



## **Cisco Prime Collaboration Analytics Guide, 11.x**

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# Overview of Cisco Prime Collaboration Analytics

This document provides information on Cisco Prime Collaboration 11.0, 11.1, 11.5 and 11.6 features.

Prime Collaboration Analytics helps you to identify the traffic trend, technology adoption trend, over-and-under-utilized resources, and device resource usages in your network. You can also track intermittent and recurring network issues and address service quality issues using the Prime Collaboration Analytics Dashboards.

Prime Collaboration Analytics is installed with the Prime Collaboration Assurance application, by default. You can disable Analytics or wait for Analytics evaluation license to expire. However, the only exception is for very large OVA (150 K) installation, where you can either install Prime Collaboration Assurance only or Prime Collaboration Assurance with Prime Collaboration Analytics.

For details on installation and system requirements, see [Cisco Prime Collaboration Assurance Install and Upgrade Guide](#).

- [Change History, page 1](#)
- [What's New in Cisco Prime Collaboration Analytics 11.x, page 3](#)
- [Usage Scenarios for Prime Collaboration Analytics Dashboards, page 8](#)
- [Cisco Prime Collaboration Analytics NBI, page 11](#)

## Change History

**Table 1: Change History**

| Version                                  | Date | Revision | Location |
|------------------------------------------|------|----------|----------|
| Cisco Prime Collaboration Analytics 11.0 |      |          |          |

| Version                                  | Date               | Revision                                                                           | Location                                                                            |
|------------------------------------------|--------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 11.0                                     | September 14, 2015 | Added a new section Troubleshooting Prime Collaboration Analytics Dashboard.       | <a href="#">Troubleshooting Prime Collaboration Analytics Dashboard, on page 53</a> |
|                                          |                    | Added a new section License Usage Dashboard.                                       | <a href="#">License Usage, on page 47</a>                                           |
|                                          |                    | Added a new section My Dashboard.                                                  | <a href="#">My Dashboard, on page 50</a>                                            |
|                                          |                    | Updated the section Service Experience Distribution with new grading details.      | <a href="#">Service Experience Distribution, on page 40</a>                         |
|                                          |                    | Updated the section Capacity Analysis Dashboard with the cross launch information. | <a href="#">Capacity Analysis, on page 32</a>                                       |
| Cisco Prime Collaboration Analytics 11.5 |                    |                                                                                    |                                                                                     |
| 11.5                                     | June 7, 2016       | Added a new section Cisco Prime Collaboration Analytics NBI.                       | <a href="#">Cisco Prime Collaboration Analytics NBI, on page 11</a>                 |
|                                          |                    | Added a new section Call Grade for Locations.                                      | <a href="#">Call Grade for Locations, on page 44</a>                                |
|                                          |                    | Added a new section Managing Customer Logo.                                        | <a href="#">Managing Customer Logo, on page 20</a>                                  |
|                                          |                    | Added a new section Cisco Prime Collaboration Analytics User Roles.                | <a href="#">Cisco Prime Collaboration Analytics User Roles, on page 16</a>          |
|                                          |                    | Added a new section Aggregating Devices.                                           | <a href="#">Aggregating Devices, on page 49</a>                                     |
|                                          |                    | Added a new section Conductor Bridge Pool Utilization.                             | <a href="#">Conductor Bridge Pool Utilization, on page 46</a>                       |
| Cisco Prime Collaboration Analytics 11.6 |                    |                                                                                    |                                                                                     |



| Version | Date              | Revision                                                     | Location                                                            |
|---------|-------------------|--------------------------------------------------------------|---------------------------------------------------------------------|
| 11.6    | November 21, 2016 | Updated the section Trunk Utilization with filter details.   | <a href="#">Trunk Utilization, on page 33</a>                       |
|         |                   | Added a new section Video Communication Server / Expressway. | <a href="#">Video Communication Server / Expressway, on page 49</a> |

## What's New in Cisco Prime Collaboration Analytics 11.x

*Table 2: What's New in Cisco Prime Collaboration Analytics 11.x*

| Version                                  | Feature Name | Feature Description | Where Documented |
|------------------------------------------|--------------|---------------------|------------------|
| Cisco Prime Collaboration Analytics 11.0 |              |                     |                  |

| Version                                  | Feature Name                                          | Feature Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Where Documented                                            |
|------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| 11.0                                     | License Usage Dashboard                               | You can track the license usage of the applications such as Unified Contact Center Enterprise (UCCE) and Cisco Voice Portal (CVP) using <b>License Usage Dashboard</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <a href="#">License Usage, on page 47</a>                   |
|                                          | My Dashboard                                          | You can create custom dashboard and add the existing dashlets as required.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <a href="#">My Dashboard, on page 50</a>                    |
|                                          | Service Experience Distribution Dashboard Enhancement | The <b>Service Experience Distribution</b> dashboard displays data based on the Severely Concealed Seconds Ratio (SCSR). The predefined service categories are now modified as good, acceptable, poor and grade not available.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <a href="#">Service Experience Distribution, on page 40</a> |
|                                          | Capacity Analysis Dashboard Enhancement               | In the Capacity Analysis dashboard, a cross launch is introduced to SIP trunk capacity setting page and CDR trunk utilization setting page from respective dashlets.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <a href="#">Capacity Analysis, on page 32</a>               |
|                                          | General                                               | <ul style="list-style-type: none"> <li>The menu <b>Analyze</b> is renamed as <b>Analytics</b></li> <li>All the analytics settings page sFTP Settings, Group Management and Trunk Traffic Max Capacity Settings are grouped under the menu <b>Analytics Administration</b></li> <li>The left pane displays <b>Navigation</b> tab, <b>Index</b> tab, <b>Favorites</b> tab, and <b>Search Menu</b> field. You can click the <b>pin</b> icon at the top to hide the left pane or click the <b>Toggle Navigation</b> icon to view the left pane as appropriate.</li> <li>You can edit and delete dashlets only in <b>My Dashboard</b> Page. The edit and delete option is not available for dashlets in other dashboards.</li> </ul> | NA                                                          |
| Cisco Prime Collaboration Analytics 11.1 |                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                             |

| Version                                  | Feature Name           | Feature Description                                                                                                                                                  | Where Documented |
|------------------------------------------|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| 11.1                                     | Back Button Navigation | You can now navigate from the detailed view of the dashlet to the respective dashboard page.                                                                         | NA               |
|                                          | Maximizing the Dashlet | You can maximize the dashlet by clicking the maximize icon in the top right corner of the dashlet. When you click the maximize icon, the dashlet opens in a new tab. | NA               |
| Cisco Prime Collaboration Analytics 11.5 |                        |                                                                                                                                                                      |                  |

| Version | Feature Name                                    | Feature Description                                                                                                                                                                                                                                                                                     | Where Documented                                                                                                                 |
|---------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| 11.5    | Call Grade for Locations Dashlet                | You can view the call grade trends based on the location in the <b>Call Grade for Locations</b> dashlet.                                                                                                                                                                                                | <a href="#">Call Grade for Locations</a> , on page 44                                                                            |
|         | Customer Logo                                   | You can now assign logos to the customers. These logos are displayed in the downloadable reports.                                                                                                                                                                                                       | <a href="#">Managing Customer Logo</a> , on page 20                                                                              |
|         | MSP Mode Support                                | Cisco Prime Collaboration Analytics is supported in MSP deployment.                                                                                                                                                                                                                                     | NA                                                                                                                               |
|         | NBI API Support                                 | NBI API support is available for the following dashboards: <ul style="list-style-type: none"> <li>• Technology Adoption</li> <li>• Asset Usage</li> <li>• Traffic Analysis</li> <li>• Service Experience</li> </ul> NBI is also supported to query Call Detail Records(CDR) for the CDR based dashlets. | <a href="#">Cisco Prime Collaboration Analytics NBI</a> , on page 11                                                             |
|         | Role-Based Access                               | You can now access and configure dashboards based on your role.                                                                                                                                                                                                                                         | <a href="#">Cisco Prime Collaboration Analytics User Roles</a> , on page 16                                                      |
|         | Customer Voice Portal Aggregation Configuration | The CVP aggregation configuration page is moved from the CVP dashlet view to <b>Analytics Administration</b> menu. Using this feature you can define the grouping according to the mode of deployment (MSP or Enterprise).                                                                              | <a href="#">Aggregating Devices</a> , on page 49                                                                                 |
|         | IPv6 Support                                    | Cisco Prime Collaboration Analytics 11.5 supports IPv6 address. You can view, filter, search, or sort details in the analytics dashboard using IPv6 address.                                                                                                                                            | Cisco Prime Collaboration Assurance Support for IPv6 section in <a href="#">Cisco Prime Collaboration Assurance Guide</a> , 11.x |
|         | Conductor Bridge Pool Utilization Dashlet       |                                                                                                                                                                                                                                                                                                         | <a href="#">Conductor Bridge Pool Utilization</a> , on page 46                                                                   |

| Version                                  | Feature Name                                   | Feature Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Where Documented |
|------------------------------------------|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
|                                          |                                                | You can view the cumulative utilization of the conference bridges for each conductor pool in your network using the <b>Conductor Bridge Pool Utilization</b> dashlet.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                  |
|                                          | Trunk Utilization Dashlet                      | You can also view trunk type(protocol) associated with the trunk in the <b>Trunk Utilization</b> dashlet.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | NA               |
|                                          | Conferencing Devices Video Utilization Dashlet | You can also filter the <b>Conferencing Devices Video Utilization</b> dashlet data using utilization percentage filter.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | NA               |
|                                          | Dashlets and Dashboards Renamed                | <p>Dashlets and dashboards are renamed as follows:</p> <ul style="list-style-type: none"> <li>• Video Conferences—Video Conference Analysis</li> <li>• Top N Call Failure Locations—Call Status for Location</li> <li>• Deployment Distribution by Endpoint Model—Endpoints Deployment Summary</li> <li>• Call Distribution by Endpoint Model—Call Volume by Endpoint Model</li> <li>• Call Distribution by Endpoint Types—Call Volume by Endpoint Types</li> <li>• Service Experience Distribution—Call Quality Analysis</li> <li>• Endpoints with Service Quality Issues—Endpoints with Call Quality Issues</li> <li>• Users with Service Quality Issues—Users with Call Quality Issues</li> </ul> | NA               |
| Cisco Prime Collaboration Analytics 11.6 |                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                  |

| Version | Feature Name                                    | Feature Description                                                                                                                                                                                                                                                                                                                                              | Where Documented                                                    |
|---------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| 11.6    | Trunk Utilization Dashlet                       | <p>You can hover on the Utilization column to view the utilization data for audio and video calls for CUCM-SIP trunk.</p> <p>You can filter the Trunk Utilization data using the <b>Trunk</b>, <b>Calculation type</b>, <b>Calculation Mode</b>, <b>Custom Groups</b>, and <b>Cluster</b> filters.</p>                                                           | <a href="#">Trunk Utilization, on page 33</a>                       |
|         | NBI API Support                                 | NBI API support is available for the Video Communication Server / Expressway dashboard.                                                                                                                                                                                                                                                                          | <a href="#">Cisco Prime Collaboration Analytics NBI, on page 11</a> |
|         | Video Communication Server / Expressway Dashlet | <p>You can view the Traversal and Non-Traversal license usage for all VCS clusters, individual VCS servers in Cisco Expressway-Core, Cisco Expressway-Edge, or a Cisco VCS with Cisco Collaboration Edge or Core using the <b>Video Communication Server / Expressway</b> dashlet.</p> <p>You can also filter the data based on the <b>Utilization Type</b>.</p> | <a href="#">Video Communication Server / Expressway, on page 49</a> |

## Usage Scenarios for Prime Collaboration Analytics Dashboards

[Table 1](#) describes the usage scenarios for Prime Collaboration Analytics dashboards.

