



CAR System Reports Configuration

CAR provides reporting capabilities for three levels of users:

- Administrators—Generate system reports to help with load balancing, system performance, and troubleshooting.
- Managers—Generate reports for users, departments, and QoS to help with call monitoring for budgeting or security purposes and for determining the voice quality of the calls.
- Individual users—Generate a billing report for each user's calls.

This chapter contains the following topics:

- [Configuring QoS Reports, page 6-1](#)
- [Configuring QoS Parameters, page 6-5](#)
- [Configuring Traffic Reports, page 6-9](#)
- [Configuring Malicious Call Details Reports, page 6-15](#)
- [Configuring Precedence Call Summary, page 6-15](#)
- [Configuring System Overview, page 6-20](#)
- [Configuring CDR Error, page 6-21](#)
- [QoS Parameter Operators, page 6-21](#)
- [Related Topics, page 6-22](#)



Note

Depending on your job function, you may not have access to every report that is described in this chapter.

Configuring QoS Reports

Only CAR administrators generate the QoS detail report. The report details the QoS ratings that are attributed to inbound and outbound calls on the Cisco CallManager network for the period that is specified.

Managers or CAR administrators generate the QoS summary report. The report provides a two-dimensional pie chart that shows the distribution of QoS grades that are achieved for the specified call classifications and period. The report also provides a table that summarizes the calls for each QoS. The call details in CDRs and CMRs and the QoS parameters that are provided in the [“Defining the Quality of Service \(QoS\) Values”](#) section on page 4-5 provide basis for assigning a particular voice-quality category to a call.

You can either view reports that the system automatically generates or generate new reports. Only CAR administrators can schedule reports for automatic generation. See the [“System Scheduler Configuration” section on page 3-7](#), for more information.

The following sections describe how to configure QoS detail and summary reports:

- [QoS Detail Report Configuration, page 6-2](#)
- [QoS Summary Report Configuration, page 6-4](#)

QoS Detail Report Configuration



Caution

Use CAR only during off-peak hours. Otherwise, data collection and report generation could cause performance degradation on the Cisco CallManager system.

This section describes how to generate, view, or mail detailed information about the system QoS.

Procedure

Step 1 Choose **System Reports > QoS > Detail**.

The QoS Detail window displays.

Step 2 In the Select Call Types area, check the check boxes for the types of calls that you want the report to include. [Table 6-1](#) describes the call types.

Table 6-1 QoS Detail Report Call Types

Call Type	Description
Internal	Intracuster calls that originated in the Cisco CallManager network and ended in the same Cisco CallManager network (no gateways are used).
Local	Local calls that are routed through the public switched telephone network (PSTN) to numbers without an area code or that include one of the local area codes.
Long Distance	Long-distance calls that originate in the Cisco CallManager network going out through the PSTN.
International	International calls that originate in the Cisco CallManager network going out through the PSTN.
On Net	Outgoing, intercluster calls that originate on one Cisco CallManager cluster and terminate on a different cluster.
Incoming	Inbound calls that originated outside the Cisco CallManager network, entered through a gateway, and went into the Cisco CallManager network.


Table 6-1 QoS Detail Report Call Types (continued)

Call Type	Description
Tandem	Inbound calls that originated outside the Cisco CallManager network, entered the Cisco CallManager network through a gateway, and were transferred outbound from the Cisco CallManager network through a gateway.
Others	All other outgoing calls, such as toll-free numbers or emergency calls such as 911.

- Step 3** In the Select QoS area, check the check boxes for the voice-quality categories that you want included in the report. The parameters set in the [“Defining the Quality of Service \(QoS\) Values”](#) section on page 4-5, provide basis for all voice-quality categories.

Table 6-2 QoS Detail Report Voice Quality

Voice Quality	Description
Good	QoS for these calls represents the highest possible quality.
Acceptable	QoS for these calls, although slightly degraded, still falls within an acceptable range.
Fair	QoS for these calls is degraded but still within a usable range.
Poor	QoS for these calls designates unsatisfactory quality.
NA	These calls did not match any criteria for the established QoS categories.

