

# **CAR Device Reports Configuration**

CAR provides reporting capabilities for three levels of users: administrators, managers, and individual users. Only administrators generate device reports.

Device reports track the load and performance of Cisco Unified CallManager related devices, such as conference bridges, voice-mail server, and gateways.

This chapter contains the following topics:

- Configuring Gateway Reports, page 7-1
- Configuring Route Plan Utilization Reports, page 7-8
- Configuring Conference Call Details, page 7-13
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# **Configuring Gateway Reports**

Configure the following device reports for gateways:

- Gateway Detail Report Configuration, page 7-1
- Gateway Summary Report Configuration, page 7-4
- Gateway Utilization Reports Configuration, page 7-5

## **Gateway Detail Report Configuration**

Only CAR administrators generate the gateway detail report. Use the gateway detail report to track issues with specific gateways.

This section describes how to generate, view, or mail detailed information about selected gateways.



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

#### **Procedure**

### Step 1 Choose Device Reports > Gateway > Detail.

The Gateway Detail window displays.

- **Step 2** To display the list of gateways in the List of Gateways box that you can include in the report, perform one of the following tasks:
  - To display all gateways in the List of Gateways box, click Gateway Types in the column on the left side of the window.
  - To display gateways for a particular gateway type in the List of Gateways box, click the icon next to **Gateway Types** in the column on the left side of the window. The tree structure expands, and a list of gateway types displays. Choose a gateway type from the list, and the gateway name displays in the List of Gateways box.



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

- To display all gateways that are associated to configured route patterns/hunt pilots, click the Route/Patterns/Hunt Pilots in the column on the left side of the window.
- To display gateways that use a particular route pattern, rather than a gateway type, click the icon next to **Route Patterns/Hunt Pilots** in the column on the left side of the window. The tree structure expands and displays a list of route patterns/hunt lists. Choose a route pattern/hunt pilot from the list, and the gateway name displays in the List of Gateways box.



You can also search for specific route patterns/hunt lists by entering part of the name of the route pattern(s)/hunt list(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 list(s) that matches the search string.

**Step 3** In the List of Gateways box, choose the gateways that you want to include in the report.



Note

You can generate up to 15 gateways at a time.

**Step 4** To move the chosen gateway to the list of Selected Gateways box, click the down arrow.

The gateway(s) that you chose displays in the Selected Gateways box.

**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 7-1 describes the call types.

Table 7-1 Gateway Details by Call Types

Call Type	Description
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 Unified CallManager network going out through the PSTN.

Table 7-1 Gateway Details by Call Types (continued)

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

**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 that are set in the "Defining the Quality of Service (QoS) Values" section on page 4-5 provide basis for all voice-quality categories.

Table 7-2 Gateway Detail 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 represents degraded quality but still within a usable range.
Poor	QoS for these calls represents unsatisfactory quality.
NA	These calls did not match any criteria for the established QoS categories.

**Step 7** Choose the date range for the period for which you want to see call information.



Note

Ensure the date and time range does not exceed one month.

**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 7-17.

## **Gateway Summary Report Configuration**

Only CAR administrators generate the gateway summary report. This report provides a summary of all the calls that went through the gateways. You can use this information for monitoring the traffic and QoS for calls through the gateways.

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 "CAR System Configuration" section on page 3-1, for more information.



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

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

#### **Procedure**

Step 1 Choose Device Reports > Gateway > Summary.

The Gateway 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 setting, Generate New Report, and go to Step 3.
- **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 7-3 describes the call types.



To check all check boxes, click Select All; to uncheck the check boxes, click Clear All.

Table 7-3 Gateway Summary by Call Types

Call Type	Description
On Net	Outgoing, intercluster calls that originate on one Cisco Unified CallManager cluster and terminate on a different cluster.
Internal	Intracluster calls that originate in the Cisco Unified CallManager network and end in the same Cisco Unified CallManager network (no gateways are used).

Table 7-3 Gateway Summary by Call Types (continued)

Call Type	Description
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 Unified CallManager network going out through the PSTN.
International	International calls that originate in the Cisco Unified CallManager network going out through the PSTN.
Incoming	Inbound calls that originated outside the Cisco Unified CallManager network, entered through a gateway, and went into the Cisco Unified CallManager network.
Tandem	Inbound calls that originated outside the Cisco Unified CallManager network, entered the Cisco Unified CallManager network through a gateway, and were transferred outbound from the Cisco Unified 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, choose the date range of 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, perform the procedure that is described in the "Mailing a Report" section on page 5-13.

### **Additional Information**

See the "Related Topics" section on page 7-17.