**Table 3: Usage Scenarios for Prime Collaboration Analytics Dashboards**

| Usage Scenario                                                                                  | Dashlet Name (Navigation from Analyze)                                                                                                                                                                                                                                 |
|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Track the progress of deployment of voice-only phones, video phones and TelePresence endpoints. | <p><b>For Cisco Prime Collaboration Release 11.1 and earlier</b></p> <p>Deployment Distribution by Endpoint Model(Technology Adoption)</p> <p><b>For Cisco Prime Collaboration Release 11.5 and later</b></p> <p>Endpoints Deployment Summary(Technology Adoption)</p> |

|                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Understand the endpoint usage to validate investments made so far and to make future investment decisions.                                                                                            | <ul style="list-style-type: none"> <li>• <b>For Cisco Prime Collaboration Release 11.1 and earlier</b><br/>Call Distribution by Endpoint Model (Technology Adoption)</li> <li>• <b>For Cisco Prime Collaboration Release 11.5 and later</b><br/>Call Volume by Endpoint Model (Technology Adoption)</li> <li>• <b>For Cisco Prime Collaboration Release 11.1 and earlier</b><br/>Call Distribution by Endpoint Types (Technology Adoption)</li> <li>• <b>For Cisco Prime Collaboration Release 11.5 and later</b><br/>Call Volume by Endpoint Types (Technology Adoption)</li> </ul> |
| Count the number of endpoints that are heavily or lightly used.                                                                                                                                       | Technology Usage (Technology Adoption)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Identify the least used endpoints to effectively plan and allocate resources across an organization.                                                                                                  | Least Used Endpoint Types (Asset Usage)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Track endpoints that did not participate in the scheduled sessions.                                                                                                                                   | <b>For Cisco Prime Collaboration Assurance 11.0 and earlier</b><br>No Show Video Conference (Asset Usage)<br><b>For Cisco Prime Collaboration Release 11.1 and later</b><br>No Show Video TelePresence Endpoint                                                                                                                                                                                                                                                                                                                                                                      |
| Enables you to identify the most utilized and least utilized endpoints.                                                                                                                               | Video TelePresence Rooms Utilization (Asset Usage)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Within the Prime Collaboration Assurance managed deployment, find the top N directory numbers sorted by the most number of calls placed or by total duration of all calls placed.                     | Top N Callers (Traffic Analysis)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Within the Prime Collaboration Assurance managed deployment, find the top N directory numbers receiving the most number of calls or to find the top N directory numbers having the most call minutes. | Top N Dialed Numbers (Traffic Analysis)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Find the locations with most number of incoming and outgoing OffNet calls.                                                                                                                            | Top N OffNet Traffic Locations (Traffic Analysis)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

|                                                                                                                                                                      |                                                                                                                                                                                                                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Identify the top N locations from which the highest number of calls were placed or received.                                                                         | Top N Call Traffic Locations (Traffic Analysis)                                                                                                                                                                                                                        |
| Understand the trend of various types of calls between sites, locations, endpoints, clusters, or device pools.                                                       | Call Traffic Analysis (Traffic Analysis)                                                                                                                                                                                                                               |
| Track the utilization of TelePresence conferencing devices to optimize their usage across the organization.                                                          | Conferencing Devices Video Utilization (Capacity Analysis)                                                                                                                                                                                                             |
| Evaluate the bandwidth allocated to each location by looking at the Call Admission Control (CAC) bandwidth usage for locations with the most number of failed calls. | Location CAC Bandwidth Utilization (Capacity Analysis)                                                                                                                                                                                                                 |
| Evaluate and optimize trunk and route group utilization across the organization. Also, you can define and track custom trunk/route group utilization.                | <ul style="list-style-type: none"> <li>• Trunk Utilization (Capacity Analysis)</li> <li>• Route Group Utilization (Capacity Analysis)</li> </ul>                                                                                                                       |
| Decide on the capacity (lines) after measuring trunks and route group Average Bouncing Busy Hour (ABBH) traffic.                                                     | <ul style="list-style-type: none"> <li>• Busy-Hour Trunk Capacity (Capacity Analysis)</li> <li>• Busy-Hour Route Capacity (Capacity Analysis)</li> </ul>                                                                                                               |
| Optimize the DSP resources for gateways                                                                                                                              | DSP Utilization (Capacity Analysis)                                                                                                                                                                                                                                    |
| Analyze the service quality experienced by users in your organization.                                                                                               | Service Experience Distribution (Service Experience)                                                                                                                                                                                                                   |
| Identify the top N endpoints experiencing service quality issues.                                                                                                    | <p><b>For Cisco Prime Collaboration Release 11.1 and earlier</b></p> <p>Endpoints with Service Quality Issues(Service Experience)</p> <p><b>For Cisco Prime Collaboration Release 11.5 and later</b></p> <p>Endpoints with Call Quality Issues(Service Experience)</p> |
| Analyze the trend of call failures in your organization and identify the locations where call failure rates are high.                                                | Top N Call Failure Locations (Service Experience)                                                                                                                                                                                                                      |
| Identify users with service quality issue.                                                                                                                           | Users with Service Quality Issue (Service Experience)                                                                                                                                                                                                                  |
| Analyze the UC applications system performance in your organization.                                                                                                 | UC System Performance                                                                                                                                                                                                                                                  |



|                                                                                 |                                                                                                                                                                   |
|---------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Get visibility into conference statistics (number of conferences and durations) | <ul style="list-style-type: none"> <li>• Video Conference Statistics (Video Conference)</li> <li>• Top N Video Conference Locations (Video Conference)</li> </ul> |
|---------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|



## Cisco Prime Collaboration Analytics NBI

### For Cisco Prime Collaboration Release 11.5 and later

Following are the NBI supporting features for Cisco Prime Collaboration Analytics 11.5:

- NBI API support is available for the following dashboards:
  - Technology Adoption
  - Asset Usage
  - Traffic Analysis
  - Service Experience

### • For Cisco Prime Collaboration Release 11.6 and later

NBI API is now available for Video Communication Server / Expressway dashlet which is present in License Usage dashboard.

- Following are the supported naming conventions:

- For Dashlet:

`https://<PC Server>/emsam/nbi/<dashboard>/<dashletname>/summary/parameters`

- For DetailsView:

`https://<PC Server>/emsam/nbi/<dashboard>/<dashletname>/details/dvparameters`

- To access the NBI API documentation, log in to the Cisco Prime Collaboration Analytics server with the administrator privilege and enter one of the following URL in the browser:

- `https://<pc-server-ip>/emsam/nbi/nbiAnalyticsDoc/`

Where *<pc-server-ip>* is the server IP address

- `https://<pc-server-ip>:<port-number>/emsam/nbi/nbiAnalyticsDoc/`

Where, *<pc-server-ip>* is the server IP address and *<port-number>* is the HTTP port number.

For example: `https://<pc-server-ip>:8443/emsam/nbi/nbiAnalyticsDoc/`



#### Note

Parameter descriptions are not included in the NBI API documentation for Cisco Prime Collaboration Analytics 11.5.

- Acceptable parameters to the NBI URL are similar to the parameters on the GUI filters, check the NBI API documentation for the parameter names and values.



#### Note

Case insensitive parameter values are not supported in the NBI API for Cisco Prime Collaboration Analytics 11.5.

- Call Detail Records (CDR) NBI Support:

- NBI is also supported to query the records for the CDR based dashlets:

`https://<PC Server>/emsam/nbi/fetchCDR/fetchTableDetails`

- Result provides information similar to the pop-up table displayed in the **Details View** when a legend is selected for CDR based dashlets.
- Search criteria can be one or combination of the following filters:
  - **Call**—status, grade, cluster, class, and type
  - **Origination Endpoint**—dn, ip, uri, cluster/location, cluster/device pool, username, codec, endpoint model, and endpoint type
  - **Destination Endpoint**—dn, ip, uri, cluster/location, cluster/device pool, username, codec, endpoint model, and endpoint type



## Cisco Prime Collaboration Analytics Licensing

Cisco Prime Collaboration Analytics license must be applied only after or while deploying the Cisco Prime Collaboration Assurance license.

### For Cisco Prime Collaboration Release 11.1 and earlier

When you switch over from the Standard to the Advanced mode in Cisco Prime Collaboration Assurance, the Cisco Prime Collaboration Analytics is installed in the Evaluation mode. To access Cisco Prime Collaboration Analytics dashboards after the Evaluation mode (60 days), you must purchase Cisco Prime Collaboration Analytics license. You need to purchase the same scale license as that of Cisco Prime Collaboration Assurance. You can continue to access Cisco Prime Collaboration Analytics in Evaluation mode even after you add a license for Cisco Prime Collaboration Assurance in the advanced mode.

Cisco Prime Collaboration Analytics licensing must be greater than or equal to the sum of the total Assurance count. For example, if the Assurance license count is 200, the license count in Analytics must be greater than or equal to 200. Otherwise, the Analytics license is not installed.

In Evaluation mode, the Cisco Prime Collaboration Analytics license is same as that of Cisco Prime Collaboration Assurance.

To add Analytics license file, choose **System Administration > License Management**.

NFR license for Cisco Prime Collaboration Analytics is included in the Cisco Prime Collaboration NFR download that is available from the Cisco Promotional Software Store for partners at no charge.

- [Adding Analytics License, page 13](#)
- [Enable and Disable Analytics, page 14](#)

## Adding Analytics License

Prime Collaboration Analytics licensing should be greater than or equal to the sum of the total assurance count.

In evaluation mode, the Prime Collaboration Analytics license is same as that of Prime Collaboration Assurance.

To add Analytics license file, choose **System Administration > License Management**.

NFR license for Prime Collaboration Analytics can be purchased only after the purchase of Prime Collaboration Assurance license.

# Enable and Disable Analytics

## Before You Begin

The Cisco Prime Collaboration Analytics must be in the Evaluation mode to enable or disable the Analytics features.

---

**Step 1** Choose **Administration > License Management**.

**Step 2** If you have deployed Cisco Prime Collaboration Assurance and Analytics very large OVA, perform the following steps after deploying the remote Cisco Prime Collaboration Analytics database.

- a) In the Analytics pane, click **Setup Remote Analytics DB** to configure the remote Cisco Prime Collaboration Analytics database.
- b) Enter the IP address of the remote database and click **OK**.

**Step 3** In the Analytics pane, click **Enable Analytics** to enable data analysis.

**Step 4** Log out from the browser and log in to Cisco Prime Collaboration Assurance server as *admin* user using CLI.

**Step 5** Enter the following commands to restart the processes and for the changes to take effect:

```
application stop cpcm
```

Wait approximately 10 to 15 minutes for all the processes to stop, after which you will receive a message indicating the successful completion of the command. To confirm if the processes have stopped, run the command `show application status cpcm`.

```
application start cpcm
```

Wait approximately 10 to 15 minutes for all the processes to start. To confirm if the processes have started, run the command `show application status cpcm`.

**Note** For very large deployment, you must run the above commands on Cisco Prime Collaboration Assurance application and database servers.

**Step 6** Log in to the Cisco Prime Collaboration Assurance server and verify if the Analytics license is activated. (**Administration > License Management**) .

If you want to disable Analytics, click **Disable Analytics** in the Analytics pane. You must restart the processes on application and database (only for very large OVA) servers after disabling. All analyzed data are purged and the Analyze tab is disabled.

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## Prime Collaboration Analytics Dashboards and Reports

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Prime Collaboration Analytics dashboards have time-period dependency. A report cannot be generated until enough time has passed to process data for the time period, specific to that report (daily, weekly, or monthly).

### **For Cisco Prime Collaboration Release 11.0 and earlier**

You can generate custom reports for any period within the last one year only. And all report data older than one year are purged.

Following must be complete to enable data display on the Prime Collaboration Analytics dashboards for the first time you launch Prime Collaboration Analytics:

- Device Discovery
- **For Cisco Prime Collaboration Release 11.1 and earlier**
  - Session Import
- Device Polling

### **For Cisco Prime Collaboration Release 11.1 and earlier**

See [Cisco Prime Collaboration Assurance Guide - Advanced](#) for more information about these tasks.

- [Cisco Prime Collaboration Analytics User Roles, page 16](#)
- [Global Customer Selection, page 16](#)
- [Global Domain Selection, page 17](#)
- [User Interface, page 17](#)
- [Managing Customer Logo, page 20](#)
- [Configure sFTP Server, page 21](#)
- [Prerequisites for Data Population in the Prime Collaboration Analytics Dashlets, page 22](#)
- [Technology Adoption, page 22](#)
- [Asset Usage, page 26](#)
- [Traffic Analysis, page 28](#)

- [Capacity Analysis, page 32](#)
- [Service Experience, page 39](#)
- [Video Conferences, page 44](#)
- [UC System Performance, page 46](#)
- [License Usage, page 47](#)
- [My Dashboard, page 50](#)
- [Custom Report, page 51](#)
- [Scheduled Reports, page 52](#)
- [Troubleshooting Prime Collaboration Analytics Dashboard, page 53](#)

## Cisco Prime Collaboration Analytics User Roles

User roles are used to define the authorizations of tasks that the users can access.

The user can be assigned to one of the following roles:

- Helpdesk—Does not have access to Analytics menu.
- Operator—Can view all the dashboards, but do not have access to edit and delete scheduled reports. Also, operator users does not have any configuration capabilities.
- Report viewer—Have access to all the dashboards except Capacity Analysis, License Usage, and My Dashboard. Report viewer cannot schedule reports and do not have access to the Scheduled Reports menu.
- Network Administrator, System Administrator and Super Administrator—Can access all the dashboards and can perform all the configuration tasks.

If you have deployed Cisco Prime Collaboration in MSP Mode, you do not have access to Custom Report Generator menu.

For more information about Cisco Prime Collaboration roles and its capabilities refer Cisco Prime Collaboration Assurance-Advanced User Roles in [Cisco Prime Collaboration Assurance Advanced Guide](#).

[User Roles and Tasks](#) lists the Cisco Prime Collaboration Analytics user roles and tasks they are mapped to.

## Global Customer Selection

### For Cisco Prime Collaboration Release 11.5 and later

This section applies only if you have deployed Cisco Prime Collaboration in MSP mode.

On the Cisco Prime Collaboration home page, you can select customers. To select customers, click the settings icon at the top right, and choose **Customer**. From the **Customer** dialogbox select the required customer names and click **Ok**. Based on the customer selection, data is displayed in analytics dashboards.

For more information on global customer selection refer Global Customer Selection section in [Cisco Prime Collaboration Assurance Advanced Guide](#).

# Global Domain Selection

## For Cisco Prime Collaboration Release 11.5 and later

This section applies only if you have deployed Cisco Prime Collaboration in Enterprise mode.

On the Cisco Prime Collaboration home page, you can select domain. Based on the domain selection, data is displayed in analytics dashboards.

For more information on global domain selection refer Global Assurance Domain Selection section in [Cisco Prime Collaboration Assurance Advanced Guide](#).

# User Interface


You can use the Prime Collaboration Analytics user interface (UI),

- To view the dashlet details in chart mode or grid mode
- To export data
- To change the chart types
- To view the detailed view or quick view - These also let you choose chart or grid display.
- To view data tips for the corresponding pie wedges or bar wedges
- To maximize the dashlet

You can filter the data displayed based on Cluster and Duration in the *Filters* pane.