- Step 4** Choose the date range for the period for which you want to see QoS information.
- Step 5** In the Select Users field, you can either choose all users or search for particular users. To choose all users, check the Select All Users check box. To choose individual users, enter the user ID of the individual in the User ID field and click the **Add** button.
-  **Note** You can also use a provided search function. See the [“Searching for Users”](#) section on page 5-14.
- Step 6** If you want the report in CSV format, choose CSV (comma separated value) in the Report Format area. If you want the report in PDF format, choose PDF (portable document format) in the Report Format area.
- Step 7** Click the **View Report** button.
The report displays.
- Step 8** If you want to mail the report, click the **Send Report** button. To send the report, follow the procedure that is described in the [“Mailing a Report”](#) section on page 5-13.

Additional Information

See the “[Related Topics](#)” section on page 6-22.

QoS Summary Report Configuration

**Caution**

Use CAR only during off-peak hours. Otherwise, data collection and report generation could cause performance degradation on the Cisco CallManager system.

This section describes how to generate, view, or mail summary information about the system QoS.

Procedure**Step 1**

Perform one of the following steps:

- If you are a manager, choose **QoS > Summary**
- If you are a CAR administrator, choose **System Reports > QoS > Summary**.

The QoS Summary window displays.

Step 2

In the Available Reports field, choose an automatically generated report (if available) and go to [Step 6](#), or use the default Generate New Report and go to [Step 3](#).

**Note**

You can only choose the automatically generated report if you are logged in as CAR administrator. The automatically generated reports do not display in the drop-down list box if you are logged in as a manager.

Step 3

In the Select Call Types area, check the check boxes for the types of calls that you want the report to include. [Table 6-3](#) describes the call types.

Table 6-3 QoS Summary Report Call Types

Call Type	Description
Internal	Intracenter calls that originated in the Cisco CallManager network and ended in the same Cisco CallManager network (no gateways are used).
Local	Local calls that are routed through the public switched telephone network (PSTN) to numbers without an area code or that include one of the local area codes.
Long Distance	Long-distance calls that originate in the Cisco CallManager network going out through the PSTN.
International	International calls that originate in the Cisco CallManager network going out through the PSTN.

Table 6-3 QoS Summary Report Call Types (continued)

Call Type	Description
On Net	Outgoing, intercluster calls that originate on one Cisco CallManager cluster and terminate on a different cluster.
Incoming	Inbound calls that originated outside the Cisco CallManager network, entered through a gateway, and went into the Cisco CallManager network.
Tandem	Inbound calls that originated outside the Cisco CallManager network, entered the Cisco CallManager network through a gateway, and were transferred outbound from the Cisco CallManager network through a gateway.
Others	All other outgoing calls, such as toll-free numbers or emergency calls such as 911.

- Step 4** If you chose Generate New Report in [Step 2](#), choose the date range for the period for which you want to generate the report.
- Step 5** If you want the report in CSV format, choose CSV (comma separated value) in the Report Format area. If you want the report in PDF format, choose PDF (portable document format) in the Report Format area.
- Step 6** Click the **View Report** button.
The report displays.
- Step 7** If you want to mail the report, click the **Send Report** button. To send the report, follow the procedure that is described in the [“Mailing a Report”](#) section on page 5-13.

Additional Information

See the [“Related Topics”](#) section on page 6-22.

Configuring QoS Parameters

Only CAR administrators generate the QoS by gateway report. The report provides the percentage of calls that satisfy the selected QoS criteria for a period that is specified for the selected gateways.

Only CAR administrators generate the QoS by call types report. The report provides jitter, latency, and lost packet information for a period that is specified for all calls of a chosen type.

The following sections describe how to configure QoS parameters by gateway and by call type:

- [QoS by Gateway Configuration, page 6-6](#)
- [QoS by Call Types Configuration, page 6-7](#)

QoS by Gateway Configuration



Caution

Use CAR only during off-peak hours. Otherwise, data collection and report generation could cause performance degradation on the Cisco CallManager system.

This section describes how to generate, view, or mail QoS information about all chosen gateways.

Before You Begin

Configure the gateway by using the procedures in the [“Gateway Configuration” section on page 3-5](#).

Procedure

Step 1 Choose **System Reports > QoS > By Gateways**.

The QoS based on Gateways window displays.

Step 2 In the Generate Reports field, choose a time as described in [Table 6-4](#).

Table 6-4 Generate Report Fields

Parameter	Description
Hour of Day	Displays the percentage of the calls, for each selected gateway, that satisfies the QoS criteria for the period that you specify in Step 6 . The percentage results show for hour of day.
Day of Week	Displays the percentage of the calls, for each selected gateway, that satisfies the QoS criteria for the period that you specify in Step 6 . The percentage results show for day of week.
Day of Month	Displays the percentage of the calls, for each selected gateway, that satisfies the QoS criteria for the period that you specify in Step 6 . The percentage results show for day of month.

