

**Oracle® Communications**

**User Data Repository**

Diameter Common User's Guide

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# Introduction

The *Diameter Common User's Guide* and Help provide information about how to use the Diameter Common GUI pages to configure Network Identifiers and MP Profiles, and how to export and import configuration data for Diameter, Diameter Common, IPFE, MAP-Diameter Interworking, and DSR Applications.

## Revision History

Date	Description
December 2016	<ul style="list-style-type: none"><li>• New CSV format table for Signaling Firewall</li><li>• Modified existing CSV format tables<ul style="list-style-type: none"><li>– System Options CSV format table</li><li>– Peer Routing Rule CSV format table</li><li>– AppRouteRule CSV format table</li><li>– Routing Option Set CSV format table</li><li>– Policy DRA Options CSV format table</li></ul></li></ul>

## Overview

The *Diameter Common User's Guide* and Help provide information about how to use the Diameter Common GUI pages to perform configuration and DSR Bulk Import/Export tasks.

The document provides the following types of information:

- Procedures to configure Diameter Common components
- Procedures to perform DSR Bulk Import/Export operations

## Scope and Audience

The Diameter Common documentation is intended for anyone responsible for configuring and using the Diameter Common functions.

Users of this manual must have a working knowledge of telecommunications, of network installations, and of the product that is using the Diameter Common functions.

The Diameter Common software component is shared by multiple applications in the product line. For this reason, this document includes references to the shared applications, and describes GUI options that are not visible or applicable to UDR. For example, DSR applications (such as RBAR, FABR, CPA, and PCA) and IPFE are currently not used by UDR, so disregard any references to these applications.

## Manual Organization

This manual is organized into the following chapters:

- [Introduction](#) contains general information about the Diameter Common help documentation, the organization of this manual, and how to get technical assistance.
- [User Interface Introduction](#) describes the organization and usage of the application 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.
- [Diameter Common on the NOAM](#) describes the configuration of the Dashboard, Metric and DashboardElements, MCCMNC, and MCCMNC Mapping Network Identifiers on the NOAM.
- [Diameter Common on the SOAM](#) describes the configuration of the MCC Ranges Network Identifiers and MPs (Profiles and Assignments) on the SOAM.
- [Diameter Common Bulk Import and Export](#) provides procedures and CSV file formats for use in DSR Bulk Import and Export of Diameter, Diameter Common, IPFE, and DSR Application configuration data on the NOAM and SOAM.

## 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.

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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.



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## 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 with the application. It is a Web-based graphical user interface (GUI) that enables remote user access over the network to the application and its functions.

### 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	<p>The left side of the banner provides the following information:</p> <ul style="list-style-type: none"> <li>• Displays the company name,</li> <li>• product name and version, and</li> <li>• the alarm panel.</li> </ul> <p>The right side of the banner:</p> <ul style="list-style-type: none"> <li>• Allows you to pause any software updates.</li> <li>• Links to the online help for all software.</li> <li>• Shows the user name of the currently logged-in user.</li> <li>• Provides a link to log out of the GUI.</li> </ul>
Main Menu	Left side of screen, under banners	<p>A tree-structured menu of all operations that can be performed through the user interface. The plus character (+) indicates a menu item contains subfolders.</p> <ul style="list-style-type: none"> <li>• To display submenu items, click the plus character, the folder, or anywhere on the same line.</li> <li>• To select a menu item that does not have submenu items, click on the menu item text or its associated symbol.</li> </ul>

**Table 2-1 (Cont.) User Interface Elements**

Element	Location	Function
Work Area	Right side of panel under status	<p>Consists of three sections: Page Title Area, Page Control Area (optional), and Page Area.</p> <ul style="list-style-type: none"><li>• 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.</li><li>• 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 <a href="#">Optional Layout Element Toolbar</a>.</li><li>• 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 user interface page. The page displays a user-defined welcome message. To customize the message, see <a href="#">Customizing the Login Message</a>.</li></ul>
Session Banner	Across the bottom of the web page	<p>The left side of the banner provides the following session information:</p> <ul style="list-style-type: none"><li>• 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.</li><li>• The HA state of the machine to which the user is connected.</li><li>• The role of the machine to which the user is connected.</li></ul> <p>The right side of the banner shows the alarm panel.</p>

## Main menu options

The menu options that appear on the screen differ according to whether you are logged into an SDS or DP SOAM. [Table 2-2](#) describes all main menu user interface options.

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

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**Table 2-2 SDS Main Menu User Interface Options**

Menu Item	Function
Administration	The Administration menu allows you to: <ul style="list-style-type: none"> <li>• Set up and manage user accounts</li> <li>• Configure group permissions</li> <li>• View session information</li> <li>• Authorize IP addresses to access the user interface</li> <li>• Configure options including, but not limited to, password history and expiration, login message, welcome message, and the number of failed login attempts before an account is disabled</li> <li>• Configure SNMP services</li> <li>• Validate and transfer ISO files</li> <li>• Prepare, initiate, monitor, and complete upgrades</li> <li>• View the software versions report</li> </ul>
Configuration	Provides access to configuring network elements, servers, server groups, and systems.
Alarms & Events	Lists active alarms and alarm history.
Security Log	Allows you to view and export security log data.
Status & Manage	Allows you to monitor the statuses of server processes, both collectively and individually, as well as perform actions required for server maintenance. Also allows you to view the status of file management systems, and to manage data files on servers throughout the system.
Measurements	Allows you to view, modify, import, and export measurement data.
Communication Agent	Provides infrastructure features and services for enabling inter-server communication.
SDS	Provides maintenance and configuration options related to SDS.
Help	Launches the online help system for the user interface.
Logout	Allows you 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.

Diameter Common 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



**ORACLE**<sup>®</sup>

**Oracle System Login** Wed Jul 8 14:20:00 2015 EDT

**Log In**

Enter your username and password to log in

Username:

Password:

Change password

Welcome to the Oracle System Login.

Unauthorized access is prohibited. This Oracle system requires the use of Microsoft Internet Explorer 8.0, 9.0, or 10.0 with support for JavaScript and cookies.

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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.

## 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.
	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.

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

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## 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**

Displaying Records 1-1 of 1 | [First](#) | [Prev](#) | [Next](#) | [Last](#)

Action	System ID	IP Address	Permission	Action
<a href="#">Edit</a> <a href="#">Delete</a>	lisa	10.25.62.4	READ_WRITE	<a href="#">Edit</a> <a href="#">Delete</a>

Displaying Records 1-1 of 1 | [First](#) | [Prev](#) | [Next](#) | [Last](#)

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**

Sequence #	Alarm ID	Timestamp	Severity	Product	Process	NE	Server	Type	Instance	Alarm Text
3498	31201	2009-Jun-11 18:07:41.214 UTC	MAJOR	MiddleWare	procmgr	OAMPNE	teks8011006	PROC	eclipseHelp	A managed process cannot be started or has unexpectedly terminated
5445	31201	2009-Jun-11 18:07:27.137 UTC	MAJOR	MiddleWare	procmgr	SOAMP	teks8011002	PROC	eclipseHelp	A managed process cannot be started or has unexpectedly terminated
5443	31107	2009-Jun-11 18:07:24.704 UTC	MINOR	MiddleWare	inetmerge	SOAMP	teks8011002	COLL	teks8011004	DB merging from a child Source Node has failed
5444	31107	2009-Jun-11 18:07:24.704 UTC	MINOR	MiddleWare	inetmerge	SOAMP	teks8011002	COLL	teks8011003	DB merging from a child Source Node has failed
5441	31209	2009-Jun-11 18:07:22.640 UTC	MINOR	MiddleWare	re.portmap	SOAMP	teks8011002	SW	teks8011003	Unable to resolve a hostname specified in the NodeInfo table.
										Unable to resolve a

[Export](#)

---

**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**

Username:  (5-16 characters)

Group:

Time Zone:

Maximum Concurrent Logins:  Maximum concurrent logins for a user (0=no limit).  
[Default = 1; Range = 0-50]

Session Inactivity Limit:  Time (in minutes) after which login sessions expire (0 = never).  
[Default = 120; Range = 0-120]

Comment:  (max 64 characters)

Temporary Password:  (8-16 characters)

Re-type Password:  (8-16 characters)

---

**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**

Entire Network *		System.CPU_CoreUtilPct_Average	System.CPU_CoreUtilPct_Peak				
NOAMP	SOAM	Timestamp	System CPU UtilPct Average	System CPU UtilPct Peak	System Disk UtilPct Average	System Disk UtilPct Peak	System RAM UtilPct Average
		10/22/2009 19:45	6.764068	44	0.520000	1	7.939407
		10/22/2009 20:00	7.143644	25	0.520000	1	8.523822

**Figure 2-6 Tabbed Pages**

Fields marked with a red asterisk (\*) require a value.

Field	Value	Description
Network Entity	<input type="text"/>	* Numeric identifier for the Network Entity 1-15 DIGITS

**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 a 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)

Some column headers are links that sort the table by that column when clicked. Sorting does not affect filtering. Column headers that are black and span several columns (group column headers) cannot be sorted.

**Figure 2-8 Sortable and Non-sortable Column Headers**

Sortable column ↓	Non-sortable column (group header) ↓				
<b>Status about ServerID</b>	<b>Additional Info</b>				
	<b>Replication Channel Status</b>	<b>DeltaSeq</b>	<b>DeltaTime</b>	<b>Update Time</b>	<b>Debug Info</b>

## 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 data or select a value for all mandatory fields.

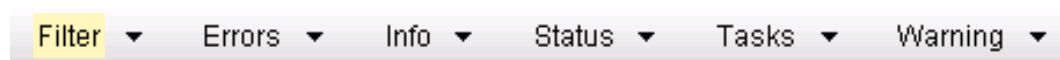
**Table 2-5 Submit Buttons**

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.

## Optional Layout Element Toolbar

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

**Figure 2-9 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:

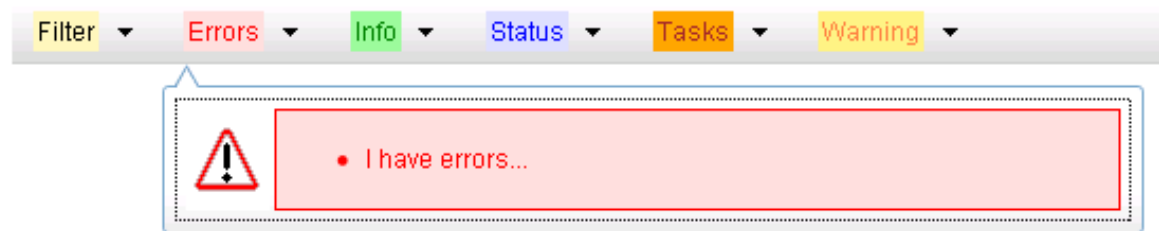


- Filter—Allows you to filter data in a table.
- Errors—Displays errors associated with the work area.
- Info—Displays information messages associated with the work area.
- Status—Displays short status updates associated with the main work area.
- Warning—Displays warnings associated with the work area.

### 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 2-10 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 style (look) of the element changes to indicate new messages are available. The style 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 can limit the data presented in a table using 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.

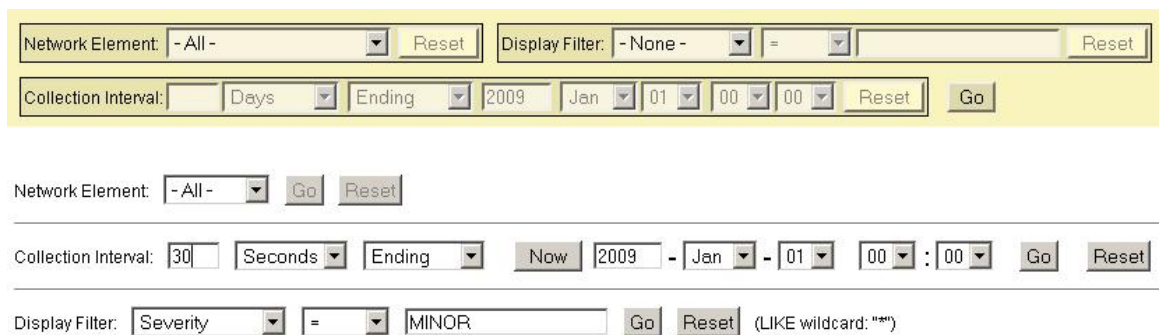
**Note:** After the filter is enabled, the Network Element filter affect all pages that list or display data relating to the Network Element.

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

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

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

**Figure 2-11 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.
<=	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 <b>Is Null</b> 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.

---

---

## Auto refresh controls

Auto refresh controls are widgets that control the rate at which the Page Area refreshes on some pages. They are located in the Page Control Area on the right side. Auto refresh can be set to **15** seconds or **30** seconds, and it can be turned off. The changes take effect immediately.

Click one of the Auto Refresh options to set the auto refresh rate. Click the **Off** option to terminate automatic refreshing of the page.

**Auto Refresh :** 15 | 30 | Off

## 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.

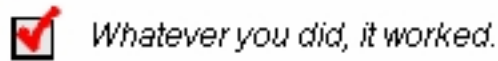
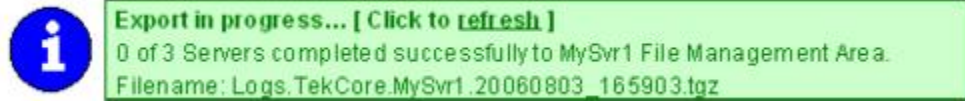
**Apply** saves the change and remains on the same page.

The maximum number of records displayed is changed.

## Message Display

A message displays at the top of the Work Area on a page when a process needs to communicate errors or information. When an event is in progress, a refresh link may be provided here so that you can refresh without having to use the browser's refresh function

These are examples of some of the messages that can appear in a Work Area:





---

## Diameter Common on the NOAM

The Diameter Common GUI pages on the NOAM can be used for Bulk Import and Export functions.

### Overview

The Diameter Common menu items on the NOAM provide access to GUI pages to perform DSR Bulk Import/Export operations (see [Diameter Common Bulk Import and Export](#)).





---

## Diameter Common on the SOAM

The Diameter Common GUI pages on the SOAM can be used for configuration of the MCC Ranges Network Identifiers and for Bulk Import and Export functions.

### Overview

The Diameter Common menu items on the SOAM provide access to GUI pages to perform the following tasks:

- Configure **Diameter Common > MPs > Profiles and Diameter Common > MPs > Profile Assignments** (see [MPs](#))
- Perform DSR Bulk Import/Export operations (see [Diameter Common Bulk Import and Export](#))

### MPs

A **Diameter Agent Message Processor (DA-MP)** is a computer or blade hosting the Diameter base protocol and one or more DSR Applications. Multiple DA-MPs are supported in a DSR system.

An SS7 Message Processor (**SS7-MP**) is a computer or blade hosting the MD-IWF **SS7/TCAP** Application that is used in translating MAP Request messages to Diameter Request messages.

An **MP Profile** defines maximum and threshold values for an MP. An MP Profile must be assigned to each DA-MP and SS7-MP in the system configuration. Select the appropriate **MP Profile** according to the hardware and application or applications that are running on the MP, as shown in [Table 4-1](#).

---

**Note:** The profiles listed in [Table 4-1](#) and that appear on the MPs GUI pages might not include all of the profiles that are available for all Oracle Communications products. Product-specific profiles and instructions for assigning them are included in the *Installation Guide* for each product.

---

**Table 4-1 MP Profile Selection**

Hardware	Application(s)	MP Profile
DA-MPs		
G6 half height blade	Diameter Relay	G6:Relay
G8/G9 half height blade	Diameter Relay	G8/G9:Relay
G7 full height blade	Diameter Relay	G7:Relay

**Table 4-1 (Cont.) MP Profile Selection**

Hardware	Application(s)	MP Profile
Virtual DA-MP	Diameter Relay	VM:Relay
<hr/> <p><b>Note:</b> If a virtualized version of DSR is being used, then the MP Profile can be VM:10K_MPS.</p> <hr/>		
G6 half height blade	Diameter Relay + FABR or RBAR	G6:Database
G8/G9 half height blade	Diameter Relay + FABR or RBAR	G8/G9:Database
G7 full height blade	Diameter Relay + FABR or RBAR	G7:Database
Virtual DA-MP	Diameter Relay + FABR or RBAR	VM:Database
<hr/> <p><b>Note:</b> If a virtualized version of DSR is being used, then the MP Profile can be VM:10K_MPS.</p> <hr/>		
G6 half height blade	Diameter Relay + CPA or PCA	G6:Session
G8/G9 half height blade	Diameter Relay + CPA or PCA	G8/G9:Session
G7 full height blade	Diameter Relay + CPA or PCA	G7:Session
Virtual DA-MP	Diameter Relay + CPA or PCA	VM:10K_MPS
G6 half height blade	Diameter Relay + RBAR + PCA	G6:Session_Database
G8/G9 half height blade	Diameter Relay + RBAR + PCA	G8/G9:Session_Database
G7 full height blade	Diameter Relay + RBAR + PCA	G7:Session_Database
SS7-MPs		
G8/G9 half height blade	MAP-to-Diameter Interworking Function (MD-IWF) Application	G8/G9:MD-IWF
Virtual SS7-MP	MAP-to-Diameter Interworking Function (MD-IWF) Application	VM:MD-IWF

[MPs Profiles Elements](#) describes the user-configurable and engineering-configured values in an MP Profile.

---

**Note:** The Ingress Message Rate Alarm Threshold values for the PCA application are user-configurable on the **NOAM Policy and Charging > Configuration > Congestion Options** page; they are not shown in [MPs Profiles Elements](#).

---

## MPs Profiles Elements

[Table 4-2](#) describes the fields on the DA-MP tab on the **Diameter Common > MPs > Profiles** page.

