

Measurement Scope
Site

Recovery

1. No action required.

VstpTxDRST

Measurement ID
21021

Measurement Group
VSTP M3UA Usages

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DRST messages sent by the vSTP server.

Collection Interval
30 min

Peg Condition
Each time a DRST message is sent

Measurement Scope
Site

Recovery

1. No action required.

VstpTxDUNA

Measurement ID
21017

Measurement Group
VSTP M3UA Usages

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DUNA messages sent by the vSTP server.

Collection Interval
30 min

Peg Condition
Each time a DUNA message is sent

Measurement Scope
Site

Recovery

1. No action required.

VstpTxDUPU

Measurement ID
21020

Measurement Group
VSTP M3UA Usages

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of DUPU messages sent by the vSTP server.

Collection Interval
30 min

Peg Condition
Each time a DUPU message is sent

Measurement Scope
Site

Recovery

1. No action required.

VstpTxHeartbeatAck

Measurement ID
21030

Measurement Group
VSTP M3UA Usages

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Heartbeat Ack messages sent by the vSTP server.

Collection Interval
30 min

Peg Condition
Each time a BEAT-ACK message is sent

Measurement Scope
Site

Recovery

1. No action required.

VstpTxLinkTPSAvg

Measurement ID
21164

Measurement Group
VSTP Link Usage

Measurement Type
Average

Measurement Dimension
Arrayed

Description
The average egress MSU sent on a link

Collection Interval
5 min

Peg Condition
None

Measurement Scope
Site

Recovery

1. No action required.

VstpTxLinkTPSPeak

Measurement ID
21163

Measurement Group
VSTP Link Usage

Measurement Type
Max

Measurement Dimension
Arrayed

Description
The peak egress MSU sent on a link

Collection Interval
5 min

Peg Condition
None

Measurement Scope
Site

Recovery

1. No action required.

VstpTxLnkMaxTpsExceeded

Measurement ID
21269

Measurement Group
VSTP Link Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of egress messages M3RL discarded because of an internal link TPS overflow.

Collection Interval
30 min

Peg Condition
Each time an egress data message is discarded due to link TPS exceeded

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) for assistance if needed.

VstpTxLnkMSU

Measurement ID
21159

Measurement Group
VSTP Link Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of MSUs sent on the link. It includes only DATA messages

Collection Interval
30 min

Peg Condition
Each time an M3UA or M2PA message is sent on the link.

Measurement Scope
Site

Recovery

1. No action required

VstpTxLnkMSUOctets

Measurement ID
21185

Measurement Group
VSTP Link Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of MSU octets sent on the link. MSU octets includes M3UA or M2PA DATA message.

Collection Interval
30 min

Peg Condition
Each time an M3UA or M2PA message is sent on the link.

Measurement Scope
Site

Recovery

1. No action required

VstpTxLnkSetMSU

Measurement ID
21191

Measurement Group
VSTP Linkset Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of MSUs sent on the link set. MSUs includes all M3UA or M2PA DATA messages sent on all links in the link set.

Collection Interval
30 min

Peg Condition
Each time an M3UA or M2PA DATA message is sent on a link in the link set

Measurement Scope
Site

Recovery

1. No action required.

VstpTxLnkSetMSUOctets

Measurement ID
21193

Measurement Group
VSTP Linkset Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of MSU octets sent on the link set. MSU octets includes all M3UA or M2PA DATA octets sent on all links in the link set. Octers for SCTP, IP, and Ethernet headers are not included.

Collection Interval
30 min

Peg Condition
Each time an M3UA or M2PA DATA message is sent on a link in the link set

Measurement Scope
Site

Recovery

1. No action required.

VstpTxM2paDataAckMsg

Measurement ID
21441

Measurement Group
VSTP M2PA Link Performance

Measurement Type
Simple

Measurement Dimension
Simple

Description
All M2PA Data Acknowledgement messages sent by the MP server on M2PA.

Collection Interval
30 min

Peg Condition
Each time a Data Acknowledgement messages sent by MP server on M2PA

Measurement Scope
Site

Recovery

1. No action required.

VstpTxM2paDataMsg

Measurement ID
21401

Measurement Group
VSTP M2PA Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
All M2PA User Data messages sent by the MP server, including MTP3 network management messages.

Collection Interval
30 min

Peg Condition
Each time a data message is sent

Measurement Scope
Site

Recovery

1. No action required.

VstpTxM2paDataMsgDiscard

Measurement ID
21403

Measurement Group
VSTP M2PA Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
All Egress User Data messages dropped by the MP server at M2PA.

Collection Interval
30 min

Peg Condition
Each time an egress data message is dropped

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpTxM2paLinkBusy

Measurement ID
21405

Measurement Group
VSTP M2PA Link Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of link busy messages sent by M2PA..

Collection Interval
30 min

Peg Condition
Each time a link busy message sent on the link

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpTxM2paLinkOOS

Measurement ID
21407

Measurement Group
VSTP M2PA Link Exception

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of link OOS messages sent by M2PA..

Collection Interval
30 min

Peg Condition
Each time a link OOS message sent on the link

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpTxM2paNonDataMsg

Measurement ID
21439

Measurement Group
VSTP M2PA Link Performance

Measurement Type
Simple

Measurement Dimension
Simple

Description
All M2PA Non-Data messages (such as M2PA Link Status) sent by the MP server.

Collection Interval
30 min

Peg Condition
Each time an M2PA Non-Data message (such as Link Status Message) sent by MP server

Measurement Scope
Site

Recovery

1. No action required.

VstpTxM3RLBufOverflow

Measurement ID
21253

Measurement Group
VSTP MTP3 Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of egress messages M3RL discarded because of an internal buffer overflow.

Collection Interval
5 min

Peg Condition
Each time a message is discarded because:

- RSP/Destination buffer overflow
- Linkset buffer overflow
- M3UA event queue overflow

Measurement Scope
Site

Recovery

1. This value provides a measure of how many egress messages M3RL discarded because of an internal buffer overflow. This should never occur, but may be caused by an unusually higher setting of either a T1, T3, or T6 time value. The default for these values is set 60ms, but set as high as 2000ms by the user.
2. The current M3RL timer values can be viewed and modified at **Main Menu** > **SS7/Sigratn** > **Configuration** > **MTP3 Options**. An internal overflow condition may occur if the IP network is unstable causing M3RL to invoke multiple changeover/changeback procedures as links fail and recover.
3. Verify that IP network connectivity exists between the vSTP server and the adjacent servers.
4. Check the event history logs for addition vSTP events or alarms from this vSTP server.