Step 3 In the Jitter field, choose the operator that you want to use and enter the value for jitter. See the [“QoS Parameter Operators” section on page 6-21](#), for descriptions of operators.

Step 4 In the Latency field, choose the operator that you want to use and enter the value for latency. See [QoS Parameter Operators, page 6-21](#), for descriptions of operators.

Step 5 In the Lost Packets field, choose the operator that you want to use and enter the value for number of lost packets. See [QoS Parameter Operators, page 6-21](#), for descriptions of operators.

Step 6 Choose the date range of the period for which you want to see call information.

Step 7 To choose the type of gateway that you want included in the report, perform one of the following tasks:

- To display all the gateways that are configured in the system, click **Gateway Types** in the column on the left side of the window.
- To expand the tree structure and display the type of gateway from which you can choose, click the icon next to Gateway types.

- To choose a gateway that uses a particular route pattern/hunt pilot, rather than a gateway type, click **Route Patterns/Hunt Pilots** in the column on the left side of the window. The tree structure expands and displays the gateways that are associated to the configured Route Patterns/Hunt Pilots.
- To expand the tree structure and display route pattern/hunt pilot for you to choose, click the icon next to Route Patterns/Hunt Pilots.

**Note**

You can also search for specific route patterns/hunt pilots by entering part of the name of the route pattern(s)/hunt pilot(s) in the Route Patterns/Hunt Pilots box in the column on the left side of the window. CAR searches for the route pattern(s)/hunt pilot(s) that matches the search string.

- Step 8** From the list, choose a gateway type.
The gateway name displays in the List of Gateways box.

**Note**

The List of Gateways box will display up to 200 gateways that are configured for the chosen gateway type.

- Step 9** In the List of Gateways box, choose the gateways that you want to include in the report.

**Note**

You can generate a report for up to 15 gateways at a time.

- Step 10** Click the down arrow icon to move the chosen gateway to the list of Selected Gateways box.
The gateway that you chose displays in the Selected Gateways box.

- Step 11** If you want the report in CSV format, choose CSV (comma separated value) in the Report Format area.
If you want the report in PDF format, choose PDF (portable document format) in the Report Format area.

- Step 12** Click the **View Report** button.
The report displays.

- Step 13** If you want to mail the report, click the **Send Report** button. To send the report, follow the procedure that is described in the [“Mailing a Report” section on page 5-13](#).

Additional Information

See the [“Related Topics” section on page 6-22](#).

QoS by Call Types Configuration

This section describes how to generate, view, or mail QoS information about all calls of a certain type.

**Caution**

Use CAR only during off-peak hours. Otherwise, data collection and report generation could cause performance degradation on the Cisco CallManager system.

Procedure

- Step 1** Choose **System Reports > QoS > By Call Types**.
The QoS based on Call Types window displays.

- Step 2** In the Generate Report field, choose a time as described in [Table 6-5](#).

Table 6-5 Generate Report Fields

Parameter	Description
Hour of Day	Displays the percentage of the calls, for each call type, that satisfies the QoS criteria for the period that you specify in Step 7 . The percentage results show for hour of day.
Day of Week	Displays the percentage of the calls, for each call type, that satisfies the QoS criteria for the period that you specify in Step 7 . The percentage results show for day of week.
Day of Month	Displays the percentage of the calls, for each call type, that satisfies the QoS criteria for the period that you specify in Step 7 . The percentage results show for day of month.

- Step 3** In the Jitter field, choose the operator that you want to use and enter the value for jitter. See “[QoS Parameter Operators](#)” section on page 6-21, for descriptions of operators.
- Step 4** In the Latency field, choose the operator that you want to use and enter the value for latency. See “[QoS Parameter Operators](#)” section on page 6-21, for descriptions of operators.
- Step 5** In the Lost Packets field, choose the operator that you want to use and enter the value for number of lost packets. See “[QoS Parameter Operators](#)” section on page 6-21, for descriptions of operators.
- Step 6** In the Select Call Types area, check the check boxes for the types of calls that you want the report to include. [Table 6-6](#) describes the call types.