---

**Note:** The Data Input Notes apply only to the DA-MP Configurable elements.

---

[Table 4-3](#) describes the view-only fields on the SS7-MP tab on the **Diameter Common > MPs > Profiles** page.

**Table 4-2** *MPs Profiles DA-MP Elements*

Field (* indicates required field)	Description	Data Input Notes
DA-MP Configurable		
*CL1 Discard Percent	The percentage below DA-MP Engineered Ingress MPS that DA-MP Overload Control will police the total DA-MP ingress MPS when the DA-MP is in congestion level 1.	Format: text box Range: 0 - 50% Default: 0
*CL2 Discard Percent	The percentage below DA-MP Engineered Ingress MPS that DA-MP Overload Control will police the total DA-MP ingress MPS to when the DA-MP is in congestion level 2.	Format: text box Range: 10 - 50% Default: 20
*CL3 Discard Percent	The percentage below DA-MP Engineered Ingress MPS that DA-MP Overload Control will police the total DA-MP ingress MPS to when the DA-MP is in congestion level 3.	Format: text box Range: 20 - 50% Default: 40
*Congestion Discard Policy	The order of priority and/or color-based traffic segments to consider when determining discard candidates for the application of treatment during DA-MP Congestion processing.	Format: pulldown list Range: Priority Only, Color Within Priority, Priority Within Color Default: Priority Only

**Table 4-2 (Cont.) MPs Profiles DA-MP Elements**

<b>Field (* indicates required field)</b>	<b>Description</b>	<b>Data Input Notes</b>
*DOC Message Discard Percentage	The percent of total DA-MP ingress MPS above DA-MP Engineered Ingress MPS that DA-MP Overload Control will discard when the DA-MP is in danger of congestion.	Format: text box Range: 0 - 50 % Default: 20
DOC Discard Policy	The order of priority and/or color-based traffic segments to consider when determining discard candidates for the application of treatment during DA-MP DOC processing.	Format: pulldown list Range: Priority Only, Color Within Priority, Priority Within Color Default: Priority Only
DA-MP View-Only		
Maximum Connections	The maximum number of Diameter connections the DA-MP can have configured at any one time	Engineering-configured
Engineered Ingress MPS	The maximum ingress message rate, in messages per second, that the DA-MP will support without overload. This value limits the total Reserved Ingress MPS of all Diameter Connections assigned to the DA-MP.	Engineering-configured
Maximum Ingress Message Rate Minor Alarm Set Threshold	The ingress message rate, in messages per second, above which a minor alarm is raised.	Engineering-configured
Maximum Ingress Message Rate Minor Alarm Clear Threshold	The ingress message rate, in messages per second, below which a minor alarm is cleared.	Engineering-configured
Maximum Ingress Message Rate Major Alarm Set Threshold	The ingress message rate, in messages per second, above which a major alarm is raised.	Engineering-configured
Maximum Ingress Message Rate Major Alarm Clear Threshold	The ingress message rate, in messages per second, below which a major alarm is cleared.	Engineering-configured
Maximum Ingress Message Rate Critical Alarm Set Threshold	The ingress message rate, in messages per second, above which a critical alarm is raised.	Engineering-configured
Maximum Ingress Message Rate Critical Alarm Clear Threshold	The ingress message rate, in messages per second, below which a critical alarm is cleared.	Engineering-configured

**Table 4-2 (Cont.) MPs Profiles DA-MP Elements**

<b>Field (* indicates required field)</b>	<b>Description</b>	<b>Data Input Notes</b>
Routing Message Rate Minor Alarm Set Threshold	The Diameter message processing rate, in messages per second, above which a minor alarm is raised.	Engineering-configured
Routing Message Rate Minor Alarm Clear Threshold	The Diameter message processing rate, in messages per second, below which a minor alarm is cleared.	Engineering-configured
Routing Message Rate Major Alarm Set Threshold	The Diameter message processing rate, in messages per second, above which a major alarm is raised.	Engineering-configured
Routing Message Rate Major Alarm Clear Threshold	The Diameter message processing rate, in messages per second, below which a major alarm is cleared.	Engineering-configured
Routing Message Rate Critical Alarm Set Threshold	The Diameter message processing rate, in messages per second, above which a critical alarm is raised.	Engineering-configured
Routing Message Rate Critical Alarm Clear Threshold	The Diameter message processing rate, in messages per second, below which a critical alarm is cleared.	Engineering-configured
Average Message Size Minor Alarm Set Threshold	The Average Message Size above which a minor alarm is set.	Engineering-configured
Average Message Size Minor Alarm Clear Threshold	The Average Message Size below which a minor alarm is cleared.	Engineering-configured
Average Message Size Major Alarm Set Threshold	The Average Message Size above which a major alarm is set.	Engineering-configured
Average Message Size Major Alarm Clear Threshold	The Average Message Size below which a major alarm is cleared.	Engineering-configured
Average Message Size Critical Alarm Set Threshold	The Average Message Size above which a critical alarm is set.	Engineering-configured
Average Message Size Critical Alarm Clear Threshold	The Average Message Size below which a critical alarm is cleared.	Engineering-configured
Average Hold Time Minor Alarm Set Threshold	The Average Hold Time above which a minor alarm is set.	Engineering-configured

**Table 4-2 (Cont.) MPs Profiles DA-MP Elements**

<b>Field (* indicates required field)</b>	<b>Description</b>	<b>Data Input Notes</b>
Average Hold Time Minor Alarm Clear Threshold	The Average Hold Time below which a minor alarm is cleared.	Engineering-configured
Average Hold Time Major Alarm Set Threshold	The Average Hold Time above which a major alarm is set.	Engineering-configured
Average Hold Time Major Alarm Clear Threshold	The Average Hold Time below which a major alarm is cleared.	Engineering-configured
Average Hold Time Critical Alarm Set Threshold	The Average Hold Time above which a critical alarm is set.	Engineering-configured
Average Hold Time Critical Alarm Clear Threshold	The Average Hold Time below which a critical alarm is cleared.	Engineering-configured
RBAR Receive Message Rate Minor Alarm Set Threshold	The ingress request rate for the RBAR Application, in messages per second, above which a minor alarm is raised.	Engineering-configured
RBAR Receive Message Rate Minor Alarm Clear Threshold	The ingress request rate for the RBAR Application, in messages per second, below which a minor alarm is cleared.	Engineering-configured
RBAR Receive Message Rate Major Alarm Set Threshold	The ingress request rate for the RBAR Application, in messages per second, above which a major alarm is raised.	Engineering-configured
RBAR Receive Message Rate Major Alarm Clear Threshold	The ingress request rate for the RBAR Application, in messages per second, below which a major alarm is cleared.	Engineering-configured
RBAR Receive Message Rate Critical Alarm Set Threshold	The ingress request rate for the RBAR Application, in messages per second, above which a critical alarm is raised.	Engineering-configured
RBAR Receive Message Rate Critical Alarm Clear Threshold	The ingress request rate for the RBAR Application, in messages per second, below which a critical alarm is cleared.	Engineering-configured
FABR Receive Message Rate Minor Alarm Set Threshold	The ingress request rate for the FABR Application, in messages per second, above which a minor alarm is raised.	Engineering-configured

**Table 4-2 (Cont.) MPs Profiles DA-MP Elements**

<b>Field (* indicates required field)</b>	<b>Description</b>	<b>Data Input Notes</b>
FABR Receive Message Rate Minor Alarm Clear Threshold	The ingress request rate for the FABR Application, in messages per second, below which a minor alarm is cleared.	Engineering-configured
FABR Receive Message Rate Major Alarm Set Threshold	The ingress request rate for the FABR Application, in messages per second, above which a major alarm is raised.	Engineering-configured
FABR Receive Message Rate Major Alarm Clear Threshold	The ingress request rate for the FABR Application, in messages per second, below which a major alarm is cleared.	Engineering-configured
FABR Receive Message Rate Critical Alarm Set Threshold	The ingress request rate for the FABR Application, in messages per second, above which a critical alarm is raised.	Engineering-configured
FABR Receive Message Rate Critical Alarm Clear Threshold	The ingress request rate for the FABR Application, in messages per second, below which a critical alarm is cleared.	Engineering-configured
CPA Receive Message Rate Minor Alarm Set Threshold	The ingress request rate for the CPA Application, in messages per second, above which a minor alarm is raised.	Engineering-configured
CPA Receive Message Rate Minor Alarm Clear Threshold	The ingress request rate for the CPA Application, in messages per second, below which a minor alarm is cleared.	Engineering-configured
CPA Receive Message Rate Major Alarm Set Threshold	The ingress request rate for the CPA Application, in messages per second, above which a major alarm is raised.	Engineering-configured
CPA Receive Message Rate Major Alarm Clear Threshold	The ingress request rate for the CPA Application, in messages per second, below which a major alarm is cleared.	Engineering-configured
CPA Receive Message Rate Critical Alarm Set Threshold	The ingress request rate for the CPA Application, in messages per second, above which a critical alarm is raised.	Engineering-configured
CPA Receive Message Rate Critical Alarm Clear Threshold	The ingress request rate for the CPA Application, in messages per second, below which a critical alarm is cleared.	Engineering-configured
DM-IWF Receive Message Rate Minor Alarm Set Threshold	The ingress request rate for the DM-IWF Application, in messages per second, above which a critical alarm is raised.	Engineering-configured

**Table 4-2 (Cont.) MPs Profiles DA-MP Elements**

<b>Field (* indicates required field)</b>	<b>Description</b>	<b>Data Input Notes</b>
DM-IWF Receive Message Rate Minor Alarm Clear Threshold	The ingress request rate for the DM-IWF Application, in messages per second, below which a critical alarm is cleared.	Engineering-configured
DM-IWF Receive Message Rate Major Alarm Set Threshold	The ingress request rate for the DM-IWF Application, in messages per second, above which a critical alarm is raised.	Engineering-configured
DM-IWF Receive Message Rate Major Alarm Clear Threshold	The ingress request rate for the DM-IWF Application, in messages per second, below which a critical alarm is cleared.	Engineering-configured
DM-IWF Receive Message Rate Critical Alarm Set Threshold	The ingress request rate for the DM-IWF Application, in messages per second, above which a critical alarm is raised.	Engineering-configured
DM-IWF Receive Message Rate Critical Alarm Clear Threshold	The ingress request rate for the DM-IWF Application, in messages per second, below which a critical alarm is cleared.	Engineering-configured

**Table 4-3 MPs Profiles SS7-MP Elements**

<b>Field</b>	<b>Description</b>	<b>Data Input Notes</b>
SS7-MP View-Only		
MD-IWF Receive Message Rate Minor Alarm Set Threshold	The ingress request rate for the MD-IWF Application, in messages per second, above which a critical alarm is raised.	Engineering-configured
MD-IWF Receive Message Rate Minor Alarm Clear Threshold	The ingress request rate for the MD-IWF Application, in messages per second, below which a critical alarm is cleared.	Engineering-configured
MD-IWF Receive Message Rate Major Alarm Set Threshold	The ingress request rate for the MD-IWF Application, in messages per second, above which a critical alarm is raised.	Engineering-configured
MD-IWF Receive Message Rate Major Alarm Clear Threshold	The ingress request rate for the MD-IWF Application, in messages per second, below which a critical alarm is cleared.	Engineering-configured
MD-IWF Receive Message Rate Critical Alarm Set Threshold	The ingress request rate for the MD-IWF Application, in messages per second, above which a critical alarm is raised.	Engineering-configured



**Table 4-3 (Cont.) MPs Profiles SS7-MP Elements**

Field	Description	Data Input Notes
MD-IWF Receive Message Rate Critical Alarm Clear Threshold	The ingress request rate for the MD-IWF Application, in messages per second, below which a critical alarm is cleared.	Engineering-configured

## Viewing MP Profiles

Use this task to view the available MP Profiles.

For information about the MP Profile values see [MPs](#). and [MPs Profiles Elements](#)

1. On the SOAM, select **Diameter Common > MPs > Profiles**.

The **Diameter Common > MPs > Profiles** page appears.

2. Click the DA-MP tab and the MP type tabs at the top of the table to view the MP Profile settings for the DA-MP types.
3. Click the SS7-MP tab and the MP type tabs at the top of the table to view the MP Profile settings for the SS7-MP types.

## Editing Configurable MP Profile Parameters

Use this task to edit the values for configurable parameters in each MP Profile type that will be assigned to a DA-MP in the DSR.

The configurable parameters are described in [MPs Profiles Elements](#).

1. Select **Diameter Common > MPs > Profiles**.

The **Diameter Common > MPs > Profiles** page appears.

2. For each MP Profile type, edit the values for the configurable parameters.
3. Click:
  - **Apply** to save the edited parameter values.
  - **Cancel** to reset the parameter values to their previous setting.

## MPs Profile Assignments Elements

[Table 4-4](#) describes the fields on the **Diameter Common > MPs > Profile Assignments** page.

**Table 4-4** *MPs Profile Assignments Elements*

Field	Description	Data Input Notes
DA-MP SS7-MP	The Hostname of the MP.  Active and Standby MP pairs are listed on the same line; they have the same type of Profile assigned.  MPs that are stand-alone or that belong to multi-active server groups will have lines of their own.	View-only
MP Profile	MP Profile assigned to the MP.	Format: Pulldown list Range: Valid Profiles for the type of MP
current value	The current MP Profile for each MP, and a description of the MP.	View-only

## Assigning MP Profiles to MPs

Use this task to assign an MP Profile to each DA-MP and SS7-MP in the system.

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**Note:** An MP Profile assignment does not take effect until the MP has been restarted.

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[MPs Profile Assignments Elements](#) describes the MP Profile Assignments elements.

**1. Select *Diameter Common > MPs > Profile Assignments*.**

The *Diameter Common > MPs > Profile Assignments* page appears.

**2. For each DA-MP or SS7-MP, select one of the available MP Profiles. See [Table 4-1](#) for help in selecting the appropriate MP Profile.**

**3. Click:**

- **Assign** to assign the selected MP Profiles to the MPs.
- **Cancel** to reset the MP Profile assignments to their previous setting.

To correct a warning that a Standby MP has a different MP Profile assignment than its corresponding Active MP, reassign the desired MP Profile to the Active/Standby MP pair on this page.

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# Diameter Common Bulk Import and Export

The **Diameter Common > Import** and **Diameter Common > Export** GUI pages provide access to functions for exporting and importing configuration data for Diameter and Diameter Common components, IPFE, MAP-Diameter Interworking, and DSR Applications.

## DSR Bulk Import

The DSR Bulk Import operations use configuration data in ASCII Comma-Separated Values (CSV) files (.csv), to insert new data into, update existing data in, or delete existing data from the Diameter Configuration and Diameter Common, IPFE Configuration, or DSR Applications (FABR, RBAR, PCA, GLA, CPA and Charging SBR, MD-IWF, DM-IWF, and RADIUS) configuration data in the system.

### Import CSV Files

Import CSV files can be created by using a DSR Bulk Export operation, or can be manually created using a text editor. The CSV file formats are described in [Diameter and Diameter Common CSV File Formats and Contents](#).

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**Caution:** The format of each Import CSV file record must be compatible with the configuration data in the current DSR release in the system.

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- Configuration data refers to any data that is configured for one of the **Export Application** types (Diameter, FABR, RBAR, CPA, PCA, GLA, SBR, MDIWF, IPFE).
- For the "Diameter" **Export Application** type, configuration data refers to any data that is configured using the GUI pages that are available from the **Diameter Configuration** menu folder, and the **Diameter Common > Network Identifiers** and **Diameter Common > MPs** menu folders.

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**Note:** **Diameter > AVP Dictionary** configuration data cannot be imported using the Bulk Export function.

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**Note:** Diameter Mediation configuration data cannot be imported with DSR Bulk Import operations; Mediation has its own Import and Export functions.

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- Each file can contain one or more records of the same format (for one configuration component, such as records for several Diameter Configuration Connections); the entire format for each record must be contained in one line of the file.

Files that are created using the DSR Bulk Export operation can be exported either to the Status & Manage File Management Directory (**Status > Manage > Files** page), or to the local Export Server Directory.

For files that are exported to the Export Server Directory,

- If a remote Export Server has been configured (see the **Administration > Remote Servers > Data Export** page), the files in the Export Server Directory are automatically transferred to the configured remote Export Server and are deleted from the Export Server Directory. The transferred files do not appear in the list on the local system **Status & Manage > Files** page or in the list on the **Diameter > Configuration > Import** page.
- If a remote Export Server has not been configured, the files in the Export Server Directory appear in the list on the **Status & Manage > Tasks > Active Tasks** page, and also appear in the list on the local system **Status & Manage > Files** page, but not on the **Diameter > Configuration > Import** page.

For files that are exported to the File Management Directory,

- The files appear in the File Management area list on the local system **Status & Manage > Files** page and in the list on the **Diameter > Configuration > Import** page.
- The files can be downloaded, edited, uploaded, and used for Import operations.
  - Import CSV files must be in the File Management area of the local system before they can be used for Import operations on the local system.
  - The **Download** function on the **Status & Manage > Files** page can be used to download the files to a location off of the local system for editing or transfer to another system.
  - The **Upload** function on the **Status & Manage > Files** page can be used to upload the files to the File Management area of the local system.

For files that are created manually using a text editor,

- Import CSV files that are located off of the local system must be uploaded to the File Management area of the local system before they can be used for Import operations on the local system.
- The **Upload** function on the **Status & Manage > Files** page can be used to upload the files to the File Management area of the local system.

### Import Operations

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**Caution:** Bulk Import can degrade the performance of the DA-MP and should be performed only in the maintenance window.

