Cisco Unified Service Monitor 2.1

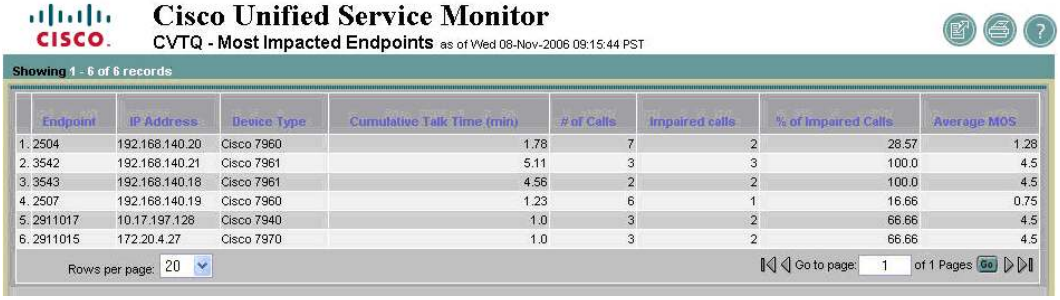
Cisco Unified Communications

Cisco Unified Communications solutions unify voice, video, data, and mobile applications on fixed and mobile networks, facilitating easy collaboration every time from any workspace.

Product Overview

Cisco® Unified Service Monitor is a component of the Cisco Unified Communications Management Suite, consisting of Cisco® Unified Provisioning Manager, Cisco® Unified Operations Manager, Cisco Unified Service Monitor, and Cisco® Unified Service Statistics Manager. Cisco Unified Service Monitor continuously monitors active calls supported by the Cisco Unified Communications system and provides near real-time notification when the voice quality of a call fails to meet a user-defined quality threshold. See Figure 1.

Figure 1. Cisco Unified Service Monitor: Voice Transmission Quality and Most Impacted Endpoint Report



Cisco Unified Service Monitor monitors, evaluates, and generates reports on user-experience metrics associated with active calls on the Cisco Unified Communications system. It provides a comprehensive list of voice-impairment metrics useful in troubleshooting voice-quality issues.

User-experience reports generated by the system provide lists and details of the endpoints (phones, gateways) that are most frequently affected by voice-quality issues. This allows users to understand service quality at a system level through call-quality metrics gathered through Cisco Voice Transmission Quality (VTQ) functionality and real-time service quality through Cisco 1040 Sensors.

Features and Benefits

Voice-Quality Measurements and Alerts

Cisco Unified Service Monitor monitors voice-quality measurements in a voice-over-IP (VoIP) network and produces alerts based on measurements exceeding preset thresholds. Voice call characteristics such as codec type/characteristics, jitter, and packet loss are collected and reported.

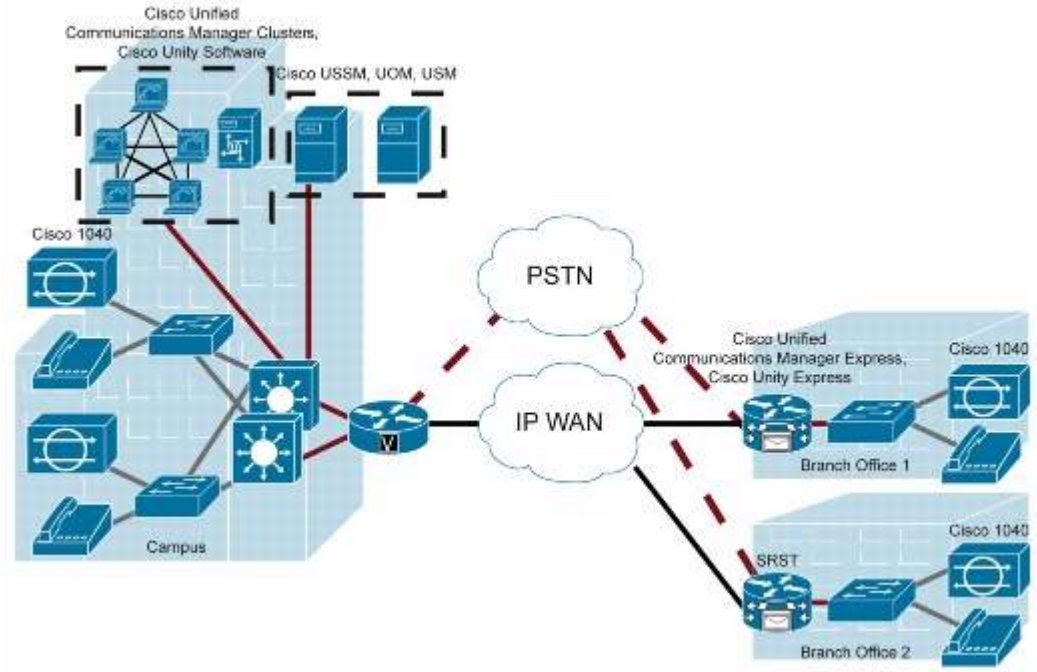
The phone-based Cisco VTQ solution provides user-experience metrics at the end of all active calls in the network expressed as a mean opinion score (MOS) calculated value. Real-time MOS values can be produced every 60 seconds for monitored active calls using Cisco 1040 Sensors.

Threshold-based alerts are sent to upstream applications such as Cisco Unified Operations Manager or a manager-of-managers application.