You can maximize the dashlet by clicking the maximize icon at the top right corner of the dashlet. When you click the maximize icon, the dashlet opens in a new tab.

By default, the layout template for all Analytics dashlets is set as 50/50. In order to gain an optimum view,

we do not recommend you to change this setting. However, if you wish to set a custom layout, click  icon at the top right, choose **Layout Template** and select your desired layout.

## Quick View

You can click a pie wedge or a bar wedge on the chart to launch the quick view of the corresponding endpoint. The quick view displays graph only for the selected endpoint. Similar to the dashlet view, quick view also allows you:

- To view the dashlet details in chart mode or grid mode
- To change the chart types
- To export data
- To launch the detailed view

### Global Filter Option

Filter option is available at the top left of the UI for each dashlet. You can filter the data displayed for all dashlets based on duration (for example, last one week, one month and so on) and other attributes based on the dashlet type; for example call types (audio or video) in Traffic Analysis dashboards.



#### Note

#### For Cisco Prime Collaboration Release 11.1 and earlier

Global filters are not applicable for the Metrics in the Technology Adoption dashboard.

### Detailed Analysis

Prime Collaboration Analytics provides a detailed analysis (click See Details at the bottom-right) of each dashlet (endpoints, devices, technology usage...).

The Detailed Analysis page consists of Metrics and Filter pane, and Graph pane:

*Metrics and Filter pane-* You can filter data based on time period, call direction, call type, call status, calculation (of absolute values or percentage), call count, call duration, endpoint type, endpoint model, deployment status, cluster, or location/device pool.



#### Note

For all dashlets in Capacity Analysis, you can filter the results using custom group, utilization, individual graphs (display each entity one below the other and is limited to 20 graphs per page) or merged graphs (display all entities in a single graph). You can sync custom dates in all graphs by selecting 'Keep selected time span in sync across all graphs'.

The *Export* option, available after the Metrics and Filter pane, at the top-right, allows you to schedule the export. You can generate reports for a dashlet according to your scheduling preferences, and download or send them to the preferred e-mail ID (You can even send the failure notification if the report generation is unsuccessful). You can also send the scheduled reports to the configured sFTP server. To configure sFTP server, see [Configure sFTP Server](#). The data from charts can be exported in CSV format or PDF, and the data from tabular-based dashlet can be exported in CSV format.

*Graph pane-* The graph displayed is based on values set for each parameter in Filter pane. The slider below the graph displays the desired time range (set in the Filter pane), you can drag the slider to zoom into a particular time period (narrow the time period) or alter values in x-axis and y-axis, resulting in the data being filtered for that period.

*Tabular view-* Prime Collaboration Analytics also provides option to view data in a tabular format that provides in-depth/detailed analysis of the data, such as detailed call record, hourly network usages, endpoint information and so on. Tabular view, in the Detailed Analysis, pops-up when you click legends/series displayed below the slider, or when you double-click at any point on the graph. You can also filter the data in the table or export it.



**Note**

- In detailed view, dashlets with Cisco VCS registered endpoints display the device pool and location, whenever the sub-zones are not configured. The Cisco VCS cluster or sub-zone details are displayed in the following dashlets:
  - All dashlets in Traffic Analysis.
  - All dashlets in Service Experience.
  - **For Cisco Prime Collaboration Release 11.0 and earlier** —All dashlets except for Deployment Distribution by Endpoint Model Endpoints Deployment Summary in Technology Adoption.
  - Least Used Endpoint Types (Asset Usage).

If the sub-zones are not configured in Cisco VCS, location, codec, and device pool details are displayed as VCS\_Unknown. Impairment details are not applicable for Cisco VCS registered calls and is displayed as zero in the detailed view.

- **For Cisco Prime Collaboration Release 11.1 and earlier**

The detailed view of the Call Detail Records (CDRs) based dashlets displays the CDR or Call Management Records (CMRs) data only for the last 30 days. The call details of the endpoints prior to 30 days are not displayed by the dashlets, however, the aggregation of CDR or CMR data for the endpoints is available for the time period of 13 months or 56 weeks.

- For dashlets with IP address and Directory Number filters, ensure that you enter the details in the following order:
  - The IP address must be in the format x.x.x.x, and the range can be between 0.0.0.0 and 255.255.255.255, excluding these two values. It must not contain any special characters.
  - For Directory Numbers, only the following special characters are allowed: +, @, and . (period).
- In some dashboards, such as Capacity Analysis, Asset Usage (except Least Used Endpoints), you can view maximum data of 100. If the filter results in more than 100 items, an error message is displayed. Also, if the filter option is supported for Endpoint Types and Locations, the maximum value of 100 is applicable for Locations and not endpoint.
- While exporting the data, all analytics data is exported. The filter parameters are applicable for the data displayed on UI only and not for the exported data.

---

The Quick Tips help you customize the graphical view for your convenience.

### Schedule Report, Export and Import

The drop-down icon available in the bottom-left, of the each dashlet, provides you with an option to choose among print, export and scheduling the report. You can generate reports for a dashlet according to your scheduling preferences, and download or send them to the preferred e-mail ID (You can even send the failure notification if the report generation is unsuccessful). You can also send the scheduled reports to the configured sFTP server. To configure sFTP server, see [Configure sFTP Server](#).

When you schedule a reporting job, you can only select the start date and not the start time. Prime Collaboration schedules the job through the Job Scheduler. A periodic job runs every 60 minutes to check and execute the reports created newly on the current day, irrespective of the recurrence interval. By default any new report

created on the current day with recurrence interval only once is executed again at 10.59PM in the respective time zone.

All the scheduled recurrent reports(daily, weekly, and monthly) runs between 5Am-8Am in the respective time zone everyday based on the recurrence interval. These reports are prioritized as low and high based on the time taken to run the reports. The reports that take more time is categorized as low priority and those which take less time to run as high priority reports. The high priority reports are executed first in a serial fashion followed by the low priority reports. Low priority reports are run in batches of 4.

The data from charts can be exported in CSV format or PDF, and the data from tabular-based dashlet can be exported in CSV format. You can also specify the number of instances that can be saved per report. After the number of instances reach the specified limit, the first report that was saved in the chronological order will be purged.

- 1 **Data Purging in Bottom Table:** During purging, the Bottom Table (BT) data will be purged after 35 days but the history of execution will have the exact number of times the Scheduled Report has been generated.
- 2 **Custom Interval in Scheduled Reports:** For the custom interval, if the Scheduled Report is generated, a report will be generated for the same interval when it is scheduled.

**Note**

It is recommended not to schedule a report for the custom interval.

## Managing Customer Logo

### For Cisco Prime Collaboration Release 11.5 and later

If you have deployed Cisco Prime Collaboration Analytics in MSP mode, you can assign a logo to the customer. These logos are displayed in the reports generated from the dashlet(scheduled or exported). The generated report will contain the logo of the customer selected in the global customer selection.

**Note**

The customer logo will be available only in the PDF format of the report.

You can upload, delete, and reset the logo of the customer.

To upload customer logo:

### Before You Begin

You must have administrator privilege to perform this task.

**Step 1** Choose **Analytics Administration > Upload Customer Logo**.

**Step 2** Choose the appropriate customer name.

**Step 3** Click **Browse** and select the appropriate image.

**Note** You can upload images only in the format .jpg, .jpeg, .bmp, or .gif.

**Step 4** Click **Submit** to save the image as customer logo.

To delete the logo, click **Delete Logo**. You can click **Reset** to update the logo.

# Configure sFTP Server

To configure sFTP server:

## Before You Begin

If you have deployed Cisco Prime Collaboration Analytics in MSP mode, ensure the following:

- The user `<userid>` is available in the sFTP server.
- The folder `/<path>/<userid>` is available in the sFTP server and accessible only by that specific user `<userid>` and the administrator.

- 
- Step 1** Choose **Analytics Administration > sFTP Settings**.
- Step 2** Enter the required details on the **sFTP Settings** page. Refer [Table 4: sFTP Settings Fields](#), on page 21 for field description.
- Step 3** Click **Test Connection** to check the connectivity to the sFTP server.
- Note** In MSP mode, using test connection you can verify whether the folder `/<path>/<userid>` is available in the sFTP server.
- Step 4** Upon successful connection, click **Save**.
- 

## For Cisco Prime Collaboration Release 11.1 and earlier

In MSP mode, the operator users do not have access to **Analytics Administration** menu and cannot configure sFTP server.

**Table 4: sFTP Settings Fields**

| Field                   | Description                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| sFTP Server(IP Address) | IP address of the sFTP server where the scheduled reports must be saved.                                                                                                                                                                                                                                                                                                                      |
| sFTP Port               | Port number of the sFTP server.                                                                                                                                                                                                                                                                                                                                                               |
| Path(Directory)         | Directory path in the sFTP server where the scheduled reports must be saved.<br><br>If you have deployed Cisco Prime Collaboration Analytics in MSP mode, the reports are saved in the location <code>/&lt;path&gt;/&lt;userid&gt;</code> and if you have deployed Cisco Prime Collaboration Analytics in enterprise mode, the reports are saved in the location <code>/&lt;path&gt;</code> . |
| User Name               | Username for accessing the sFTP server.                                                                                                                                                                                                                                                                                                                                                       |

| Field    | Description                             |
|----------|-----------------------------------------|
| Password | Password for accessing the sFTP server. |

## Prerequisites for Data Population in the Prime Collaboration Analytics Dashlets

Ensure that the following prerequisites are met for data to be populated in the Prime Collaboration Analytics dashlets.

- Endpoints registered with Unified CM and Cisco VCS are discovered (**Device Inventory**).
- CDR records for Unified CM and Cisco VCS registered endpoints is available (**Assurance Reports > CDR & CMR Reports**).
- Confirm data collection for the registered Unified CM in **Assurance Administration > CDR Source Settings > Manage Call Quality Data Sources**.
- Verify data population by setting the global filters empty in the respective dashboard.
- Analytics uses historical data collected for a selected period of time. While selecting the filters for days, weeks, and months, the data is displayed excluding the current day, week, and month.

The Prime Collaboration Assurance Domain is not applicable for the analytics dashboards.

## Technology Adoption

Use the Technology Adoption dashboard to validate technology investments made so far. This dashboard also provides key decision-support metrics that you can use in future investment decisions.

**Prerequisite :** The endpoints registered to Unified CM and Cisco VCS should be discovered.

**Data Source :** The device details for this dashlet is collected from Prime Collaboration inventory and the call details are collected from Unified CM and Cisco VCS CDR.

All dashlets in this dashboard display data for endpoints registered with Unified CM and VCS.

The deployment details for the Unknown endpoints will not be displayed in the Technology Adoption dashlets.

The Technology Adoption dashboard displays metrics that provide a quick update and a snapshot view of audio endpoints and video endpoints deployed in your organization.

The Technology Adoption dashboard displays the following metrics:

| Metrics                  | Provides a quick update on                                                                                                                                                                          |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Video endpoints deployed | <ul style="list-style-type: none"> <li>• Total video endpoints in use</li> <li>• Change in the number of endpoints in the last 1 month</li> <li>• Percentage of video endpoints deployed</li> </ul> |

|                          |                                                                                                                                                                                                        |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Video call minutes       | <ul style="list-style-type: none"> <li>• Total duration of video calls</li> <li>• Change in the duration of video calls in the last 12 weeks</li> <li>• Trend of video call usage</li> </ul>           |
| Audio endpoints deployed | <ul style="list-style-type: none"> <li>• Total number of audio endpoints</li> <li>• Change in the number of endpoints in the last 1 month</li> <li>• Percentage of audio endpoints deployed</li> </ul> |
| Audio call minutes       | <ul style="list-style-type: none"> <li>• Total duration of audio calls</li> <li>• Change in the duration of audio calls in the last 12 weeks.</li> </ul>                                               |

Use the drop-down list to choose a time period for which to view metrics.

The following dashlets are available in the Technology Adoption dashboard:

## Deployment Distribution by Endpoint Model

### For Cisco Prime Collaboration Release 11.1 and earlier

This dashlet shows the deployment trend of the configured and active endpoints.

- All endpoints that are managed in Cisco Prime Collaboration, irrespective of their registration status are categorized as configured endpoints.
- Endpoints in Cisco Prime Collaboration which are either in registered or partially registered status are active endpoints.

By default, this dashlet will display the graph for all endpoints that were deployed from the date Cisco Prime Collaboration was installed till the current date. You can filter data based on weeks. If you select the time period as 7 days ago, the graph will display all the endpoints that were deployed from the day you installed Prime Collaboration till the current date (7 days ago).

As an example, you would be able to determine the rate of increase in addition/deployment of a specific endpoint model, say CTS 1000 series, over a period of time.



#### Note

The **Duration** global filter is not applicable for this dashlet.

The device details (such as model number, version, and so on) are collected from Prime Collaboration inventory and also by polling the endpoints using SNMP or HTTP. This device information is stored in the Analytics

database and is used to group endpoints based on the model. The details thus collected are represented as pie chart.

You can filter deployment data on the detailed view based on endpoint type, endpoint model, device pool, cluster or location. You can also view the cumulative count for active and configured devices for a specific endpoint model.

For Cisco Jabber phones that are registered with Cisco VCS, the count of active and configured endpoints are same irrespective of their registration status. This is because, if the status of Cisco Jabber is unregistered, inventory immediately moves it to Deleted state. For the other phones (like soft client CSF, CUPC and so on) the device is moved to Deleted state only when the status remains to be unregistered for more than 24 hours.

## Endpoints Deployment Summary

### For Cisco Prime Collaboration Release 11.5 and later

This dashlet shows the deployment trend of the configured and active endpoints.