## **Gateway Utilization Reports Configuration**

Only CAR administrators generate the gateway utilization report. The report provides an estimate of the utilization percentage of the gateway for the period and not the exact utilization. For example, the system calculates the utilization of a gateway between 11hrs-12hrs, as (number of calls in the 5-minute interval that used the gateway \*100) / (maximum number of calls that could possibly use the gateway at any time). Maximum number of calls that are possible by using the gateway at any time = maximum number

of ports for the gateway as configured in the CAR Gateway Configuration window. After calculating the utilization for each 5-minute sample for the whole 1-hour duration, the maximum utilization value found for that 1 hour displays in the report as the utilization for the time between 11hrs and 12hrs. Similarly, to get a utilization for the whole day, the whole day gets divided into samples of 5 minutes each, and maximum utilization is calculated. You can examine the usage based on each hour of a day or on a specified number of days for each week or month. Reports generate for each gateway that is chosen.

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 "CAR System Configuration" section on page 3-1, for more information.



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

This section describes how to generate, view, or mail gateway utilization reports.

#### **Procedure**

Step 1 Choose Device Reports > Gateway > Utilization.

The Gateway Utilization window displays.

**Step 2** In the Generate Reports field, choose a time as described in Table 7-4.

Table 7-4 Generate Report Fields

Parameter	Description
Hour of Day	Displays the cumulative results for each hour in a 24-hour period for the period that you specify in Step 8.
Day of Week	Displays the days of the week that occur within the period that you specify in Step 8.
Day of Month	Displays the days of the month that occur within the period that you specify in Step 8.

- Step 3 In the Available Reports field, choose an automatically generated report (if available) and go to Step 10, or use the default Generate New Report and go to Step 4.
- **Step 4** To display the list of gateways that you can include in the report in the List of Gateways box, perform one of the following tasks:
  - To display all gateways in the List of Gateways box, click Gateway Types in the column on the left side of the window.
  - To display gateways for a particular gateway type in the List of Gateways box, click the icon next to **Gateway Types** in the column on the left side of the window. The tree structure expands and a list of gateway types displays. Choose a gateway type from the list, and the gateway name displays in the List of Gateways box.



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

- To display all gateways that are associated to configured route patterns/hunt pilots, click the **Route**Patterns/Hunt Pilots in the column on the left side of the window.
- To display gateways that use a particular route pattern, rather than a gateway type, click the icon next to **Route Patterns/Hunt Pilots** in the column on the left side of the window. The tree structure expands and displays a list of route patterns/hunt lists. Choose a route pattern/hunt pilot from the list, and the gateway name displays in the List of Gateways box.



Note

You can also search for specific route patterns/hunt lists by entering part of the name of the route pattern(s)/hunt list(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 list(s) that matches the search string.

**Step 5** Choose a gateway type from the list.

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 6** 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 7** Click the down arrow to move the chosen gateway to the list of Selected Gateways box.

The gateway(s) that you chose displays in the Selected Gateways box.

**Step 8** If you chose Generate New Report, enter the date range of the period for which you want to see call information.



Note

Ensure the date and time range does not exceed one month.

- **Step 9** 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 10** Click the **View Report** button.

The report displays.

**Step 11** If you want to mail the report, click the **Send Report** button. To send the report, perform the procedure that is described in the "Mailing a Report" section on page 5-13.

#### **Additional Information**

See the "Related Topics" section on page 7-17.

# **Configuring Route Plan Utilization Reports**

Configure the following device reports for route plans:

- Route and Line Group Utilization Reports Configuration, page 7-8
- Route/Hunt List Utilization Report Configuration, page 7-9
- Route Pattern/Hunt Pilot Utilization Report Configuration, page 7-11

### **Route and Line Group Utilization Reports Configuration**

Only CAR administrators generate the route and line group utilization report. This report provides an estimate of the maximum utilization percentage of the route and line group (cumulative utilization of all the gateways under the route and line group) for the period and not the exact utilization. The system calculates the utilization in the same way as it is done for Gateway Utilization, but this calculation gives cumulative utilization of all the gateways under the route groups and all the lines under the line groups. You can examine the usage based on each hour of a day or on a specified number of days for each week or month. Reports generate for each of the selected route and line groups.

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 "CAR System Configuration" section on page 3-1, for more information.



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

This section describes how to generate, view, or mail route and line group utilization reports.

#### **Procedure**

Step 1 Choose Device Reports > Route Plan > Route and Line Group Utilization.

The Route and Line Group Utilization window displays.