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The CSV files that are used for Import operations must be in the local File Management area on the OAM where the data can be configured:

- The NOAM for Diameter Topology Hiding data, network-wide PCA data, and MAP-Diameter Interworking data for MD-IWF

- The SOAM for the rest of the Diameter data, site-specific PCA data, MAP-Diameter Interworking data for DM-IWF, IPFE data, MP Profiles and Profile Assignments data, and data for other DSR Applications.

The **Diameter Common > Import** page lists all files in the File Management area (on the **Status & Manage > Files** page) that have the .csv file extension.

The **File Management** button on the **Diameter Common > Import** page opens the **Status & Manage > Files** page.

The following Import operations can be performed:

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**Note:** The **Application Type**, **Keyword**, and **Key** fields in each file record are used to identify the configuration data entry in the system.

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- Insert new configuration data into the system  
Only data records that do not currently exist in the system are inserted. Any records in the file that do already exist in the system are treated and logged as failures.
- Update existing configuration data in the system  
Only data records that currently exist in the system can be updated. Any records in the file that do not already exist in the system, and any records that already exist in the system but are not updated in the file, are treated and logged as failures.
- Delete existing configuration data from the system  
Only data records that currently exist in the system can be deleted. Any records in the file that do not exist in the system, and any records that exist in the system but are not changed in the file, are treated and logged as failures.

For the Import operation on each record in a file to be successful with no errors logged for the operation, each record must be valid for the configuration data format and for the Import operation that is being performed.

- Exported configuration data probably needs to be edited before the exported file is used for an Import operation on the same system.

**Insert from CSV operations** - Records need to be added or edited to be able to insert new configuration data entries (such as connections or Route Lists). It is best to remove from the file any records for existing configuration data entries; they will be flagged as errors for an Insert operation. It might be difficult to distinguish between logged errors for existing data and for the records for the new entries.

**Update from CSV operations** – Records need to be edited to change element values in existing configuration data entries. The Application Type, Keyword, and Key fields are NOT changed in the records, so that the entries can be identified as existing in the system. It is best to remove from the file any records for existing configuration data entries that are NOT being updated; they will be flagged as errors for an Insert operation. It might be difficult to distinguish between logged errors for existing records that are not updated and for the updated records.

**Delete from CSV operations** – Using an exported file without editing it will remove from the system all of the configuration data entries in the exported records. If you do not want to delete all of the configuration data entries that are

in the file records, edit the file and remove the records for the entries that are NOT to be deleted. Records for configuration data entries that do not exist in the system will be flagged as errors for a Delete operation. For example, if you want to delete 20 of 100 configured connections, edit the file and remove the records for the 80 connections that you do not want to delete.

- Files that were created using the DSR Bulk Export operation and are transferred to another system for importing configuration data on that other system may not need to be edited. Exceptions might be system-specific information such as IP addresses and MP Profiles.
- Manually created files can be created so that they contain only the configuration data that is needed for the desired Import operation.

The files can be edited later for use with a different Import operation.

Manually created CSV files are not required to contain a comment header. If a comment header is included in the file, it must be formatted using pound signs (#), as shown in the Export file header that is described in Export Results.

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**Note:** IPFE supports Import and Delete operations only. Due to the design of the IPFE database, import of a single table is not supported. Importing both *IpfeOption* and *IpListTsa* is required. You must import *IpfeOption* first followed by *IpListTsa*. *IpfeOption* defines part of the Target Set data used during validation of the *IpListTsa*.

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### Import Operation Results

Each Import operation creates one or two files that appear in the File Management area:

- A log file that has the same name as the Import file, but with the .log extension

For example, `ImportExportStatus/<import file name>.log`

The Bulk Import operation can be configured with the **Abort On First Error** check box to:

- Log the error for each record that failed during the operation, and continue the Import operation.
- Log the error for just the first record that failed, and end the Import operation.

Information for records that succeed is not included in the log. The log file contains the Action (Import operation) that was performed; and the number of Successful Operations (records), Failed Operations (records), and Total Operations (records).

- A Failures file, if failures occurred during the Import operation

The file is a .csv with the same name as the Import file, but contains `_Failures` in the file name.

For example, if the Import file name is

`October_2_SO_DSR1_Diameter_CmdCodes.csv`, the Failures file is named `October_2_SO_DSR1_Diameter_CmdCodes_Failures.csv`

A Failures file can be downloaded from the local File Management area to a server off the local system, edited to correct each record that failed, uploaded to the local

system File Management area, and used again to repeat the Import operation and successfully process the records.

Any Failures .csv files in the File Management Directory that remain unchanged for more than 14 days and any log files older than 14 days will be automatically removed. The task to remove these files runs once a day.

### The Diameter Common > Import page

On the **Diameter Common > Import** page, you can perform the following actions:

- Sort the list of files by column, by clicking the column heading. The default sort is by File Name in ascending ASCII order.
- Select a file and click **Insert From CSV**, **Update From CSV**, or **Delete From CSV**.  
A popup window appears to confirm the selected Import operation.  
One import or export task at a time is allowed.
- Click **Tasks** to display the status and progress of an Import operation.  
The progress of the import operation can also be viewed on the **Status > Manage > Tasks > Active Tasks** page.
- Click **File Management** to open the **Status & Manage > Files** page.  
Exported .csv files can be viewed, downloaded to an external location, uploaded from an external location, and deleted.  
Log files from Import operations can be viewed and deleted.
- Click the **Abort On First Error** check box.  
When a check mark appears in the box, only the first record that failed is recorded in the log and the Failures .csv file. The Bulk Import operation stops after the error is detected and logged.  
When there is no check mark in the box (the default), all records that failed are recorded in the log and the Failures .csv file.

## Bulk Import elements

[Table 5-1](#) describes the fields on the **Diameter Common > Import** page.

**Table 5-1 Bulk Import Elements**

Element	Description
File Name	The name of the .csv file from the Status & Manage File Management area.
Line Count	Number of lines in the file.
Time Stamp	The creation time and date of the file.

## Using an Import File to insert DSR Configuration Data

Use the following procedure to insert into the system new configuration data entries from the records in a DSR Bulk Import CSV file.

1. Select **Diameter Common > Import**.

The **Diameter > Common > Import** page appears. The page lists all of the .csv files from the **Status & Manage > Files** File Management area.

2. Select the **File Name** for the file to be used to insert the configuration data.
3. Specify whether the Import operation should stop processing on the first error that occurs, or should continue processing if errors occur during the Import operation.
  - To continue processing when errors occur, click the **Abort On First Error** check box so that the box is empty (the default).
  - To stop processing on the first error, click the **Abort On First Error** check box so that a checkmark appears in the check box.
4. Click **Insert From CSV**.

A popup window appears to confirm the file to use for the **Insert From CSV** operation.

5. On the popup window, do one of the following actions:
  - **OK** to perform the Import **Insert From CSV** operation.  
An indication is displayed that the operation is in progress.
  - **Cancel** to cancel the **Insert From CSV** operation and return to the **Diameter Common > Import** page.
6. To view the progress of the Import operation, you can:
  - Select the **Tasks** icon near the top left of the **Diameter > Configuration > Import** page.
  - Select **Status & Manage > Tasks > Active Tasks** to open the **Status & Manage > Tasks > Active Tasks (Filtered)** page.
7. To view the log file from the Import operation, and the Failures.csv file if one was created, click **File Management** to open the **Status & Manage > Files (Filtered)** page.

## Using an Import File to update DSR Configuration Data

Use the following procedure to use the contents of a DSR Bulk Import .csv file to update existing configuration data in the system.

1. Select **Diameter Common > Import**.

The **Diameter Common > Import** page appears. The page lists all of the .csv files from the **Status & Manage > Files** File Management area.

2. Select the **File Name** for the file to be used to update the configuration data.
3. Specify whether the Import operation should stop processing on the first error that occurs, or should continue processing if errors occur during the Import operation.
  - To continue processing when errors occur, click the **Abort On First Error** check box so that the box is empty (the default).
  - To stop processing on the first error, click the **Abort On First Error** check box so that a checkmark appears in the check box.



4. Click **Update From CSV**.

A popup window appears to confirm the file to use for the **Update From CSV** operation.

5. On the popup window, do one of the following actions:

- **OK** to perform the Import **Update From CSV** operation.

An indication is displayed that the operation is in progress.

- **Cancel** to cancel the **Update From CSV** operation and return to the **Diameter Common > Import** page.

6. To view the progress of the Import operation, you can:

- Select the **Tasks** icon near the top left of the **Diameter > Configuration > Import** page.
- Select **Status & Manage > Tasks > Active Tasks** to open the **Status & Manage > Tasks > Active Tasks (Filtered)** page.

7. To view the log file from the Import operation, and the Failures.csv file if one was created, click **File Management** to open the **Status & Manage > Files (Filtered)** page.

## Using an Import File to delete DSR Configuration Data

Use the following procedure to use the contents of a DSR Bulk Import .csv file to delete configuration data.

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**Note:** This operation does NOT delete a .csv file from the list of files on the page.

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1. Select **Diameter Common > Import**.

The **Diameter Common > Import** page appears. The page lists all of the .csv files from the **Status & Manage > Files** File Management area.

2. Select the **File Name** for the file to be used to delete the configuration data.

3. Click **Delete From CSV**.

A popup window appears to confirm the file that you want to use for the **Delete From CSV** operation.

4. On the popup window, click:

- **OK** to perform the Import **Delete From CSV** operation.

An indication is displayed that the operation is in progress.

- Click **Cancel** to cancel the **Delete From CSV** operation and return to the **Diameter Common > Import** page.

5. To view the progress of the Import operation, you can:

- Select the **Tasks** icon near the top of the **Diameter Common > Import** page.

- Select **Status & Manage > Tasks > Active Tasks** to open the **Status & Manage > Tasks > Active Tasks (Filtered)** page.
6. To view the log file from the Import operation, click **File Management** to open the **Status & Manage > Files (Filtered)** page.

## DSR Bulk Export

The DSR Bulk Export operation creates ASCII Comma-Separated Values (CSV) files (.csv) containing Diameter and Diameter Common, IPFE, and DSR Application configuration data. Exported configuration data can be edited and used with the DSR Bulk Import operations to change the configuration data in the local system without the use of GUI pages. The exported files can be transferred to and used to configure another DSR system.

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**Note:** Exported CSV files are not intended for long-term backup of configuration data. (Use the Database Backup function described in the *DSR Administration Guide* and DSR Administration Help for long-term backups of configuration data.)

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### Exported CSV Files

Each exported CSV file contains one or more records for the configuration data that was selected for the Export operation. The record formats and contents are described in [Diameter and Diameter Common CSV File Formats and Contents](#).

The selected configuration data can be exported once immediately, or can be periodically automatically exported on a defined schedule.

- Configuration data refers to any data that is configured for one of the **Export Application** types (Diameter, RADIUS, FABR, RBAR, CPA, SBR, PCA, GLA, MDIWF and IPFE).

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**Note:** GLA requires that Policy DRA Pooling is active. For more information, see *Gateway Location Application (GLA) User Guide* or *PCA User Guide*.

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Exports must be performed on the OAM where the data can be configured - the NOAM for Diameter Topology Hiding, Diameter Common data, network-wide PCA data, and MAP-Interworking data for MD-IWF ; and the SOAM for the rest of the Diameter data, Diameter Common data, site-specific PCA data, IPFE data, MAP-Diameter Interworking data for DM-IWF, and DSR Application data.

- For the "Diameter" **Export Application** type, configuration data refers to any data that is configured using the GUI pages that are available from the Diameter Configuration folders and the Diameter Common folders.

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**Note:** **Diameter > AVP Dictionary** configuration data cannot be imported using the Bulk Export function.

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**Note:** Diameter Mediation configuration data cannot be exported with DSR Bulk Export; Mediation has its own Import and Export functions.

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The following configuration data can be exported in one Export operation:

- All exportable configuration data available on the OAM
- All exportable configuration data from the selected Export Application, on the OAM
- Exportable configuration data from a selected configuration component for the selected Export Application

When ALL is selected, the exported data for each configuration component appears in a separate .csv file.

For data that is exported once immediately, the default Output File Name has the following format; the name can be changed and is not required to keep this format: `NE Name_Timestamp-TimeZone_ApplicationType_DataType.csv`.

For data that is scheduled to be exported periodically, the default Task Name is DSR Configuration Export; the name can be changed.

All exported .csv files contain a comment header with the following information:

- Software revision used to generate the exported file
- Date and Time file was generated
- Name of each selected Data object exported
- Total number of exported records

The following example illustrates how the export file header might appear, but it might not look exactly as shown:

```
#####
#
# Oracle Communications DSR Software Revision: <x.x.x-xxx.xx.x>
# Date/Time Generated: <yyy/mon/dd hh:mm:ss timezone>
# Exported Application: <ApplicationType>
# Exported Object: <ObjectType>
# Number of Records: <nnn>
#####
#
```

## Export Operations

Exported files can be written to the File Management Directory in the Status & Manage File Management area (see the **Status & Manage > Files** page) or to the Export Server Directory.

Files that are created by a DSR Bulk Export operation must be in the local File Management area before they can be used for Bulk Import operations. See [DSR Bulk Import](#).

For files that are exported to the local File Management Directory,

- The files appear in the File Management area list on the local system (see the **Status & Manage > Files** page) and in the list on the **Diameter > Configuration > Import** page.
- These files can be used for Import operations on the local system.

Any .csv files that are exported to the File Management Directory and remain unchanged for more than 14 days will be automatically removed. The task to remove these files runs once a day.

For files that are exported to the local Export Server Directory,

- If a remote Export Server has been configured (see **Administration > Remote Servers > Data Export**), the files in the local Export Server Directory are transferred to the configured remote Export Server location and are deleted from the local Export Server Directory. These transferred files do not appear in the File Management area on the local system, and cannot be used for Import operations on the local system.
- If a remote Export Server has not been configured, the files in the local Export Server Directory appear in the list on the **Status & Manage > Tasks > Active Tasks** page and in the File Management area list on the local system, but not on the **Diameter Common > Import** page. These files cannot be used for Import operations on the local system.

### Export Results

If the export has any failures or is unsuccessful, the results of the export operation are logged to a log file with the same name as the exported file but with a ".log" extension. Successful export operations will not be logged.

### The Diameter Common Export page

On the **Diameter Common > Export** page, you can perform the following actions:

- Manually export configuration data one time immediately in a CSV file to either the Export Server or the File Management area.
- Schedule periodic automatic exports of configuration data in CSV files to either the Export Server or the File Management area. Scheduled exports are listed on the **Status & Manage > Tasks > Scheduled Tasks** page.
- Click **Tasks** to display the status and progress of an Export operation.  
The progress of the export operation can also be viewed on the **Status & Manage > Tasks > Active Tasks** page.
- Click **File Management** on the **Diameter Common > Export** page to open the **Status & Manage > Files** page.

On the **Status & Manage > Files** page, exported .csv files can be viewed, downloaded to an external location, uploaded from an external location, and deleted. Log files from Export operations can be viewed and deleted.

## Bulk Export elements

[Table 5-2](#) describes the fields on the Diameter Configuration Export page.

**Table 5-2 Bulk Export Elements**

Element (* indicates required field)	Description	Data Input Notes
*Export Application	Diameter or activated DSR Application from which configuration data will be exported. <b>Diameter</b> includes Diameter Common configuration data.	Format: Pulldown list Range: ALL, <b>Diameter</b> , <b>IPFE</b> , all activated DSR Applications To clear the field, select <b>-Select-</b> in the list.
Export Data	Data to be exported. <b>Diameter</b> , <b>IPFE</b> , or a specific activated DSR Application must be selected in Export Application before this list is available. This field is required when <b>Diameter</b> or a DSR Application is selected. <b>Diameter</b> includes Diameter Common configuration data.	Format: Pulldown list Range: ALL; configuration folders for <b>Diameter</b> (except Mediation folders), <b>IPFE</b> , or the selected DSR Application. To clear the field, select <b>-Select-</b> in the list.
Output File Name	Name of the .csv export file. The default name appears in this field when Export Frequency is <b>Once</b> and: <ul style="list-style-type: none"> <li>• <b>ALL</b> is selected in Export Application</li> <li>• <b>Diameter</b>, <b>IPFE</b>, or a DSR Application is selected in Export Application, and <b>ALL</b> or a specific configuration folder is selected in Export Data</li> </ul> <b>Diameter</b> includes Diameter Common data. The default file name can be changed, and is not required to follow the default format. This field is required when it is available.	Format: Valid characters are alphanumeric characters, dash (-), and underscore (_) Default file name: file name in the format NeName_ReportDate-TimeZone_ApplicationType_ReportType, with the following values: NeName = Host name of the NO or SO from which the configuration data will be exported. ReportDate = Current date in the format mmddyy. TimeZone = Current Time Zone. Application Type = the selected Export Application to export from ObjectType = the selected Data to export

**Table 5-2 (Cont.) Bulk Export Elements**

Element (* indicates required field)	Description	Data Input Notes
*Task Name	<p>Periodic Export Task name.</p> <p>This field is required when the Export Frequency is not <b>Once</b>.</p>	<p>Format: text box; length must not exceed 24 characters. Valid characters are alphanumeric, minus sign (-), and spaces between words. The first character must be an alpha character. The last character must not be a minus sign.</p> <p>Range: 1-24 characters</p> <p>Default: DSR Configuration Export</p>
Description	Periodic Export Task description.	<p>Format: text box; length must not exceed 255 characters. Valid characters are alphanumeric, minus sign (-), and spaces between words. The first character must be an alpha character. The last character must not be a minus sign.</p> <p>Range: 1-255 characters</p>
Export Directory	<p>Directory in which an export file will be placed.</p> <p>Files that are exported to the Export Server Directory will automatically be copied over to the remote if one is configured. The files will be deleted from the local system after the transfer to the remote Export Server is complete.</p> <p>Files that are exported to the File Management Directory, or are exported to the Export Server Directory when no remote Export Server is configured, can be viewed and imported on the local system.</p>	<p>Format: radio buttons</p> <p>Range: radio button for Export Server Directory, radio button for File Management Directory</p> <p>Default: Export Server Directory</p>
Export Frequency	<p>How often the data will be written to the Export Server Directory or File Management Directory.</p> <p>When <b>Once</b> is selected, the export is performed immediately after <b>Ok</b> is clicked.</p>	<p>Format: radio buttons</p> <p>Range: radio buttons for Once, Hourly, Daily, Weekly</p> <p>Default: Once</p>

**Table 5-2 (Cont.) Bulk Export Elements**

<b>Element (* indicates required field)</b>	<b>Description</b>	<b>Data Input Notes</b>
Minute	The minute of each hour when the data will be exported. This field is available only when <b>Hourly</b> is selected for <b>Export Frequency</b> .	Format: text box with up and down selection arrows Range: 1-59 Default: 0
Time of Day	Time of day when data will be exported. This field is available only when <b>Daily</b> or <b>Weekly</b> is selected for <b>Export Frequency</b> .	Format: <ul style="list-style-type: none"> <li>Text box; the time can be typed in the format HH:MM AM or HH:MM PM.</li> <li>Pulldown list; click in the box to display a 24-hour list of times that are at 15-minute intervals. Select the desired time in the list.</li> </ul> Range: 12:00 AM through 11:45 PM in 15-minute intervals, or specified time Default: 12:00 AM
Day of the Week	Day of the week on which data will be exported. This field is available only when <b>Weekly</b> is selected for <b>Export Frequency</b> .	Format: a radio button for each day of the week Range: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday Default: Sunday

## Manually Exporting a Configuration Data File Once

Use the following procedure to export a configuration data .csv file once immediately to the Status & Manage File Management area or to the Export Server Directory.