5. Verify that the adjacent server is not under maintenance.
6. It is recommended to contact My Oracle Support (MOS) for assistance if needed

VstpTxM3RLDataMsgs

Measurement ID
21254

Measurement Group
VSTP MTP3 Performance

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of egress M3RL DATA messages (at M3RL > M3UA interface). This measurement includes SCMG messages (which are DATA to the M3RL later), but does not include SNM messages.

Collection Interval
5 min

Peg Condition
Each time M3RL sent a message to M3UA

Measurement Scope
Site

Recovery

1. This value provides a measure of how many egress messages M3RL is processing from the network.

VstpTxM3RLDestCong

Measurement ID
21252

Measurement Group
VSTP MTP3 Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of egress messages M3RL discarded because the RSP/Destination's congestion level was higher than the message's priority.

Collection Interval
5 min

Peg Condition
Each time a message is discarded because RSP/Destination's congestion level was higher than the message's priority

Measurement Scope
Site

Recovery

1. This value provides a measure of how many egress messages M3RL discarded because the RSP/Destination was higher than the message's priority. network Management messages have the highest message priority. User Part message priorities are determined by the SCCP layer.

VstpTxM3RLDestUnavail

Measurement ID
21251

Measurement Group
VSTP MTP3 Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of egress messages M3RL discarded because the RSP/Destination was unavailable.

Collection Interval
5 min

Peg Condition
Each time a message is discarded because no route exists for RSP

Measurement Scope
Site

Recovery

1. This value provides a measure of how many egress messages M3RL discarded because the RSP/Destination was unavailable. The RSP/Destination can be unavailable when the request is received from the User Part or while M3RL is buffering messages for a rerouting or changeover/changeback procedure.

VstpTxM3RLDestUnknown

Measurement ID
21250

Measurement Group
VSTP MTP3 Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of egress messages M3RL discarded because no routing information exists for the RSP/Destination

Collection Interval
5 min

Peg Condition
Each time a message is discarded because RSP is not configured

Measurement Scope
Site

Recovery

1. This value provides a measure of how many egress messages M3RL discarded because the RSP/Destination was unknown. Because SCCP and M3RL share RSP/Destination routing information, this type of failure only occurs due to a transient inconsistency between SCCP and M3RL, such as RSP/Destination was deleted after SCCP queued the message to M3UA.
2. If a high number of these errors occur, then an internal routing table problem exists.
3. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpTxM3RLInvalidDPC

Measurement ID
21255

Measurement Group
VSTP MTP3 Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress messages M3RL discarded because the DPC was not the True Point Code (TPC) or Capability Point Code (CPC) configured for the vSTP.

Collection Interval
5 min

Peg Condition
Each time a message is discarded because the message is pegged each time DPC is not the true point code

Measurement Scope
Site

Recovery

1. This value provides a measure of how many ingress messages M3RL are discarded because the DPC was not the True Point Code (TPC) or Capability Point Code (CPC) configured for the vSTP. If this measurement is large, it may indicate a routing inconsistency between STP/SG and the vSTP.

VstpTxM3RLInvalidNI

Measurement ID
21257

Measurement Group
VSTP MTP3 Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress messages M3RL discarded because the Network Indicator received was not the same value configured for the vSTP.

Collection Interval
5 min

Peg Condition
Each time a message is discarded because the message is pegged when NI is not matched

Measurement Scope
Site

Recovery

1. This value provides a measure of how many ingress messages M3RL are discarded because the Network Indicator received was the same value configured for the vSTP. If this measurement is large, it may indicate a routing inconsistency between STP/SG and the vSTP.

VstpTxM3RLInvalidSI

Measurement ID
21256

Measurement Group
VSTP MTP3 Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of ingress messages M3RL discarded because the Service Indicator received was not 0 (SIM) or 3 (SCCP).

Collection Interval
5 min

Peg Condition
Each time a message is discarded because the message is pegged when SI value was not 0 or 3

Measurement Scope
Site

Recovery

1. This value provides a measure of how many ingress messages M3RL are discarded because the Service Indicator received was not 0 (SIM) or 3 (SCCP). This type of failure should never occur and usually indicates that the routing STP/SG or originator of the message is incorrect.

VstpTxM3uaDataMsg

Measurement ID
21000

Measurement Group
VSTP M3UA Usages

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of M3UA user DATA messages sent by the vSTP.

Collection Interval
30 min

Peg Condition
Each time a User DATA message is sent

Measurement Scope
Site

Recovery

1. No action required.

VstpTxM3uaDataMsgDiscarded

Measurement ID
21272

Measurement Group
VSTP M3UA Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of egress messages discarded by M3UA due to a link being in inactive or down state. This message includes SSNM and DATA messages.

Collection Interval
30 min

Peg Condition
Each time a link is in Inactive or Down state

Measurement Scope
Site

Recovery

1. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpTxM3uaDataOctets

Measurement ID
21002

Measurement Group
VSTP M3UA Usages

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of M3UA DATA sent by the vSTP server. SCTP, IP, and Ethernet headers are not included in the octet counts.

Collection Interval
30 min

Peg Condition
Each time a User DATA message is sent

Measurement Scope
Site

Recovery

1. No action required.

VstpTxM3uaError

Measurement ID
21024

Measurement Group
VSTP M3UA Exception

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of M3UA ERROR messages sent by the vSTP server. M3UA ERROR messages are sent to inform the originator of an M3UA message that the message cannot be processed due to some problem with the message syntax or semantics.

Collection Interval
30 min

Peg Condition
Each time a ERROR message is sent

Measurement Scope
Site

Recovery

1. If all is well, this measurement will have a zero value. In case of a non-zero value, look for event 70057 using **Main Menu** > **Alarms & Events** > **View History**. Event 70057 provides details about the reason for sending the M3UA ERROR message. If the error reason indicates a problem with routing context, verify that the routing context used for the link specified in event 70057 is configured to match between the ASP and the SG.
2. It is recommended to contact My Oracle Support (MOS) if assistance is needed.