- All endpoints that are managed in Cisco Prime Collaboration, irrespective of their registration status are categorized as configured endpoints.
- Endpoints in Cisco Prime Collaboration which are either in registered or partially registered status are active endpoints.

By default, this dashlet will display the graph for all endpoints that were deployed from the date Cisco Prime Collaboration was installed till the current date. You can filter data based on weeks. If you select the time period as 7 days ago, the graph will display all the endpoints that were deployed from the day you installed Prime Collaboration till the current date (7 days ago).

As an example, you would be able to determine the rate of increase in addition/deployment of a specific endpoint model, say CTS 1000 series, over a period of time.



#### Note

The **Duration** global filter is not applicable for this dashlet.

The device details (such as model number, version, and so on) are collected from Prime Collaboration inventory and also by polling the endpoints using SNMP or HTTP. This device information is stored in the Analytics database and is used to group endpoints based on the model. The details thus collected are represented as pie chart.

You can filter deployment data on the detailed view based on endpoint type, endpoint model, device pool, cluster or location. You can also view the cumulative count for active and configured devices for a specific endpoint model.

For Cisco Jabber phones that are registered with Cisco VCS, the count of active and configured endpoints are same irrespective of their registration status. This is because, if the status of Cisco Jabber is unregistered, inventory immediately moves it to Deleted state. For the other phones (like soft client CSF, CUPC and so on) the device is moved to Deleted state only when the status remains to be unregistered for more than 24 hours.

## Call Distribution by Endpoint Model

### For Cisco Prime Collaboration Release 11.1 and earlier

This dashlet displays the call distribution based on call volume per endpoint model. You can view the details for the calls that are,

- Attempted-All calls, including the completed and failed.
- Completed-All the successful calls made from that endpoint model.
- Dropped-Non zero duration failed calls.
- Failed-All calls that failed.

The device details for this dashlet is collected from Prime Collaboration inventory and the call details are collected from Unified CM and Cisco VCS CDR.

You can filter the call distribution details in the detailed view page based on device pool, IP address, endpoint type, endpoint model, call type, call status, call direction, call count, call duration, cluster, user ID, or location.

The Cluster filter does not support Cisco VCS.

Call direction, in the above sentence means Incoming or Outgoing. It is determined based on the perspective of the endpoint or location making a call. For example, if an endpoint A calls endpoint B, it is an outgoing call from the perspective of endpoint A and incoming call from the perspective of endpoint B.

## Call Volume by Endpoint Model

### For Cisco Prime Collaboration Release 11.5 and later

This dashlet displays the call distribution based on call volume per endpoint model. You can view the details for the calls that are,

- Attempted-All calls, including the completed and failed.
- Completed-All the successful calls made from that endpoint model.
- Dropped-Non zero duration failed calls.
- Failed-All calls that failed.

The device details for this dashlet is collected from Prime Collaboration inventory and the call details are collected from Unified CM and Cisco VCS CDR.

You can filter the call distribution details in the detailed view page based on device pool, IP address, endpoint type, endpoint model, call type, call status, call direction, call count, call duration, cluster, user ID, or location.

The Cluster filter does not support Cisco VCS.

Call direction, in the above sentence means Incoming or Outgoing. It is determined based on the perspective of the endpoint or location making a call. For example, if an endpoint A calls endpoint B, it is an outgoing call from the perspective of endpoint A and incoming call from the perspective of endpoint B.

## Call Distribution by Endpoint Types

### For Cisco Prime Collaboration Release 11.1 and earlier

This dashlet displays the call distribution based on endpoint types-Audio endpoints and Video endpoints.

Audio endpoints are devices from which you can make and receive audio calls. Audio IP Phones, wireless IP Phones, and personal communication endpoints are categorized under Audio endpoints.

Video endpoints are devices from which you can make and receive the video calls. Multipurpose TelePresence, immersive TelePresence, personal TelePresence, mobile video and desktop video devices are categorized as Video endpoints.

For a list of supported audio and video endpoints in Cisco Prime Collaboration 11.0, see [Supported Devices for Prime Collaboration Assurance](#).

The device details for this dashlet is gathered from Prime Collaboration inventory and call details for this dashlet is obtained from Unified CM and Cisco VCS CDR.

You can filter the call distribution details in the detailed view page based on device pool, URI, directory number, IP address, endpoint type, endpoint model, call type, call status, call direction, call count, call duration, cluster, user ID, or location.

## Call Volume by Endpoint Types

### For Cisco Prime Collaboration Release 11.5 and later

This dashlet displays the call distribution based on endpoint types-Audio endpoints and Video endpoints.

Audio endpoints are devices from which you can make and receive audio calls. Audio IP Phones, wireless IP Phones, and personal communication endpoints are categorized under Audio endpoints.

Video endpoints are devices from which you can make and receive the video calls. Multipurpose TelePresence, immersive TelePresence, personal TelePresence, mobile video and desktop video devices are categorized as Video endpoints.

For a list of supported audio and video endpoints in Cisco Prime Collaboration 11.0, see [Supported Devices for Prime Collaboration Assurance](#).

The device details for this dashlet is gathered from Prime Collaboration inventory and call details for this dashlet is obtained from Unified CM and Cisco VCS CDR.

You can filter the call distribution details in the detailed view page based on device pool, URI, directory number, IP address, endpoint type, endpoint model, call type, call status, call direction, call count, call duration, cluster, user ID, or location.

## Technology Usage

This dashlet shows the trend of audio and video usage. It shows the endpoint with maximum number of calls. You can view the data for each week in a graphical or tabular format. By default, data is displayed for the last 1 month.

The endpoints details for this dashlet is collected from Prime Collaboration inventory and the call details are collected from Unified CM and Cisco VCS CDR.

In detailed view, the formula used for calculating the percentage of the audio and video usage is:

$$\text{Endpoint Count} \geq \text{number of calls per week with the same call status (failed/dropped/completed/attempted)} / \text{Device Count} \geq \text{number of calls per week (with the same model and call type)} * 100.$$

You can filter the details in the detailed view page based on call type, URI, directory number, endpoint model, call status, usage status, location, device pool, cluster, user ID, or IP address.

## Asset Usage

This dashboard helps you to track the asset usage. For example, it helps you to determine if endpoints have been effectively allocated and used, and so on.

**Prerequisite :** The endpoints registered to Unified CM and Cisco VCS should be discovered.



**Data Source :** The device details for this dashlet is collected from Prime Collaboration inventory and the call details are collected from Unified CM and Cisco VCS CDR.

The following dashlets are available in the Asset Usage dashboard:

## Least Used Endpoint Types

This dashlet displays the endpoint types that are least used, based on the number of calls made per week. By default, the dashlet displays only the unused endpoints (endpoints with no calls). The 'No more than X calls per week' category in the dashlet view includes, the unused endpoints and the endpoints with x calls per week.

This dashlet displays data for endpoints registered with Unified CM and VCS. Device details for this dashlet is collected from Prime Collaboration inventory and the call details are collected from CDR.

The detailed view displays only the data that is aggregated weekly. You can filter the data in the detailed view page based on endpoint type, endpoint model, usage status, device pool or location, user ID, or cluster.



### Note

The data displayed for the unused endpoints per week in the detailed view graph is not in synchronization with the Least Used Endpoint Types Report table in the detailed view. This is because, the table lists only the endpoints that were not used or least used for the selected duration in the detailed view graph; in the dashlet, the formula used for calculating the least used endpoint is:

Least used endpoint type = (total number of calls by each endpoint type across the selected number of weeks / selected number of weeks) > = number of selected calls.

## Video TelePresence Rooms Utilization

You can track the most utilized and least utilized endpoints. This dashlet displays a list of Endpoint Names, Session Count, Used Duration, and Utilization for a week. You can filter the data by time period, endpoint type, and utilization percentage.

You can customize the number of working hours per day (by default, 8 hours) and working days per week (by default, 5 days) for each of the managed endpoints using **Change Utilization (Assurance Reports > Telepresence Endpoint Reports > Endpoint Utilization Report)**. These values are used while analyzing the asset usage for TelePresence Rooms.

You can launch the quick view if you rest the mouse over an endpoint name or utilization, which launches the graph and grid view consisting of number of sessions, duration, and utilization percentage.

In detailed analysis, you can filter the results displayed by time period, All Endpoints or a specific endpoint type, percentage or absolute values, individual or merged graphs. If you choose All Endpoints, you can also filter by utilization percentage.

## No Show Video Conference

You can identify endpoints that did not participate in the scheduled sessions. This dashlet displays the data based on the scheduled completed sessions. In this dashlet, you can view total scheduled sessions, scheduled sessions that have occurred, and No Show sessions- scheduled sessions that did not start and scheduled sessions completed but endpoints that were part of the scheduled session did not join (you can also view the data for

this column in terms of percentage and absolute value). The endpoints with the no show count greater than zero are listed. You can filter the data by time period, endpoint type, and no show.

In detailed analysis, you can filter the data by time period, endpoint name, endpoint type, endpoint model, no shows (absolute and percentage), cluster, location, device pool to see the No Shows and No Shows percentage trend of endpoints. When you click on an endpoint legend, you can view endpoint model and type, show and no show count along with total scheduled sessions.

**Note**

This dashlet is not supported in Cisco Prime Collaboration Analytics in MSP mode.

## No Show Video TelePresence Endpoint

### For Cisco Prime Collaboration Release 11.1 and later

You can identify endpoints that did not participate in the scheduled sessions. This dashlet displays the data based on the scheduled completed sessions. In this dashlet, you can view total scheduled sessions, scheduled sessions that have occurred, and No Show sessions- scheduled sessions that did not start and scheduled sessions completed but endpoints that were part of the scheduled session did not join (you can also view the data for this column in terms of percentage and absolute value). The endpoints with the no show count greater than zero are listed. You can filter the data by time period, endpoint type, and no show.

In detailed analysis, you can filter the data by time period, endpoint name, endpoint type, endpoint model, no shows (absolute and percentage), cluster, location, device pool to see the No Shows and No Shows percentage trend of endpoints. When you click on an endpoint legend, you can view endpoint model and type, show and no show count along with total scheduled sessions.

**Note**

This dashlet is not supported in Cisco Prime Collaboration Analytics in MSP mode.

# Traffic Analysis

The Traffic Analysis dashboard displays the technology usage by various users, departments, or business units in the organization. It helps you to plan and allocate business costs across various organizational units or departments.

**Data Source :** Call details of the dashlets in Traffic Analysis dashboard are obtained from CDR that the Cisco Unified Communications Manager generates.

**Note**

In Detail View, the filters are based on Top N. In Bottom Table all the records are displayed based on other filter conditions selected in Detail View page. However, the database only holds raw data for 35 days. The Bottom Table displays the data accordingly.

The following dashlets are available in the Traffic Analysis dashboard:

## Top N Callers

This dashlet lists the top N numbers from which calls originated, based on the total number of calls made from the directory number to any other number within the Prime Collaboration Assurance managed deployment.

You can filter the data displayed in the detailed view page based on directory number, call type, call count, call duration, cluster, location, device pool or endpoint details (such as IP, caller number, or source URI and so on). The directory numbers of those endpoints that are managed in the Prime Collaboration Assurance are displayed, the external directory numbers are not displayed.

You can view the number of calls or the duration of calls either in absolute or percentage mode. You can also view the users or directory numbers when you filter by endpoint or users respectively.

The formula used for calculating the percentage of top N callers is:

Total number of calls or the duration of calls for a particular number in a week / Total number of calls or duration of calls for all callers in that week \* 100.

This dashlet displays data for endpoints registered with Unified CM and VCS.

Using the zoom selector graph displayed in the detailed view, you can adjust the pointer in the time window (x axis) of the graph to view details of the calls that were placed from that particular number, for the selected time period.

You can also view the top N callers for each individual cluster by using the global cluster filter.

## Top N Dialed Numbers

This dashlet lists the Top N dialed numbers based on destination, for a specified time period. You can view the Top N numbers that were:

- Called the most number of times (call count)
- Engaged for the longest duration (call duration)

This dashlet displays data for endpoints registered with Unified CM and VCS.

You can filter the details displayed in the detailed view based on directory number, call type, call count, call duration, cluster, or location. The directory numbers of those endpoints that are managed in the Prime Collaboration Assurance are displayed, the external directory numbers are not displayed.

## Top N Off-Net Traffic Locations

This dashlet displays the OffNet versus OnNet traffic trend per location.

You can filter the data displayed in the detailed view page based on off net or onnet traffic, call type, call count, call duration, cluster, location, device pool, endpoint details (such as IP, directory number, or source URI and so on), call direction, or user ID.

**Note**

You can also filter the data in the detailed view based on the call direction, such as, incoming or outgoing calls. Incoming calls are the calls received by the gateway from the CUCM, whereas the outgoing calls are the calls made from the gateway to the CUCM. So when you filter incoming calls, you must enter the endpoint details of the source or the caller and when you filter outgoing calls, you must enter the endpoint details of the callee or the destination.

When you filter data based on the endpoints the directory numbers of those endpoints that are managed in the Cisco Prime Collaboration Assurance are displayed, the external directory numbers are not displayed.

In dashlet view, the formula used to calculate the percentage of OnNet calls is:

Total number of OnNet calls in the location/ Total number of OffNet calls and OnNet calls in that location \* 100

The formula used to calculate the percentage of OffNet calls is:

Total number of OffNet calls in the location/ Total number of OffNet calls and OnNet calls in that location \* 100

The dashlet does not include the calls processed on Video Communication Server (VCS).