---

**Note:** The exported file appears the File Management area list on the **Status & Manage > Files** page if the **File Management Directory** is selected as the **Export Directory**, or if the **Export Server Directory** is selected and no remote Export Server is configured.

---

1. Select **Diameter Common > Export**.

The **Diameter Common > Export** page appears.

2. Verify that the **Once** radio button is selected in the **Export Frequency** list. (Select **Once** if another radio button is currently selected.)

3. In the **Export Application** pulldown list, select **ALL**, **Diameter**, **IPFE**, **RADIUS**, or the activated DSR Application from which the configuration data will be exported.

If you selected **ALL**, go to 5.

4. In the **Export Data** pulldown list, select **ALL** or the configuration folder that contains the data that will be exported from the selected **Export Application** type.
5. Either use (do not change) the default **Output File Name**, or change the entry to the desired name.
6. Select the radio button for the **Export Directory** to which the file will be exported.

Select either the Export Server Directory (the default), or the File Management Directory.

7. Select **Ok** to perform the Export operation.

An indication is displayed that the operation is in progress.

8. To view the progress of the Export operation, you can:
  - Select the **Tasks** icon near the top of the **Diameter Common > Export** page.
  - Select **Status & Manage > Tasks > Active Tasks** to open the **Status & Manage > Tasks > Active Tasks (Filtered)** page.
9. To locate a file in the File Management area or to view the log file from an Export operation, click **File Management** to open the **Status & Manage > Files (Filtered)** page.

## Scheduling Periodic Automatic Exports of Configuration Data

Use the following procedure to schedule periodic automatic Exports of configuration data files to the local Export Server Directory or to the local File Management area.

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**Note:** When the selected **Export Directory** is the **Export Server Directory**, the file is exported to a temporary Export directory on the local system. A remote Export Server must be configured before the exported file can be transferred to the specified directory on the configured remote Export Server. See the online help for the **Administration > Remote Servers > Data Export** page and Help for instructions to configure a remote Export Server.

If no remote Export Server is configured, or if the exported configuration data could be used for Import operations on the local system, select **File Management Directory** as the **Export Directory**.

---

---

1. Select **Diameter Common > Export**.

The **Diameter Common > Export** page appears.

2. In the **Export Application** pulldown list, select **ALL**, **Diameter**, **IPFE**, **RADIUS**, or the activated DSR Application from which the configuration data will be exported.

If you selected **ALL**, go to 4.



3. In the **Export Data** pulldown list, select **ALL** or the configuration folder that contains the data that will be exported from the selected **Export Application** type.
4. Select the radio button for the **Export Frequency** of the scheduled Exports. (Do not select **Once**.)
5. Either use the default **Task Name** (DSR Configuration Export), or change the name if desired for the Export operation.

The **Task Name** is required when the **Export Frequency** is not **Once**.

6. If a description of the Export task is desired, enter the **Description** in the text box (up to 255 characters).
7. Select the radio button for the **Export Directory** to which the file will be exported.

Select either the **Export Server Directory** (the default), or the **File Management Directory**.

Select the **File Management Directory** if no remote Export Server has been configured.

8. Enter or select the time or day information to specify when the scheduled Export operations will occur.
  - If **Export Frequency** is **Hourly**, enter (type or click the arrows) the **Minute** of each hour (0-59) when the file will be exported.
  - If **Export Frequency** is **Daily**, enter (type, or click in the box and select from the pulldown list) the **Time of Day** when the file will be exported. Select from 15-minute intervals or enter a specific time.
  - If **Export Frequency** is **Weekly**,
    - Select the radio button for the **Day of Week** on which the file will be exported.
    - Enter (type, or click in the box and select from the pulldown list) the **Time of Day** when the file will be exported. Select from 15-minute intervals or enter a specific time.
9. Click **Ok** to save the schedule.

To view, edit, or delete the saved schedule task, select **Status & Manage > Tasks > Active Tasks** or click the link in the indication to open the **Status & Manage > Tasks > Scheduled Tasks** page.

The schedule can be changed or deleted on the **Status & Managed > Tasks > Scheduled Tasks** page.

10. To view the progress of an Export operation, you can:
  - Select the **Tasks** icon near the top of the **Diameter Common > Export** page.
  - Select **Status & Manage > Tasks > Active Tasks** to open the **Status & Manage > Tasks > Active Tasks (Filtered)** page.
11. To locate a file in the File Management area or to view the log file from an Export operation, click **File Management** to open the **Status & Manage > Files (Filtered)** page.

## Bulk Import and Export CSV File Formats and Contents

### CSV File Formats and Contents

DSR Bulk Import and Export files support an ASCII Comma-Separated Values (CSV) file format.

- The configuration data described in each table in this help section is contained in a single line in the CSV file.
- The first field or column of each line defines the Application Type; see [Table 5-3](#).
- The second column describes the configuration data type, such as LocalNode, PeerNode, or RouteList.
- Subsequent fields or columns contain the associated configuration data.
- Fields containing text that includes spaces or commas are enclosed in double quotes.
- Element values that are selected using radio buttons on the GUI page are shown as separate fields or columns in the CSV Format tables. A selected value appears in its field or column; an unselected value is shown as just two commas in the file (...,...) to maintain the positioning in the file.
- The CSV file can include optional comment lines for documenting within the file. Comment lines must begin with a pound sign (#) in the first column, and can be included on any line of the file.
- All text fields within the CSV file containing comma (,), double quotes ("), newline (\n), tab (\t), carriage return (\r) or their combinations are double quoted.

**Table 5-3 Application Types Supported by DSR Bulk Import and Export**

Application Type	Description
Diameter	Common Diameter PlugIn (DPI); includes Diameter Common data
RBAR	<b>Range Based Address Resolution (RBAR)</b>
FABR	<b>Full Address Based Resolution (FABR)</b>
CPA	<b>Charging Proxy Application (CPA)</b>
SBR	<b>Session Binding Repository (Charging SBR)</b>
PCA	<b>Policy and Charging Application (PCA)</b>
IPFE	<b>IP Front End (IPFE)</b>
GLA	<b>Gateway Location Application (GLA)</b>
MAPIWF	MAP-Diameter Interworking Function
RADIUS	Remote Authentication Dial In User Service

## Diameter and Diameter Common CSV File Formats and Contents

### Diameter CSV File Formats

The following tables describe the CSV file content and attribute field or column positions for all Diameter configuration data supported by the Diameter Application Type.

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**Note:** **Diameter > AVP Dictionary** configuration data cannot be imported and exported with the Bulk Import/Export functions in Diameter Common.

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"Local Node Configuration Elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-4](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-4 Local Node CSV Format**

Column	Data Description
0	Application Type (Diameter)
1	LocalNode (Keyword)
2	Name (Key)
3	Fqdn
4	Realm
5	Tcp Port
6	Sctp Port
7	Dtls Port
8	TlsPort
9	RADIUS UDP Server Ports [0] (repeated x 10)
19	Enable RADIUS UDP Client Ports (Yes/No)
20	RADIUS Client UDP Port Range Start
21	RADIUS Client UDP Port Range End
22	Verification Mode ('SslVerifyNone', 'SslVerifyPeer', 'SslVerifyPeerFailIfNoPeerCert' and 'SslVerifyPeerVerifyClientOnce')
23	Certificate Type
24	Certificate Name
25	Connection Configuration Set Name
26	Cex Configuration Set Name
27	IP Address [0] (repeated x 128)

**Table 5-4 (Cont.) Local Node CSV Format**

Column	Data Description
153	IP Address [127]
154	IP Type [0] (LocalIp, PeerIp, IpfeTsa) (repeated x 128)
282	IP Type [127] (LocalIp, PeerIp, IpfeTsa)

"Peer Node Configuration Elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-5](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-5 Peer Node CSV Format**

Column	Data Description
0	Application Type
1	PeerNode (Keyword)
2	Name (Key)
3	AAA Protocol (RADIUS, Diameter)
4	Fqdn
5	Realm
6	Tcp Port
7	Sctp Port
8	Dtls Port
9	Tls Port
10	RADIUS Server UDP Ports[0] (repeated x 10)
19	RADIUS Server UDP Ports[9]
20	Replace Destination Host (No, Yes)
21	Replace Destination Realm (No, Yes)
22	Minimum Connection Capacity
23	Alternate Route on Connection failure (SamePeer, DifferentPeer, SameConnection)
24	Alternate Route on Answer Timeout (SamePeer, DifferentPeer, SameConnection)
25	Alternate Route on Answer Result Code (SamePeer, DifferentPeer, SameConnection)
26	Alternate Implicit Route
27	Maximum Alternate Routing Attempts

**Table 5-5 (Cont.) Peer Node CSV Format**

Column	Data Description
28	IP Address [0] (repeated x 128)
155	IP Address [127]
156	Dynamic (No, Yes)
157	Routing Option Set
158	Pending Answer Timer
159	Peer Route Table
160	Message Priority Setting
161	Message Priority Configuration Set
162	Application Route Table
163	Topology Hiding Status (Enabled, Disabled)
164	Peer Node Group Name
165	Transaction Configuration Set
166	AVP Removal List

"Peer Node Group Configuration Elements" in the *Diameter User Guide* and Help describes the configuration data elements list in [Table 5-6](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-6 Peer Node Group CSV Format**

Column	Data Description
0	Application Type
1	PeerNodeGroup (Keyword)
2	Peer Node Group Name

"Route Groups Configuration Elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-7](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-7 Route Group CSV Format**

Column	Data Description
0	Application Type
1	RouteGrp (Keyword)
2	Name (Key)
3	Dynamic (No, Yes)

**Table 5-7 (Cont.) Route Group CSV Format**

Column	Data Description
4	Type (Peer, Connection)
5	Peer Node 1 Name
6	Peer Node 1 Weight (repeated x 160)
323	Peer Node 160 Name
324	Peer Node 160 Weight
325	Connection 1 Name
326	Connection 1 Weight (repeated x 512)
1347	Connection 512 Name
1348	Connection 512 Weight

"Route List Configuration Elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-8](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-8 Route List CSV Format**

Column	Data Description
0	Application Type
1	RouteList (Keyword)
2	Name (Key)
3	Dynamic (No, Yes)
4	Minimum Route Group Availability Weight
5	Route Across Route Groups (Enabled/Disabled)
6	Route Group 1 Name
7	Route Group 1 Priority (repeated x 3)
10	Route Group 3 Name
11	Route Group 3 Priority
12	Site Name[0]
13	Traffic Throttle Group[0]
14	Maximum Loss Percent Threshold[0]
15	Route Group Name[0] (repeated x 10)

**Table 5-8 (Cont.) Route List CSV Format**

Column	Data Description
48	Site Name[10]
49	Traffic Throttle Group[10]
50	Maximum Loss Percent Threshold[10]
51	Route Group Name[10] (12-51 repeated x 3)
92	Site Name[0]
93	Traffic Throttle Group[0]
94	Maximum Loss Percent Threshold[0]
95	Route Group Name[0] (repeated x 10)
128	Site Name[0]
129	Traffic Throttle Group[0]
130	Maximum Loss Percent Threshold[0]
131	Route Group Name[0]

"Peer Routing Rules Configuration Elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-9](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-9 Peer Routing Rule CSV Format**

Column	Data Description
0	Application Type (Diameter)
1	PeerRouteRule (Keyword)
2	Name (Key)
3	Priority
4	param (DestHost, DestRealm, OrigHost, OrigRealm, CmdCode, AppID)
5	condOperator (Present, Absent, Equal, Not Equal, StartsWith, EndsWith, DontCare, Always True)
6	Value
7	param (DestHost, DestRealm, OrigHost, OrigRealm, CmdCode, AppID)
8	condOperator (Present, Absent, Equal, Not Equal, StartsWith, EndsWith, DontCare, Always True)
9	Value
10	param (DestHost, DestRealm, OrigHost, OrigRealm, CmdCode, AppID)

**Table 5-9 (Cont.) Peer Routing Rule CSV Format**

Column	Data Description
11	condOperator (Present, Absent, Equal, Not Equal, StartsWith, EndsWith, DontCare, Always True)
12	Value
13	param (DestHost, DestRealm, OrigHost, OrigRealm, CmdCode, AppID)
14	condOperator (Present, Absent, Equal, Not Equal, StartsWith, EndsWith, DontCare, Always True)
15	Value
16	param (DestHost, DestRealm, OrigHost, OrigRealm, CmdCode, AppID)
17	condOperator (Present, Absent, Equal, Not Equal, StartsWith, EndsWith, DontCare, Always True)
18	value
19	param (DestHost, DestRealm, OrigHost, OrigRealm, CmdCode, AppID)
20	condOperator (Present, Absent, Equal, Not Equal, StartsWith, EndsWith, DontCare, Always True)
21	Value
22	Action (RouteToPeer, Forward To Peer Route Table, SendAnswer, Abandon With No Answer)
23	Target Peer Route Table Name
24	Route List Name
25	Diameter Answer Code
26	Answer Error Message
27	Message Priority (NC, PR0, PR1, PR2)
28	Message Copy Configuration Set
29	Vendor Id
30	Peer Route Table

"Connections Configuration Elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-10](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-10 Connection CSV Format**

Column	Data Description
0	Application Type
1	Conn (Keyword)
2	Connection Name (Key)



**Table 5-10 (Cont.) Connection CSV Format**

<b>Column</b>	<b>Data Description</b>
3	AAA Protocol (RADIUS, Diameter)
4	Type (FullySpecified, LocalMpInitiator, LocalMpResponder, RadiusServer, RadiusClient)
5	Local Node Name
6	Dynamic (No, Yes)
7	Peer Node Name
8	IPFE Initiator DAMP IP Address
9	Protocol Type (Tcp, Sctp, Dtls, Tls, Udp)
10	Connection Configuration Set Name
11	Cex Configuration Set Name
12	Cap Configuration Set Name
13	Primary Local IP Address
14	Secondary Local IP Address
15	Primary Peer IP Address
16	Secondary Peer IP Address
17	Transport Fqdn
18	Peer Identification (Ip, TransportFqdn, PeerFqdn)
19	Local Initiate Port
20	UDP Port
21	Transport Congestion Abatement Timeout
22	Remote Busy Usage (Enabled, Disabled)
23	Remote Busy Timeout
24	Message Priority Setting (None, RequestMessage, UserConfigured)
25	Message Priority Configuration Set
26	Egress Message Throttling Configuration Set
27	Shared Secret Configuration Set
28	Message Authenticator Configuration Set
29	Message Conversion Configuration Set
30	Ingress Status-Server Configuration Set
31	Suppress Connection Unavailable Alarm (Yes, No)
32	Suppress Connections Attempts (Yes, No)
33	Test Mode (Yes, No)

"Connection Configuration Set Elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-11](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-11 Connection Configuration Set CSV Format**

Column	Data Description
0	Application Type
1	ConnCfgSet (Keyword)
2	ConnCfgSet Name (Key)
3	retransInitialTimeout
4	retransMinTimeout
5	retransMaxTimeout
6	retransMaxTimeoutInit
7	retransPathFailure
8	retransAssocFailure
9	retransInitFailure
10	sackDelay
11	heartbeatInterval
12	sctpSockSendSize
13	sctpSockRecvSize
14	burstMax
15	sctpNumInboundStreams
16	sctpNumOutboundStreams
17	sctpDatagramBundlingEnabled (Yes, No)
18	sctpMaxSegmentSize
19	sctpFragmentationEnabled (Yes, No)
20	sctpDataChunkDeliveryOrdered (Yes, No)
21	tcTimer
22	twinitTimer
23	tcexTimer
24	tdpxTimer
25	provingMode (Always, Suspect, Never)
26	provingTimeout
27	provingDwrsToSend
28	pendTransPerConn

**Table 5-11 (Cont.) Connection Configuration Set CSV Format**

Column	Data Description
29	cexHostIpValidationEnabled(Yes, No)
30	nagleEnabled (Yes, No)
31	tcpSockSendSize
32	tcpSockRecvSize
33	tcpMaxSegmentSize
34	tcpKeepAliveEnabled (Yes, No)
35	tcpKeepAliveIdleTime
36	tcpKeepAliveProbeInterval
37	tcpKeepAliveMaxCount
38	radiusPendTransPerConn
39	preventDupEgressRetrans
40	preventDupIngressRetrans
41	cachedResponseDur