VstpTxM3uaNonDataMsg

Measurement ID
21004

Measurement Group
VSTP M3UA Usages

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Non-DATA messages sent by the vSTP server, including all non-DATA M3UA messages (such as ASPSM, ASPTM, RROR, SSNM, MGMT)

Collection Interval
30 min

Peg Condition
Each time:

- An ASP-UP-ACK message is sent
- An ASP-DOWN-ACK message is sent
- An ASP-ACTIVE-ACK message is sent
- An ASP-INACTIVE-ACK message is sent
- An ERROR message is sent
- A SSNM message is sent
- A BEAT-ACK message is sent

Measurement Scope
Site

Recovery

1. No action required.

VstpTxM3uaNonDataOctets

Measurement ID
21006

Measurement Group
VSTP M3UA Usages

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of Non-DATA octets received by the vSTP server, including all non-DATA M3UA messages (such as ASPSM, ASPTM, RROR, SSNM, MGMT). SCTP, IP, and Ethernet headers are not included in the octet counts.

Collection Interval
30 min

Peg Condition
Each time:

- An ASP-UP-ACK message is sent
- An ASP-DOWN-ACK message is sent
- An ASP-ACTIVE-ACK message is sent
- An ASP-INACTIVE-ACK message is sent
- An ERROR message is sent
- A SSNM message is sent
- A BEAT-ACK message is sent
- A NOTIFY message is sent

Measurement Scope
Site

Recovery

1. No action required.

VstpTxMgmtLnkMsg

Measurement ID
21265

Measurement Group
VSTP Link Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of SSNM messages sent on the link

Collection Interval
30 min

Peg Condition
Each time M3UA/M2PA transmits any Network management message on the link.

Measurement Scope
Site

Recovery

1. No action required.

VstpTxMgmtLnkMSUOctets

Measurement ID
21267

Measurement Group
VSTP Link Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of MSU octets sent on the link. MSU octets includes all M3UA non-DATA SSNM messages.

Collection Interval
30 min

Peg Condition
Each time M3UA/M2PA transmits any non-DATA message octets on the link

Measurement Scope
Site

Recovery

1. No action required.

VstpTxNetworkTestLnkMsg

Measurement ID
21443

Measurement Group
VSTP M2PA Link Performance

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
The number of Regular/Special network Test and Maintenance messages sent on the link.

Collection Interval
30 min

Peg Condition
Each time a Regular/Special network Test and Maintenance message sent by the MP server on the M2PA.

Measurement Scope
Site

Recovery

1. No action required.

VstpTxSCON

Measurement ID
21019

Measurement Group
VSTP M3UA Usages

Measurement Type
Simple

Measurement Dimension
Single

Description
The number of SCON messages sent by the vSTP server.

Collection Interval
30 min

Peg Condition
Each time a SCON message is sent

Measurement Scope
Site

Recovery

1. No action required.

VstpTxSctpChunk

Measurement ID
21183

Measurement Group
VSTP Connection

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
SCTP total chunks on ingress

Collection Interval
5 min

Peg Condition
The output from Linux networking stack

Measurement Scope
Site

Recovery

1. No action required

VstpTxSctpRtxChunk

Measurement ID
21184

Measurement Group
VSTP Connection

Measurement Type
Simple

Measurement Dimension
Arrayed

Description
SCTP total chunks on ingress

Collection Interval
5 min

Peg Condition
The output from Linux networking stack

Measurement Scope
Site

Recovery

1. No action required

A

Policy DRA Error Resolution Procedures

This section provides information and procedures to help users diagnose and resolve internal error codes indexed by the Policy DRA application. These procedures are best used in combination with the *Policy DRA Error Resolution* section of the *Policy DRA User's Guide*.

Error Code 500

Associated Error Category
Missing or Unconfigured APN

Description
Binding capable session initiation request is received with no APN.

Associated P-DRA Alarm/Event
Alarm 22730 - Policy and Charging Configuration Error (refer to the *DSR Alarms and KPIs Reference* for details about this alarm)

Associated Measurement
RxBindCapMissingApn

Associated Diameter Interface/Message Type
Gx/Gxx CCR-I

GUI Configurable
Yes

Recovery

1. See *CCR-I Processing with PCRF Pool* and *findOrCreateBinding Response Processing with PCRF Pool* in the Error Resolution appendix of the *Policy and Charging Application User Guide* to investigate and understand the circumstances where this error occurs and the impacts on Gx/Gxx CCR signaling processing.
2. Go to the P-DRA GUI at **Alarms & Events** > **View History**. Set up the right scope for Server Group, Resource Domain, Place and Place Association, or use Alarm 22730 - Policy and Charging Configuration Error (refer to the *DSR Alarms and KPIs Reference* for details about this alarm) as Display Filter to start the search.
3. A list of Alarm 22730 - Policy DRA Configuration Error (refer to the *DSR Alarms and KPIs Reference* for details about this alarm) displays. Select an alarm based on the alarm time stamp or other preferred criteria to display details of the alarm in **Alarms & Events** > **View History [Report]**.

4. Obtain the policy client's Origin-Host FQDN from the ERR_INFO in the alarm report on Alarm 22730 - Policy and Charging Configuration Error (refer to the *DSR Alarms and KPIs Reference* for details about this alarm).
5. Navigate to **Measurements** > **Report** to obtain the measurement report for RxBindCapMissingApn and other relevant measurements. The frequency of the problem may be observed.
6. If needed, it is recommended to contact My Oracle Support (MOS) for further assistance.

Error Code 501

Associated Error Category
Missing or Unconfigured APN

Description
Binding capable session initiation request is received with an APN, but the APN is not configured in the APN configuration.

Associated P-DRA Alarm/Event
Alarm 22730 - Policy and Charging Configuration Error (refer to the *DSR Alarms and KPIs Reference* for details about this alarm)

Associated Measurement
RxBindCapUnknownApn

Associated Diameter Interface / Message Type
Gx/Gxx CCR-I

GUI Configurable
Yes

Recovery

1. See *CCR-I Processing with PCRF Pool* and *findOrCreateBinding Response Processing with PCRF Pool* in the Error Resolution appendix of the *Policy and Charging Application User Guide* to investigate and understand the circumstances where this error occurs and the impacts on Gx/Gxx CCR signaling processing.
2. Go to the PCA GUI at **Main Menu** > **Alarms & Events** > **View History**. Set up the right scope for Server Group, Resource Domain, Place and Place Association, or use Alarm 22730 - Policy and Charging Configuration Error (refer to the *DSR Alarms and KPIs Reference* for details about this alarm) as Display Filter to start the search.
3. A list of Alarm 22730 - Policy and Charging Configuration Error (refer to the *DSR Alarms and KPIs Reference* for details about this alarm) should be displayed. Select an alarm based on the alarm time stamp or other preferred criteria that will bring in the details of the alarm in **Main Menu** > **Alarms & Events** > **View History [Report]**.
4. Obtain the policy client's Origin-Host FQDN from the ERR_INFO in the alarm report on Alarm 22730 - Policy DRA Configuration Error (refer to the *DSR Alarms and KPIs Reference* for details about this alarm).

