Introduction to Prime Collaboration Analytics

Cisco Prime Collaboration is a comprehensive video and voice assurance and management system with a set of monitoring, troubleshooting, and reporting capabilities that help ensure end users receive a consistent, high-quality video and voice collaboration experience.

Prime Collaboration:
- Provides provisioning, monitoring, diagnostics, and reporting capabilities for Unified Communications Systems.
- Supports timely, end-to-end visibility and isolates voice and video-related issues for sessions (calls), endpoints, and the network.
- Reduces time to troubleshoot and recover from service-affecting problems.
- Provides detailed analysis of the media (voice and video) path with critical fault and performance statistics that enable you to isolate network devices that cause service degradation.
- Validates large-scale deployments through comprehensive inventory, health, and status of Cisco Collaboration systems, as well as service and network infrastructure devices.
- Delivers reports that allow operators to track usage and problem history.

Prime Collaboration Analytics

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

You can launch the following dashboards from the Analyze tab in the interface:
- Technology Adoption, page 2-1
- Asset Usage, page 2-5
- Traffic Analysis, page 2-5
- Capacity Analysis, page 2-9
- Service Experience, page 2-13
Prerequisites

- You need to deploy Prime Collaboration in Enterprise Deployment mode to access the Analytics features.

**Note**

Prime Collaboration Analytics is not supported in Managed Service Provider (MSP) mode.

- To access Prime Collaboration Analytics dashboards after the evaluation mode (60 days), you need to purchase Prime Collaboration Analytics license. We recommend that you purchase the same scale license as that for Assurance.

See “Managing Licenses” chapter in *Cisco Prime Collaboration 9.5 Administration Guide* for more information on Analytics licensing.

- 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
  - Session Import
  - Device Polling

See *Cisco Prime Collaboration 9.5 Assurance Guide* for more information about these tasks.

- Prime Collaboration Analytics has 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).

### Enabling or Disabling Analytics

You can enable or disable Analytics only during the evaluation period. After the purchase of the license, you will not be able to run the enable or disable scripts for Analytics.

To disable Analytics,

**Step 1** Login as root user to Prime Collaboration Assurance server.

**Step 2** Run the script `disable_adv_reporting.sh` available at `/opt/emms/emsam/advance_reporting/bin`.

**Step 3** Enter yes, when prompted with confirmation message to run the script.

**Step 4** After you run the disable script, you need to stop and start the daemons for the changes to take effect.

```bash
cpcmcontrol.sh stop
cpcmcontrol.sh start
```

**Step 5** See if Analytics tab is removed from the GUI.

To enable Analytics,

**Step 1** Login as root user to Prime Collaboration Assurance server.

**Step 2** Run the script `enable_adv_reporting.sh` available at `/opt/emms/emsam/advance_reporting/bin`.

**Step 3** Enter yes, when prompted with confirmation message to run the script.
Step 4 After you run the enable script, you need to stop and start the daemons for the changes to take effect.
cpcmcontrol.sh stop
cpcmcontrol.sh start

Step 5 See if Analytics tab is enabled in the GUI.

Note If you choose to enable Prime Collaboration Analytics in the evaluation mode at a later period of time, the evaluation period for Prime Collaboration Analytics will not be extended from initial install date.

Usage Scenarios for Prime Collaboration Analytics Dashboards

Table 1 describes the usage scenarios for Prime Collaboration Analytics dashboards.

<table>
<thead>
<tr>
<th>Usage Scenario</th>
<th>Dashlet Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Track the progress of deployment of voice-only phones, video phones and TelePresence endpoints.</td>
<td>• Deployment Distribution by Endpoint Model</td>
</tr>
<tr>
<td>Understand the endpoint usage to validate investments made so far and to make future investment decisions.</td>
<td>• Call Distribution by Endpoint Model&lt;br&gt;• Call Distribution by Endpoint Types</td>
</tr>
<tr>
<td>Count the number of endpoints that are heavily or lightly used.</td>
<td>• Technology Usage</td>
</tr>
<tr>
<td>Identify the least used endpoints to effectively plan and allocate resources across an organization.</td>
<td>• Least Used Endpoint Types</td>
</tr>
<tr>
<td>Find the top N directory numbers sorted by the most number of calls placed or by total duration of all calls placed.</td>
<td>• Top N Callers</td>
</tr>
<tr>
<td>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.</td>
<td>• Top N Dialed Numbers</td>
</tr>
<tr>
<td>Find the locations with most number of incoming and outgoing Off-Net calls.</td>
<td>• Top N Off-Net Traffic Locations</td>
</tr>
<tr>
<td>Identify the top N locations from which the highest number of calls were placed or received.</td>
<td>• Top N Call Traffic Locations</td>
</tr>
<tr>
<td>Understand the trend of various types of calls between sites, locations, endpoints, clusters, or device pools.</td>
<td>• Call Traffic Analysis</td>
</tr>
<tr>
<td>Track the utilization of TelePresence conferencing devices to optimize their usage across the organization.</td>
<td>• Top N Utilized Video Conferencing Devices&lt;br&gt;• Bottom N Utilized Video Conferencing Devices</td>
</tr>
</tbody>
</table>
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 launch the detailed view or quick view
- To view data tips for the corresponding pie wedges or bar wedges.

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 the icon at the top right corner of the UI, choose Layout Template and select your desired layout.

<table>
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<tr>
<th>Usage Scenario</th>
<th>Dashlet Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td>• Top N Location CAC Bandwidth Utilization</td>
</tr>
<tr>
<td></td>
<td>• Bottom N Location CAC Bandwidth Utilization</td>
</tr>
<tr>
<td>Evaluate and optimize trunk utilization across the organization.</td>
<td>• Top N Utilized Trunks</td>
</tr>
<tr>
<td></td>
<td>• Bottom N Utilized Trunks</td>
</tr>
<tr>
<td>Decide on increasing or decreasing the capacity (lines) after measuring trunks and route group Average Bouncing Busy Hour (ABBH) traffic.</td>
<td>• Top N Busy-Hour Trunk Capacity</td>
</tr>
<tr>
<td></td>
<td>• Bottom N Busy-Hour Trunk Capacity</td>
</tr>
<tr>
<td>Analyze the service quality experienced by users in your organization.</td>
<td>• Service Experience Distribution</td>
</tr>
<tr>
<td>Identify the top N endpoints experiencing service quality issues.</td>
<td>• Endpoints with Service Quality Issues</td>
</tr>
<tr>
<td>Analyze the trend of call failures in your organization and identify the locations where call failure rates are high.</td>
<td>• Top N Call Failure Locations</td>
</tr>
</tbody>
</table>

Table 1  Usage Scenarios for Prime Collaboration Analytics Dashboards (continued)

User Interface
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
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Adding a Custom Dashboard

You can create custom dashboards and add the existing dashlets to these dashboards. You can also move the dashlets around under a dashboard by dragging and dropping them.

To add a custom dashboard:

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

Detailed View

You can filter the details in the detailed view based on endpoint type, endpoint model, deployment status, cluster, or location. Drill down to the zoom selector graph in the detailed view page. You can adjust the pointer in the time window (x axis) of the graph to view data for the desired time range.

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 detailed view, dashlets with VCS registered endpoints display the location, codec, and device pool details as VCS_Unknown. Impairment details are not applicable for VCS registered calls and will be displayed as zero in the detailed view.

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

Global Filter Options

Global Filter option is available at the top left of the UI for each dashboard. You can filter the details displayed for all the dashlets in that dashboard based on the CUCM cluster and duration (for example, last one week, one month and so on).