## OffNet and OnNet Calls

Calls within the Cisco Unified CM (private network) are termed as OnNet calls. For example, a call from an internal cisco IP phone to another internal IP phone is an OnNet call. OnNet calls can be routed over intercluster trunks (ICT) or Session Initiation Protocol (SIP) trunks to integrate with remote Cisco Unified CM clusters or third-party SIP vendor equipment.

OffNet calls are normally the calls that are routed outside the private telephony system to the PSTN. Most OffNet calls are routed across gateways to the PSTN. A call can also be categorized as OffNet when at least one endpoint is a trunk or a gateway, and when one of the following holds good of the endpoint.

- The Call Classification parameter is set to OffNet in the gateway configuration or the trunk configuration in Unified Communications Manager (Administration).
- Call Classification parameter is set to System default in the gateway or trunk configuration.
- System default service parameter is set to OffNet.
- The endpoint is an analog gateway.

Any call that does not meet the criteria for an OffNet call is considered to be an OnNet call.

**Note**

By default, all route patterns and all calls to or from a gateway are classified as OffNet.

## Top N Call Traffic Locations

This dashlet helps you to identify the top N locations that have highest number of calls, based on the call count or call duration.

You can filter the details in the detailed view based on location (both Top N and Bottom N), device pool (both Top N and Bottom N), IP Address, directory number, URI, call type, call status, call count, call duration, call direction, user ID, or cluster.

**Note**

The dashlet displays call locations based on attempted calls only. Filters for the other statuses like completed, dropped, and failed calls are enabled in the detailed view.

In dashlet view, the formula used for calculating the percentage of the locations with highest number of calls is:

Total number of calls or duration of calls in a location / Total number of calls or duration of calls in all locations \* 100.

## Call Traffic Analysis

This dashlet displays the distribution of calls that belong to the following predefined call categories:

- External
- Internal
- Conference
- Emergency
- Long distance
- Toll free
- H 323 (Incoming and outgoing gateways/trunks) or MGCP (Incoming and outgoing gateways) or SIP (Incoming and outgoing trunks)
- Voicemail
- Local
- International

To add a call category, see section **Adding a Call Category** in [Cisco Prime Collaboration Assurance Guide - Advanced](#).

**Note**

A call can be included in more than one call category; for example, an internal call can also be a conference call. Therefore, the sum of all calls that belong to all categories might be greater than the reported total number of calls.

This dashlet includes only the details for the calls processed on Unified CM. Call category information is collected from CDR.

In dashlet view, the formula used to calculate the percentage of the distribution of calls is:

Total number of calls or the duration of calls that belong to a specific traffic category / Total number of calls or duration of calls of all categories \* 100.

In detailed view, the formula used to calculate the percentage of the distribution of calls is:

Total number of calls of a traffic type which belongs to one call status (failed, dropped, completed, attempted) / Total number of calls of a traffic type which belong to Attempted call status \* 100.

You can filter the details in the Detailed View based on location, call type, call status, call count, call duration, call direction, user ID, or cluster.

## Capacity Analysis

This dashboard displays the usage trends and available capacity of the key network resources. This information helps you to effectively plan for future capacity addition or dilution where needed.

For all the dashlets in Capacity Analysis dashboard, the data for the current day will be processed only on the following day. Therefore, the dashlets display the data for the current day as zero.

**Data Source :** The utilization data for this dashboard is obtained from the voice utilization polled data.

The quick view, dashlet view and the detailed view of these dashlets provide data for the time period for which the filter has been applied.

You can see the details of SIP Trunk types supported in the capacity analysis dashboard in the following table:

| SIP Trunk Type                                               | % Utilization Report             |           | Busy-hour Trunk Traffic Report |           |
|--------------------------------------------------------------|----------------------------------|-----------|--------------------------------|-----------|
|                                                              | Data Source                      | Support   | Data Source                    | Support   |
| SIP Trunk terminated at Cisco CUBE                           | Polling the CUBE directly        | Available | CDR                            | Available |
| UCM logical SIP trunk (ICT, Trunk to WebEx, etc)             | RTMT UCM SIP Performance Counter | NA        | CDR                            | Available |
| SIP Trunk terminated at non-Cisco border element (ACME, etc) | RTMT UCM SIP Performance Counter | NA        | CDR                            | Available |

You can view the following dashlets from the Capacity Analysis dashboard:

## Analytics Group Management

Prime Collaboration Analytics allows you to create custom groups for Trunks, Route Groups, and CAC Locations, based on your business needs. Click **Analytics Administration > Group Management**. Choose a group from the **Group Type** drop-down on the top-right. You can create new groups, modify the members of existing group, or remove a group.

For instance, all trunks in your network are displayed in the Analytics Group Management page. Select a trunk, under **All Trunks**, and add it to an existing group (Click **Add to Group**) or a new group (Click **Add New Group**).

After you create a group, the list of available groups are displayed under Trunk Groups in the left pane. These groups are also listed under **All Trunks** drop-down (in Trunk Utilization dashlet) of the Capacity Analysis dashboard

You can follow a similar approach for creating custom Route Groups and CAC Locations, the corresponding utilization thresholds are listed in the dashlets. When you apply a threshold, the results will be filtered based on threshold filter.

Use the **Settings** icon on the top-right corner to add or remove the columns displayed.



#### Note

- In MSP mode, the operator users do not have access to **Analytics Administration** menu, hence cannot create custom group.
- Group names can only be added or deleted, but cannot be edited.
- The trunk/route groups for Analytics Group Management and other dashlets in Prime Collaboration Analytics are imported from Prime Collaboration Assurance database, but the custom groups created in Prime Collaboration Analytics are not visible/used in Prime Collaboration Assurance.
- If you want to display the aggregated data in the Trunk/Route Group Utilization dashlet, you need to define the custom groups using **Monitor > Utilization Monitor > Route Group Utilization > RouteGroup Aggregation Settings**.
- If you want create custom groups for DSP, use **Device Inventory > Inventory Management > Create Group** (under Device Group).

## Location CAC Bandwidth Utilization

Call Admission Control (CAC) enables you to control the audio and video quality of calls over a wide-area (IP WAN) link by limiting the number of calls that are allowed on that link.

Audio and video quality can begin to degrade when too many active calls exist on a link and the amount of bandwidth is oversubscribed. Call admission control operates by rejecting a call when there is inadequate bandwidth and makes it a failed call.

It displays the location name, the number of calls that failed (calls that failed to establish due to lack of bandwidth), and the bandwidth used per location, as a percentage. By default, the table is sorted based on the Bandwidth Used.

The dashlet can be filtered based on utilization type as Peak and audio, video or immersive. By default, it displays the locations where bandwidth utilization has been peak for the last 28 days.

You can filter the details displayed in the detailed analysis based on WAN location, bandwidth used, utilization type, failed calls, or cluster. You can also filter the calls based on locations. Use the Select option to choose a location.

This dashlet will not include the details for the calls processed on VCS.

## Trunk Utilization

This dashlet helps you to identify the trunks which are most heavily or least utilized. Trunk utilization information is obtained from voice utilization polled data. This dashlet displays the maximum concurrent

calls (configured data), concurrent calls (data used), trunk type (protocol of the trunk), and the utilization in percentage of each trunk.

#### For Cisco Prime Collaboration Release 11.6 and later

As an enhancement to the current feature, utilization of CUCM SIP trunks is also included from 11.6.

The utilization is displayed in terms of audio and video utilization of the trunk, when the user hovers on the utilization column for each CUCM SIP trunk in dashlet view. In the quick and detailed view, the same information is displayed in the chart and grid view as well. In chart view, the utilization is displayed against time. In grid view it is shown as separate columns for each day/month/week as applicable.

The utilization of each CUCM SIP trunk is calculated as:

$(\text{Total calls} / \text{Total configured calls}) * 100$

The audio utilization of each CUCM SIP trunk is calculated as:

$(\text{Audio calls} / \text{Configured audio calls}) * 100$

The video utilization of each CUCM SIP trunk is calculated as:

$(\text{Video calls} / \text{Configured video calls}) * 100$



#### Note

Sum of audio and video utilization in percentage will be equal to total utilization of the trunk.

#### Prerequisite:

- Trunk groups that are created under **Analytics Administration > Group Management** page are listed on the dashlet to enable the user to view the utilization of trunks in that group.
- You must update the maximum capacity for CUCM-SIP trunks for the first time when the trunks are configured. The utilization will be displayed after the capacity is set on the GUI.

You can either update the maximum capacity for CUCM-SIP trunks using the **Utilization Monitor > UCM SIP Trunk Utilization > Set Maximum Capacity** link (or)

By clicking missing trunk in the trunk utilization dashlet (on the top-left corner of the dashlet below the filters) and click CUCM SIP Trunk Max Concurrent Calls link (in Analytics).

You can filter the details displayed in the detailed view of the trunk utilization based on trunk, calculation type, calculation mode, custom groups (this drop-down list is enabled only if you choose the Custom Groups option in the detailed view), or when the threshold level is above or below the selected percentage of utilization (this drop-down list is enabled only if you choose the Utilization option in the detailed view) or cluster (this drop-down list is enabled only if you choose the Utilization option in the detailed view).

Click **Max Concurrent Call** to specify the maximum number of concurrent calls that can go through the SIP Trunk in Cisco Prime Collaboration Analytics.

For other trunks, such as MGCP, inter-cluster and so on, the data is collected through polled data.



#### Note

For non-CUCM trunks, audio and video utilization is not available and hence it is shown as NA in the corresponding columns of the bottom table and in exported CSV file.



## Busy-Hour Trunk Capacity

This dashlet helps you identify the trunks experiencing high average bouncing busy hour (ABBH) traffic. ABBH is calculated by analyzing the traffic load on a switching system during the peak hour of each day, over a certain period (typically one week), and then calculating the average for the time period.

**Prerequisite :** The maximum capacity for the CDR utilization trunks must be configured to see the available capacity in this dashlets. To configure maximum capacity for the CDR utilization trunks click **Missing Busy-Hour Trunk?** at the top left corner of the dashlet, below the filters.

You can also view the following capacity details of the trunk groups or route groups:

- Available Capacity
- Average Bouncing Busy Hour Traffic
- Maximum Bouncing Busy Hour Traffic

The maximum capacity required for a resource is calculated from the maximum BBH value, represented in erlangs. Maximum BBH is the maximum Bouncing Busy Hour value of a particular trunk for the selected time period. BBH is the peak value of that day.

The average capacity required is calculated from the ABBH value. Average capacity, here, means the minimum capacity required for a resource to maintain good traffic flow. ABBH is the average of all BBH values of a particular trunk or a route group for the selected time period.



### Note

ABBH value will be calculated only for the working days, for the selected time period. For example, if you have specified the time period as one week, Analytics will first calculate the ABBH for seven days. The days that have BBH value less than 25 percentage of ABBH are considered as non-working days. Analytics ignores the non-working days and calculates the ABBH value for all the other days of that week.

By default, Analytics uses the Grade of Service (GOS) value as 0.01 to calculate the average required capacity and maximum required capacity. To calculate the average and maximum required capacity for a different GOS (for example, 0.1, 0.001 and so on), you must edit the gos.properties file. See [Editing the GOS Properties File](#) for details .

BBH of the current day is calculated only at the end of the day and you can see it only on the next day. There is no Inbound or Outbound traffic for ABBH. It is applicable only for BBH.

You can filter the details displayed in the detailed view based on trunk , traffic type, direction, bandwidth used, or cluster (this drop-down list is enabled only if you choose the Select option in the detailed view). When you select a cluster, all the devices for that cluster gets listed, regardless of whether the devices are maximum or least utilized.

You need to configure the maximum capacity for the CDR utilization trunks in order to see the available capacity in the dashlets. If the maximum capacity for the CDR trunks is not configured or zero, the data for these trunks will not be shown in the dashlet.

This dashlet will not include the details for the calls processed on VCS.

## Calculating Erlang

An erlang is used to describe the total traffic volume of one hour. For example, If a group of users made 30 calls in one hour, and each call had an average call duration of 5 minutes, then the number of erlangs this represents is worked out as follows:

Minutes of traffic in the hour = number of calls x duration (30\*5) = 150

Hours of traffic in the hour = 150/60 = 2.5

Therefore, the total traffic = 2.5 Erlangs.

Erlang traffic measurements are made in order to understand traffic patterns within your voice networks. It can also be used to work out the number of lines that will be required between a telephone system and a central office (PSTN exchange lines), or between multiple network locations.

## Editing the GOS Properties File

Analytics uses the Grade of Service (GOS) value as 0.01 to calculate the average required capacity and maximum required capacity. To calculate the average and maximum required capacity for a different GOS (for example, 0.1, 0.001 and so on), you must edit the GOS properties file:

- 
- Step 1** Log in to the Prime Collaboration Assurance server with the administrator privilege.
  - Step 2** Open a new tab in browser and enter the URL this link  
<https://<pc-server-ip>/emsam/applications/emsam/PCDiagnostics/fileEditor.jsp>.  
 Where, pc-service-ip is the Prime Collaboration Assurance server IP address.
  - Step 3** Choose the following:
    - a) In the Location drop-down list, /opt/emms/emsam/advance\_reporting/conf/.
    - b) In the File Type drop-down list, properties.
    - c) In the Files drop-down list, gos.properties.
  - Step 4** Click **Edit**.
  - Step 5** Edit the gos value and click **Save**.
- 

## Configuring Maximum Capacity for a Trunk or Gateway

To configure the maximum capacity for a trunk or gateway:

**Note**

In MSP mode, the operator users do not have access to **Analytics Administration** menu, so you cannot configure the maximum capacity for a trunk or gateway.

