

Cisco Prime™ Collaboration Assurance and Analytics

Cisco Prime™ Collaboration Assurance and Analytics enables a leading semiconductor foundry to quickly resolve Unified Communications service quality issues and ensure optimal capacity, which results in a superior Unified Communications experience for its employees.

EXECUTIVE SUMMARY

Industry: Semiconductor fabrication
Location: Global footprint
Company Size: More than 13,000 employees

BUSINESS IMPACT

- Rapid detection and resolution of call quality issues.
- Lower TCO: Reduction in network management costs of by using one system to manage voice and video networks.
- Ensuring optimal capacity based on usage patterns and demand for UC resources over the long term.

Business Challenge

A leading semiconductor foundry with a global manufacturing and technology footprint and more than 13,000 employees spread out across the world has deployed Cisco Unified Communications solution to achieve agility and efficiency with its operations.

Services offered by Cisco Unified Communications are crucial for its operations. To improve operational efficiency, the enterprise's IT staff needed a solution to effectively monitor a large, multi-cluster, multi-site Cisco Unified Communications network, which includes 5,000 hard phones and 3,000 softphones in each cluster. With three clusters spread across the world, the enterprise's IT needs to manage approximately 24,000 hard phones and softphones.

Employees constantly complained about poor call quality issues. Network engineers needed a system that collects call quality metrics and measures performance over time to resolve call quality degradation issues.

This enterprise will be in aggressive growth mode for the next 8 to 10 years and plans to add about 1,000 new employees over the next 8 to 16 months. Therefore, its IT managers also needed a solution that helps them with optimizing Cisco Unified Communications resources and enable them to plan for future capacity based on reliable insights obtained over the long term.

Essentially, IT staff required a system to minimize end-user complaints and ensure optimal capacity that results in a superior Unified Communications experience for all employees.

Solution & Results

Cisco Prime Collaboration Assurance and Analytics was deployed to manage their Unified Communications network.

Cisco Prime Collaboration Assurance provided IT with Voice Call Quality Reports with details about call quality metrics, such as packet loss, jitter, and MOS scores as well as type of service (ToS) values, - a crucial parameter that determines quality of service (QoS). Using Cisco Prime Collaboration Assurance reports, an IT manager instantly detected that QoS settings were not configured properly for some of the softphones, resulting in poor call quality. Misconfigurations of switch ports were also discovered.

The IT manager was able to take corrective action and configure QoS appropriately to resolve call quality degradation issues. These reports also enabled IT staff members to get a measure of baseline performance of their Unified Communications network against which call quality can be measured.

Cisco Prime Collaboration Assurance enables IT to significantly reduce the time taken to troubleshoot issues. Network topology views allow the enterprise's IT staff to quickly gain visibility into Unified Communications deployment. Issues are isolated faster - and consequently resolved faster as well - using built-in dashboards and intuitive drill down tools. Cisco Prime Collaboration Assurance enables IT to detect faults from third party endpoints as well. Video endpoints from Polycom are being used. With Cisco Prime Collaboration Assurance, the enterprise's IT did not have to spend time, money, and costly resources on multiple management platforms, thus providing a quick ROI.

The Cisco Prime Collaboration Analytics module provides historical reporting of key performance indicators (KPIs) and helps enable IT network managers to analyze trends for capacity planning, resource optimization, and QoS. This module has been very beneficial in a variety of ways. Using this module, the enterprise's IT staff is able to size WANs in an effective manner by gaining insights into top callers, top dialed numbers, and top call traffic locations. IT organization is able to identify route group and trunk utilization for all the trunks as well as CAC (Call Admission Control) Bandwidth Utilization for all the enterprise's locations. All these dashlets provide visibility over the long term enabling IT organization to allocate network resources in an optimal manner based on usage patterns and demand for Unified Communications resources.

According to Michael Mertens, the enterprise's network engineer focused on Unified Communications, "Prime Collaboration Assurance and Analytics has been incredibly helpful in troubleshooting poor call quality issues as well plan for future capacity and has empowered IT to deliver a superior experience for end users. This is a top notch solution for managing a UC network."