Table 6-6 QoS Parameters by Call Types

Call Type	Description
Internal	Intracuster calls that originated in the Cisco CallManager network and ended in the same Cisco CallManager network (no gateways are used).
Local	Local calls that are routed through the public switched telephone network (PSTN) to numbers without an area code or that include one of the local area codes.
Long Distance	Long-distance calls that originate in the Cisco CallManager network going out through the PSTN.
International	International calls that originate in the Cisco CallManager network going out through the PSTN.
On Net	Outgoing, intercluster calls that originate on one Cisco CallManager cluster and terminate on a different cluster.

Table 6-6 QoS Parameters by Call Types (continued)

Call Type	Description
Incoming	Inbound calls that originated outside the Cisco CallManager network, entered through a gateway, and went into the Cisco CallManager network.
Tandem	Inbound calls that originated outside the Cisco CallManager network, entered the Cisco CallManager network through a gateway, and were transferred outbound from the Cisco CallManager network through a gateway.
Others	All other outgoing calls, such as toll-free numbers or emergency calls such as 911.

- Step 7** Choose the date range for the period for which you want to see call information.
- Step 8** If you want the report in CSV format, choose CSV (comma separated value) in the Report Format area. If you want the report in PDF format, choose PDF (portable document format) in the Report Format area.
- Step 9** Click the **View Report** button.
The report displays.
- Step 10** If you want to mail the report, click the **Send Report** button. To send the report, follow the procedure that is described in the [“Mailing a Report” section on page 5-13](#).

Additional Information

See the [“Related Topics” section on page 6-22](#).

Configuring Traffic Reports

Only CAR administrators can generate the traffic summary report. The report provides information about the call volume for a period that you specify. Include only those call types and QoS voice-quality categories that you chose.

**Tip**

Use this report to determine the number of calls that are being made on an hourly or daily basis. This report helps you identify high- and low-traffic patterns for capacity planning.

Only CAR administrators can generate the traffic summary by extensions report. The report provides information about the call volume for a period and set of extensions that you specify. Include only those call types and extensions that you chose.

**Tip**

You can use this report to track call usage by a specified group of users, by a department, or by another criteria, such as lobby phones or conference room phones. You can set up this report to generate on a weekly basis. This report helps you determine high-usage users or groups by aggregating the usage level across the users that you specify.

The following sections describe how to configure traffic summary and traffic summary by extensions reports:

- [Configuring Traffic Summary, page 6-10](#)
- [Configuring Traffic Summary by Extensions, page 6-12](#)

Configuring Traffic Summary

Only CAR administrators generate the traffic summary report. The report provides information about the call volume for a period that you specify.

You can either view reports that the system automatically generates or generate new reports. See [System Scheduler Configuration, page 3-7](#), for more information.



Caution

Use CAR only during off-peak hours. Otherwise, data collection and report generation could cause performance degradation on the Cisco CallManager system.

This section describes how to generate, view, or mail summary information about system traffic.

Procedure

Step 1 Choose **System Reports > Traffic> Summary**.

The Traffic Summary window displays.

Step 2 In the Generate Report field, choose a time as described in [Table 6-7](#).

Table 6-7 Generate Report Fields

Parameter	Description
Hour of Day	Displays the average number of calls in the system for the period that you specify in Step 4 , the call types you specify in Step 5 , and the Qos values you specify in Step 6 for hour of day.
Day of Week	Displays the average number of calls in the system for the period that you specify in Step 4 , the call types you specify in Step 5 , and the Qos values you specify in Step 6 for day of the week.
Day of Month	Displays the average number of calls in the system for the period that you specify in Step 4 , the call types you specify in Step 5 , and the Qos values you specify in Step 6 for day of month.

Step 3 In the Available Reports field, choose an automatically generated report (if available) and go to [Step 8](#) or use the default Generate New Report and go to [Step 4](#).

Step 4 Choose the date range for the period for which you want to generate the report.

Step 5 In the Select Call Types area, check the check boxes for the types of calls that you want to include in the report. [Table 6-8](#) describes the call types.

Table 6-8 **Traffic Summary by Call Types**

Call Type	Description
Internal	Intracuster calls that originated in the Cisco CallManager network and ended in the same Cisco CallManager network (no gateways are used).
Local	Local calls that are routed through the public switched telephone network (PSTN) to numbers without an area code or that include one of the local area codes.
Long Distance	Long-distance calls that originate in the Cisco CallManager network going out through the PSTN.
International	International calls that originate in the Cisco CallManager network going out through the PSTN.
On Net	Outgoing, intercluster calls that originate on one Cisco CallManager cluster and terminate on a different cluster.
Incoming	Inbound calls that originated outside the Cisco CallManager network, entered through a gateway, and went into the Cisco CallManager network.
Others	All other outgoing calls, such as toll-free numbers or emergency calls such as 911.