"Reroute On Answer Configuration Elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-12](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-12 Reroute on Answer CSV Format**

Column	Data Description
0	Application Type (Diameter)
1	RerouteOnAns (Keyword)
2	Answer Result-Code AVP Value
3	Application ID

"System Options Elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-13](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-13 System Options CSV Format**

Column	Data Description
0	Application Type
1	Options (Keyword)
2	Fixed Connection Failure Major Aggregation Alarm Threshold
3	Fixed Connection Failure Critical Aggregation Alarm Threshold

**Table 5-13 (Cont.) System Options CSV Format**

<b>Column</b>	<b>Data Description</b>
4	IPFE Connection Failure Major Aggregation Alarm Threshold
5	IPFE Connection Failure Critical Aggregation Alarm Threshold
6	Peer Node Failure Critical Aggregation Alarm Threshold
7	Route List Failure Critical Aggregation Alarm Threshold
8	Excessive Reroute Onset Threshold
9	Excessive Reroute Abatement Threshold
10	Message Copy Feature Enabled (Enabled, Disabled)
11	Message Copy Disable Congestion Level (CL1, CL2)
12	Redirect Answer Processing Enabled (Yes, No)
13	Redirect Application Route Table
14	Redirect Peer Route Table
15	Client Socket Send Buffer Size
16	Client Socket Receive Buffer Size
17	Server Socket Send Buffer Size
18	Server Socket Receive Buffer Size
19	Encode FQDN In Lower Case (Yes, No)
20	Realm Expiration Minor Alarm Set Time
21	Realm Expiration Major Alarm Set Time
22	NGN-PS Admin State (Enabled, Disabled)
23	Minimum Answer Priority
24	Minimum Inviolable Priority
25	NGN-PS Maximum Message Rate Percent
26	NGN-PS Gx Admin State (Enabled, Disabled)
27	NGN-PS Gx ARP1
28	NGN-PS Gx ARP2
29	NGN-PS Gx ARP3
30	NGN-PS Gx ARP4
31	NGN-PS Gx ARP5
32	NGN-PS Gx Advance Priority Type (None, Spr, Hss)
33	NGN-PS Rx Admin State (Enabled, Disabled)
34	NGN-PS Rx MPS AVP Value
35	NGN-PS Cx/Dx Admin State (Enabled, Disabled)

**Table 5-13 (Cont.) System Options CSV Format**

Column	Data Description
36	NGN-PS Dh/Sh Admin State (Enabled, Disabled)

"DNS Options Elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-14](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-14 DNS Options CSV Format**

Column	Data Description
0	Application Type (Diameter)
1	DnsOption (Keyword)
2	Primary IP
3	Secondary IP
4	Query Duration Timer

"CEX Configuration Sets Elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-15](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-15 CEX Configuration Set CSV Format**

Column	Data Description
0	Application Type (Diameter)
1	CexCfgSet (Keyword)
2	Name (Key)
3	Dynamic (Yes, No)
4	Selected Application ID [1]
5	Selected Type [1]
6	Selected Vendor ID [1] (repeated x 10)
31	Selected Application ID [10]
32	Selected Type [10]
33	Selected Vendor ID [10]
34	Must Application ID [1]
35	Must Type [1]
36	Must Vendor ID [1] (repeated x 10)

**Table 5-15 (Cont.) CEX Configuration Set CSV Format**

Column	Data Description
61	Must Application ID [10]
62	Must Type [10]
63	Must Vendor ID [10]
64	Vendor ID [1] (repeated x 10)
73	Vendor ID [10]
74	DSR Feature Status AVP (Yes, No)

"Capacity Configuration Sets Elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-16](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-16 Capacity Configuration Set CSV Format**

Column	Data Description
0	Application Type (Diameter)
1	CapCfgSet (Keyword)
2	Capacity Configuration Set Name (Key)
3	Reserved Ingress MPS
4	Maximum Ingress MPS
5	Ingress MPS Minor Alarm Threshold
6	Ingress MPS Major Alarm Threshold
7	Ingress MPS Abatement Time
8	Convergence Time

"Application Routing Rules Configuration Elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-17](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-17 AppRouteRule CSV Format**

Column	Data Description
0	Application Type
1	AppRouteRule (Keyword)
2	Name (Key)
3	Priority

**Table 5-17 (Cont.) AppRouteRule CSV Format**

Column	Data Description
4	param (DestHost, DestRealm, OrigHost, OrigRealm, CmdCode AppID)
5	condOperator (Present, Absent, Equal, Not Equal, StartsWith, EndsWith, DontCare, Always True)
6	Value
7	param (DestHost, DestRealm, OrigHost, OrigRealm, CmdCode AppID)
8	condOperator (Present, Absent, Equal, Not Equal, StartsWith, EndsWith, DontCare, Always True)
9	Value
10	param (DestHost, DestRealm, OrigHost, OrigRealm, CmdCode AppID)
11	condOperator (Present, Absent, Equal, Not Equal, StartsWith, EndsWith, DontCare, Always True)
12	Value
13	param (DestHost, DestRealm, OrigHost, OrigRealm, CmdCode AppID)
14	condOperator (Present, Absent, Equal, Not Equal, StartsWith, EndsWith, DontCare, Always True)
15	Value
16	param (DestHost, DestRealm, OrigHost, OrigRealm, CmdCode AppID)
17	condOperator (Present, Absent, Equal, Not Equal, StartsWith, EndsWith, DontCare, Always True)
18	Value
19	param (DestHost, DestRealm, OrigHost, OrigRealm, CmdCode AppID)
20	condOperator (Present, Absent, Equal, Not Equal, StartsWith, EndsWith, DontCare, Always True)
21	Value
22	Application Name
23	Action (Route to Application, Forward To Egress Routing, Send Answer, Abandon With No Answer, Forward To Application Route Table, Forward To Peer Route Table)
24	Target Route Table Name (Application Route Table Name/Peer Route Table Name)
25	Answer Result-Code Value
26	Vendor Id
27	Answer Error Message
28	Gx-Prime (No, Yes)
29	Application Route Table

"Application Ids Elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-18](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-18 Application ID CSV Format**

Column	Data Description
0	Application Type (Diameter)
1	Appids (Keyword)
2	Application ID
3	Name

"CEX Parameters elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-19](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-19 CEX Parameters CSV Format**

Column	Data Description
0	Application Type (Diameter)
1	CexParameters (Keyword)
2	Application ID
3	Application ID Type (Authentication, Accounting)
4	Vendor ID

"Pending Answer Timers Elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-20](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-20 Pending Answer Timer CSV Format**

Column	Data Description
0	Application Type (Diameter)
1	PendingAnswerTimer (Keyword)
2	Name (Key)
3	Timer

"Routing Option Set Elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-21](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-21 Routing Option Set CSV Format**

Column	Data Description
0	Application Type



**Table 5-21 (Cont.) Routing Option Set CSV Format**

<b>Column</b>	<b>Data Description</b>
1	RoutingOptionSet (Keyword)
2	Name (Key)
3	Maximum Per Message Forwarding Allowed
4	Transaction Lifetime
5	Pending Answer Timer
6	Resource Exhausted Action
7	Resource Exhaustion Result Code
8	Resource Exhausted Error Message
9	Resource Exhausted Vendor Id
10	No Peer Response Action
11	No Peer Response Result Code
12	No Peer Response Error Message
13	No Peer Response Vendor Id
14	Connection Failure Action
15	Connection Failure Result Code
16	Connection Failure Error Message
17	Connection Failure Vendor Id
18	Connection Congestion Action
19	Connection Congestion Result Code
20	Connection Congestion Error Message
21	Connection Congestion Vendor Id
22	Peer Node Reported Congestion Action
23	Peer Node Reported Congestion Result Code
24	Peer Node Reported Congestion Error Message
25	Peer Node Reported Congestion Vendor Id
26	Destination Realm Not Served Action
27	Destination Realm Not Served Result Code
28	Destination Realm Not Served Error Message
29	Destination Realm Not Served Vendor Id
30	Nested ART/PRT Error Action
31	Nested ART/PRT Error Result Code
32	Nested ART/PRT Error Message

**Table 5-21 (Cont.) Routing Option Set CSV Format**

Column	Data Description
33	Nested ART/PRT Error Vendor Id

"Peer Route Tables Elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-22](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-22 Peer Route Table CSV Format**

Column	Data Description
0	Application Type (Diameter)
1	PeerRouteTable (Keyword)
2	Name (Key)

"Message Priority Configuration Set Elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-23](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-23 Message Priority Configuration Set CSV Format**

Column	Data Description
0	Application Type (Diameter)
1	MsgPriorityCfgSet (Keyword)
2	Name
3	applId[1]
4	cmdCode[1]
5	msgPriority[1]
	(repeated x 50)
151	applId[50]
152	cmdCode[50]
153	msgPriority[50]

"Message Throttling Configuration Set Elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-24](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-24 Message Throttling Configuration Set CSV Format**

Column	Data Description
0	Application Type (Diameter)

**Table 5-24 (Cont.) Message Throttling Configuration Set CSV Format**

Column	Data Description
1	MsgThrottlingCfgSet (Keyword)
2	Name (Key)
3	maxEMR
4	smoothFactor
5	abateTime
6	TT1
7	AT1
8	TT2
9	AT2
10	TT3
11	AT3

"Message Copy Configuration Set Elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-25](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-25 MessagecopyCfgSet CSV Format**

Column	Data Description
0	Application Type
1	MessagecopyCfgSet (Keyword)
2	Message Copy Configuration Set Name
3	Message Copy Request Type
4	Original Answer Result Code for Message Copy
5	Route List of the DAS node
6	Ingress Answer Included (No, Yes)
7	DAS Answer Result Code
8	Max DAS Retransmission Attempts

"Application Route Tables elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-26](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-26 Application Route Table CSV Format**

Column	Data Description
0	Application Type (Diameter)

**Table 5-26 (Cont.) Application Route Table CSV Format**

Column	Data Description
1	ApplicationRouteTable (Keyword)
2	Name (Key)

"Command Codes elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-27](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-27 Command Code CSV Format**

Column	Data Description
0	Application Type (Diameter)
1	CmdCodes (Keyword)
2	cmdCode
3	name

Troubleshooting with IDIH "Traces elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-28](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-28 Trace CSV Format**

Column	Data Description
0	Application Type
1	Trace (Keyword)
2	Trace Name (Key)
3	Trace Location
4	Scope Type
5	Scope Value
6	Number of Matches
7	Time of Duration
8	Content Type
9	Condition 1 Name
10	Condition 1 AVP
11	Condition 1 Operator
12	Condition 1 Value
	(repeated x 13)
57	Condition 13 Name

**Table 5-28 (Cont.) Trace CSV Format**

Column	Data Description
58	Condition 13 AVP
59	Condition 13 Operator
60	Condition 13 Value
61	Notes

Troubleshooting with IDIH "Options elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-29](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-29 Trace Options CSV Format**

Column	Data Description
0	Application Type (Diameter)
1	TraceOptions (Keyword)
2	Max Bandwidth
3	IDIH IP Address
4	IDIH Visualization IP address

Troubleshooting with IDIH "Global Options elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-30](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-30 Trace Global Options CSV Format**

Column	Data Description
0	Application Type (Diameter)
1	TraceGlobalOptions (Keyword)
2	Max Active Network Traces

"Trusted Network Lists elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-31](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-31 Trusted Network List CSV Format**

Column	Data Description
0	Application Type (Diameter)
1	TrustedNetworkList (Keyword)
2	Name (Key)

**Table 5-31 (Cont.) Trusted Network List CSV Format**

Column	Data Description
3	trustedRealm [1]  (repeated x 100)

"Path Topology Hiding Configuration Sets Elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-32](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-32 Path Topology Hiding Configuration Set CSV Format**

Column	Data Description
0	Application Type (Diameter)
1	PathTopologyHidingCfgSet (Keyword)
2	Name (Key)
3	hostnameSuffix  (repeated x 10)
13	pseudoRouteRecord
14	pseudoProxy
15	encryptionKey

"S6a/S6d Topology Hiding Configuration Sets Elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-33](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-33 S6a/S6d HSS Topology Hiding Configuration Set CSV Format**

Column	Data Description
0	Application Type
1	HssTopologyHidingCfgSet (Keyword)
2	Name (Key)
3	useSingleHssPseudoHostname
4	singleHssPseudoHostname
5	count
6	randomizeCount
7	autoGenerate
8	prefix
9	suffix

**Table 5-33 (Cont.) S6a/S6d HSS Topology Hiding Configuration Set CSV Format**

Column	Data Description
10	length
11	action (SendAnswer, Forward, Abandon)
12	resultCode
13	vendorId
14	errMsg
15	actualHostname
16	pseudoHostname1
17	pseudoHostname2
18	pseudoHostname3
	(combination of actual and pseudo hostnames repeated x 500)

"MME/SGSN Topology Hiding Configuration Sets Elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-34](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-34 MME/SGSN Topology Hiding Configuration Set CSV Format**

Column	Data Description
0	Application Type (Diameter)
1	MmeTopologyHidingCfgSet (Keyword)
2	Name (Key)
3	count
4	randomizeCount
5	autoGenerate
6	prefix
7	suffix
8	length
9	Action (SendAnswer, Forward, Abandon)
10	resultCode
11	vendorId
12	errMsg
13	actualHostname[1]
14	pseudoHostname1
15	pseudoHostname2

**Table 5-34 (Cont.) MME/SGSN Topology Hiding Configuration Set CSV Format**

Column	Data Description
16	pseudoHostname3 (combination of actual and pseudo hostnames repeated x 300)

"S9 PCRF Topology Hiding Configuration Sets Elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-35](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-35 S9 PCRF Topology Hiding Configuration Set CSV Format**

Column	Data Description
0	Application Type (Diameter)
1	S9PcrfTopologyHidingCfgSet (Keyword)
2	Name (Key)
3	count
4	randomizeCount
5	autoGenerate
6	prefix
fe7	suffix
8	length
9	action (SendAnswer, Forward, Abandon)
10	resultCode
11	vendorId
12	errMsg
13	actualHostname
14	pseudoHostname1
15	pseudoHostname2
16	pseudoHostname3 (combination of actual and pseudo hostnames repeated x 600)

"S9 AF/pCSCF Topology Hiding Configuration Sets Elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-36](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.



**Table 5-36 S9 AF/pCSCF Topology Hiding Configuration Set CSV Format**

Column	Data Description
0	Application Type (Diameter)
1	S9AfPcscfTopologyHidingCfgSet (Keyword)
2	Name (Key)
3	count
4	randomizeCount
5	autoGenerate
6	prefix
7	suffix
8	length
9	Action (SendAnswer, Forward, Abandon)
10	resultCode
11	vendorId
12	errMsg
13	actualHostname[1]
14	pseudoHostname1
15	pseudoHostname2
16	pseudoHostname3
	(combination of actual and pseudo hostnames repeated x 500)

"Protected Network Configuration Elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-37](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-37 Protected Network CSV Format**

Column	Data Description
0	Application Type (Diameter)
1	ProtectedNetwork (Keyword)
2	protectedRealm (Key)
3	trustedNetList
4	pathTopologyHidingCfgSet
5	mmeTopologyHidingCfgSet
6	hssTopologyHidingCfgSet
7	S9PcrfTopologyHidingCfgSet

**Table 5-37 (Cont.) Protected Network CSV Format**

Column	Data Description
8	S9AfPcscfTopologyHidingCfgSet

**Diameter Common CSV File Formats**

The following tables describe the CSV file content and attribute field or column positions for all Diameter Common configuration data supported by the **Diameter** Application Type.