- 
- Step 1** Choose **Analytics Administration > Trunk Traffic Max Capacity Settings**.
  - Step 2** From the drop-down list, select the Cisco Unified CM cluster that you want to configure.
  - Step 3** Select a gateway or trunk type.
  - Step 4** Click **Configure Maximum Capacity** and make the appropriate entries.
  - Step 5** Click **Apply**, and then click **Close**.
- 

## Importing Trunk Utilization Data for All Clusters

To import the trunk utilization data for all Cisco Unified CM clusters:

**Note**

In MSP mode, the operator users do not have access to **Analytics Administration** menu, so you cannot import the trunk utilization.

- 
- Step 1** Choose **Analytics Administration > Trunk Traffic Max Capacity Settings**.
  - Step 2** Click **Bulk Export**.
  - Step 3** In the Export Trunk Configuration window, click **Export** to accept the default named export CSV file.
  - Step 4** Open the CSV file and edit the data as needed.  
All the gateways and trunks will be listed in the file. You just need to enter the values in the file.
  - Step 5** Click **Bulk Import**.
  - Step 6** Browse to the location of the CSV file, and then click **Import**.
- 

## Route Group/Trunk Group Utilization

### For Cisco Prime Collaboration Release 11.6 and later

This dashlet displays information about the most utilized route groups and trunk groups in terms of channel usage. The utilization data for this dashlet is obtained from the voice utilization polled data. The dashlets details include Route Group/Trunk Group, Concurrent Calls (data used), Max Concurrent Calls (configured data), and the utilization in percentage for each route/trunk.

### Prerequisite :

- To view the aggregated data, you must associate the trunks to a route group, by clicking **Missing Route Group/Trunk Group?** on the top-left corner of the dashlet below the filters..
- To view data for user-defined trunk groups, you must create custom groups, by clicking **Missing Route Group/Trunk Group?** on the top-left corner of the dashlet below the filters.
- For the SIP trunk data to be populated, you must configure the maximum capacity for SIP trunks, by clicking **Missing Route Group/Trunk Group?** on the top-left corner of the dashlet below the filters.. For other trunks, such as MGCP, inter-cluster and so on, the data is collected through polled data.
- If you want to view data for the custom groups, you must define these groups using **Analytics Administration > Group Management**.

You can filter the data based on the utilization type such as peak and average. By default, the dashlet displays the list of devices with peak utilization for the last 28 days.

You can also view the detailed information of the devices by clicking the **See Details** link. In the detailed view, you can filter the details of all the devices, selected or aggregated devices based on time period, peak or average utilization, percentage or absolute values, and individual or merged graphs.

## Busy-Hour Route-Group Capacity

This dashlet helps you identify the route groups experiencing high, average bouncing busy hour (ABBH) traffic. ABBH is calculated by analyzing the traffic load on a switching system during the peak hour of each day, over a certain period (typically one week), and then calculating the average for the time period.

**Prerequisite :** The maximum capacity for the CDR utilization trunks must be configured to see the available capacity in this dashlets. To configure maximum capacity for the CDR utilization trunks click **Missing Busy-Hour Route Group?** at the top left corner of the dashlet, below the filters.

You can also view the following capacity details of the trunk groups or route groups:

- Available Capacity
- Average Bouncing Busy Hour Traffic
- Maximum Bouncing Busy Hour Traffic

The maximum capacity required for a resource is calculated from the maximum BBH value, represented in erlangs. Maximum BBH is the maximum Bouncing Busy Hour value of a particular route group for the selected time period. BBH is the peak value of that day.

The average capacity required is calculated from the ABBH value. Average capacity, here, means the minimum capacity required for a resource to maintain good traffic flow. ABBH is the average of all BBH values of a particular route group for the selected time period.



### Note

ABBH value will be calculated only for the working days, for the selected time period. For example, if you have specified the time period as one week, Analytics will first calculate the ABBH for seven days. The days that have BBH value less than 25 percentage of ABBH are considered as non-working days. Analytics ignores the non-working days and calculates the ABBH value for all the other days of that week.

By default, Analytics uses the Grade of Service value as 0.01 to calculate the average required capacity and maximum required capacity. To calculate the average and maximum required capacity for a different GOS

(for example, 0.1, 0.001 and so on) you must edit the gos.properties file. See [Editing the GOS Properties File](#) for details.

BBH of the current day is calculated only at the end of the day and you can see it only on the next day. There is no Inbound or Outbound traffic for ABBH. It is applicable only for BBH.

In the detailed analysis page, you can filter the details displayed based on route group, traffic type, direction, bandwidth used, or cluster (this drop-down list is enabled only if you choose the Select option in the detailed view). When you select a cluster, all the devices for that cluster gets listed, regardless of whether the devices are maximum or least utilized.

In addition, you can view the traffic type and direction of the associated trunks for a route group when you select **Show Trunks**. The tabular view (pops up when the legend is clicked) also displays associated trunks details for a route group.

You need to configure the maximum capacity for the CDR utilization trunks in order to see the available capacity in the dashlets. If the maximum capacity for the CDR trunks is not configured or zero, the data for these trunks will not be shown in the dashlet.

To configure maximum capacity for CDR trunks, see [Configuring Maximum Capacity for a Trunk or Gateway](#), on page 36.

This dashlet will not include the details for the calls processed on VCS.

## DSP Utilization

You can track DSP resource utilization, so that you can optimize its usage. In this dashlet, you can view the average and minimum DSP utilization for a gateway.

**Prerequisite :** The gateways must be discovered to populate data in this dashlet.

You can view the details of utilization based on the time period, through the Quick view (launched when you rest your mouse pointer on a value in the Gateway column).

In detailed analysis page, you can filter by custom group or DSP utilization, time period, MTP, Transcoder, cluster, and gateway. The tabular view (pops up when you click the legend) displays the peak, average and minimum DSP usage, and total number of channels used on an hourly basis.

You can create a DSP custom group either using the **Device Inventory** or from the DSP Detailed Analysis page. In the Detailed Analysis page, click **Save Results** after applying the required filter parameters. While creating the custom groups, you must ensure that the number of gateways selected must not exceed 100. You can edit or delete the custom groups from the Device Work Center page only.



**Note**

**For Cisco Prime Collaboration Release 11.1 and earlier**

In MSP mode, the operator user do not have the privilege to create custom group, hence the **Save Result** button is grayed out.

## Service Experience

This dashboard helps you to analyze the service quality distribution and traffic trends based on number of calls, location, or call duration.

**Prerequisite :** The Call Measure Records(CMR) must provide either Mean Opinion Score (MOS) or Severely Concealed Seconds Ratio (SCSR) values.

**Data Source :** The device details for this dashlet is collected from Prime Collaboration inventory and the call quality details for this dashlet is obtained from CDR.

In addition to other filters in the detailed analysis view, for each dashlet of the Service Experience dashboard, you can also filter the results based on a selected user (specify the userid in the User field). The tabular view (pops-up when you click legends/series displayed below the slider, or when you double-click at any point on the graph) also has the user field. The same results, containing details of a selected user, can be also be exported.

**Issue found:**

Detail view page for "Users with Call Quality Issues" shows 'No data'.

**Work around provided:**



**Note**

You can find the Detail view page from Quick view shows data.

- 1 Login to Prime Collaboration Assurance server address 10.197.94.104 with the username *globaladmin* and password *Ecmbu!23*.
- 2 Go to 'Analytics -> Service Experience'
- 3 Observe the data available in 'Users with Call Quality Issues' dashlet
- 4 Click on 'See Details'.
- 5 Detail view page shows 'No data'.

## Service Experience Distribution

**For Cisco Prime Collaboration Release 11.1 and earlier**

This dashlet displays the percentage distribution of calls that belong to the following predefined service categories:

- Good—The Severely Concealed Seconds Ratio (SCSR) value falls below the long call and short call SCSR threshold.
- Acceptable—The SCSR value exceeds or equals the long call and short call SCSR threshold.
- Poor—The SCSR value exceeds the long call and short call SCSR threshold.
- Grade Not Available—Occurs when the corresponding SCSR value is not available.

To configure threshold, see the Overview of Voice Call Grade Settings section in [Cisco Prime Collaboration Assurance Guide - Advanced](#).

In the dashlet view, you can select the chart to be displayed for:

- Graded calls— Good, Acceptable, and Poor calls
- Graded and Ungraded calls—Good, Acceptable, Poor, and Grade Not Available calls

By default, the dashlet view displays the chart for Graded calls.

You can filter the call quality data in the Detailed View based on the call type, call quality, device pool, directory number, IP address, URI, cluster, or location.

The device details for this dashlet are collected from Prime Collaboration inventory and the call quality details for this dashlet are obtained from CDR.

This dashlet includes only the details for the calls processed on Cisco Unified Communications Manager.

## Call Quality Analysis

### For Cisco Prime Collaboration Release 11.5 and later

This dashlet displays the percentage distribution of calls that belong to the following predefined service categories:

- Good—The Severely Concealed Seconds Ratio (SCSR) value falls below the long call and short call SCSR threshold.
- Acceptable—The SCSR value exceeds or equals the long call and short call SCSR threshold.
- Poor—The SCSR value exceeds the long call and short call SCSR threshold.
- Grade Not Available—Occurs when the corresponding SCSR value is not available.

In the dashlet view, you can select the chart to be displayed for:

- Graded calls— Good, Acceptable, and Poor calls
- Graded and Ungraded calls—Good, Acceptable, Poor, and Grade Not Available calls

By default, the dashlet view displays the chart for Graded calls.

You can filter the call quality data in the Detailed View based on the call type, call quality, device pool, directory number, IP address, URI, cluster, or location.

The device details for this dashlet are collected from Prime Collaboration inventory and the call quality details for this dashlet are obtained from CDR.

This dashlet includes only the details for the calls processed on Cisco Unified Communications Manager.

## Endpoints with Service Quality Issues

### For Cisco Prime Collaboration Release 11.1 and earlier

This dashlet lists the top N endpoint types and endpoint models that experience service quality issues. It shows the trend of acceptable and poor quality calls for all IP Phones except Cisco DX650, DX70, DX80, 88xx, and 78xx.

The device information details for this dashlet are gathered from Prime Collaboration inventory and the call quality information for this dashlet is obtained from CMR.

In dashlet view, the formula used for calculating the percentage of the acceptable and poor quality calls is:

Total number of Poor and Acceptable calls of an endpoint model or endpoint type / Total number of calls of same endpoint model or endpoint type \* 100.

In detailed view, the formula used for calculating the percentage of the acceptable and poor quality calls is:

One type of call grade of an endpoint model or endpoint type / Total number calls of the same endpoint model or endpoint type \* 100.

You can filter the details in the Detailed View based on endpoint type, endpoint model, call type, call grade, calculation (absolute or percentage), call count, call duration, cluster, location, device pool, IP Address, directory number, or URI.

This dashlet includes only the details for the calls processed on Cisco Unified Communications Manager.

**Note**

The call count data displayed in the detailed view graph will not be in synchronization with the data displayed in the Call Records table. This is because, the detailed view graph aggregates the data at the endpoint level (using CMR) but the Call Records table displays data at call details level (using CDR).

## Endpoints with Call Quality Issues

### For Cisco Prime Collaboration Release 11.5 and later

This dashlet lists the top N endpoint types and endpoint models that experience service quality issues. It shows the trend of acceptable and poor quality calls for all IP Phones except Cisco DX650, DX70, DX80, 88xx, and 78xx.

The device information details for this dashlet are gathered from Prime Collaboration inventory and the call quality information for this dashlet is obtained from CMR.

In dashlet view, the formula used for calculating the percentage of the acceptable and poor quality calls is:

Total number of Poor and Acceptable calls of an endpoint model or endpoint type / Total number of calls of same endpoint model or endpoint type \* 100.

In detailed view, the formula used for calculating the percentage of the acceptable and poor quality calls is:

One type of call grade of an endpoint model or endpoint type / Total number calls of the same endpoint model or endpoint type \* 100.

You can filter the details in the Detailed View based on endpoint type, endpoint model, call type, call grade, calculation (absolute or percentage), call count, call duration, cluster, location, device pool, IP Address, directory number, or URI.

This dashlet includes only the details for the calls processed on Cisco Unified Communications Manager.

**Note**

The call count data displayed in the detailed view graph will not be in synchronization with the data displayed in the Call Records table. This is because, the detailed view graph aggregates the data at the endpoint level (using CMR) but the Call Records table displays data at call details level (using CDR).

## Top N Call Failure Locations

### For Cisco Prime Collaboration Release 11.1 and earlier

This dashlet displays the top N locations that have highest number of failed calls (calls that failed to establish due to lack of bandwidth).

This dashlet displays the locations that have highest number of failed calls (calls that failed to establish due to lack of bandwidth). A call is considered good when each endpoint clears the call successfully.



The location information for this dashlet is collected from CDR.

You can filter the details in the Detailed View based on location, call type, call status, call count, call duration, call direction, or cluster.

You can view the Cause Code Analysis report that summarizes user-selected cause codes in the detailed view. Each slice of the pie chart corresponds to a cause code. To see the number of occurrences of the cause code and its percentage in the graph, place the cursor over a slice of the pie chart.

In dashlet view, the formula used to calculate the percentage of failed calls is:

Total number of failed calls in a location / Total number of calls in the same location \* 100

This dashlet includes only the details for the calls processed on Cisco Unified Communications Manager.

In detailed view, the formula used for calculating the percentage of failed calls is:

Total number of calls or duration of calls of a particular call status (failed, dropped, completed, attempted / Total number of attempted calls or duration of calls in the same location, call type and call direction \* 100

See section **Call termination cause codes** in [Cisco Unified Communications Manager Call Details Record Administration Guide](#) for the cause codes for failed calls.