Thresholds

Cisco Unified Service Monitor provides the ability to set thresholds based on device types and codec types, incorporates support for Cisco Unified Communications Manager 6.0, and includes reporting data export. Alerts are sent to upstream applications such as Cisco Unified Operations Manager when a MOS threshold is violated. Figure 2. Integration of Cisco Unified Service Monitor

Figure 2. Deployment Model for more than 5000 phones



Integration with Operations Manager

Tight integration with Cisco Unified Operations Manager offers the ability to simulate synthetic voice traffic using the Cisco IOS® Software IP service-level agreement (SLA) feature and perform path analysis between the devices where the endpoints are connected.

Integration with Service Statistics Manager

Tight integration with Cisco Unified Service Statistics Manager offers detailed reports and analysis of the Unified Communications call detail records to enable long-term trending and capacity-planning reports.

Cisco 1040 Sensors

Cisco 1040 Sensors (Figure 3), deployed close to the endpoint (IP phone, gateway, or voicemail system), monitor and evaluate call quality and report this information for active calls in near real time. The Cisco 1040 Sensors can be used during live subscriber calls and during synthetic test calls.

Figure 3. The Cisco 1040 Sensor

Features and Benefits

Table 1 lists additional features and benefits of Cisco Unified Service Monitor.

Table 1. Additional Features and Benefits

Feature	Benefit
Voice metrics reported	• MOS • Jitter • Packet loss • Codec type and codec characteristics
Most-affected endpoints report	• Identify and isolate the endpoints that are experiencing voice-quality issues
Northbound interface	• Supports Simple Network Management Protocol (SNMP) trap notifications that can be sent to Cisco Unified Operations Manager or manager-of-managers applications
Customized threshold settings	• Based on location, codecs, and device types • Plug-and-play setup with default threshold values set for each codec • Offers the ability to define customized threshold settings based on endpoints in different locations as well as device types
Scalability	• Supports up to 30,000 Cisco Unified IP Phones or up to 30 Cisco Unified Communications Manager clusters
Cisco 1040 Sensors	• Deployment is straightforward and similar to deployment of IP phones • User experience monitored and reported every 60 seconds • Supports up to 100 concurrent RTP streams • 802.3af PoE (Power over Ethernet) compliant • Uses ITU G107 R-factor to compute MOS • Two 10/100 Ethernet interfaces (one management and one SPAN port) • Supports Cisco Discovery Protocol

System Requirements

Table 2 lists the system minimum requirements of Cisco Unified Service Monitor.

Table 2. System Requirements

Component	Minimum Requirement
Hardware	Server platform with dual-CPU, Xeon processor, 2.33 GHz or greater
Software for Windows	Windows Server 2003 Service Pack 1 or 2, Standard or Enterprise Edition
Available memory	4 GB RAM and 4 GB virtual memory

Ordering Information

Cisco Unified Service Monitor 2.1 will begin shipping on November 7, 2008. Customers can order these new products through normal Cisco sales channels as of August 8, 2008. Base part number includes licensing for the indicated number of phones. Add-on licenses are available to increase the maximum number of phones supported. Cisco Unified Service Monitor can be ordered as part of a management suite bundle or as a standalone product. Service Monitor 2.1 is a minor upgrade from Service Monitor 2.0 and may be downloaded by SAS customers from Cisco.com. The Cisco

1040 Sensor can be ordered as a standalone component. It comes in two packs and five packs as shown in Table 3, which lists ordering information.

To place an order, visit the Cisco Ordering Homepage.

Table 3. Ordering Information

Product Name	Part Number
Cisco Unified Communications Management Suite Bundle for 1K License PM 1.3, OM 2.1 Premium, SM 2.1 and SSM 1.1 Premium	CUCMS-A-1K-K9
Cisco Unified Communications Management Suite Bundle for 5K License PM 1.3, OM 2.1 Premium, SM 2.1 and SSM 1.1 Premium	CUCMS-A-5K-K9
Cisco Unified Communications Management Suite Bundle for 10K License PM 1.3, OM 2.1 Premium, SM 2.1 and SSM 1.1 Premium	CUCMS-A-10K-K9
Cisco Unified Service Monitor 2.1 Software And 1K Phone License	CUSM-2.1-1K-K9
Cisco Unified Service Monitor 2.1 Software And 2K Phone License	CUSM-2.1-2K-K9
Cisco Unified Service Monitor 2.1 Software And 5K Phone License	CUSM-2.1-5K-K9
Cisco 1040 Sensor 2 Pack	CUSM-1040-2PK
Cisco 1040 Sensor 5 Pack	CUSM-1040-5PK

Cisco Unified Communications Services

Cisco Unified Communications Services allows you to accelerate cost savings and productivity gains associated with deploying a secure, resilient Cisco Unified Communications solution. Delivered by Cisco and our certified partners, our portfolio of services is based on proven methodologies for unifying voice, video, data, and mobile applications on fixed and mobile networks. Our unique lifecycle approach to services enhances your technology experience to accelerate true business advantage. For more information about Cisco services, see Cisco Technical Support Services or Cisco Advanced Services.

For More Information

For more information about Cisco Unified Service Monitor, please visit http://www.cisco.com/go/cusm, contact your local account representative, or send an email to the Cisco product marketing group at ask-ipc-management@cisco.com.

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Printed in USA C78-484114-01 06/09