**Note**

The calls that the chart/table shows comprise an average number of calls per day. If the data that is generated is less and you have chosen a wide date range, the report shows negligible values, that are treated as 0, and the graph does not display. For example, if a Day of Week report gets generated for eight days that comprise two Mondays, the data that is shown for Monday represents the average number of calls for both the Mondays (the sum of all the calls in each Monday divided by 2). Similarly, in an Hour of Day report, the data that displays against 05-06 will be the average number of calls per day between the time 05 and 06 of the date range that was chosen for the report.

- Step 6** In the Select QoS area, check the check boxes for the voice-quality categories that you want to include in the report. The parameters set in the [“Defining the Quality of Service \(QoS\) Values”](#) section on page 4-5 provide basis for all voice-quality categories.

Table 6-9 **QoS Detail Report Voice Quality**

Voice Quality	Description
Good	QoS for these calls represents the highest possible quality.
Acceptable	QoS for these calls, although slightly degraded, still falls within an acceptable range.

Table 6-9 QoS Detail Report Voice Quality (continued)

Voice Quality	Description
Fair	QoS for these calls, although degraded, still remains within a usable range.
Poor	Poor voice quality indicates that QoS for these calls is unsatisfactory.
NA	These calls did not match any criteria for the established QoS categories.

- Step 7** If you want the report in CSV format, choose CSV (comma separated value) in the Report Format area. If you want the report in PDF format, choose PDF (portable document format) in the Report Format area.
- Step 8** Click the **View Report** button.
The report displays.
- Step 9** If you want to mail the report, click the **Send Report** button. To send the report, follow the procedure described in the [“Mailing a Report” section on page 5-13](#).

Additional Information

See the [“Related Topics” section on page 6-22](#).

Configuring Traffic Summary by Extensions

Only CAR administrators generate the traffic summary by extensions report. The report provides information about the call volume for a period and set of extensions that you specify.

This section describes how to generate, view, or mail a traffic summary report based on user extensions.

**Caution**

Use CAR only during off-peak hours. Otherwise, data collection and report generation could cause performance degradation on the Cisco CallManager system.

Procedure

- Step 1** Choose **System Reports > Traffic > Summary By Extension**.
The Traffic Summary based on Extension(s) window displays.
- Step 2** In the Generate Report field, choose a time as described in [Table 6-10](#).

Table 6-10 **Generate Report Fields**

Parameter	Description
Hour of Day	Displays the average number of calls in the system for the chosen extension numbers for the date range that was chosen for hour of day. Note Ensure that the date and time range does not exceed one month.
Day of Week	Displays the average calls in the system for the selected extension numbers for the date range that was chosen for day of week. Note Ensure that the date and time range does not exceed one month.
Day of Month	Displays the average calls in the system for the selected extension numbers for the date range that was chosen for day of month. Note Ensure that the date and time range does not exceed one month.

Step 3 In the Select Call Types area, check the check boxes for the types of calls that you want to include in the report. [Table 6-11](#) describes the call types.

Table 6-11 **Traffic Summary (Extn) by Call Types**

Call Type	Description
Internal	Intracuster calls that originated in the Cisco CallManager network and ended in the same Cisco CallManager network (no gateways are used).
Local	Local calls that are routed through the public switched telephone network (PSTN) to numbers without an area code or that include one of the local area codes.
Long Distance	Long-distance calls that originate in the Cisco CallManager network going out through the PSTN.
International	International calls that originate in the Cisco CallManager network going out through the PSTN.
On Net	Outgoing, intercluster calls that originate on one Cisco CallManager cluster and terminate on a different cluster.

Table 6-11 **Traffic Summary (Extn) by Call Types (continued)**

Call Type	Description
Incoming	Inbound calls that originated outside the Cisco CallManager network, entered through a gateway, and went into the Cisco CallManager network.
Others	All other outgoing calls, such as toll-free numbers or emergency calls such as 911.

**Note**

The calls in the chart/table shows comprise an average number of calls per day. If the data generated is less and you have chosen a wide date range, the report shows negligible values, that are treated as 0, and the graph does not display. For example, if a Day of Week report gets generated for eight days that comprise two Mondays, the data that is shown for Monday represents the average number of calls for both the Mondays (the sum of all the calls in each Monday divided by 2). Similarly, in an Hour of Day report, the data that displays against 05-06 will be the average number of calls per day between the time 05 and 06 of the date range that was chosen for the report.