"MCCMNC Elements" describes the configuration data elements listed in [Table 5-38](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-38 MCCMNC CSV Format**

Column	Data Description
0	Application Type (Diameter)
1	MccMnc (Keyword)
2	Mobile Country Code (MCC)
3	Mobile Network Code (MNC)
4	Country Name
5	Network Name

"MCCMNC Mapping Elements" describes the configuration data elements listed in [Table 5-39](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-39 MCCMNC Mapping CSV Format**

Column	Data Description
0	Application Type (Diameter)
1	MccMncMapping (Keyword)
2	Mobile Country Code (MCC)
3	Mobile Network Code (MNC)
4	Prefix
5	Country Name
6	Network Name
7	CCNDC
8	Realm
9	Description

"MCC Ranges Elements" describes the configuration data elements listed in [Table 5-40](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-40 Reserved MCC Ranges CSV Format**

Column	Data Description
0	Application Type (Diameter)
1	ReservedMccRanges (Keyword)
2	startMccRange
3	endMccRange

"Transaction Configuration Set Elements" describes the configuration data elements list in [Table 5-41](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-41 Transaction Configuration Group CSV Format**

Column	Data Description
0	Application Type
1	TransactionConfigurationSet(Keyword)
2	Name(Key)

"Transaction Configuration Rule Elements" describes the configuration data elements listed in [Table 5-42](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-42 Transaction Configuration Rule CSV Format**

Column	Data Description
0	Application Type
1	TransactionConfigurationRule(Keyword)
2	Name(Key)
3	appId
4	cmdCode
5	routingOptionSet
6	pendingAnswerTimer
7	applicationRouteTable
8	peerRouteTable
9	transactionCfgSet

"MP Profiles Elements" describes the editable configuration data elements listed in [Table 5-43](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-43 MP Profile Parameters CSV Record Format**

Column	Data Description
0	Application Type (Diameter)
1	MpProfileRwParm (Keyword)
2	profileName (key)
3	key (key)
4	value

"MP Profile Assignments Elements" describes the configuration data elements listed in [Table 5-44](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-44 MP Profile Assignments CSV Record Format**

Column	Data Description
0	Application Type (Diameter)
1	MpProfileAssignment (Keyword)
2	nodeName (key)
3	profileName

"Rate Limiting Configuration Elements" describes the configuration data elements listed in [Table 5-45](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-45 Rate Limiting Configuration CSV Record Format**

Column	Data Description
0	Application Type
1	RateCfgSet (Keyword)
2	Name (Key)
3	Maximum Egress Rate
4	RateConvergenceTime
5	RateAbatementTime
6	RateOnsetThres1
7	RateAbateThres1
8	RateOnsetThres2
9	RateAbateThres2
10	RateOnsetThres3
11	RateAbateThres3

"Pending Transaction Limiting Configuration Elements" describes the configuration data elements listed in [Table 5-46](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-46 Pending Transaction Limiting Configuration CSV Record Format**

Column	Data Description
0	Application Type
1	PendTransCfgSet (Keyword)
2	Name (Key)
3	Maximum Number of Pending Transactions
4	PendTransOnsetThres1
5	PendTransAbateThres1
6	PendTransOnsetThres2
7	PendTransAbateThres2
8	PendTransOnsetThres3
9	PendTransAbateThres3
10	PendTransAbateTime3

"Egress Throttle List Elements" describes the configuration data elements listed in [Table 5-47](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-47 Egress Throttle List CSV Record Format**

Column	Data Description
0	Application Type
1	Etl (Keyword)
2	Name (Key)
3	siteName_1
4	etgName_1
5	connFailPctReduction_1
6	siteName_2
7	etgName_2
8	connFailPctReduction_2
9	siteName_3
10	etgName_3
11	connFailPctReduction_3
12	RateCfgSet
13	PendTransCfgSet

"Egress Throttle Group Elements" in the *Diameter User Guide* and Help describes the configuration data elements listed in [Table 5-48](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-48 Egress Throttle Group CSV Format**

Column	Data Description
0	Application Type
1	Etg (Keyword)
2	Name (Key)
3	EtgControlScope
4	RateCfgSet
5	PendTransCfgSet
6	Peers (repeated x 128)
133	Conns (repeated x 128)

"Dashboard Network Elements" describes the configuration data elements listed in [Table 5-49](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-49 Dashboard Network CSV Format**

Column	Data Description
0	Application Type
1	DshNetwork (Keyword)
2	Network Name (always "Network" in DSR 7.1)
3	SOAM Server Group #1 Name
4	SOAM Server Group #1 Display Order
5-66	(31 additional SOAM SG pairs of rows)
67	Summary Threshold Configuration Set Name

"Dashboard Network Element Elements" describes the configuration data elements listed in [Table 5-50](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-50 Dashboard Network Element CSV Format**

Column	Data Description
0	Application Type
1	DshNe (Keyword)

**Table 5-50 (Cont.) Dashboard Network Element CSV Format**

Column	Data Description
2	Network Element Name
3	Server Threshold Configuration Set Name (empty or "ServerThresholds" in DSR 7.1)
4	Summary Threshold Configuration Set Name
5	Display Administratively Disabled Servers ("Yes"/"No")

"Dashboard Metric Group Elements" describes the configuration data elements listed in [Table 5-51](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-51 Dashboard Metric Group CSV Format**

Column	Data Description
0	Application Type
1	DshMetricGroup (Keyword)
2	Metric Group Name
3	Metric #1 Name
4	Metric #1 Display on Dashboard ("Yes"/"No")
5-30	(13 additional SOAM SG pairs of rows)

"Dashboard Metric Threshold Configuration Set Elements" describes the configuration data elements listed in [Table 5-52](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-52 Dashboard Metric Threshold Configuration Set CSV Format**

Column	Data Description
0	Application Type
1	DshMetricThresholdCfgSet (Keyword)
2	MTCfgSet Name
3	MTCfgSet Type ("Server"/"Summary")
4	Metric #1 Name
5	Metric #1 Threshold 1
6	Metric #1 Threshold 2
7	Metric #1 Threshold 3
8	Metric #2 Name
9	Metric #2 Threshold 1
10	Metric #2 Threshold 2

**Table 5-52 (Cont.) Dashboard Metric Threshold Configuration Set CSV Format**

Column	Data Description
11	Metric #2 Threshold 3
12-239	(57 additional groups of 4 rows per engineering-configured Metric)

"AVP Removal List Elements" describes the configuration data elements listed in [Table 5-53](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-53 AvpRemovalList CSV Format**

Column	Data Description
0	Application Type
1	AvpRemovalList (Keyword)
2	Name (Key)
3	Direction
4	Message Type
5	AVP Code_1
6	AVP Name_1
7	Vendor Id_1
8	Vendor Name_1 (repeated x 10)
41	AVP Code_10
42	AVP Name_10
43	Vendor Id_10
44	Vendor Name_10

"Discovery Attributes Elements" describes the configuration data elements listed in [Table 5-54](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-54 DpdAttribute CSV Format**

Column	Data Description
0	Application Type
1	DpdAttributeSet (Keyword)
2	Realm Name
3	DNS Set
4	Local Node



**Table 5-54 (Cont.) DpdAttribute CSV Format**

Column	Data Description
5	Connection Mode
6	Local Protocol Preference Override (No, Yes)
7	Application Id[1]
8	Application Type[1]
9	Vendor Id[1]
10	TCP Preference[1]
11	SCTP Preference[1]
12	TLS Preference[1]
13	DTLS Preference[1]
14	Max Num Peers[1]
15	Max Num Connections[1] (repeated x 10)
88	Application Id[10]
89	Application Type[10]
90	Vendor Id[10]
91	TCP Preference[10]
92	SCTP Preference[10]
93	TLS Preference[10]
94	DTLS Preference[10]
95	Max Num Peers[10]
96	Max Num Connections[10]
97	Local IP Address
98	IPFE Initiator DAMP
99	Connection Configuration Set
100	Capacity Configuration Set
101	Realm Prefix

"DNS Set Elements" describes the configuration data elements listed in [Table 5-55](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-55 DpdDnsSet CSV Format**

Column	Data Description
0	Application Type

**Table 5-55 (Cont.) DpdDnsSet CSV Format**

Column	Data Description
1	DpdDnsSet (Keyword)
2	DNS Set Name (Key)
3	Primary DNS Server IP Address
4	Secondary DNS Server IP Address
5	DNS Query Timeout
6	Number Of Retries

"Dynamic Peer Discovery Realms Elements" describes the configuration data elements listed in [Table 5-56](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-56 DpdRealm CSV Format**

Column	Data Description
0	Application Type
1	DpdRealm (Keyword)
2	Realm Name

"Traffic Throttle Group Elements" describes the configuration data elements listed in [Table 5-57](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-57 TrafficThrottleGroup CSV Format**

Column	Data Description
0	Application Type
1	TrafficThrottleGroup (Keyword)
2	Name (Key)
3	Traffic Throttle Point [1] (repeated x 20)
22	Traffic Throttle Point [20]
23	Application ID
24	Shared (No, Yes)

"Traffic Throttle Point Elements" describes the configuration data elements listed in [Table 5-58](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-58 TrafficThrottlePoint CSV Format**

Column	Data Description
0	Application Type
1	TrafficThrottlePoint (Keyword)
2	Name (Key)
3	TTP Configuration Set
4	Max Loss Percent Threshold
5	Alternate Implicit Route
6	Peer Node
7	Application Id
8	Max ETR

"Traffic Throttle Point Configuration Elements" describes the configuration data elements listed in [Table 5-59](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-59 TrafficThrPointCfgSet CSV Format**

Column	Data Description
0	Application Type
1	TrafficThrPointCfgSet (Keyword)
2	Name (Key)
3	Diversion Policy
4	Abatement Recovery Rate
5	Override Message Priority Threshold
6	Default Reduction Percentage
7	Default Validity Duration
8	Rate Convergence Time

Diameter Signaling Firewall Elements describes the configuration data elements listed in [Table 5-60](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-60 Signaling Firewall CSV Format**

Column	Data Description
0	Application Type
1	Signaling Firewall (Keyword)
2	Signaling Node Name

**Table 5-60 (Cont.) Signaling Firewall CSV Format**

Column	Data Description
3	Signaling Firewall Administrative State

### Range Based Address Resolution (RBAR) CSV File Formats and Contents

The following tables describe the CSV file content and attribute column positions for all configuration data supported by the RBAR Application Type.

**Note:** Address Individual and Address Range elements are in different CSV files for performance reasons.

"Applications configuration elements" in the RBAR Help describes the configuration data elements listed in [Table 5-61](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-61 Supported Application CSV Format**

Column	Data Description
0	Application Type (Rbar)
1	SuppAppl (Keyword)
2	Application ID
3	Routing Mode (Proxy)

"Addresses configuration elements" in the RBAR Help describes the configuration data elements listed in [Table 5-62](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-62 Address Individual CSV Format**

Column	Data Description
0	Application Type (Rbar)
1	AddressIndv (Keyword)
2	Table Name
3	Address
4	Destination
5	Pfx Length
6	Old Table Name
7	Old Address
8	Old Pfx Length

"Addresses configuration elements" in the RBAR Help describes the configuration data elements listed in [Table 5-63](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-63 Address Range CSV Format**

Column	Data Description
0	Application Type (Rbar)
1	AddressRange (Keyword)
2	Table Name
3	Start Address
4	End Address
5	Destination
6	Pfx Length
7	Old Table Name (Key)
8	Old Start Address (Key)
9	Old Pfx Length (Key)

"Address Tables configuration elements" in the RBAR Help describes the configuration data elements listed in [Table 5-64](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-64 Address Table CSV Format**

Column	Data Description
0	Application Type (Rbar)
1	AddressTable (Keyword)
2	Name
3	Comment
4	Routing Entity (Imsi, Msisdn, Impi, Impu, ExternalId, Ipv4, Ipv6PfxAddr, Unsigned16)

"Destinations configuration elements" in the RBAR Help describes the configuration data elements listed in [Table 5-65](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-65 Destination Table CSV Format**

Column	Data Description
0	Application Type (Rbar)
1	Destination (Keyword)
2	Name (Key)
3	Realm

**Table 5-65 (Cont.) Destination Table CSV Format**

Column	Data Description
4	Fqdn
5	Avp Insertion (No, Yes)

"Exceptions configuration elements" in the RBAR Help describes the configuration data elements listed in [Table 5-66](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-66 Routing Exception CSV Format**

Column	Data Description
0	Application Type (Rbar)
1	RoutingException (Keyword)
2	Application ID
3	Exception Type (UnknownCmdCode, NoRoutingEntityAddress, NoDrtEntry)
4	Action (FwdUnchanged, FwdToDest, SendAnswer, SendAnsExp)
5	Destination Name
6	Answer Result Code
7	Vendor ID
8	Error Message

"Address Resolutions configuration elements" in the RBAR Help describes the configuration data elements listed in [Table 5-67](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-67 Address Resolution CSV Format**

Column	Data Description
0	Application Type (Rbar)
1	Resolution (Keyword)
2	Application ID
3	CMD Code
4	Routing Entity 1 (Imsi, Msisdn, Impi, Impu, Ipv4, Ipv6PfxAddr, Unsigned16, ExternalId)
5	Re 1 Avp 1 (PublicIdentity, SvcInfoSubscrId0, SvcInfoSubscrId1, SvcInfoSubscrId2, SvcInfoSubscrId3, SvcInfoSubscrId4, SubscriptionId0, SubscriptionId1, SubscriptionId2, SubscriptionId3, SubscriptionId4, UserIdentityMsisdn, UserIdentityPublic, UserIdentifierExternalId, UserName, FramedIpAddress, FramedIpv6Prefix, SvcInfoPsInfo3gppcc, Unprovisioned)

**Table 5-67 (Cont.) Address Resolution CSV Format**

Column	Data Description
6	Re 1 Avp 2 (PublicIdentity, SvcInfoSubscrId0, SvcInfoSubscrId1, SvcInfoSubscrId2, SvcInfoSubscrId3, SvcInfoSubscrId4, SubscriptionId0, SubscriptionId1, SubscriptionId2, SubscriptionId3, SubscriptionId4, UserIdentityMsisdn, UserIdentityPublic, UserIdentifierExternalId, UserName, FramedIpAddress, FramedIpv6Prefix, SvcInfoPsInfo3gppcc, Unprovisioned)
7	Re 1 Address Table Name
8	Routing Entity 2 (Imsi, Msisdn, Impi, Impu, Ipv4, Ipv6PfxAddr, Unsigned16, Externalid)
9	Re 2 Avp 1 (PublicIdentity, SvcInfoSubscrId0, SvcInfoSubscrId1, SvcInfoSubscrId2, SvcInfoSubscrId3, SvcInfoSubscrId4, SubscriptionId0, SubscriptionId1, SubscriptionId2, SubscriptionId3, SubscriptionId4, UserIdentityMsisdn, UserIdentityPublic, UserIdentifierExternalId, UserName, FramedIpAddress, FramedIpv6Prefix, SvcInfoPsInfo3gppcc, Unprovisioned)
10	Re 2 Avp 2 (PublicIdentity, SvcInfoSubscrId0, SvcInfoSubscrId1, SvcInfoSubscrId2, SvcInfoSubscrId3, SvcInfoSubscrId4, SubscriptionId0, SubscriptionId1, SubscriptionId2, SubscriptionId3, SubscriptionId4, UserIdentityMsisdn, UserIdentityPublic, UserIdentifierExternalId, UserName, FramedIpAddress, FramedIpv6Prefix, SvcInfoPsInfo3gppcc, Unprovisioned)
11	Re 2 Address Table name
12	Routing Entity 3 (Imsi, Msisdn, Impi, Impu, Ipv4, Ipv6PfxAddr, Unsigned16, ExternalId )
13	Re 3 Avp 1 (PublicIdentity, SvcInfoSubscrId0, SvcInfoSubscrId1, SvcInfoSubscrId2, SvcInfoSubscrId3, SvcInfoSubscrId4, SubscriptionId0, SubscriptionId1, SubscriptionId2, SubscriptionId3, SubscriptionId4, Msisdn, UserIdentityMsisdn, UserIdentifier Msisdn, UserIdentity Public, UserIdentifierExternalId , UserIdentifierUserName, UserName, FramedIpAddress, FramedIpv6Prefix, SvcInfoPsInfo3gppcc, Unprovisioned)
14	Re 3 Avp 2 (PublicIdentity, SvcInfoSubscrId0, SvcInfoSubscrId1, SvcInfoSubscrId2, SvcInfoSubscrId3, SvcInfoSubscrId4, SubscriptionId0, SubscriptionId1, SubscriptionId2, SubscriptionId3, SubscriptionId4, Msisdn, UserIdentityMsisdn, UserIdentifier Msisdn, UserIdentity Public, UserIdentifierExternalId , UserIdentifierUserName, UserName, FramedIpAddress, FramedIpv6Prefix, SvcInfoPsInfo3gppcc, Unprovisioned)
15	Re 3 Address Table name

"System Options elements" in the RBAR Help describes the configuration data elements listed in [Table 5-68](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-68 Option CSV Format**

Column	Data Description
0	Application Type (Rbar)

**Table 5-68 (Cont.) Option CSV Format**

Column	Data Description
1	Option (Keyword)
2	Uri Supported (No, Yes)
3	RemoveDestHost (No, Yes)
4	Exclude Space (No, Yes)
5	Allow SubsequentDSR App Invoc (No, Yes)
6	Realm
7	Fqdn
8	Resource Exhaustion Error Code
9	Resource Exhaustion Error Message
10	Resource Exhaustion Vendor ID
11	Unavailable Application Action (ContinueRouting, DefaultRoute, SendAnswer, SendAnsExp)
12	Unavailable Application Route List
13	Unavailable Application Result Code
14	Unavailable Application Error Message
15	Unavailable Application Vendor ID
16	ASCII Exluded List [0] (repeated x 20) . . .
35	ASCII Excluded List [19]
36	TBCD Excluded List [0] (repeated x 5) . . .
40	TBCD Excluded List [4]

### Full Address Based Resolution (FABR) CSV File Formats and Contents

#### Full Address-Based Resolution (FABR) CSV File Formats

The following tables describe the CSV file content and attribute column positions for all configuration data supported by the FABR Application Type.