5. If the APN string is expected, configure the APN at the NOAMP using **Main Menu** > **Policy and Charging** > **Configuration** > **Access Point Names** screen.
6. If the APN string is not expected, it may imply that the policy client whose FQDN is specified in the ERR_INFO is using an invalid APN.
7. Go to **Main Menu** > **Measurements** > **Report** to obtain the measurement report for all relevant measurements. The frequency of the problem may be observed.

Error Code 502

Associated Error Category
Binding Found But Unable To Route

Description
Request message is received and a binding with a PRCF was found. Policy DRA can't route the request to PCRF due to DSR queue full error.

Associated P-DRA Alarm/Event
Event 22707 - Diameter Message Processing Failure (refer to the *DSR Alarms and KPIs Reference* for details about this event)

Associated Measurement
RxRequestMsgQueueFullDiscard

Associated Diameter Interface / Message Type

- Gx/Gxx CCR-I
- Rx AAR
- Gx-Prime CCR-I

GUI Configurable
Yes

Recovery

1. See *findSessionRef Processing* in the Error Resolution appendix of the *Policy and Charging Application User Guide* to investigate and understand the circumstances where this error occurs.
2. Go to the PCA NOAM GUI to collect information for possible root causes that may resort in the DRL queue being full:
   - Go to **Main Menu** > **Status & Manage** > **Server** to verify is some DA-MPs have failed. If some servers on the same side fail, the traffic will be distributed amongst the remaining DA-MPs).
   - Go to **Main Menu** > **Status & Manage** > **KPIs** to check the ingress traffic rates of the DA-MPs. Each DA-MP in the site should have about the same ingress rate in normal situation.
   - Go to **Main Menu** > **Alarms & Events** > **View History** to search for relevant congestion alarms. The Display Filter may be set as Timestamp or Server to include P-DRA, DRL, or DCL alarms.

3. Go to **Main Menu** > **Measurements** > **Report** to obtain the measurement report for all relevant measurements.

Error Code 2xx/3xx

Associated Error Category
Binding Found But Unable To Route

Description
Request message is received and a binding with a PRCF was found. Policy DRA can't route the request to PCRF due to PCRF being unreachable.

Associated P-DRA Alarm/Event
Event 22707 - Diameter Message Processing Failure (refer to the *DSR Alarms and KPIs Reference* for details about this event)

Associated Measurement
TxPdraAnswersGeneratedForDiameterErr

Associated Diameter Interface / Message Type

- Gx/Gxx CCR-I
- Rx AAR
- Gx-Prime CCR-I

GUI Configurable
Yes

Recovery

1. Error code 2xx/3xx is generated by DSR routing layer for various routing errors that result in the failure of routing the Diameter request to the PCRF.
2. Go to the PCA NOAM GUI to check the server status from **Main Menu** > **Status & Manage** > **Server** to verify if some DA-MPs have failed (if some servers on the same side fail, the traffic will be distributed amongst the remaining DA-MPs).
3. Go to **Main Menu** > **Status & Manage** > **KPIs** to check the ingress traffic rates of the DA-MPs. Each DA-MP in the site should have about the same ingress rate in normal situation
4. Go to **Main Menu** > **Alarms & Events** > **View History** to search for relevant congestion alarms. The Display Filter may be set as Timestamp or Server to include Policy DRA, DRL, or DCL alarms.
5. Check the PCA SOAM GUI **Main Menu** > **Measurements** > **Report** to search for relevant measurements.

Error Code 510

Associated Error Category
Binding Found But Unable To Route

Description
A slave session could not be routed because, on polling the slave, sessionRef was no longer in the binding database.

Associated P-DRA Alarm/Event
N/A

Associated Measurement
SbrSlavePollingFail

Associated Diameter Interface / Message Type

- Gx/Gxx CCR-I
- Rx AAR
- Gx-Prime CCR-I

GUI Configurable
Yes

Recovery

1. See *Early binding Processing with PCRF Pool* in the Error Resolution appendix of the *Policy and Charging Application User Guide* to investigate and understand
2. Go to the PCA SOAM GUI at **Main Menu** > **Status & Manage** > **Server** to check binding SBRs' status.
3. Go to the **Main Menu** > **Alarms & Events** > **View History** to check binding SBR's congestion alarm/event info to determine a relation with the error.
4. Go to the PCA SOAM GUI **Main Menu** > **Measurements** > **Report** to search for relevant measurements. Select, but not limited to, "SBR Binding Exception" Measurement Group for the measurements directly related to this error.

Error Code 511

Associated Error Category
Binding Found But Unable To Route

Description
A slave session could not be routed because, on polling the master, sessionRef was no longer in the binding database.

Associated P-DRA Alarm/Event
N/A

Associated Measurement
SbrSlavePollingFail

Associated Diameter Interface / Message Type

- Gx/Gxx CCR-I
- Rx AAR

- Gx-Prime CCR-I

GUI Configurable
Yes

Recovery

1. See *Early binding Processing with PCRF Pool* in the Error Resolution appendix of the *Policy and Charging Application User Guide* to investigate and understand the circumstances where the error occurs.
2. Go to the PCA SOAM GUI at **Main Menu** > **Status & Manage** > **Server** to check binding SBRs' status.
3. Get the measurement report from **Main Menu** > **Measurements** > **Report** to the frequency of the relevant measurements. Select, but not limited to, "SBR Binding Exception" Measurement Group to determine the frequency of the relevant measurements.

Error Code 512

Associated Error Category
Binding Found But Unable To Route

Description
A slave session could not be routed because, on polling the master, sessionRef was early too long.