**Step 2** In the Generate Reports field, choose a time as described in Table 7-5.

Table 7-5 Generate Report Fields

Parameter	Description
Hour of Day	Displays the cumulative results for each hour in a 24-hour period for the period that you specify in Step 8.
Day of Week	Displays the days of the week that occur within the period that you specify in Step 8.
Day of Month	Displays the days of the month that occur within the period that you specify in Step 8.

**Step 3** In the Available Reports field, choose an automatically generated report (if available) and go to Step 10, or use the default setting, Generate New Report, and go to Step 4.

Step 4 To choose only those route and line groups that use a particular route pattern, click Route Patterns/Hunt Pilots in the column on the left side of the window.

The tree structure expands and displays the route patterns/hunt lists that you chose.



Note

You can also search for specific route patterns/hunt lists by entering part of the name of the route pattern(s)/hunt list(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 list(s) that matches the search string.

**Step 5** Choose a route pattern/hunt list from the list.

The route and line groups for this route pattern/hunt list display in the List of Route/Line Groups box.



Note

The List of Route/Line Groups box will display up to 200 route groups.

**Step 6** In the List of Route/Line Groups box, choose the route/line groups that you want to include in the report.



Note

You can generate a report for up to 15 route/line groups at a time.

**Step 7** To move the chosen gateway to the list of Selected Route/Line Groups box, click the down arrow. The route/line groups that you chose display in the Selected Route Groups box.

**Step 8** If you chose Generate New Report, enter the date range of the period for which you want to see call information.



Note

Ensure the date and time range does not exceed one month.

- **Step 9** 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 10** Click the **View Report** button.

The report displays.

**Step 11** 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 7-17.

## **Route/Hunt List Utilization Report Configuration**

Only CAR administrators generate the route/hunt list utilization report. The route/hunt list utilization report provides an estimate of the maximum utilization percentage of the route/hunt list (cumulative utilization of all the gateways under the route/hunt list) for the period and not the exact utilization. The system calculates the cumulative utilization of all the gateways under the route lists and all the lines under the hunt lists.

You can examine the usage based on each hour of a day or on a specified number of days for each week or month. Reports generate for each of the selected route/hunt lists.

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.



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

This section describes how to generate, view, or mail route/hunt list utilization reports.

#### **Procedure**

Step 1 Choose Device Reports > Route Plan > Route/Hunt List Utilization.

The Route/Hunt List Utilization window displays.

**Step 2** In the Generate Report field, choose a time as described in Table 7-6.

Table 7-6 Generate Report Fields

Parameter	Description
Hour of Day	Displays the cumulative results for each hour in a 24-hour period for the period that you specify in Step 8.
Day of Week	Displays the days of the week that occur within the period that you specify in Step 8.
Day of Month	Displays the days of the month that occur within the period that you specify in Step 8.

- Step 3 In the Available Reports field, choose an automatically generated report (if available) and go to Step 10, or use the default setting, Generate New Report, and go to Step 4.
- Step 4 To choose the route/hunt lists that you want to include in the report, click Route Patterns/Hunt Pilots in the column on the left side of the window. The tree structure expands and displays the route patterns/hunt pilots that you chose.



You can also search for specific route patterns/hunt lists by entering part of the name of the route pattern(s)/hunt lists 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 list(s) that matches the search string.

**Step 5** Choose a route/hunt list from the list.

The route/hunt list name displays in the List of Route/Hunt Lists box.



The List of Route/Hunt Lists box will display up to 200 route/hunt lists.

**Step 6** In the List of Route/Hunt Lists box, choose the route/hunt lists that you want to include in the report.



Note

You can generate a report for up to 15 route/hunt lists at a time.

- Step 7 To move the chosen route/hunt lists to the list of Selected Route/Hunt Lists box, click the down arrow.

  The route/hunt lists that you chose display in the Selected Route/Hunt Lists box.
- **Step 8** If you chose Generate New Report, enter the date range of the period for which you want to see call information.



Note

Ensure the date and time range does not exceed one month.

- **Step 9** 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 10 Click the View Report button.

The report displays.

**Step 11** If you want to mail the report, click the **Send Report** button. To send the report, perform the procedure that is described in the "Mailing a Report" section on page 5-13.

#### **Additional Information**

See the "Related Topics" section on page 7-17.

## **Route Pattern/Hunt Pilot Utilization Report Configuration**

Only CAR administrators generate the route pattern/hunt pilot utilization report. The report provides an estimate of the maximum utilization percentage of the route pattern/hunt pilot (cumulative utilization of all the gateways under the route pattern/hunt pilot) for the period and not the exact utilization. The system calculates the utilization of all the gateways under the route patterns and all the lines under the hunt pilots. You can examine the usage based on each hour of a day or on a specified number of days for each week or month. Reports generate for each of the selected route patterns/hunt pilots.