"Applications configuration elements" in the FABR Help describes the configuration data elements listed in [Table 5-69](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-69 Supported Application CSV Format**

Column	Data Description
0	Application Type (Fabr)



**Table 5-69 (Cont.) Supported Application CSV Format**

Column	Data Description
1	SuppAppl (Keyword)
2	Application ID
3	Routing Mode (Proxy)

"Exceptions configuration elements" in the FABR Help describes the configuration data elements listed in [Table 5-70](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-70 Routing Exception CSV Format**

Column	Data Description
0	Application Type (Fabr)
1	RoutingException (Keyword)
2	Application ID
3	Exception Type (UnknownCmdCode, NoRoutingEntityAddress, NoAddrMatch, DpErrors, DpCongestion)
4	Action (FwdUnchanged, FwdToDest, SendAnswer, SendAnsExp, AbandonRequest)
5	Destination Name
6	Answer Result Code
7	Vendor ID
8	Error Message

"Destinations configuration elements" in the FABR Help describes the configuration data elements listed in [Table 5-71](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-71 Default Destination Table CSV Format**

Column	Data Description
0	Application Type (Fabr)
1	Destination (Keyword)
2	Name
3	Realm
4	Fqdn

"Address Resolutions configuration elements" in the FABR Help describes the configuration data elements listed in [Table 5-72](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-72 Address Resolution CSV Format**

Column	Data Description
0	Application Type (Fabr)
1	Resolution (Keyword)
2	Application ID
3	CMD Code
4	Routing Entity 1 (Imsi, Msisdn, Impi, Impu, ExternalId)
5	Re 1 Avp 1 (PublicIdentity, SvcInfoSubscrId0, SvcInfoSubscrId1, SvcInfoSubscrId2, SvcInfoSubscrId3, SubscriptionId0, SubscriptionId1, SubscriptionId2, SubscriptionId3, Msisdn, UserIdentityMsisdn, UserIdentifierMsisdn, UserIdentityPublic, UserIdentifierExternalId , UserIdentifierUserName, UserName, WildCardedPubIdnty)
6	Re 1 Avp 2 (PublicIdentity, SvcInfoSubscrId0, SvcInfoSubscrId1, SvcInfoSubscrId2, SvcInfoSubscrId3, SubscriptionId0, SubscriptionId1, SubscriptionId2, SubscriptionId3, Msisdn, UserIdentityMsisdn, UserIdentifierMsisdn, UserIdentityPublic, UserIdentifierExternalId , UserIdentifierUserName, UserName, WildCardedPubIdnty)
7	Re 1 Destination Type (MtcHss, ImsHss, LteHss, Pcrf, Ocs, Ofcs, Aaa, UserDefined1, UserDefined2)
8	Routing Entity 2 (Imsi, Msisdn, Impi, Impu, ExternalId)
9	Re 2 Avp 1 (PublicIdentity, SvcInfoSubscrId0, SvcInfoSubscrId1, SvcInfoSubscrId2, SvcInfoSubscrId3, SubscriptionId0, SubscriptionId1, SubscriptionId2, SubscriptionId3, Msisdn, UserIdentityMsisdn, UserIdentifierMsisdn, UserIdentityPublic, UserIdentifierExternalId , UserIdentifierUserName, UserName, WildCardedPubIdnty)
10	Re 2 Avp 2 (PublicIdentity, SvcInfoSubscrId0, SvcInfoSubscrId1, SvcInfoSubscrId2, SvcInfoSubscrId3, SubscriptionId0, SubscriptionId1, SubscriptionId2, SubscriptionId3, Msisdn, UserIdentityMsisdn, UserIdentifierMsisdn, UserIdentityPublic, UserIdentifierExternalId , UserIdentifierUserName, UserName, WildCardedPubIdnty)
11	Re 2 Destination Type (MtcHss, ImsHss, LteHss, Pcrf, Ocs, Ofcs, Aaa, UserDefined1, UserDefined2)
12	Routing Entity 1 Search Prefix (Yes, No)
13	Routing Entity 2 Search Prefix (Yes, No)
14	Routing Entity 1 Search Blacklist (Yes, No)
15	Routing Entity 2 Search Blacklist (Yes, No)
16	Routing Entity 3 (Imsi, Msisdn, Impi, Impu, ExternalId)
17	Re 3 Avp 1 (PublicIdentity, SvcInfoSubscrId0, SvcInfoSubscrId1, SvcInfoSubscrId2, SvcInfoSubscrId3, SubscriptionId0, SubscriptionId1, SubscriptionId2, SubscriptionId3, Msisdn, UserIdentity Msisdn, UserIdentifierMsisdn, UserIdentityPublic, UserIdentifier ExternalId , UserIdentifierUserName, UserName, WildCardedPubIdnty)

**Table 5-72 (Cont.) Address Resolution CSV Format**

Column	Data Description
18	Re 3 Avp 2 (PublicIdentity, SvcInfoSubscrId0, SvcInfoSubscrId1, SvcInfoSubscrId2, SvcInfoSubscrId3, SubscriptionId0, SubscriptionId1, SubscriptionId2, SubscriptionId3, Msisdn, UserIdentityMsisdn, UserIdentifierMsisdn, UserIdentityPublic, UserIdentifier ExternalId , UserIdentifierUserName, UserName, WildCardedPubIdnty)
19	Re 3 Destination Type ( MtcHss, ImsHss, LteHss, Pcrf, Ocs, Ofcs, Aaa, UserDefined1, UserDefined2)
20	Routing Entity 3 Search Prefix (Yes, No)
21	Routing Entity 3 Search Blacklist (Yes, No)

"System Options elements" in the FABR Help describes the configuration data elements listed in [Table 5-73](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-73 Option CSV Format**

Column	Data Description
0	Application Type (Fabr)
1	Option (Keyword)
2	RemoveDestHost (No, Yes)
3	Exclude Space (No, Yes)
4	Allow SubsequentDSR App Invoc (No, Yes)
5	Realm
6	Fqdn
7	Resource Exhaustion Error Code
8	Resource Exhaustion Error Message
9	Resource Exhaustion Vendor ID
10	Unavailable Application Action (ContinueRouting, DefaultRoute, SendAnswer, SendAnsExp)
11	Unavailable Application Route List
12	Unavailable Application Result Code
13	Unavailable Application Error Message
14	Unavailable Application Vendor ID
15	ASCII Excluded List [0] (repeated x 20) . . .
33	ASCII Excluded List [19]
35	TBCD Excluded List [0]

**Table 5-73 (Cont.) Option CSV Format**

Column	Data Description
	(repeated x 5) . . .
39	TBCD Excluded List [4]
40	Bundling Enabled (Yes, No)
41	Max Bundle Size
42	Prefix Search Enabled (Yes, No)
43	Blacklist Search Enabled (Yes, No)

### Charging Proxy Application (CPA) CSV File Formats and Contents

#### Charging Proxy Application (CPA) CSV File Formats

The following tables describe the CSV file content and attribute column positions for all configuration data supported by the CPA Application Type.

"System Options configuration elements" in the Charging Proxy Application (CPA) Help describes the configuration data elements listed in [Table 5-74](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-74 System Option CSV Format**

Column	Data Description
0	Application Type (Cpa)
1	Option (Keyword)
2	unavailableAction (SendAnswer)
3	unavailableAppResultCode
4	unavailableActionVendorId
5	unavailableActionErrorMessage
6	application InvokedAvpInsertion (Yes, No)
7	shutdownMode (Graceful, Force)
8	shutdownTimer
9	generateAnswerResultCode
10	generateAnswerVendorId
11	generateAnswerErrorMessage
12	behaviorIfSessionLookupError (GenerateAnswer, ContinueRouting)

"Message Copy elements" in the Charging Proxy Application (CPA) Help describes the **Message Copy** configuration data elements listed in [Table 5-75](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-75 Message Copy CSV Format**

Column	Data Description
0	Application Type (Cpa)
1	Messagecopy (Keyword)
2	messageCopyStatus
3	messageCopyRouteList1
4	messageCopyRouteList2
5	messageCopyRouteList3
6	messageCopyRouteList4
7	messageCopyRouteList5
8	messageCopyRouteList6
9	messageCopyRouteList7
10	messageCopyRouteList8
11	messageCopyRouteList9
12	messageCopyRouteList10
13	calledStationIdString1
14	calledStationIdString2
15	calledStationIdString3
16	calledStationIdString4

"SBR elements" describes the **Session Binding Repository (SBR)** configuration data elements listed in [Table 5-76](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-76 SBR CSV Format**

Column	Data Description
0	Application Type (Sbr)
1	Sbrconfig (Keyword)
2	sbdbAuditStartTime
3	sbdbAuditStopTime
4	staleSbdbSessionBindingAge
5	maximumActiveSessionBindings
6	mostlyStalePercent

### Charging Session Binding Repository (CSBR) CSV File Formats and Contents

The following tables describe the CSV file content and attribute column positions for all configuration data supported by the SBR.

"SBR elements" describes the **Session Binding Repository (SBR)** configuration data elements listed in [Table 5-76](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-77 SBR CSV Format**

Column	Data Description
0	Application Type (CSBR)
1	Sbrconfig (Keyword)
2	sbdbAuditStartTime
3	sbdbAuditStopTime
4	staleSbdbSessionBindingAge
5	maximumActiveSessionBindings
6	mostlyStalePercent

## IP Front End (IPFE) CSV File Formats and Contents

### IP Front End CSV File Formats

The following tables describe the CSV file content and attribute column positions for all configuration data supported by the IP Front End (IPFE) Application Type.

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**Note:** Both IPFE CSV formats must be included in the file for an IPFE Import operation (Insert or Delete). Bulk Import for IPFE does not support Insert or Delete for only IpfeOption or only IpfeListTsa.

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"Configuration Options elements" in the IPFE Help describes the configuration data elements listed in [Table 5-78](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-78 IPFE IpfeOption CSV Format**

Column	Data Description
0	Application Type
1	Options (Keyword)
2	Ipfe1IpAddress
3	Ipfe2IpAddress
4	Ipfe3IpAddress
5	Ipfe4IpAddress
6	StatSyncTcpPort
7	StateSyncReconnectS
8	RejectOption (tcpreset, drop, icmphostunreachable, icmpportunreachable, icmpadminprohibited)

**Table 5-78 (Cont.) IPFE IpfeOption CSV Format**

Column	Data Description
9	SctpRejectOption (drop, icmpghostunreachable, icmpportunreachable, icmpadminprohibited)
10	OverloadStart
11	LeastLoadStart
12	GratuitousArpType
13	Accounting Support (enabled, disabled)
14	ConnectTryPort
15	ConnectTimeoutS
16	ConnectTryIntervalS
17	MonitorProtocol (tcpconnectonly, fullmonitoring, disabled)
18	PacketRateLimit
19	Tsa1DeleteAge
20	Tsa1IPAddress
21	Tsa1IPSecondaryAddress
22	Tsa1IPSecondaryPreferredIpfe
23	Tsa1LoadAlgorithm (hash, roundrobin, leasttraff, leastconns, leastload, leastloadtest)
24	Tsa1PreferredIpfe (1, 2, 3, 4)
25	Tsa1Protocols (SCTP, TCP, SCTP_AND_TCP)
26	Tsa1TsDisable (0, 1)
27	Tsa1AllowedDeviation (0-50)
28	Tsa1LoadFactorMPS (0-100)
29	Tsa1LoadFactorConn (0-100)
30	Tsa1PeerGroup (enabled, disabled)
31	Tsa1PeerGroupDelta (1-10)
	(fields 19 thru 31 repeated x 31 times) . . .
422	Tsa32DeleteAge
423	Tsa32IPAddress
424	Tsa32IPSecondaryAddress
425	Tsa32IPSecondaryPreferredIpfe
426	Tsa32LoadAlgorithm (hash, roundrobin, leasttraff, leastconns, leastload, leastloadtest)
427	Tsa32PreferredIpfe

**Table 5-78 (Cont.) IPFE IpfeOption CSV Format**

Column	Data Description
428	Tsa32Protocols (SCTP, TCP, SCTP_AND_TCP)
429	Tsa32TsDisable (0, 1)
430	Tsa32AllowedDeviation (0-50)
431	Tsa32LoadFactorMPS (0-100)
432	Tsa32LoadFactorConn (0-100)
433	Tsa32PeerGroup (enabled, disabled)
434	Tsa32PeerGroupDelta (1-10)

"Target Sets configuration elements" in the IPFE Help describes the configuration data elements listed in [Table 5-79](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-79 IPFE IpfeListTsa CSV Format**

Column	Data Description
0	Application Type (Ipfe)
1	IPListTsa (Keyword)
2	tsa
3	server
4	ipAddress
5	description
6	ipSecondaryAddress
7	Initiator Port Start
8	Initiator Port Mid
9	Initiator Port End

### Policy and Charging Application (PCA) CSV File Formats and Contents

The following tables describe the CSV file content and attribute column positions for all configuration data supported by the Policy and Charging Application Type.

"PCRFs elements" in the PCA Help describes the configuration data elements listed in [Table 5-80](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-80 PCRFs CSV Format**

Column	Data Description
0	Application Type (Pca - Policy and Charging Application)
1	Pcrf (Keyword)



**Table 5-80 (Cont.) PCRFs CSV Format**

Column	Data Description
2	PCRF Peer Node Name (Key)
3	Comments

"Binding Key Priority elements" in the PCA Help describes the configuration data elements listed in [Table 5-81](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-81 Binding Key Priority CSV Format**

Column	Data Description
0	Application Type (Pca - Policy and Charging Application)
1	BindPriority (Keyword)
2	Priority 1
3	Binding Key Type 1 (Imsi, Msisdn, Ipv4, Ipv6)
4	Priority 2
5	Binding Key Type 2 (Imsi, Msisdn, Ipv4, Ipv6)
6	Priority 3
7	Binding Key Type 3 (Imsi, Msisdn, Ipv4, Ipv6)
8	Priority 4
9	Binding Key Type 4 (Imsi, Msisdn, Ipv4, Ipv6)

"Site Options elements" and "Network-Wide Options elements" in the PCA Help describes the configuration data elements listed in [Table 5-82](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-82 Policy DRA Options CSV Format**

Column	Data Description
0	Application Type (Pca - Policy and Charging Application)
1	PdraOptions (Keyword)
2	Enable Topology Hiding
3	Topology Hiding Scope
4	Default Topology Hiding FQDN
5	Default Topology Hiding Realm
6	Topology Hiding Host
7	Topology Hiding Realm
8	Peer Route Table Name

**Table 5-82 (Cont.) Policy DRA Options CSV Format**

Column	Data Description
9	Enable PCRF Pooling
10	PCRF Pooling Mode
11	Default APN for Non Specific Binding Correlation
12	Early Binding Polling Interval
13	Maximum Early Binding Lifetime
14	Suspect Binding Removal Events Ignore Interval
15	Suspect Binding Removal Events Reset Interval
16	Suspect Binding Removal Events Threshold
17	RAR Origin Host and Realm Option
18	Max Query RAR Rate Per Session Server Group
19	RarAttemptedThreshold
20	Max Release RAR Rate Per Session Server Group
21	Max Attempts Per Release RAR
22	Query RAR Queue Capacity Per Session Server Group
23	Release RAR Queue Capacity Per Session Server Group

"Error Codes elements" in the PCA Help describes the configuration data elements listed in [Table 5-83](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-83 PCA Error Codes CSV Format**

Column	Data Description
0	Application Type (Pca - Policy and Charging Application)
1	ErrorCodes (Keyword)
2	Error Condition (Key) (PdcaUnavailCong, PcaFuncUnavailableOrDisabled, BindingNotFound, UnableToRoute, SbrError, BindingKeyNotFoundCondition, SessionNotFound, MissingOrUnconfiguredApn)
3	Gx/Gxx Result Code
4	Gx/Gxx Vendor ID
5	Rx Result Code
6	Rx Vendor ID
7	S9 Result Code
8	S9 Vendor ID
9	Gx-Prime Result Code

**Table 5-83 (Cont.) PCA Error Codes CSV Format**

Column	Data Description
10	Gx-Prime Vendor ID
11	Gy/Ro Result Code
12	Gy/Ro Vendor ID
13	All Result Code
14	All Vendor ID

"PCA Access Point Names elements" in the PCA Help describes the configuration data elements listed in [Table 5-84](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-84 PCA Access Point Names CSV Format**

Column	Data Description
0	Application Type (Pca - Policy and Charging Application)
1	AccessPointName (Keyword)
2	Access Point Name
3	Function Name
4	PCRF Pool Name
5	Maximum Allowed Sessions per IMSI
6	Per IMSI Session Exceeded Treatment (Reject, Route)
7	Stale Session Timeout
8	PCRF Sub-Pool Count (Read Only)
9	Last Updated Timestamp (Read Only)

"Alarm Settings elements" in the PCA Help describes the configuration data elements listed in [Table 5-85](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-85 Alarm Settings CSV Format**

Column	Data Description
0	Application Type (Pca - Policy and Charging Application)
1	AlarmSupp (Keyword)
2	Alarm Name 1 (PcaIngressMessageRate, OutstandingPdraSessionsThresholdExceeded)
3	Critical Alarm Threshold (Percent) 1
4	Suppress Critical 1 (Yes, No)
5	Major Alarm Threshold (Percent) 1

**Table 5-85 (Cont.) Alarm Settings CSV Format**

Column	Data Description
6	Suppress Major 1 (Yes, No)
7	Minor Alarm Threshold (Percent) 1
8	Suppress Minor 1 (Yes, No)
9	Alarm Name 2 (PsbrActiveSessionsThreshold)
10	Critical Alarm Threshold (Percent) 2
11	Suppress Critical 2 (Yes, No)
12	Major Alarm Threshold (Percent) 2
13	Suppress Major 2 (Yes, No)
14	Minor Alarm Threshold (Percent) 1
15	Suppress Minor 2 (Yes, No)
16	Alarm Name 3 (PsbrActiveBindingsThreshold)
17	Critical Alarm Threshold (Percent) 3
18	Suppress Critical 3 (Yes, No)
19	Major Alarm Threshold (Percent) 3
20	Suppress Major 3 (Yes, No)
21	Minor Alarm Threshold (Percent) 3
22	Suppress Minor 3 (Yes, No)

"Congestion Options elements" in the PCA Help describes the configuration data elements listed in [Table 5-86](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-86 Congestion Options CSV Format**

Column	Data Description
0	Application Type (Pca - Policy and Charging Application)
1	CongOptions (Keyword)
2	Critical Alarm Onset Threshold 1
3	Critical Alarm Abatement Threshold 1
4	Major Alarm Onset Threshold 1
5	Major Alarm Abatement Threshold 1
6	Minor Alarm Onset Threshold 1
7	Minor Alarm Abatement Threshold 1
8	Congestion Level 1- Discard Session Creation Requests
9	Congestion Level 1- Discard Session Update Requests

**Table 5-86 (Cont.) Congestion Options CSV Format**

Column	Data Description
10	Congestion Level 1- Discard Session Terminate Requests
11	Congestion Level 2- Discard Session Creation Requests
12	Congestion Level 2- Discard Session Update Requests
13	Congestion Level 2- Discard Session Terminate Requests
14	Congestion Level 3- Discard Session Creation Requests
15	Congestion Level 3- Discard Session Update Requests
16	Congestion Level 3- Discard Session Terminate Requests