Associated P-DRA Alarm/Event
N/A

Associated Measurement
SbrEarlyTooLongSrRemoved

Associated Diameter Interface / Message Type

- Gx/Gxx CCR-I
- Rx AAR
- Gx-Prime CCR-I

GUI Configurable
Yes

Recovery

1. Check *Early binding Processing with PCRF Pool* in the Error Resolution appendix of the *Policy and Charging Application User Guide* to investigate and understand the circumstances where the error occurs.
2. Go to the PCA SOAM GUI at **Main Menu** > **Status & Manage** > **Server** to obtain the Policy DRA DA-MP and binding SBR status.
3. Go to the **Main Menu** > **Alarms & Events** > **View History** to obtain the congestion alarm/event for Policy DRA DA-MP and/or binding SBR, if congestion occurs.

Some congestion conditions may be released after a short while. The error may not persist after the congestion condition is gone.

4. Get the measurement report from **Main Menu** > **Measurements** > **Report** for, but not limited to, "SBR Binding Exception" and "Policy DRA Congestion" Measurement Groups.

5. Go to PCA NOAM GUI at **Main Menu** > **Policy and Charging** > **Configuration** > **Policy DRA** > **Network-Wide Options** to check the Maximum Early Binding Lifetime value. Re-configure the value if necessary.

Note: The measurement SbrEarlyTooLongSrRemoved indicates the frequency at which binding sessionRefs are discovered in an early state for longer than expected. This unexpected condition could occur if the binding SBR was in congestion and load shedding prevented the session from being transitioned from the early state to a final state. It could also occur if the Maximum Early Binding Lifetime value is configured to be nearly equal to or shorter than the Diameter transaction timer.

Error Code 513

Associated Error Category
Binding Found But Unable To Route

Description
A slave session could not be routed because, on polling the master, an internal error occurred.

Associated P-DRA Alarm/Event
N/A

Associated Measurement
SbrSlavePollingFail

Associated Diameter Interface / Message Type

- Gx/Gxx CCR-I
- Rx AAR
- Gx-Prime CCR-I

GUI Configurable
Yes

Recovery

1. Go to the PCA SOAM GUI at **Main Menu** > **Status & Manage** > **Server** to obtain the Policy DRA DA-MP and binding SBR status.

2. Go to the **Main Menu** > **Alarms & Events** > **View History** to obtain the congestion alarm/event for Policy DRA DA-MP and/or binding SBR, if congestion occurs. Some congestion conditions may be released after a short while. The error may not persist after the congestion condition is gone.

3. Go to Policy DRA SOAM GUI at **Main Menu** > **Communication Agent** > **Maintenance** > **Connection Status** to check the server connection status. The error may be caused by a disconnection between the local and peer nodes that the message was retransmitted the maximum number of times without receiving a response.
4. Get the measurement report from **Main Menu** > **Measurements** > **Report** for, but not limited to, "ComAgent Exception," "Connection Congestion," "SBR Binding Exception" and "Policy DRA Congestion" Measurement Groups.

Error Code 503

Associated Error Category
No Usable Keys In Binding Dependent Message

Description
No binding key in Binding Key Priority GUI can be matched or no key is included in the binding dependent message.

Associated P-DRA Alarm/Event
Event 22706 - Binding Key Not Found In Diameter Message (refer to the *DSR Alarms and KPIs Reference* for details about this event)

Associated Measurement
TxPdraAnswersGeneratedForDiameterErr

Associated Diameter Interface / Message Type

- Rx AAR
- Gx-Prime CCR-I

GUI Configurable
Yes

Recovery

1. Check *AAR Processing* in the Error Resolution appendix of the *Policy and Charging Application User Guide* to investigate and understand the circumstances where the error occurs.
2. Go to PCA SOAM GUI at **Main Menu** > **Policy and Charging** > **Configuration** > **Policy DRA** > **Binding Key Priority** to verify if the binding key priorities are expected (for instance IMSI and IPv56 Address are expected, but MSISDN and IPv4 are displayed instead).
3. If the binding key priorities are not expected, reset the binding key priority in this screen properly.
4. If the binding key priority are expected, check the validity of the received Request message as follows:
   - AVP carrying the expected key is present in the message
   - AVP carrying the expected key is correctly formed

- AVP carrying the expected key is using a supported format (e.g. Subscription-ID AVP only Subscription-ID-Type of END_USER_E164 for MSISDN key and END_USER_IMSI for IMSI key).

5. Check the PCRA SOAM GUI at **Main Menu** > **Alarms & Events** > **View History** to search for all relevant alarms/events. The alarm Display Filter may be set as Timestamp to verify all alarms generated at the same time when the error occurred.

6. Get the measurement report from **Main Menu** > **Measurements** > **Report** for, but not limited to, "SBR Binding Exception," "SBR Session Exception," and "Policy DRA Diameter Exception" Measurement Groups.

Error Code 505

Associated Error Category
Binding Not Found

Description
Binding record is not found after examining all configured binding keys in Diameter message.

Associated P-DRA Alarm/Event
Event 22718 - Binding Not Found for Binding Dependent Session Initiate Request (refer to the *DSR Alarms and KPIs Reference* for more information)

Associated Measurement
TxPdraAnswersGeneratedForPsbrErrResp

Associated Diameter Interface / Message Type

- Rx AAR
- Gx-Prime CCR-I

GUI Configurable
Yes

Recovery

1. Check *AAR Processing* in the Error Resolution appendix of the *Policy and Charging Application User Guide* to investigate and understand the circumstances where the error occurs.

2. Go to Policy SRA SOAM GUI at **Main Menu** > **Policy and Charging** > **Configuration** > **Policy DRA** > **Binding Key Priority** to verify if the binding key priorities are expected (for instance IMSI and IPv56 Address are expected, but MSISDN and IPv4 are displayed instead).

3. If the binding key priorities are not expected, reset the binding key priority in this screen properly.

4. If the binding key priority are expected, check the validity of the received Request message as follows:

   - AVP carrying the expected key is present in the message
   - AVP carrying the expected key is correctly formed

- AVP carrying the expected key is using a supported format (e.g. Subscription-ID AVP only Subscription-ID-Type of END_USER_E164 for MSISDN key and END_USER_IMSI for IMSI key).