## Call Status For Locations

### For Cisco Prime Collaboration Release 11.5 and later

This dashlet displays the locations that have highest number of failed calls (calls that failed to establish due to lack of bandwidth). A call is considered good when each endpoint clears the call successfully.

The location information for this dashlet is collected from CDR.

You can filter the details in the Detailed View based on location, call type, call status, call count, call duration, call direction, or cluster.

You can view the Cause Code Analysis report that summarizes user-selected cause codes in the detailed view. Each slice of the pie chart corresponds to a cause code. To see the number of occurrences of the cause code and its percentage in the graph, place the cursor over a slice of the pie chart.

In dashlet view, the formula used to calculate the percentage of failed calls is:

Total number of failed calls in a location / Total number of calls in the same location \* 100

This dashlet includes only the details for the calls processed on Cisco Unified Communications Manager.

In detailed view, the formula used for calculating the percentage of failed calls is:

Total number of calls or duration of calls of a particular call status (failed, dropped, completed, attempted / Total number of attempted calls or duration of calls in the same location, call type and call direction \* 100

See section **Call termination cause codes** in [Cisco Unified Communications Manager Call Details Record Administration Guide](#) for the cause codes for failed calls.

## Users with Service Quality Issues

### For Cisco Prime Collaboration Release 11.1 and earlier

This dashlet lists the users who have experienced most service quality issues. It displays the trend of acceptable and poor audio and video call quality for users.

In the Detailed View, you can filter based on call type (audio or video), call grade (good, acceptable, poor), calculation (absolute or percentage), call count, call duration, cluster, location, device pool, endpoint IP Address, and user.

## Users with Call Quality Issues

### For Cisco Prime Collaboration Release 11.5 and later

This dashlet lists the users who have experienced most service quality issues. It displays the trend of acceptable and poor audio and video call quality for users.

In the Detailed View, you can filter based on call type (audio or video), call grade (good, acceptable, poor), calculation (absolute or percentage), call count, call duration, cluster, location, device pool, endpoint IP Address, and user.

## Call Grade for Locations

### For Cisco Prime Collaboration Release 11.5 and later

This dashlet lists the total number of poor, acceptable and good calls based on the location. You can also view the overall call experience where the poor calls are represented in red, acceptable calls in orange, good calls in green, and grade not available in yellow.

The location information for this dashlet is collected from the CDR.

You can view the detailed information of the call grade by clicking the **See Details** at the bottom-right corner of the dashlet. In the **Detailed Analysis** page, you can filter the call grade data based on the call type, call quality, call count, call duration, calculation (absolute or percentage), device pool, cluster, or location, and individual or merged graphs.

In the detailed view, the formula used for calculating the percentage is:

Total number of calls in a particular call grade(good, acceptable, poor or grade not available) / Total number of calls (good + acceptable + poor + grade not available ) \* 100

### For Cisco Prime Collaboration Release 11.1 and earlier

You can also configure the threshold range for poor, acceptable and good calls from the **Detailed Analysis** page. To configure call grade threshold, click **Configure** in the **Detailed Analysis** page. For details about configuring the call grade threshold, refer the Overview of Voice Call Grade Settings section in [Cisco Prime Collaboration Assurance Guide - Advanced](#).

### For Cisco Prime Collaboration Release 11.5 and later

## Video Conferences

### For Cisco Prime Collaboration Release 11.1 and earlier

This dashboard displays the usage trends of the conference resources. This information helps you to effectively plan for future capacity addition or dilution where needed.

**Prerequisite :** The dashboard data is populated only if there are at least two video endpoints (Multipurpose, Immersive, or Personal TelePresences) in a conference.

This dashboard provides information on locations with highest number of conferences, conference duration (in minutes) and number of participants. The quick view, dashlet view and the detailed view of these dashlets provide data for a selected time period.

You can view the following dashlets from the Conferences dashboard:

## Video Conference Analysis

### For Cisco Prime Collaboration Release 11.5 and later

This dashboard displays the usage trends of the conference resources. This information helps you to effectively plan for future capacity addition or dilution where needed.

**Prerequisite :** The dashboard data is populated only if there are at least two video endpoints (Multipurpose, Immersive, or Personal TelePresences) in a conference.

This dashboard provides information on locations with highest number of conferences, conference duration (in minutes) and number of participants. The quick view, dashlet view and the detailed view of these dashlets provide data for a selected time period.

You can view the following dashlets from the Conferences dashboard:

## Video Conference Statistics

You can analyze the conference calls in your site based on call type and call category.

This dashlet displays number of participants, conference count and duration based on call type (adhoc, scheduled) and call category (p2p, multisite and multipoint).

In the detailed view, you can filter based on conference, participants, and duration for conference type and conference category. You can customize your display based on number of participants per conference and duration per conference.

**Note**

In MSP mode, you cannot filter the dashlet details based on the call type such as adhoc, scheduled and all filters.

## Top N Video Conference Locations

You can analyze the number of participants in conference calls and overall conference duration for every location. You can filter these data on call type (adhoc and scheduled) and call category (p2p, multisite and multipoint).

In the detailed view, you can filter based on locations with maximum or minimum conferences. You can view details on conference type (adhoc, scheduled), session type (P2P, Multi-Point, Multi-Site), and clusters within a location.

The Cluster filter does not support Cisco VCS.

**Note**

In MSP mode, you cannot filter the dashlet details based on the call type such as adhoc, scheduled and all filters.

## Conferencing Devices Video Utilization

This dashlet helps you to track the utilization of conferencing devices.

**Prerequisite :**Conference bridges must be deployed and discovered in device work center.

It also:

- Provides statistics of the peak and average usage of video ports in conferencing devices over a given period of time.
- Helps you see the usage trends of the video ports configured in your network, and manage them better. Provides information on the maximum number of a video ports that is configured on a device and number of ports used.

You can filter the details in the detailed analysis, based on conferencing device, utilization, peak or average ports, utilization percentage, and the device types such as Multipoint Control Unit (MCU), Cisco TelePresence Multipoint Switch (CTMS), or TelePresence Server (TPS). You can also select a Conductor and device information for each device type (these drop-down lists are enabled only if you choose the Select option in the detailed view).

Only the peak and average ports usage filters are applicable in the dashlet, detailed view, and quick view.

## Conductor Bridge Pool Utilization

**For Cisco Prime Collaboration Release 11.5 and later**

This dashlet displays the cumulative utilization of the conference bridges for each conductor pool in your network.

The dashlet displays the following details:

- Pool Name—Name of the conference bridge pool
- Video Ports/Screen License Utilization—Number of video ports/screen licenses currently in use
- Max Video Ports/Screen License Utilization—Number of video ports/screen licenses available.
- Utilization—Percentage of video ports utilized from maximum available video ports.
- Conference Bridge Type
- Conductor Name—Name of the conductor that manages the conference bridge pool.

You can filter the data based on the utilization type(peak and average) and utilization percentage.

You can also view detailed information of the devices by clicking the **See Details** link. In the detailed view, you can filter the details of all the devices or selected device based on device type, device, time period, peak or average utilization, utilization percentage and individual or merged graphs.

## UC System Performance

This dashboard helps you analyze system performance, based on CPU and Memory for the UC applications. You can use these trends to determine UC applications that are consuming high CPU/memory consistently over a period of time.

**Prerequisite :** The endpoints registered to Unified CM and Cisco VCS should be discovered.

**Data Source :** The performance utilization details for this dashboard is obtained from RTMT polled data

The quick view, dashlet view and the detailed view of these dashlets provide data for the time period for which the filter has been applied.

The following dashlets are available:

**CPU Utilization** - This dashlet displays the CPU utilization data (as a percentage) in terms of peak, average, and minimum utilization, for each device.

**Memory Utilization** - This dashlet displays the total memory and used memory (peak, average, and minimum) in terms of MB terms. Also, it displays the memory utilization as a percentage in terms of peak, average, and minimum utilization.



**Note**

- These dashlets display a maximum of 25 rows at an instant.
- Also, they display data (peak, average, and minimum) as a sparkline trend for last 2 days.

## License Usage

This dashboard helps you to track the license usage of applications such as Unified Contact Center Enterprise (UCCE) and Cisco Voice Portal (CVP).

**Prerequisite :** Contact Center Assurance License is required to populate data in the license usage dashboard.

**Data Source :** The license usage details for this dashboard are obtained from voice utilization polled data.

The following dashlets are available in License Usage dashboard:

## Contact Center Enterprise

This dashlet displays the license usage of Unified Contact Center Enterprise.

The dashlet displays the following details:

- Device—Device name
- Capability—Capability of the device such as router or peripheral gateway
- Instance Name—Name of the instance
- Agents logged on—Number of contact center agents currently logged on

You can filter the data based on the utilization type such as peak and average. By default, the dashlet displays the list of devices with peak utilization for the last 14 days.

To launch a quick view of the device, click the information icon available against the respective device name. The quick view shows the number of agents logged on for a particular time period, in the form of graph or grid view.

You can also view detailed information of the devices by clicking the *See Details* link. In the detailed view, you can filter the details of all the devices or selected device based on time period, cluster, capability, device, peak or average utilization, and individual or merged graphs.

## Customer Voice Portal

This dashlet displays the license usage of CVP call servers.

The dashlet displays the following details :

- Device—Device name.
- **For Cisco Prime Collaboration Release 11.1 and earlier**  
Type—Device Type. For aggregated device, the device type is Multidevice.
- **For Cisco Prime Collaboration Release 11.5 and later**  
Type—Device Type. For aggregated device, the device type is Device Group.
- Port in use—Number of port licenses currently in use.
- Max ports—Number of port licenses available for the processing of new calls. If there is any change in the ports utilized in the selected period, then minimum- maximum available port range is displayed.
- Utilization (%)—Percentage of ports utilized from maximum available ports.
- Port request denied—Number of port license checkout requests that were denied since the start of the system.

**For Cisco Prime Collaboration Release 11.1 and earlier**

**For Cisco Prime Collaboration Release 11.5 and later**

You can view the aggregated license usage of multiple devices. For aggregating devices, see [Aggregating Devices](#).

You can filter the data based on the utilization type such as peak and average. By default, the dashlet displays the list of devices with peak utilization for the last 14 days.

To launch a quick view of the device, click the information icon available against the respective device. The quick view shows the ports in use and its utilization for a particular time period, in graph or grid view.

You can also view the detailed information of the devices by clicking the **See Details** link. In the detailed view, you can filter the details of all the devices, selected or aggregated devices based on time period, utilization range, clusters, devices, peak or average utilization, percentage or absolute values, and individual or merged graphs.

## Aggregating Devices

**For Cisco Prime Collaboration Release 11.1 and earlier**

You can select multiple CVP devices, and view the aggregated license usage of these devices. To select the devices for aggregation:

- 
- Step 1** Click the device in the first row. The **Aggregated Devices** dialog box appears.
  - Step 2** In the **Aggregated Devices** dialog box, edit the **Name** as required.
  - Step 3** Select the required devices.
  - Step 4** Click **Save & Close**.

You can view the aggregated device values populated in the first row of the dashlet.

---

## Aggregating Devices

### For Cisco Prime Collaboration Release 11.5 and later

You can select multiple CVP devices, and view the aggregated license usage of these devices.

**Note**

You must have administrator privilege to perform this task.

To select the devices for aggregation:

---

**Step 1** Click **CVP Aggregation Configuration** on the top left corner of **Customer Voice Portal** dashlet.

**Step 2** In the **CVP Aggregation Configuration** page, based on the mode of deployment, do the following:

- In Enterprise mode, select the devices for aggregation as required.
- In MSP mode, you can aggregate devices for individual customers as follows:
  - 1 Click the customer name. The devices associated with the customer are displayed.
  - 2 From the displayed devices, select the required devices for aggregation.
  - 3 Enter a name for the aggregated devices.

**Step 3** Click **Save**.

You can find the aggregated device values populated in the **Customer Voice Portal** dashlet with the device type as **Device Group**.

---

## Video Communication Server / Expressway

### For Cisco Prime Collaboration Release 11.6 and later

This dashlet displays the license usage of VCS standalone or cluster servers.

You can view the Traversal and Non-Traversal license usage for all VCS clusters, individual VCS servers in a cluster, standalone VCS servers, Cisco Expressway-Core, Cisco Expressway-Edge, or a Cisco VCS with Cisco Collaboration Edge or Core. For Cisco Expressway-Core and Cisco Expressway-Edge clusters, you can also view the peak number of calls since last restart in the Expressway Peak Concurrent column.

The dashlet displays the following details:

- Cluster/Standalone Server
- Peak Traversal

- Peak Non-Traversal
- Peak Registration
- Expressway Peak Concurrent

**Note**

When the device operates in expressway mode, you can view valid Expressway Peak Concurrent value. If the device operates in VCS mode, the Expressway Peak Concurrent value will be displayed as not applicable.

You can filter the data based on the utilization type such as peak and average. By default, the dashlet displays the list of devices with peak utilization for the last 7 days.

To launch a quick view of the device, click the information icon available against the respective device. The quick view shows the used and utilization information for Peak Traversal, Peak Non-Traversal, and Peak Registration for a particular time period, in graph or grid view.

You can also view the detailed information of the devices by clicking the **See Details** link. In the detailed view, you can filter the details of all the devices, selected devices based on time period, peak or average utilization, percentage or absolute values, and individual or merged graphs.

## My Dashboard

You can customize dashboards on **My Dashboard** page and add existing dashlets to it.

