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 Communications Manager related devices, such as conference bridges, voice-messaging servers, gateways, and trunks.

Only CAR administrators generate the trunk reports. The following section describes how to configure Trunk Utilization reports.

- Generate Trunk Utilization Reports, page 1
- Related Topics, page 3
- Additional Documentation, page 3

### Generate Trunk Utilization Reports

Only CAR administrators generate the Trunk Utilization report. This report calculates the utilization reports for devices based on the duration of calls that passed through the devices.

You can generate this report on an hourly, daily, or monthly basis. The system calculates the utilization of a trunk for each hour in the selected date range. For example, the system calculates the utilization of a trunk between 11hrs-12hrs, using the formula, 
\[
\frac{\text{Sum of the duration of calls that used the trunk in that hour}}{\text{total seconds in an hour} \times \text{maximum number of ports in a trunk} \times \text{number of days between the fromDate and toDate selected}} \times 100
\]

Similarly, to get the utilization for each day in a week, the system calculates the utilization using the formula, 
\[
\frac{\text{sum of the duration of calls that used the trunk in a day}}{\text{total seconds in each day} \times \text{number of each day between the fromDate and toDate selected} \times \text{maximum number of ports in a trunk}} \times 100
\]

In the case of monthly utilization reports, the system calculates the utilization for each day in a month, using the formula, 
\[
\frac{\text{sum of the duration of calls that used the trunk in a day}}{\text{total seconds in each day} \times \text{number of each day between the fromDate and toDate selected} \times \text{maximum number of ports in a trunk}} \times 100
\]

Reports generate for each trunk that is chosen.

For calculation of the trunk utilization, the system uses the port numbers from the CAR Trunk Configuration window. To find this window, choose System > System Parameters > Trunk Configuration. You cannot take port details for H.323 trunks from the Cisco Unified Communications Manager database because the
H.323 port number always equals zero in the database. The user must update H.323 trunk ports information in the CAR Trunk Configuration window.

Be aware that the only port detail information that is taken from the CAR Trunk Configuration window is only for those trunks that do not have port details that are available or that show zero in the Cisco Unified Communications Manager database.

This section describes how to generate, view, or mail Trunk Utilization reports.

**Procedure**

**Step 1** Choose **Device Reports > Trunk > Utilization**.

The Trunk Utilization window displays.

**Step 2** In the Generate Reports field, choose a time as described in the following table.

**Table 1: Generate Report Fields**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hour of Day</td>
<td>Displays the cumulative utilization for each hour in a 24-hour period for the period that you specify in Step 7, on page 3.</td>
</tr>
<tr>
<td>Day of Week</td>
<td>Displays the cumulative utilization for the days of the week that occur within the period that you specify in Step 7, on page 3.</td>
</tr>
<tr>
<td>Day of Month</td>
<td>Displays the cumulative utilization for the days of the month that occur within the period that you specify in Step 7, on page 3.</td>
</tr>
</tbody>
</table>

**Note** The Trunk Utilization report is not generated automatically.

**Step 3** To display the list of trunks that you can include in the report in the List of Trunks box, perform one of the following tasks:

a) To display all trunks in the List of Trunks box, click **Trunk Types** in the column on the left side of the window.

b) To display trunks for a particular trunk type in the List of Trunks box, click the icon next to **Trunk Types** in the column on the left side of the window. The tree structure expands, and a list of trunk types displays. Choose a trunk type from the list, and the trunk name displays in the List of Trunks box.

**Note** The List of Trunks box will list up to 200 trunks that are configured for the chosen trunk type.

**Note** You can generate the trunk utilization reports for route groups, route lists, and route patterns that are connected through trunks.

**Step 4** Choose a trunk type from the list.

The trunk name displays in the List of Trunks box.

**Note** The List of Trunks box displays up to 200 trunks that are configured for the chosen trunk type.
Step 5  In the List of Trunks box, choose the trunks that you want to include in the report.
         Note  You can generate a report for up to five trunks at a time.
Step 6  To move the chosen trunk to the list of Selected Trunks box, click the down arrow.
         The trunk(s) that you chose displays in the Selected Trunks box.
Step 7  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 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, perform the procedure that is described in the Mail Reports.

Related Topics
   Related Topics, on page 3

Related Topics
   • Generate CDR Analysis and Reporting
   • CAR Device Reports
   • Gateway Device Reports
   • Route Pattern and Hunt Pilot Device Reports
   • Conference Bridge Device Reports
   • Voice Messaging Utilization Device Reports
   • CAR Device Reports Results

Additional Documentation
   • Administration Guide for Cisco Unified Communications Manager
   • Cisco Unified Serviceability Administration Guide
   • Cisco Unified Communications Manager Call Detail Records Administration Guide