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.



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

This section describes how to generate, view, or mail route pattern/hunt pilot utilization reports.

#### **Procedure**

Step 1 Choose Device Reports > Route Plan > Route Pattern/Hunt Pilot Utilization.

The Route Pattern/Hunt Pilot Utilization window displays.

**Step 2** In the Generate Report field, choose a time as described in Table 7-7.

Table 7-7	Generate Report Fields
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Parameter	Description
Hour of Day	Displays the cumulative results for each hour in a 24-hour period for the period that you specify in Step 8.
Day of Week	Displays the days of the week that occur within the period that you specify in Step 8.
Day of Month	Displays the days of the month that occur within the period that you specify in Step 8.

- Step 3 In the Available Reports field, choose an automatically generated report (if available) and go to Step 10, or use the default Generate New Report and go to Step 4.
- Step 4 To choose the route pattern(s)/hunt list(s) that you want to include in the report, click **Route**Patterns/Hunt Pilots in the column on the left side of the window.

The tree structure expands and displays the route pattern(s)/hunt list(s) that you chose.



Note

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

**Step 5** Choose a route pattern/hunt pilot from the list.

The route pattern/hunt pilot name displays in the List of Route Patterns/Hunt Pilots box.



Note

The List of Route Patterns/Hunt Pilots box will display up to 200 route patterns/hunt lists.

**Step 6** In the List of Route Patterns/Hunt Pilots box, choose the route patterns/hunt lists that you want to include in the report.



Note

You can generate a report for up to 15 route patterns/hunt pilots at a time.

Step 7 Click the down arrow to move the chosen route pattern/hunt pilot to the list of Selected Route Patterns/Hunt Pilots box.

The route pattern/hunt pilot that you chose displays in the Selected Route Patterns/Hunt Pilots box.

**Step 8** If you chose Generate New Report, enter the date range of the period for which you want to see call information.



Note

Ensure the date and time range does not exceed one month.

- Step 9 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 10 Click the View Report button.

The report displays.

If you want to mail the report, click the **Send Report** button. To send the report, perform the procedure that is described in the "Mailing a Report" section on page 5-13.

#### **Additional Information**

See the "Related Topics" section on page 7-17.

## **Configuring Conference Call Details**

Only CAR administrators generate the Conference Call Details report. The Conference Call Details report allows you to generate and view details about conference calls.



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

This section describes how to generate, view, or mail a Conference Call Details report.

#### **Procedure**

Step 1 Choose **Device Reports > Conference Bridge > Call Details**.

The Conference Call Details window displays.

- Step 2 In the Report Type pull-down menu, choose either **Summary** or **Detail**.
- Step 3 In the Available Reports field, choose an automatically generated report (if available) and go to Step 7 or use the default setting, Generate New Report, and go to Step 4.
- Step 4 In Select Conference Types, check the check box of the conference type that you want to include in the report as described in Table 7-8.

Table 7-8 Conference Calls Detail Fields

Parameter	Description
Ad-Hoc	Ad hoc conferences allow the conference controller to let only certain participants into the conference.
Meet-Me	Meet-me conferences allow users to dial in to a conference.

Step 5 If you chose Generate New Report, enter the date range of the period for which you want to see conference call details.

Note

Ensure the date and time range does not exceed one month.

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, perform the procedure that is described in the "Mailing a Report" section on page 5-13.

#### **Additional Information**

See the "Related Topics" section on page 7-17.

# **Configuring Conference Bridge Utilization Reports**

Only CAR administrators generate the conference bridge utilization report. The report provides an estimate of the maximum utilization percentage of the Conference Bridges (cumulative utilization of all the Conference Bridges in the system) for the period and not the exact utilization. For example, the system calculates the utilization of a Conference Bridge between 11hrs and 12hrs by sampling the 1-hour duration in 5-minute equal samples. The utilization for each 5 minutes gets calculated as (number of calls in the 5-minute interval that used the conference bridge \*100) / (maximum number of calls that the conference bridge can handle at any time). After calculating the utilization for each 5-minute sample for the whole one-hour duration, the maximum utilization value found for that one hour displays in the report as the utilization for the time between 11hrs and 12hrs. You can examine the usage based on each hour of a day or on a specified number of days for each week or month. Reports generate for each conference bridge.

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.



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

This section describes how to generate, view, or mail conference bridge utilization reports for each conference bridge type.

### **Procedure**

**Step 1** Choose **Device Reports > Conference Bridge > Utilization**.

The Conference Bridge Utilization window displays.