5. Go to Policy DRANOAM GUI at **Main Menu** > **Policy DRA** > **Maintenance** > **Policy Database Query** to query the IMSI key to find all alternate keys. If alternate records exist, compare the keys from the database to the keys in the request message to see if they match exactly (e.g. no extra digits or characters, etc.)
6. Check the Policy DRA SOAM GUI at **Main Menu** > **Alarms & Events** > **View History** to search for all relevant alarms/events. The alarm Display Filter may be set as Timestamp to verify all alarms generated at the same time when the error occurred.
7. Get the measurement report from **Main Menu** > **Measurements** > **Report** for, but not limited to, "SBR Binding Exception," "SBR Session Exception," and "Policy DRA Diameter Exception" Measurement Groups.

Error Code 507

Associated Error Category
SBR Error

Description
SBR Error - ComAgent timeout

Associated P-DRA Alarm/Event
Event 22704 - Communication Agent Error

Associated Measurement
TxPdraErrAnsGeneratedCAFailure

Associated Diameter Interface / Message Type

- Gx CCR-I, CCR-U, and CCR-T
- Rx AAR, STR
- Gx-Prime CCR-I, CCR-U, and CCR-T

GUI Configurable
Yes

Recovery

1. Check *findSessionRef Processing*, *findOrCreateBindingResult Processing*, *findOrCreateBinding Response Processing with PCRF Pool*, *findSession Response Processing*, and *AAR Processing* in the Error Resolution appendix of the *Policy and Charging Appliaction User Guide* to investigate and understand the circumstances where the error occurs.
2. Go to Policy DRA SOAM GUI at **Main Menu** > **Communication Agent** > **Maintenance** > **Connection Status** to check the server connection status. The error may be caused by a disconnection between the local and peer nodes that the message was retransmitted the maximum number of times without receiving a response. Also check the Communication Agent Service status screen that

corresponds to the ServiceID in the event instance to troubleshoot the operation of the service.

3. Get the measurement report from **Main Menu** > **Measurements** > **Report** for, but not limited to, "ComAgent Exception," "Connection Congestion," "SBR Binding Exception," and "Policy DRA Congestion" Measurement Groups.

4. Check the **Main Menu** > **Alarms & Events** > **View History** and set the Display Filter by Events (in particular, 19810 - Communication Agent Egress Message Discarded, 19811 - Communication Agent Ingress Message Discarded, 19814 - Communication Agent Peer has not responded to heartbeat, 19832 - Communication Agent Reliable Transaction Failed, 19833 - Communication Agent Service Egress Message Discarded, 22712 - Policy SBR Communication Error, 22722 - Policy DRA Binding Sub-resource Unavailable, and 22723 - Policy DRA Session Sub-resource Unavailable. Refer to the *DSR Alarms and KPIs Reference* for details about these events.

Error Code 508

Associated Error Category
SBR Error

Description
SBR Error - SBR database error prevents SBR from reading, writing, or deleting a record

Associated P-DRA Alarm/Event
Event 22711 - SBR Database Error (refer to the *DSR Alarms and KPIs Reference* for details about this event)

Associated Measurement
TxPdraAnswersGeneratedForPsbrErrResp

Associated Diameter Interface / Message Type

- Gx CCR-I, CCR-U, and CCR-T
- Rx AAR, STR
- Gx-Prime CCR-I, CCR-U, and CCR-T

GUI Configurable
Yes

Recovery

1. Check *findSessionRef Processing*, *findOrCreateBindingResult Processing*, *findOrCreateBinding Response Processing with PCRF Pool*, *findSession Response Processing*, and *AAR Processing* in the Error Resolution appendix of the *Policy and Charging Application User Guide* to investigate and understand the circumstances where the error occurs.

2. Go to PCA NOAM GUI at **Main Menu** > **Policy and Charging** > **Maintenance** > **SBR Status** to verify the status of binding and session SBR servers.

3. Check the **Main Menu** > **Alarms & Events** > **View History** and set the Display Filter by Events (in particular, 22711 - SBR Database Error). The table, operation, and key value of the SBR DB where the error may occur will be indicated as well.
4. Get the measurement report from **Main Menu** > **Measurements** > **Report** for, but not limited to, "SBR Binding Exception" and "SBR Session Exception" Measurement Groups.

Error Code 520

Associated Error Category
SBR Error

Description
SBR PCRF Configuration Error - binding capable session initiation request received, but not PCRFs are configured at the site.

Associated P-DRA Alarm/Event
Alarm 22730 - Policy and Charging Configuration Error

Associated Measurement
TxPdraAnswersGeneratedConfigErr

Associated Diameter Interface / Message Type
Gx CCR-I

GUI Configurable
Yes

Recovery

1. Check *findOrCreateBinding Response Processing with PCRF Pool* in the Error Resolution appendix of the *Policy and Charging Application User Guide* to investigate and understand the circumstances where the error occurs.
2. Check the **Main Menu** > **Alarms & Events** > **View History** and set the Display Filter by Events (in particular, 22730 - Policy and Charging Configuration Error).
3. If Alarm 22730 - Policy and Charging Configuration Error indicates that no PCRF are configured, configure PCRFs at the SOAM GUI at **Main Menu** > **Policy and Charging** > **Configuration** > **Policy DRA** > **PCRFs**.

Error Code 521

Associated Error Category
SBR Error

Description
SBR Error - maximum number of Sessions per Binding is Exceeded that fails the binding creation for given IMSI of MSISDN key.

Associated P-DRA Alarm/Event
Event 22719 - Maximum Number of Sessions per Binding Exceeded (refer to the *DSR Alarms and KPIs Reference* for details about this event)

Associated Measurement
TxPdraAnswersGeneratedForPsbrErrResp

Associated Diameter Interface / Message Type
Gx CCR-I, CCR-U, and CCR-T

GUI Configurable

Recovery

1. Check *findOrCreateBindingResult Processing* and *findOrCreateBinding Response Processing with PCRF Pool* in the Error Resolution appendix of the *Policy and Charging Application User Guide* to investigate and understand the circumstances where the error occurs.
2. Check the **Main Menu** > **Alarms & Events** > **View History** and set the Display Filter by Events (in particular, 22719 - Maximum Number of Sessions per Binding Exceeded).
3. Go to PCA NOAM GUI at **Main Menu** > **Policy and Charging** > **Maintenance** > **Policy Database Query** by using Event 22719 - Maximum Number of Sessions per Binding Exceeded to get all the information about session, including session-ids and PCEF FQDNs, to determine if the session is valid.
4. If the sessions exist in the Policy DRA, but not on the PCEF(s), contact My Oracle Support (MOS) for assistance.