Figure 1. At-a-Glance Dashboards

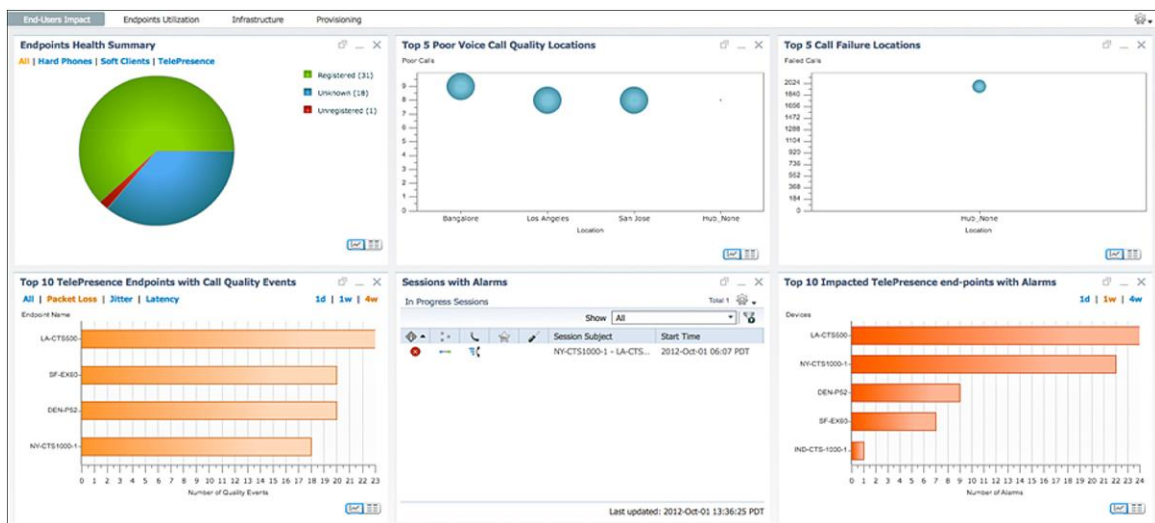
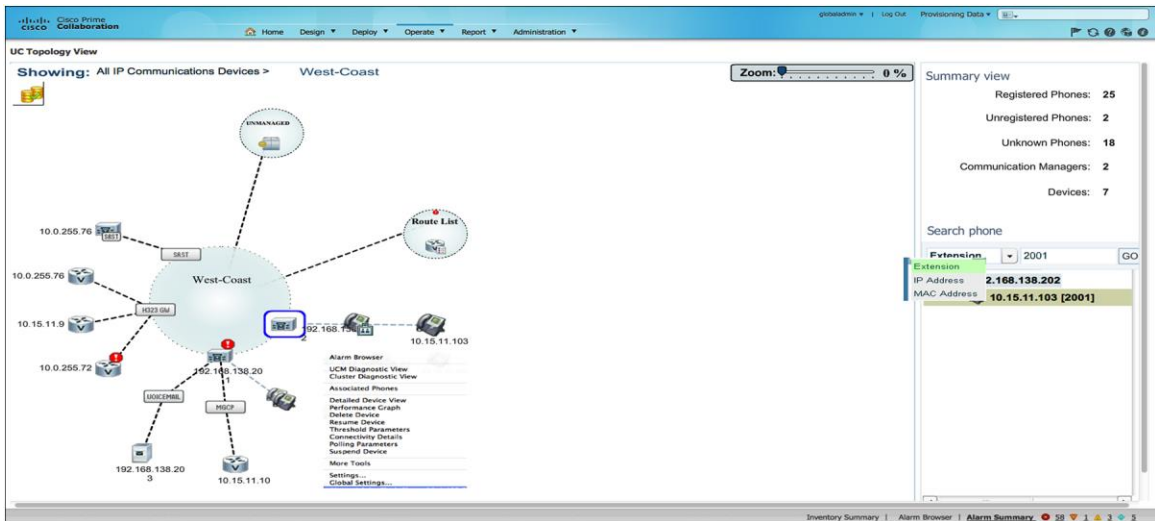


Figure 2. Network Topology View



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