**Step 2** In the Generate Report field, choose a time as described in Table 7-9.

Table 7-9 Generate Report Fields

Parameter	Description
Hour of Day	Displays the cumulative results for each hour in a 24-hour period for the period that you specify in
	Step 6.

Table 7-9 Generate Report Fields (continued)

Parameter	Description
•	Displays the days of the week that occur within the period that you specify in Step 6.
•	Displays the days of the month that occur within the period that you specify in Step 6.

- **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** From the Conference Bridge Types column in the left pane, choose the conference bridge type(s) that you want to include in the utilization report.

The conference bridges of the particular conference bridge type that you chose display in the List of Devices box.

- **Step 5** When you have chosen all the conference bridges that you want to include in the report, click the down arrow to add them to the Selected Devices box.
- **Step 6** If you chose Generate New Report, enter the date range of the period for which you want to see call information.



Note

Ensure the date and time range does not exceed one month.

- **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, perform the procedure described in the "Mailing a Report" section on page 5-13.

### **Additional Information**

See the "Related Topics" section on page 7-17.

# Configuring Voice-Messaging Utilization Reports

Only CAR administrators generate the voice-messaging utilization report. The report provides an estimate of the maximum utilization percentage of the voice-messaging devices for the period and not the exact utilization. For example, the system calculates the utilization of a voice-messaging device between 11hrs and 12hrs by sampling the 1-hour duration in 5-minute samples. The system calculates utilization for each 5 minutes as (number of calls in the 5-minute interval that used the voice-messaging devices \*100) / (maximum number of calls that the voice messaging devices can handle at any time). After calculating the utilization for each 5-minute sample for the entire one-hour duration, the maximum utilization value that is found for that one hour displays in the report as the utilization for the time between 11hrs and 12hrs. Similarly, to get a utilization for the whole day, the whole day comprises

samples of 5 minutes each, and maximum utilization gets calculated. You can examine the usage based on each hour of a day or on a specified number of days for each week or month. Reports generate for each voice messaging server.

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 CAR voice-messaging utilization report only supports Cisco uOne, Unity, and Octel Voicemail gateway.



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

This section describes how to generate, mail, or view voice-messaging utilization reports.

### **Procedure**

**Step 1** Choose **Device Reports > Voice Messaging > Utilization**.

The Voice Messaging Utilization window displays.

**Step 2** In the Generate Report field, choose a time as described in Table 7-10.

Table 7-10 Generate Report Fields

Parameter	Description
Hour of Day	Displays the cumulative results for each hour in a 24-hour period for the period that you specify in Step 12.
Day of Week	Displays the days of the week that occur within the period that you specify in Step 12.
Day of Month	Displays the days of the month that occur within the period that you specify in Step 12.

- Step 3 In the Available Reports field, choose an automatically generated report (if available) and go to Step 14, or use the default setting, Generate New Report, and go to Step 4.
- Step 4 To choose a voice-messaging DN, click Voice Messaging DNs in the left pane.

A list of configured voice-messaging DNs displays.

**Step 5** From the list of DNs, choose a voice-messaging DN.

The DN that you chose displays in the List of DNs/Ports list box.

**Step 6** In Select Voice Messaging DNs/Ports, click the down arrow.

The DN that you chose displays in the Selected DNs/Ports list box.

- Step 7 Repeat Step 5 and Step 6 until you have chosen all DNs that you want to include in the report.
- **Step 8** To choose a voice-messaging port, click **Voice Messaging Ports** in the left pane.

A list of configured voice-messaging ports displays.

**Step 9** From the list of ports, choose a voice-messaging port.

The port that you chose displays in the List of DNs/Ports list box.

**Step 10** In Select Voice Messaging DNs/Ports, click the down arrow.

The port that you chose displays in the Selected DNs/Ports list box.

- **Step 11** Repeat Step 9 and Step 10 until you have chosen all the ports that you want to include in the report.
- **Step 12** If you chose Generate New Report, enter the date range of the period for which you want to see call information.



Note

Ensure the date and time range does not exceed one month.

- **Step 13** 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 14 Click the View Report button.

The report displays.

**Step 15** If you want to mail the report, click the **Send Report** button. To send the report, perfom the procedure described in the "Mailing a Report" section on page 5-13.

#### **Additional Information**

See the "Related Topics" section on page 7-17.

# **Related Topics**

- Voice Messaging Utilization Report Results, page 10-22
- Conference Bridge Utilization Report Results, page 10-21
- Conference Call Detail Report Results, page 10-20
- Gateway and Route Utilization Report Results, page 10-20
- Gateway Detail Report Results, page 10-18

Related Topics