Error Code 504

Associated Error Category
Policy SBR Error

Description
ComAgent resource unavailable when sending stack event to pSBR.

Associated P-DRA Alarm/Event
Event 22704 - Communication Agent Error (refer to the *DSR Alarms and KPIs Reference* for details about this event)

Associated Measurement
TxPdraErrAnsGeneratedCAFailure

Associated Diameter Interface / Message Type

- Gx CCR-I, CCR-U, and CCR-T
- Rx AAR, STR
- Gx-Prime CCR-I, CCR-U, and CCR-T

GUI Configurable
Yes

Recovery

1. Check *CCR-I Processing with PCRF Pool* in the Error Resolution appendix of the *Policy and Charging Application User Guide* to investigate and understand the circumstances where the error occurs.
2. Check the **Main Menu** > **Alarms & Events** > **View History** and set the Display Filter by Events (in particular, 19810 - Communication Agent Egress Message Discarded, 19811 - Communication Agent Ingress Message Discarded, 19814 - Communication Agent Peer has not responded to heartbeat, 19832 - Communication Agent Reliable Transaction Failed, 19833 - Communication Agent Service Egress Message Discarded, and 22712 - Policy SBR Communication Error). Refer to the *DSR Alarms and KPIs Reference* for details about these events.
3. Check the PCA NOAM GUI at **Main Menu** > **Policy and Charging** > **Maintenance** > **SBR Status** to verify the status of the binding SBR, session SBR, and related resources/sub-resources (Resource HA Role, Congestion Level, etc.)
4. Go to **Main Menu** > **Communication Agent** > **Maintenance** to verify Connection Status, Routed Services Status, and HA Services Status for resolving ComAgent unavailability.

Error Code 509

Associated Error Category
Session Not Found

Description
Session Not Found - session record doesn't exist for given session ID.

Associated P-DRA Alarm/Event
Event 22705 - SBR Error Response Received By Policy DRA (refer to the *DSR Alarms and KPIs Reference* for details about this event)

Associated Measurement
SbrFindSessDbErr

Associated Diameter Interface / Message Type

- Gx CCR-I, CCR-U, and CCR-T
- Rx AAR, STR
- Gx-Prime CCR-I, CCR-U, and CCR-T

GUI Configurable
Yes

Recovery

1. Check*findSession Response Processing* and *AAR Processing* in the Error Resolution appendix of the *Policy and Charging Application User Guide* to investigate and understand the circumstances where the error occurs.
2. Check the **Main Menu** > **Alarms & Events** > **View History** and set the Display Filter by Events (in particular, 22716 - SBR Audit Statistics Report to find the Session table to see if sessions were removed by audit.

3. Get the measurement report from **Main Menu** > **Measurements** > **Report** for, but not limited to, measurements SbrExpiredSessionsFound, SbrCreateSessDbErr, and SbrRemSessRarAttempts.
4. Check if topology hiding applies to the policy client.

Note: All checks may help to determine whether the session was never created, or was created, but removed by audit.

Error Code 305

Associated Error Category
Policy DRA Unavailable or Degraded

Description
Policy DRA Unavailable

Associated P-DRA Alarm/Event
Alarm 22500 - DSR Application Unavailable (refer to the *DSR Alarms and KPIs Reference* for details about this alarm)

Associated Measurement
RxApplUnavailableForRequest

Associated Diameter Interface / Message Type

- All Gx requests
- All Rx Requests
- All Gx-Prime Requests

GUI Configurable
Yes

Recovery

1. Go to the P-DRA SOAM GUI at **Main Menu** > **Diameter** > **Maintenance** > **Applications** to verify Policy DRA's admin state is set as expected.
2. Check the **Main Menu** > **Diameter** > **Maintenance** > **Applications** to verify Policy DRA's Operational Status and Congestion Level. Policy DRA's Operational Status is "Unavailable" when the operator has removed Policy DRA from service (Admin State is "Disabled").
3. Check **Main Menu** > **Alarms & Events** > **View History** for relevant events or alarms related to this DA-MP server.
4. Get the measurement report from **Main Menu** > **Measurements** > **Report** for, but not limited to, measurement RxApplUnavailableForAnswer.

Error Code 305

Associated Error Category
Policy DRA Unavailable or Degraded

Description
Policy DRA Degraded

Associated P-DRA Alarm/Event
Alarm 22501 - DSR Application Degraded (refer to the *DSR Alarms and KPIs Reference* for details about this alarm)

Associated Measurement
RxApplUnavailableForRequest

Associated Diameter Interface / Message Type

- All Gx requests
- All Rx Requests
- All Gx-Prime Requests

GUI Configurable
Yes

Recovery

1. Go to the P-DRA SOAM GUI at **Main Menu** > **Diameter** > **Maintenance** > **Applications** to verify Policy DRA's admin state is set as expected.
2. Check the **Main Menu** > **Diameter** > **Maintenance** > **Applications** to verify Policy DRA's Operational Status and Congestion Level. Policy DRA's Operational Status is "Unavailable" when the operator has removed Policy DRA from service (Admin State is "Disabled").
3. Check **Main Menu** > **Alarms & Events** > **View History** for relevant events or alarms related to this DA-MP server.
4. Get the measurement report from **Main Menu** > **Measurements** > **Report** for, but not limited to, measurement RxApplUnavailableForAnswer.

Error Code 522

Associated Error Category
Session ID is missing from Request

Description
Session ID is missing from Request

Associated P-DRA Alarm/Event
Event 22700 - Protocol errors in Diameter Requests (refer to the *DSR Alarms and KPIs Reference* for details about this event)

Associated Measurement
RxPdraRequestProtocolErr

Associated Diameter Interface / Message Type

- All Gx requests
- All Rx Requests
- All Gx-Prime Requests

GUI Configurable
No (Result Code 5005)

Recovery

1. Check *Diameter Message Validation* and *CCR-I Processing without PCRF Pool* in the Error Resolution appendix of the *Policy and Charging Application User Guide* to investigate and understand the circumstances where the error occurs.
2. Go to the Policy DRA SOAM GUI at **Main Menu** > **Alarms & Events** > **View History** and set the Display Filter by Events (in particular, 22700 - Protocol errors in Diameter Requests).
3. Use the Origin-Host value of the received Request found in 22700 - Protocol errors in Diameter Requests to understand from where the Request was sent.
4. Get the measurement report from **Main Menu** > **Measurements** > **Report** for, but not limited to, "Diameter Exception," "DSR Application Exception," and "Policy DRA Diameter Exception" Measurement Groups.