- Step 4** In the Select Extensions group box, you can either choose all extensions or search for extensions based on users.

**Note**

You can enter a wildcard pattern like "!" or "X" to search on extensions. The "!" represents any n digit that has 0-9 as each of its digits, and the "X" represents a single digit in the range 0-9.

To choose all extensions, check the Select All Extensions check box. To choose extensions based on users, enter the extension number of the individual in the Extension field and click the **Add Extension** button. You can also use a provided search function, as described in the [“Searching for Users” section on page 5-14](#).

- Step 5** If you want the report in CSV format, choose CSV (comma separated value) in the Report Format area. If you want the report in PDF format, choose PDF (portable document format) in the Report Format area.
- Step 6** Click the **View Report** button.
- The report displays.
- Step 7** If you want to mail the report, click the **Send Report** button. To send the report, follow the procedure that is described in the [“Mailing a Report” section on page 5-13](#).

Additional Information

See the [“Related Topics” section on page 6-22](#).

Configuring Malicious Call Details Reports

Only CAR administrators generate the Malicious Call Details report. The report displays the details of malicious calls.

This section describes how to generate, view, or mail a malicious call detail report.

**Caution**

Use CAR only during off-peak hours. Otherwise, data collection and report generation could cause performance degradation on the Cisco CallManager system.

Procedure

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- Step 1** Choose **System Reports > Malicious Call Details**.
- The Malicious Call Details window displays.
- Step 2** In the From Date drop-down list boxes, choose the month, day, and year from which you want malicious call details.
- Step 3** In the To Date drop-down list boxes, choose the month, day, and year to which you want malicious call details.
- Step 4** If you want the report in CSV format, choose CSV (comma separated value) in the Report Format area. If you want the report in PDF format, choose PDF (portable document format) in the Report Format area.
- Step 5** To view the report, click **View Report**.
- The report displays.
- Step 6** To mail the report to an e-mail recipient, see the [“Mailing a Report” section on page 5-13](#).
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Additional Information

See the [“Related Topics” section on page 6-22](#).

Additional Documentation

- *Cisco CallManager Features and Services Guide*

Configuring Precedence Call Summary

Only CAR administrators generate the Precedence Call Summary report. The report displays the Call Summary for the precedence values that you choose.

This section describes how to generate, view, or mail a Precedence Call Summary report.

**Caution**

Use CAR only during off-peak hours. Otherwise, data collection and report generation could cause performance degradation on the Cisco CallManager system.

Procedure

Step 1 Choose **System Reports > Precedence Call Summary**.

The Call Summary by Precedence window displays.

Step 2 In the Generate Reports field, choose a time as described in [Table 6-12](#).

Table 6-12 *Generate Report Fields*

Parameter	Description
Hour of Day	Displays the average number of calls in the system for the chosen extension numbers for the date range that was chosen for hour of day. Note Ensure that the date and time range does not exceed one month.
Day of Week	Displays the average number of calls in the system for the chosen extension numbers for the date range that was chosen for day of week. Note Ensure that the date and time range does not exceed one month.
Day of Month	Displays the average number of calls in the system for the chosen extension numbers for the date range that was chosen for day of month. Note Ensure that the date and time range does not exceed one month.

Step 3 In the Select Precedence Levels field, check the precedence levels that you want in the report or click **Select All** to check all precedence levels.



Note To uncheck the precedence level check boxes, click **Clear All**.

Step 4 In the From Date drop-down list boxes, choose the month, day, and year from which you want precedence summary information.

Step 5 In the To Date drop-down list boxes, choose the month, day, and year to which you want precedence summary information.

Step 6 If you want the report in CSV format, choose CSV (comma separated value) in the Report Format area. If you want the report in PDF format, choose PDF (portable document format) in the Report Format area.

Step 7 To view the report, click **View Report**.

The report displays.

Step 8 To mail the report to an e-mail recipient, see the [“Mailing a Report”](#) section on page 5-13.

Additional Information

See the [“Related Topics”](#) section on page 6-22.

Configuring Client Matter Code Reports

Only CAR administrators can generate the Client Matter Code report. You can generate a report that shows the originating and destination numbers, the date and time that the call originated, the call duration in seconds, and the call classification for calls that relate to each chosen client matter code.

