



# CHAPTER 11

## Configuring Traffic System Reports

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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 calls by each user.

This chapter contains the following topics:

- [Configuring Traffic Summary Reports, page 11-2](#)
- [Configuring Traffic Summary by Phone Number Reports, page 11-4](#)
- [Related Topics, page 11-7](#)
- [Additional Cisco Documentation, page 11-7](#)



### Note

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

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



### Tip

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When you configure CAR to generate a traffic summary report, you can choose different call types (On Net, Internal, Local, Long Distance, and so on). CAR compares the traffic volume for every hour interval and identifies the hour with the highest traffic volume (the Busy Hour Call Completion [BHCC] number). To obtain the overall BHCC number, choose all call types when you configure CAR. Under the report title, a separate line displays the BHCC number for that day.

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Only CAR administrators can generate the traffic summary by phone numbers report. The report provides information about the call volume for a period and set of phone numbers that you specify, and includes only those call types and phone numbers that you choose.



### Tip

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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.

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# Configuring Traffic Summary Reports

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 [Chapter 30, “Configuring the CAR System Scheduler”](#), for more information.

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 11-1](#).

**Table 11-1** Generate Report Fields

Parameter	Description
Hour of Day	Displays the average number of calls in the system for the period that you specify in <a href="#">Step 4</a> , the call types that you specify in <a href="#">Step 5</a> , and the QoS values that you specify in <a href="#">Step 6</a> for hour of day.  If the period that you specify in <a href="#">Step 4</a> is within one day, the system compares the traffic volume for every hour interval and identifies the hour with the highest traffic volume as the BHCC number for that day.
Day of Week	Displays the average number of calls in the system for the period that you specify in <a href="#">Step 4</a> , the call types that you specify in <a href="#">Step 5</a> , and the QoS values that you specify in <a href="#">Step 6</a> for day of the week.
Day of Month	Displays the average number of calls in the system for the period that you specify in <a href="#">Step 4</a> , the call types that you specify in <a href="#">Step 5</a> , and the QoS values that you specify in <a href="#">Step 6</a> 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 setting, 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. To obtain the overall BHCC number for a particular hour or 24-hour period, choose all call types. [Table 11-2](#) describes the call types.

**Table 11-2** Traffic Summary by Call Types

Call Type	Description
On Net	Outgoing calls that originate on one Cisco Unified Communications Manager network, go out through a trunk, and terminate on a different Cisco Unified Communications Manager network. For CAR purposes, be aware that any outgoing call can be classified as an On Net call if it is configured as such in the CAR dial plan configuration window. See <a href="#">“Configuring the Dial Plan”</a> section on page 29-2.
Internal	Calls, including intracluster calls, that originate in the Cisco Unified Communications Manager network and end in the same Cisco Unified Communications Manager network (no gateways or trunks are used).
Local	Local calls that route 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 Communications Manager network and go out through the PSTN.
International	International calls that originate in the Cisco Unified Communications Manager network and go out through the PSTN.
Incoming	Inbound calls that originate outside the Cisco Unified Communications Manager network, enter through a gateway, and go into the Cisco Unified Communications Manager 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 designate 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 that are set in the [“Configuring QoS Values”](#) section on page 35-1 provide the basis for all voice-quality categories.

**Table 11-3 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, 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, perform the procedure that is described in the “[Mailing a Report](#)” section on page 3-3.

**Additional Information**

See the “[Related Topics](#)” section on page 11-7.

## Configuring Traffic Summary by Phone Number Reports

Only CAR administrators generate the Traffic Summary by Phone Number report. The report provides information about the call volume for a period and set of phone numbers that you specify.

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

**Procedure**

- Step 1** Choose **System Reports > Traffic > Summary By Phone Number**.  
The Traffic Summary that is based on Phone Number(s) window displays.
- Step 2** In the Generate Report field, choose a time as described in [Table 11-4](#).

**Table 11-4** *Generate Report Fields*

Parameter	Description
Hour of Day	Displays the average number of calls in the system for the chosen phone numbers for the date range that was chosen for hour of day. <b>Note</b> 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 phone numbers for the date range that was chosen for day of week. <b>Note</b> 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 phone numbers for the date range that was chosen for day of month. <b>Note</b> 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 11-5](#) describes the call types.

**Table 11-5** *Traffic Summary (Phone Number) by Call Types*

Call Type	Description
On Net	Outgoing calls that originate on one Cisco Unified Communications Manager network, go out through a trunk, and terminate on a different Cisco Unified Communications Manager network. For CAR purposes, be aware that any outgoing call can be classified as an On Net call if it is configured as such in the CAR dial plan configuration window. See <a href="#">“Configuring the Dial Plan” section on page 29-2</a> .
Internal	Calls, including intracluster calls, that originate in the Cisco Unified Communications Manager network and end in the same Cisco Unified Communications Manager network (no gateways or trunks 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 Unified Communications Manager network and go out through the PSTN.

**Table 11-5** Traffic Summary (Phone Number) by Call Types (continued)

Call Type	Description
International	International calls that originate in the Cisco Unified Communications Manager network and go out through the PSTN.
Incoming	Inbound calls that originate outside the Cisco Unified Communications Manager network, enter through a gateway, and go into the Cisco Unified Communications Manager 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 represent 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 Phone Number(s) group box, you can either choose all phone numbers or search for phone numbers based on users.



**Note** You can enter a wildcard pattern like "!" or "X" to search on phone numbers. 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 phone numbers, check the **Select All Phone Number(s)** check box. To choose phone numbers based on users, enter the phone number of the individual in the Phone Number field and click the **Add Phone Number** button. You can also use a provided search function, as described in the [“Searching for Users” section on page 9-3](#).

**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 3-3](#).

#### Additional Information

See the [“Related Topics” section on page 11-7](#).

## Related Topics

- [CDR Analysis and Reporting Configuration Checklist, page 2-1](#)
- [Chapter 9, “Understanding CAR System Reports”](#)
- [Chapter 10, “Configuring QoS System Reports”](#)
- [Chapter 12, “Configuring FAC/CMC System Reports”](#)
- [Chapter 13, “Configuring Malicious Call Details System Reports”](#)
- [Chapter 14, “Configuring Precedence Call Summary System Reports”](#)
- [Chapter 15, “Configuring System Overview System Reports”](#)
- [Chapter 16, “Configuring CDR Error System Reports”](#)
- [Chapter 18, “Understanding CAR Device Reports”](#)

## Additional Cisco Documentation

- *Cisco Unified Communications Operating System Administration Guide*
- *Cisco Unified Serviceability Administration Guide*
- *Cisco Unified Communications Manager Call Detail Records Administration Guide*