Error Code 523

Associated Error Category
CC-Request-Type AVP is missing from CCR message

Description
CC-Request-Type AVP is missing from CCR message

Associated P-DRA Alarm/Event
Event 22700 - Protocol errors in Diameter Requests (refer to the *DSR Alarms and KPIs Reference* for details about this event)

Associated Measurement
RxPdraRequestProtocolErr

Associated Diameter Interface / Message Type
Gx CCR-I, CCR-U, and CCR-T

GUI Configurable
No (Result Code 5005)

Recovery

1. Check *CCR Processing* in the Error Resolution appendix of the *Policy and Charging Application User Guide* to investigate and understand the circumstances where the error occurs.

2. Go to the Policy DRA SOAM GUI at **Main Menu** > **Alarms & Events** > **View History** and set the Display Filter by Event (in particular, 22700 - Protocol errors in Diameter Requests).
3. Use the Origin-Host value of the received Request found in 22700 - Protocol errors in Diameter Requests to understand from where the Request was sent.
4. Get the measurement report from **Main Menu** > **Measurements** > **Report** for, but not limited to, "Diameter Exception," "DSR Application Exception," and "Policy DRA Diameter Exception" Measurement Groups.

Error Code 525

Associated Error Category
Invalid AVP value in request message

Description
Invalid AVP value in request message

Associated P-DRA Alarm/Event
Event 22700 - Protocol errors in Diameter Requests (refer to the *DSR Alarms and KPIs Reference* for details about this event)

Associated Measurement
RxPdraRequestProtocolErr

Associated Diameter Interface / Message Type

- All Gx requests
- All Rx Requests
- All Gx-Prime Requests

GUI Configurable
No (Result Code 5004)

Recovery

1. Check *CCR Processing* in the Error Resolution appendix of the *Policy and Charging Application User Guide* to investigate and understand the circumstances where the error occurs.
2. Go to the Policy DRA SOAM GUI at **Main Menu** > **Alarms & Events** > **View History** and set the Display Filter by Events (in particular, 22700 - Protocol errors in Diameter Requests).
3. Use the Origin-Host value of the received Request found in 22700 - Protocol errors in Diameter Requests to understand from where the Request was sent.
4. Get the measurement report from **Main Menu** > **Measurements** > **Report** for, but not limited to, "Diameter Exception," "DSR Application Exception," and "Policy DRA Diameter Exception" Measurement Groups.

Error Code 506

Associated Error Category
Destination-Host AVP is missing in in-session request

Description
Destination-Host AVP is missing in in-session request

Associated P-DRA Alarm/Event
Event 22700 - Protocol errors in Diameter Requests (refer to the *DSR Alarms and KPIs Reference* for details about this event)

Associated Measurement
RxPdraRequestProtocolErr

Associated Diameter Interface / Message Type

- Gx CCR-U and CCR-T
- Rx AAR, STR
- Gx-Prime CCR-U, and CCR-T

GUI Configurable
No (Result Code 5012)

Recovery

1. Check *STR Processing* and *ASR/ASA Processing* in the Error Resolution appendix of the *Policy and Charging Application User Guide* to investigate and understand the circumstances where the error occurs.
2. Go to the Policy DRA SOAM GUI at **Main Menu** > **Alarms & Events** > **View History** and set the Display Filter by Event (in particular, 22700 - Protocol errors in Diameter Requests).
3. Use the Origin-Host value of the received Request found in 22700 - Protocol errors in Diameter Requests to understand from where the Request was sent.
4. Get the measurement report from **Main Menu** > **Measurements** > **Report** for, but not limited to, "Diameter Exception," "DSR Application Exception," and "Policy DRA Diameter Exception" Measurement Groups.

Error Code 530

Associated Error Category
Unsupported Application ID

Description
Application ID unsupported by Policy DRA

Associated P-DRA Alarm/Event
Event 22700 - Protocol errors in Diameter Requests (refer to the *DSR Alarms and KPIs Reference* for details about this event)

Associated Measurement
RxPdraRequestProtocolErr

Associated Diameter Interface / Message Type
Diameter Requests

GUI Configurable
No (Result Code 3007)

Recovery

1. Check *Diameter Message Validation* in the Error Resolution appendix of the *Policy and Charging Application User Guide* to investigate and understand the circumstances where the error occurs.
2. Go to the Policy and Charging SOAM GUI at **Main Menu** > **Alarms & Events** > **View History** and set the Display Filter by Events (in particular, Event 22700 - Protocol errors in Diameter Requests).
3. Use the Origin-Host value of the received Request found in Event 22700 - Protocol errors in Diameter Requests to understand from where the Request was sent.
4. Get the measurement report from **Main Menu** > **Measurements** > **Report** for, but not limited to, "Diameter Exception," "DSR Application Exception," and "Policy DRA Diameter Exception" Measurement Groups.

Error Code 531

Associated Error Category
Command Code and App ID no match

Description
Command Code doesn't match the App ID or doesn't exist

Associated P-DRA Alarm/Event
Event 22700 - Protocol errors in Diameter Requests (refer to the *DSR Alarms and KPIs Reference* for details about this event)

Associated Measurement
RxPdraRequestProtocolErr

Associated Diameter Interface / Message Type
Diameter Requests

GUI Configurable
No (Result Code 5019)

Recovery

1. Check *Diameter Message Validation* in the Error Resolution appendix of the *Policy and Charging Application User Guide* to investigate and understand the circumstances where the error occurs.
2. Go to the Policy DRA SOAM GUI at **Main Menu** > **Alarms & Events** > **View History** and set the Display Filter by Events (in particular, Event 22700 - Protocol errors in Diameter Requests.
3. Use the Origin-Host value of the received Request found in Event 22700 - Protocol errors in Diameter Requests to understand from where the Request was sent.

4. Get the measurement report from **Main Menu** > **Measurements** > **Report** for, but not limited to, "Diameter Exception," "DSR Application Exception," and "Policy DRA Diameter Exception" Measurement Groups.