The following procedure describes how to generate a report that shows the usage of specific client matter codes.

**Caution**

Use CAR only during off-peak hours; otherwise, data collection and report generation could cause performance degradation on the Cisco CallManager system.

Procedure

Step 1 Choose **System Reports > FAC CMC > Client Matter Code**.

The Call Details for Client Matter Code window displays a list of all client matter codes that are configured in the system.

Step 2 In the List of Client Matter Codes box, choose the codes that you want included in the report.

**Note**

You can choose up to 100 client matter codes.

Step 3 To add the chosen code(s) to the Selected Client Matter Codes box, click the down button.

The report will include all codes, for which data is available, that are listed in this box.

Step 4 In the From Date and To Date pull-down list boxes, enter the date range of the period for which you want to see client matter code information.

Step 5 In Report Format, choose the CSV radio button if you want the report to generate in CSV (comma separated value) format or the PDF radio button if you want the report to generate in PDF (portable document format).

Step 6 Click **View Report**.

The report displays.

Step 7 If you want to mail the report, click the **Send Report** button. To send the report, follow the procedure that is described in [“Mailing a Report” section on page 5-13](#).

Additional Information

See the [“Related Topics” section on page 6-22](#).

Configuring Authorization Code Name Reports

Only CAR administrators can generate the Authorization Code Name report. You can generate a report that shows the originating and destination numbers, the date and time that the call originated, the call duration in seconds, the call classification, authorization code name, and the authorization level for calls that relate to each chosen authorization code name.

**Note**

For security purposes, the authorization code does not display; instead, the authorization code name (description) displays.

The following procedure describes how to generate a report that shows the usage of specific authorization code names.

**Caution**

Use CAR only during off-peak hours; otherwise, data collection and report generation could cause performance degradation on the Cisco CallManager system.

Procedure

Step 1 Choose **System Reports > FAC CMC > Authorization Code Name**.

The Call Details for Authorization Code Name window displays a list of all authorization code names that are configured in the system.

Step 2 In the List of Authorization Code Names box, choose the code names that you want included in the report.

**Note**

You can choose up to 30 code names.

Step 3 To add the chosen code name(s) to the Selected Authorization Code Names box, click the down button. The report will include all code names, for which data is available, that are listed in this box.

Step 4 In the From Date and To Date pull-down list boxes, enter the date range of the period for which you want to see authorization code name information.

Step 5 In Report Format, choose the CSV radio button if you want the report to generate in CSV (comma separated value) format, or the PDF radio button if you want the report to generate in PDF (portable document format).

Step 6 Click **View Report**.

The report displays.

Step 7 If you want to mail the report, click the **Send Report** button. To send the report, follow the procedure that is described in [“Mailing a Report” section on page 5-13](#).

Additional Information

See the [“Related Topics” section on page 6-22](#).

Configuring Authorization Level Reports

Only CAR administrators can generate the Authorization Level report. You can generate a report that shows the originating and destination numbers, the date and time that the call originated, the call duration in seconds, and the call classification for calls that relate to each chosen authorization level.

The following procedure describes how to generate a report that shows the usage of specific authorization levels.

**Caution**

Use CAR only during off-peak hours; otherwise, data collection and report generation could cause performance degradation on the Cisco CallManager system.

Procedure

Step 1 Choose **System Reports > FAC CMC > Authorization Level**.

The Call Details by Authorization Level window displays a list of all authorization levels that are configured in the system.

Step 2 In the List of Authorization Levels box, choose the levels that you want included in the report.

Step 3 To add the chosen level(s) to the Selected Authorization Levels box, click the down button.

The report will include all levels, for which data is available, that are listed in this box.

**Note**

Only FAC authorization levels reports associated with Route Patterns will be generated.

Step 4 In the From Date and To Date pull-down list boxes, enter the date range of the period for which you want to see authorization level information.

Step 5 In Report Format, choose the CSV radio button if you want the report to generate in CSV (comma separated value) format or the PDF radio button if you want the report to generate in PDF (portable document format).

Step 6 Click **View Report**.

The report displays.

Step 7 If you want to mail the report, click the **Send Report** button. To send the report, follow the procedure that is described in [“Mailing a Report” section on page 5-13](#).

Additional Information

See the [“Related Topics” section on page 6-22](#).

Configuring System Overview

Only CAR administrators generate the system overview report that provides the entire set of system reports in one report.