You can also do the following:

- Create new dashboards.
- Add existing dashlets.
- Move dashlets around a dashboard by dragging and dropping them.
- Edit and delete dashlets.
- Add global filters.
- Change layout template. By default, the layout template for **My Dashboard** is set as 100.

To add a new dashboard:

- 
- Step 1** Click the Settings icon on the top-right corner of the **My Dashboard** page, and then click **Add New Dashboard**.
  - Step 2** Enter a name in the text box provided, and click **Apply**.
  - Step 3** Click **Add Dashlet(s)**.
  - Step 4** Click **Add** next to the dashlet you want to add.
-



# Custom Report

The Prime Collaboration Analytics custom reports are based on the OLAP cube technique. When you select a report, you have the flexibility of choosing the required attributes and values to generate an analytics report.

The attributes include elements such as DialedNumber, Date, Time, Cluster, MeetingCategory, and so on; the values, which represents the numeric value includes count, duration, and so on. For detailed description on attributes and values for analytics cubes, see Prime Collaboration Analytics Custom Report – [Attributes and Values](#) page.

You can generate Analytics custom reports for:

## Call Quality

- Caller Call Status and Callee Call Status: Displays call status, such as dropped, failed and so on for the originated or destination endpoint.
- Caller Call Grade and Callee Call Grade: Displays call quality data, such as No MOS, poor call, short call, and so on for the originated or destination endpoint. It also provides details on the call grades (using the CMR records) for the originated or destination EP.
- Caller Call Class and Callee Call Class: Displays call traffic types, such as external, internal, conference, and so on for the originated or endpoint information. It also provides the onnet and offnet call indicator.
- Caller Call Cause Code and Callee Call Cause Code: Displays call termination code, such as temporary failure (41), Destination out of order (27), no user responding (18), and so on for the originated or destination endpoint information.

## Capacity Planning

- Location CAC Bandwidth Utilization: Displays CAC bandwidth usage details along with the number of calls failed because of less bandwidth.
- Conferencing Devices Video Utilization: Displays channel utilization for conferencing devices, such as Cisco MCU, Cisco TPS.
- Busy-Hour Trunk Capacity: Displays ABBH (Average Bouncing Busy Hour) data that are collected from the Unified CM CDR.
- Utilization: Trunk, DSP, MTP/Transcoder, Route Group and Trunk Group.

## Conference

- Conference Locations: Displays conference details, such as conference category, count, and so on for endpoints.
- Conference Statistics: Displays conference details, such as participants count, duration and so on.

## System Performance

CPU and memory utilization.

## Creating Custom Reports

To create a custom report:

- 
- Step 1** Choose **Analytics > Custom Report Generator**.
- Step 2** Choose a report from the Reports drop-down list.
- Step 3** From the Attributes and Values panes, choose the elements.  
Double-click the Attributes element to view and select the required parameters.

The elements of a Attributes can be organized as a hierarchy, a set of parent-child relationships, where a parent member summarizes its children. Parent elements can further be aggregated as the children of another parent; for example May 2014's parent is second Quarter 2014 which is in turn the child of Year 2014.

For network analysis or UC utilization related custom reports, if you have selected to view hourly data for over 13 months, the report may take a long time to generate. It is recommended to select hourly data for a time period less than 13 months.

- Step 4** Click **Save**.
- 



### Note

In MSP mode, the operator user do not have access to **Custom Report Generator** page.

You can view the generated report in chart or grid mode. You can export the report in PDF, MS Excel, PNG, and so on based on the view mode.

For the query that you have defined, you can view the corresponding query in the MDX language. MDX is a language for querying an OLAP cube. MDX is similar to SQL, but has added support for the multidimensional nature of cubes. For more details on the MDX query, see the [Mondrian Documentation](#). While writing the MDX query, you must use the attributes and values to generate the report; you can refer to the [Attributes and Values](#) page.

## Scheduled Reports

This dashboard displays the list of entities (reports) that have been scheduled (when you click **Schedule Report** from the drop-down on the bottom-left of a dashlet). To view this dashboard, go to **Analytics > Scheduled Reports**.

You can view the report name, report type, frequency of the schedule, the filters that you have used while scheduling (displayed in **Filter Settings** when you click **Schedule Report** from the drop-down on the bottom-left of a dashlet), the status indicating success/failure when the report was last generated, and next scheduled run time.

The top Metric panel displays data on the disk utilization, reports e-mailed and reports exported to SFTP server.

You can also suspend or resume a job (select a job and click Suspend/Resume). In case of errors, rest your mouse over a job to view the errors.

Also, you can add or remove the columns displayed, based on your business needs. To do this, click **Settings** icon available on the top-right corner of the page and rest your mouse on **Columns**.

To generate the report immediately:

- Click Run Now (at the end of the row of each report listed).
- Click the Run History (adjacent to Run Now) - shows the number of times the report has been run but the number of files listed are limited for the last 30/35 days only. List of reports that have been run are displayed.
- You can download a report or purge the selected report.

**Note**

- You cannot use Run Now on a report for which the schedule time has expired (reached end date).
- Clicking Run Now does not change the original schedule of the job (daily, weekly, and such).

## Troubleshooting Prime Collaboration Analytics Dashboard

The following table has the details to troubleshoot data population in individual dashboard:

**Table 5: Troubleshooting details for individual dashboard**

| Dashboards | Prerequisite | Data Source | Associated Assurance reports to confirm data collection |
|------------|--------------|-------------|---------------------------------------------------------|
|------------|--------------|-------------|---------------------------------------------------------|

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                       |  |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|--|
| Technology Adoption | <ul style="list-style-type: none"> <li>Endpoints must be discovered.</li> <li><b>For Cisco Prime Collaboration Release 11.1 and earlier</b><br/><b>Deployment Distribution by Endpoint Model:</b> Endpoint status in Device Work Center should be either registered, partially registered, or non-registered.<br/><b>For Cisco Prime Collaboration Release 11.5 and later</b><br/><b>Endpoints Deployment Summary:</b> Endpoint status in Device Work Center should be either registered, partially registered, or non-registered.</li> <li><b>For Cisco Prime Collaboration Release 11.1 and earlier</b><br/><b>Call Distribution by Endpoint Model and Types:</b> CDR records for Unified CM and Cisco VCS registered endpoints must be available.<br/><b>For Cisco Prime Collaboration Release 11.5 and later</b><br/><b>Call Volume by Endpoint Model and Types:</b> CDR records for Unified CM and Cisco VCS registered endpoints must be available.</li> </ul> | CDR and Prime Collaboration Inventory |  |
| Asset Usage         | Endpoints must be discovered.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | CDR and Prime Collaboration Inventory |  |
| Traffic Analysis    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | CDR                                   |  |

|                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                       |                                                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------------------------------------------------------------------------------|
| Capacity Analysis                                                                                                                                                              | <ul style="list-style-type: none"> <li>• <b>Trunk Utilization:</b> Configure maximum SIP trunk capacity, and define custom trunk groups .</li> <li>• <b>Busy-Hour Trunk and Busy-Hour Route-Group Capacity:</b><br/>Maximum CDR trunk capacity must be configured.</li> <li>• <b>Route Group/Trunk Group Utilization:</b><br/>Configure Maximum SIP trunk capacity, and define custom trunk groups, and Associate trunks to route group .</li> <li>• <b>Conferencing Devices Video Utilization:</b><br/>Conference bridges must be deployed and discovered in device work center, and calls from any of these media resources (MCU, TPS, CTMS) must be present.</li> <li>• <b>DSP Utilization:</b> Gateways must be discovered.</li> </ul> | Voice Utilization Polled Data         | <b>Monitor &gt; Utilization Monitor</b>                                                                 |
| Service Experience                                                                                                                                                             | CMR must provide MOS and SCSR grade details.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | CDR and Prime Collaboration Inventory | <b>Monitor &gt; System View &gt; Service Experience Network Health Overview &gt; Service Experience</b> |
| <b>For Cisco Prime Collaboration Release 11.1 and earlier</b><br>Video Conferences<br><b>For Cisco Prime Collaboration Release 11.5 and later</b><br>Video Conference Analysis | <ul style="list-style-type: none"> <li>• At least two video endpoints in a conference must be available.</li> <li>• <b>Video Conference Statistics:</b><br/>Endpoints visibility must be set to Full (<b>Device Inventory &gt; Edit (under Current Inventory)</b>) (<b>Inventory &gt; Edit (under Current Inventory)</b>) and session details must be polled.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                   |                                       | <b>Diagnose &gt; Session Diagnostics Diagnose &gt; Conference Diagnostics</b>                           |
| UC System Performance                                                                                                                                                          | Endpoints must be discovered.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | RTMT Polled Data                      | <b>Monitor &gt; System View &gt; Performance</b>                                                        |

|               |                                                     |                               |                                         |
|---------------|-----------------------------------------------------|-------------------------------|-----------------------------------------|
| License Usage | Contact Center Assurance License must be available. | Voice Utilization Polled Data | <b>Monitor &gt; Utilization Monitor</b> |
|---------------|-----------------------------------------------------|-------------------------------|-----------------------------------------|



## CHAPTER

# 4

## Backup and Restore for Prime Collaboration Analytics

---

Prime Collaboration Analytics data is backed up on a remote server using SSH. It does not use the Prime Collaboration Assurance backup repository. You can backup the analytics data only through UI, and restore the data through CLI.



### Note

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Linux server is recommended for Cisco Prime Collaboration Analytics backup.

You can also backup Cisco Prime Collaboration Analytics on windows server. Backup support in windows server is provided only using Bitwise SSH (recommended version 6.31) and Cygwin UNIX shell. Backup support in windows server is not available using other SSH tools or Unix Shell.

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- [Schedule Backup using Cisco Prime Collaboration User Interface, page 57](#)
- [Restore Data on the Same System, page 59](#)

## Schedule Backup using Cisco Prime Collaboration User Interface

**For Cisco Prime Collaboration Release 11.1 and earlier**

**For Cisco Prime Collaboration Release 11.5 and later**

You must be logged in as an administrator to perform backup.

To create a new backup job:

---

**Step 1** Choose **Administration > Backups**.

**Step 2** On the Backup page, click **New**.

**Step 3** Enter a name for the backup job.

If backup name is not specified, the **Backup Title** field is defaulted with date stamp.

**Step 4** Select the **Backup Category** from the drop-down list.

**Step 5** In the **Assurance Connection Settings** pane, enter the following details.  
In the **Connection Settings** pane, enter the following details.

You can use SFTP, FTP, or local connection to create backup.

If you select SFTP or FTP, provide the following details:

- IP address of the server where the backup files need to be saved
- Path to the backup location
  - Note** While backing up using SFTP, ensure that you provide relative path. The relative path must contain directory details(for example DIRNAME or DIRNAME 1 / DIRNAME 2), to avoid backup in root directory.
- Port (for SFTP only)
- Username
- Password

Click **Test** to test the SFTP or FTP connection using the credentials.

If you select local, specify the location to save the backup files on your local machine.

For a local backup, you can specify the number of backup files to be saved, using the **Backup History** drop-down list. By default, the last two backup files are saved. You can save up to nine backup files.

#### For Cisco Prime Collaboration Release 11.5 and later

**Step 6** In the **Analytics Connection Settings** pane, enter the following details.  
You can use only a remote server to backup the Analytics data using SSH.

- IP address of the remote server where the backup files need to be saved
- Path to the backup location. You must provide relative path.
  - Note** The backup location is relative to the specified SSH user home directory. The relative path must contain directory details(for example DIRNAME or DIRNAME 1 / DIRNAME 2), to avoid backup in root directory.
- SSH Port
- SSH Username
- SSH Password

Click **Test** to test the connection using the credentials.

**Step 7** Specify the backup start time and recurrence interval.  
The time displayed in the date picker is the client browser time.

**Step 8** (Optional) Enter the email IDs to which the backup status notification needs to be sent. Separate the email IDs using comma.  
Configure the SMTP server details in the Cisco Prime Collaboration Assurance server (**Administration > System Setup > Assurance Setup > General Settings**) to receive emails.

#### For Cisco Prime Collaboration Release 11.5 and later

**Step 9** Click **Save**.  
The scheduled backup job is listed on the **Backup Management** page.  
You can click **Run Now** to run the backup immediately.



## Restore Data on the Same System

The following sections describe the process of restoring the data on the same system.

To restore the data, log in to the Cisco Prime Collaboration Assurance application server as *admin* and run the following command to restore the Cisco Prime Collaboration Assurance data: .

```
admin# restore Backupfilename repository RepositoryName application cpcm
```

Where, *Backupfilename* is the name of the backup file suffixed with the timestamp (*YYMMDD-HHMM*) and file extension *.tar.gpg*.

For example, to restore on the ftp server:

```
admin# restore assurance_Sun_Feb_09_14_20_30_CST_2014.tar.gpg repository myftp application cpcm
```

If you want to restore both Cisco Prime Collaboration Assurance and Analytics data, you are prompted with the following:

1 Restore may require a restart of application services. Continue? (yes/no)

Enter **yes**.

2 Do you want to restore Analytics [y/n]?

Enter **y**.

3 Enter the following details for the Cisco Prime Collaboration Analytics data:

- Remote server IP address, where the analytics backup data is stored.
- Remote server SSH port
- SSH username
- SSH password
- Backup file path



### Note

While restoring the data, ensure that you provide relative path. The relative path must contain directory details(for example DIRNAME or DIRNAME 1 / DIRNAME 2), to avoid backup in root directory.

After checking the remote server connection, the Cisco Prime Collaboration Assurance and Analytics data restore starts. This may take a few minutes to complete based on the data.