"PCRF Pools elements" in the PCA Help describes the PCRF Pools CSV Record elements listed in [Table 5-87](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-87 PCRF Pools CSV Record Format**

Column	Data Description
0	Application Type (Pca - Policy and Charging Application)
1	PcrfPool (Keyword)
2	PCRF Pool Name (Key)
3	Is Pcrf SubPool
4	Comments

"PCRF Sub-Pool Selection Rules elements" in the PCA Help describes the PCRF Sub-Pool Selection Rules CSV Record elements listed in [Table 5-88](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-88 PCRF Sub-Pool Selection Rules CSV Record Format**

Column	Data Description
0	Application Type (Pca - Policy and Charging Application)
1	SubPoolSelRules (Keyword)
2	Rule Name (Key)
3	Priority
4	PCRF Pool Name
5	Condition Parameter (Origin-Host)
6	Condition Operator (Equals, StartsWith, EndsWith)
7	Condition Value
8	PCRF Sub-Pool Name

**Table 5-88 (Cont.) PCRF Sub-Pool Selection Rules CSV Record Format**

Column	Data Description
9	Last Updated Timestamp (Read Only)

"PCRf Pool To PRT Mapping CSV Record elements" in the PCA Help describes the PCRf Pool To PRT Mapping CSV Record elements listed in [Table 5-89](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-89 PCRf Pool To PRT Mapping CSV Record Format**

Column	Data Description
0	Application Type (Pca - Policy and Charging Application)
1	PcrfPoolToPrt (Keyword)
2	PCRf Pool Name (Key)
3	Peer Route Table Name

"General Options CSV Record elements" in the PCA Help describes the General Options CSV Record elements listed in [Table 5-90](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-90 General Options CSV Record Format**

Column	Data Description
0	Application Type (Pca - Policy and Charging Application)
1	GeneralOptions (Keyword)
2	Policy DRA Enabled
3	Online Charging DRA Enabled
4	Number of Policy Binding Server Groups
5	Number of Policy and Charging Session Sever Groups
6	Default Stale Session Timeout
7	Maximum Audit Frequency

"Online Charging DRA OCS Session State CSV Record elements" in the PCA Help describes the OCS Session State CSV Record elements listed in [Table 5-91](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-91 Online Charging DRA OCS Session State CSV Record Format**

Column	Data Description
0	Application Type (Pca - Policy and Charging Application)
1	OcsSessionState (Keyword)

**Table 5-91 (Cont.) Online Charging DRA OCS Session State CSV Record Format**

Column	Data Description
2	OCS Realm
3	OCS FQDN
4	OCS Session State Enabled

"Online Charging DRA Realm CSV Record elements" in the PCA Help describes the OC-DRA Realm CSV Record elements listed in [Table 5-92](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-92 Online Charging DRA Realm CSV Record Format**

Column	Data Description
0	Application Type (Pca - Policy and Charging Application)
1	Realm (Keyword)
2	OCS Realm
3	Comment

"Online Charging DRA Network-Wide Options CSV Record elements" in the PCA Help describes the OC-DRA Network-Wide Options CSV Record elements listed in [Table 5-93](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-93 Online Charging DRA Network-Wide Options CSV Record Format**

Column	Data Description
0	Application Type (Pca - Policy and Charging Application)
1	OcdraNwOptions (Keyword)
2	Session State Scope (None, All Messages, Specific Message)
3	Session State Unavailable Action (Send Answer, Route To Peer)
4	OCS Pool Selection Mode (Single Pool, Multiple Pools)

"PCA Policy Clients Options CSV Record elements" in the PCA Help describes the OC-DRA Network-Wide Options CSV Record elements listed in [Table 5-94](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-94 PDRA Policy Clients CSV Record Format**

Column	Data Description
0	Application Type (Pca - Policy and Charging Application)
1	PolicyClients (Keyword)

**Table 5-94 (Cont.) PDRA Policy Clients CSV Record Format**

Column	Data Description
2	Policy Client Peer Node Name
3	Topology Hiding Enabled
4	Comments

"Online Charging DRA OCSs CSV Record elements" in the PCA Help describes the OC-DRA OCSs CSV Record elements listed in [Table 5-95](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-95 Online Charging DRA OCSs CSV Record Format**

Column	Data Description
0	Application Type (Pca - Policy and Charging Application)
1	Ocs (Keyword)
2	OCS Peer Node Names
3	Comments

"Online Charging DRA CTFs CSV Record elements" in the PCA Help describes the OC-DRA CTFs CSV Record elements listed in [Table 5-96](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-96 Online Charging DRA CTFs CSV Record Format**

Column	Data Description
0	Application Type (Pca - Policy and Charging Application)
1	Ctf (Keyword)
2	CTF Peer Node Names
3	Comments

"Suspect Binding Removal Rules Elements" in the PCA Help describes the Suspect Binding Removal Rules CSV elements listed in [Table 5-97](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-97 Suspect Binding Removal Rules CSV Record Format**

Column	Data Description
0	Application Type (Pca - Policy and Charging Application)
1	SuspectBindingRemovalRules (Keyword)
2	Rule Name (Key)



**Table 5-97 (Cont.) Suspect Binding Removal Rules CSV Record Format**

Column	Data Description
3	Application Name
4	Command Code
5	Error Scenario Category
6	Result Code
7	Vendor ID
8	Remove Suspect Binding Immediately
9	Comments

### MAP-Diameter Interworking Function CSV File Formats and Contents

The following tables describe the CSV file content and attribute column positions for all configuration data supported by the MDIWF Application Type, for the MD-IWF and DM-IWF applications.

"Diameter Realm elements" in the MAP-Diameter Interworking Help describes the configuration data elements listed in [Table 5-98](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-98 Mapiwf Diameter Realm CSV Format**

Column	Data Description
0	Application Type (Mapiwf - MAP-Diameter Interworking)
1	DiameterRealm (Keyword)
2	Realm
3	Network (ANSI, ITUI, ITUN)
4	MGT Conversion Needed (Yes, No, NA)

"Diameter Identity Global Title Address elements" in the MAP-Diameter Interworking Help describes the configuration data elements listed in [Table 5-99](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-99 Mapiwf DiamIdGta CSV Format**

Column	Data Description
0	Application Type (Mapiwf - MAP-Diameter Interworking)
1	DiamIdGta (Keyword)
2	Host
3	Realm
4	GTA

"Global Title Address Range to Point Code elements" in the MAP-Diameter Interworking Help describes the configuration data elements listed in [Table 5-100](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-100 Mapiwf GtaRangeToPc CSV Format**

Column	Data Description
0	Application Type (Mapiwf - MAP-Diameter Interworking)
1	GtaRangeToPc (Keyword)
2	Default Configuration (Yes, No)
3	GTA Start
4	GTA End
5	Network (ANSI, ITUI, ITUN)
6	Primary Point Code
7	Secondary Point Code
8	Load Sharing (Solitary, ActiveActive, ActiveStandby)

"MD-IWF Options elements" in the MAP-Diameter Interworking Help describes the configuration data elements listed in [Table 5-101](#) [Table 5-82](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-101 Mapiwf MD-IWF Option CSV Format**

Column	Data Description
0	Application Type (Mapiwf - MAP-Diameter Interworking)
1	MdiwfOption (Keyword)
2	Diameter Timeout
3	MAP Timeout
4	EIR Host Name
5	EIR Realm
6	IWF HSS Destination Host
7	IWF HSS Destination Realm
8	EIR Destination GTA
9	Shutdown Mode (Forced, Graceful)
10	Shutdown Timer
11	ECR No Destination Host Action (Discard, SendAnswer, TranslateUsingEir)
12	ECR No Destination Host Result Code
13	ECR No Destination Host Vendor ID

**Table 5-101 (Cont.) Mapiwf MD-IWF Option CSV Format**

Column	Data Description
14	ECR No Destination Host Error String
15	ECR Destination Host Action (Discard, SendAnswer, TranslateUsingEir)
16	ECR Destination Host Result Code
17	ECR Destination Host Vendor ID
18	ECR Destination Host Error String
19	DSR Node GTA (entityId_1)
20	DSR Node GTA (gta_1)
	-entityId and gta repeated total of 32 times...
81	DSR Node GTA (entityId_32)
82	DSR Node GTA (gta_32)

"DM-IWF Option elements" in the MAP-Diameter Interworking Help describes the configuration data elements listed in [Table 5-102](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-102 Mapiwf DM-IWF Option CSV Format**

Column	Data Description
0	Application Type (Mapiwf - MAP-Diameter Interworking)
1	DmiwfOption (Keyword)
2	Unavailable Action (ContinueRouting, DefaultRoute, SendAnswer)
3	Route List Name
4	Unavailable Action Result Code
5	Unavailable Action Vendor ID
6	Unavailable Action Error Message
7	AVP Insertion (Yes, No)
8	Shutdown Mode (Forced, Graceful)
9	Shutdown Timer
10	Realm
11	FQDN
12	Application Route Table (ART)
13	Peer Route Table (PRT)

"Diameter Exception elements" in the MAP-Diameter Interworking Help describes the configuration data elements listed in [Table 5-103](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-103 Mapiwf Diameter Exception CSV Format**

Column	Data Description
0	Application Type (Mapiwf - MAP-Diameter Interworking)
1	DiameterException (Keyword)
2	Exception Type (InternalProcessingError, DiamToMapTransTimeout, TranslationError)
3	Exception Name
4	Action (Discard, SendAnswer, ApplyUnavailAction)
5	Result Code
6	Vendor ID
7	Error String

"MAP Exception elements" in the MAP-Diameter Interworking Help describes the configuration data elements listed in [Table 5-104](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-104 Mapiwf MAP Exception CSV Format**

Column	Data Description
0	Application Type (Mapiwf - MAP-Diameter Interworking)
1	MapException (Keyword)
2	Exception Type (InternalProcessingError, MapToDiamTransTimeout, TranslationError)
3	Exception Name
4	Action (Discard, SendAnswer)
5	Abort Reason (UserDefined, ContextNotSupported, DialogRefused)
6	Error Cause (SystemFailure, DataMissing, UnexpectedDataValue, FacilityNotSupported, IncompatibleTerminal, ResourceLimitation)
7	Abort Choice (SpecificReason, ResourceLimitation, ResourceUnavailable)
8	Resource Unavailable Reason (ShortTermLimitation, LongTermLimitation)

"CCNDC Mapping elements" in the MAP-Diameter Interworking Help describes the configuration data elements listed in [Table 5-86](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-105 Mapiwf CCNDC Mapping CSV Format**

Column	Data Description
0	Application Type (Mapiwf - MAP-Diameter Interworking)
1	CcNdcMapping (Keyword)

**Table 5-105 (Cont.) Mapiwf CCNDC Mapping CSV Format**

Column	Data Description
2	Ccndc
3	Realm
4	Description

### Gateway Location Application (GLA) CSV File Formats and Contents

"Configure GLA Exceptions elements" in the GLA Help describes the Gateway Location Application (GLA) CSV Record elements listed in [Table 5-106](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-106 GLA Exception CSV Record Format**

Column	Data Description
0	Application Type (GLA)
1	Exception (Keyword)
2	Exception Type(EdlDecodeError, UnknownAppId, UnknownCmdCode, ImsiMsisdnPresent, ImsiMsisdnAbsent, PsbrQueryFailure, PsbrQueryTimeout, ResourceExhausted, UnableToProcess)
3	Exception Name
4	Action ( SendAnswer, SendAnsExp, AbandonRequest )
5	Result Code
6	Vendor ID
7	Error String

"Configure GLA System Options elements" in the GLA Help describes the Gateway Location Application (GLA) CSV Record elements listed in [Table 5-107](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-107 GLA Option CSV Record Format**

Column	Data Description
0	Application Type (GLA)
1	Option (Keyword)
2	Unavailable Action (ContinueRouting, DefaultRoute, SendAnswer, Discard)
3	Unavailable Application Result Code
4	Unavailable Application Vendor ID
5	Unavailable Application Error Message
6	Realm

**Table 5-107 (Cont.) GLA Option CSV Record Format**

Column	Data Description
7	FQDN
8	Unavailable Application Route List

"Configure GLA Alarm Settings elements" in the GLA Help describes the Gateway Location Application (GLA) CSV Record elements listed in [Table 5-108](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-108 GLA Alarm CSV Record Format**

Column	Data Description
0	Application Type (GLA)
1	Alarm (Keyword)
2	Alarm Type (RxGlaMsgRate)
3	Severity(Critical, Major, Minor)
4	Action(Set, Clear)
5	Level

## RADIUS CSV File Formats and Contents

### RADIUS CSV File Formats

The following tables describe the CSV file content and attribute field or column positions for all RADIUS configuration data supported by the RADIUS Application Type.

"RADIUS Message Authentication Cfg Set elements" in the *RADIUS User's Guide* describes the configuration data elements listed in [Table 5-109](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-109 RADIUS Message Authentication Cfg Sets CSV Format**

Column	Data Description
0	Application Type (RADIUS)
1	MsgAuthCfgSet (Keyword)
2	Message Authenticator Set Name (Keyword)
3	Encode Message-Authenticator in egress CoA-Request (YES, NO)
4	Encode Message-Authenticator in egress Disconnect-Request (YES, NO)
5	Encode Message-Authenticator in response to Status-Server (YES, NO)
6	Encode Message-Authenticator in egress CoA-NACK (YES, NO)

**Table 5-109 (Cont.) RADIUS Message Authentication Cfg Sets CSV Format**

Column	Data Description
7	Encode Message-Authenticator in egress CoA-ACK (YES, NO)
8	Encode Message-Authenticator in egress Disconnect-ACK (YES, NO)
9	Encode Message-Authenticator in egress Disconnect NACK (YES, NO)
10	Encode Message-Authenticator in egress Access-Request (YES, NO)
11	Encode Message-Authenticator in egress Access-Accept (YES, NO)
12	Encode Message-Authenticator in egress Access-Reject (YES, NO)
13	Encode Message-Authenticator in egress Access-Challenge (YES, NO)

"RADIUS Shared Secret Cfg Set elements" in the *RADIUS User's Guide* describes the configuration data elements listed in [Table 5-110](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-110 RADIUS Shared Secret Cfg Set CSV Format**

Column	Data Description
0	Application Type (RADIUS)
1	SharedSecretCfgSet (Keyword)
2	Shared Secret Configuration Set Name
3	Shared Secret Configuration Set Key
4	Iv
5	Index

"RADIUS Ingress Status Server Cfg Set elements" in the *RADIUS User's Guide* describes the configuration data elements listed in [Table 5-111](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-111 RADIUS Ingress Status Server Cfg Set CSV Format**

Column	Data Description
0	Application Type (RADIUS)
1	IngressStatusServerCfgSet (Keyword)
2	Ingress Status-Server Set Name
3	Send Response to Status-Server (Yes, No)
4	Status Server Response Message Type (AccountingResponse, AccessAccept)

"RADIUS Message Conversion Cfg Set elements" in the *RADIUS User's Guide* describes the data elements listed in [Table 5-112](#) and considerations for the data elements that must be observed when the elements are edited in the CSV files.

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**Note:** Import of the Message Conversion Cfg Set is not supported because user configuration of this data is not supported.

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**Table 5-112 RADIUS Message Conversion Cfg Set CSV Format**

Column	Data Description
0	Application Type (RADIUS)
1	MsgConvCfgSet (Keyword)
2	Message Conversion Set Name
3	Message Conversion Set Rules

"RADIUS NAS Node elements" in the *RADIUS User's Guide* describes the configuration data elements listed in [Table 5-113](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-113 RADIUS NAS Node CSV Format**

Column	Data Description
0	Application Type (RADIUS)
1	NasNode (Keyword)
2	NAS Node Name
3	FQDN
4	Realm
5	NAS Node Identifier
6	NAS IP Addresses [0] (repeated x 4)
9	NAS IP Addresses [3]

"RADIUS Network Options elements" in the *RADIUS User's Guide* describes the configuration data elements listed in [Table 5-114](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-114 RADIUS Network Options CSV Format**

Column	Data Description
0	Application Type (RADIUS)
1	NetworkOptions (Keyword)
2	Name
3	Shared Secret
4	Iv
5	Index



## Subscriber Binding Repository (SBR) CSV File Formats and Contents

The following tables describe the CSV file content and attribute column positions for all configuration data supported by the SBR.

"SBR Database Elements" in the PCA Help describes the SBR Database CSV elements listed in [Table 5-115](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-115 SBR Database CSV Record Format**

Column	Data Description
0	Application Type (SBR)
1	SbrDatabase (Keyword)
2	SBR Database Name (Key)
3	Database Type (Binding or Session)
4	Resource Domain Name
5	Number of Server Groups
6	Place Association Name

"SBR Database Resizing Elements" in the PCA Help describes the SBR Database Resizing CSV elements listed in [Table 5-116](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-116 SBR Database Resizing CSV Record Format**

Column	Data Description
0	Application Type (SBR)
1	SbrDatabaseResizingPlan (Keyword)
2	SBR Database Resizing Plan Name (Key)
3	SBR Database Name
4	Target Resource Domain Name
5	Target Number of Server Groups

"SBR Data Migration Plan Elements" in the PCA Help describes the SBR Migration Plan CSV elements listed in [Table 5-117](#) and configuration considerations for the data elements that must be observed when the elements are edited in the CSV files.

**Table 5-117 SBR Data Migration Plan CSV Record Format**

Column	Data Description
0	Application Type (SBR)
1	SbrDataMigrationPlan (Keyword)
2	SBR Data Migration Plan Name (Key)
3	Migration Type
4	Initial SBR Database Name

**Table 5-117 (Cont.) SBR Data Migration Plan CSV Record Format**

<b>Column</b>	<b>Data Description</b>
5	Target SBR Database Name