You can either view reports that the system automatically generates or generate new reports. Only CAR administrators can schedule reports for automatic generation. See the “[System Scheduler Configuration](#)” section on page 3-7, for more information.

**Caution**

Use CAR only during off-peak hours. Otherwise, data collection and report generation could cause performance degradation on the Cisco CallManager system.

This section describes how to generate, view, or mail summary information about the Cisco CallManager system.

Procedure

-
- Step 1** Choose **System Reports > System Overview**.
- The System Overview window displays.
- Step 2** In the Available Reports field, choose an automatically generated report (if available) and go to [Step 6](#), or use the default Generate New Report and go to [Step 3](#).
- Step 3** Choose the date range for the period for which you want to generate the report.
- Step 4** From the List of Reports, choose the reports that you want generated by highlighting the report and clicking the right arrow icon.
- The reports that you chose appear in the Selected Reports list box.
-  **Tip** You can highlight more than one report at a time by holding down the Ctrl key on your keyboard while clicking the reports.
-
- Step 5** If you want the report in CSV format, choose CSV (comma separated value) in the Report Format area. If you want the report in PDF format, choose PDF (portable document format) in the Report Format area.
- Step 6** Click the **View Report** button.
- The report displays.
- Step 7** If you want to mail the report, click the **Send Report** button. To send the report, follow the procedure that is described in [Mailing a Report](#), page 5-13.
-

Additional Information

See the “[Related Topics](#)” section on page 6-22.

Configuring CDR Error

Only CAR administrators generate the CDR error report. The report provides statistics for the number of error records in the CAR Billing_Error table and the reason for the errors.

This section describes how to generate, view, or mail information about CDR errors.

**Caution**

Use CAR only during off-peak hours. Otherwise, data collection and report generation could cause performance degradation on the Cisco CallManager system.

Procedure

- Step 1** Choose **System Reports > CDR Error**.
The CDR Error window displays.
- Step 2** Choose the date range of the period for which you want to generate the report.
- Step 3** If you want the report in CSV format, choose CSV (comma separated value) in the Report Format area. If you want the report in PDF format, choose PDF (portable document format) in the Report Format area.
- Step 4** Click the **View Report** button.
The report displays.
- Step 5** If you want to mail the report, click the **Send Report** button. To send the report, follow the procedure that is described in the [“Mailing a Report” section on page 5-13](#).

Additional Information

See the [“Related Topics” section on page 6-22](#).

QoS Parameter Operators

[Table 6-13](#) describes the QoS parameter operators.

Table 6-13 QoS Parameter Operators

Operator	Description
>=	Choose this operator to generate jitter, latency, or lost packet data that is greater than or equal to the specified value.
=	Choose this operator to generate jitter, latency, or lost packet data that is equal to the specified value.
<=	Choose this operator to generate jitter, latency, or lost packet data that is less than or equal to the specified value.

Table 6-13 QoS Parameter Operators (continued)

Operator	Description
N.A.	Choose this operator to preclude jitter, latency, or lost packet data.
Between	Choose this operator to generate jitter, latency, or lost packet data that occurs between one value and another value. When you choose this operator, a second field displays, so you can set the start and end values.

Additional Information

See the [“Related Topics”](#) section on page 6-22.

Related Topics

- [CDR Error Report Results, page 10-18](#)
- [System Overview Report Results, page 10-17](#)
- [Enabling or Customizing Reports for Automatic Generation, page 4-7](#)
- [Precedence Call Summary Report Results, page 10-16](#)
- [CDR Analysis and Reporting Overview, page 1-1](#)
- [Traffic Summary Report Results, page 10-13](#)
- [Configuring Traffic Summary, page 6-10](#)
- [Configuring Traffic Summary by Extensions, page 6-12](#)
- [QoS by Call Types Report Results, page 10-12](#)
- [QoS Parameter Operators, page 6-21](#)
- [QoS by Gateway Configuration, page 6-6](#)
- [QoS by Gateways Report Results, page 10-12](#)
- [QoS Parameter Operators, page 6-21](#)
- [QoS by Call Types Configuration, page 6-7](#)
- [QoS Detail Report Configuration, page 6-2](#)
- [QoS Summary Report Results, page 10-11](#)
- [Defining the Quality of Service \(QoS\) Values, page 4-5](#)
- [QoS Detail Report Results, page 10-10](#)
- [QoS Summary Report Configuration, page 6-4](#)