Cisco Unified Operations Manager 2.2

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. Part of a comprehensive solution that includes network infrastructure, security, wireless, management, or third-party applications and lifecycle services, Cisco Unified Communications Management Solutions can accelerate deployment, provide cost savings, and enhance productivity.

Product Overview

Cisco® Unified Operations Manager is the cornerstone of the Cisco Unified Communications Management Suite, designed specifically for managing Cisco Unified Communications Solutions. The Cisco Unified Communications Management Suite offers provisioning, monitoring, diagnostics, and extensive reporting capabilities to:

- Simplify the management of your Unified Communications environment
- Reduce the total cost of ownership
- Help ensure high-quality service and end-user satisfaction
- Optimize your Unified Communications resources

Cisco Unified Operations Manager provides comprehensive voice network monitoring with diagnostics for the entire Cisco Unified Communications System, including the underlying voice transport infrastructure.
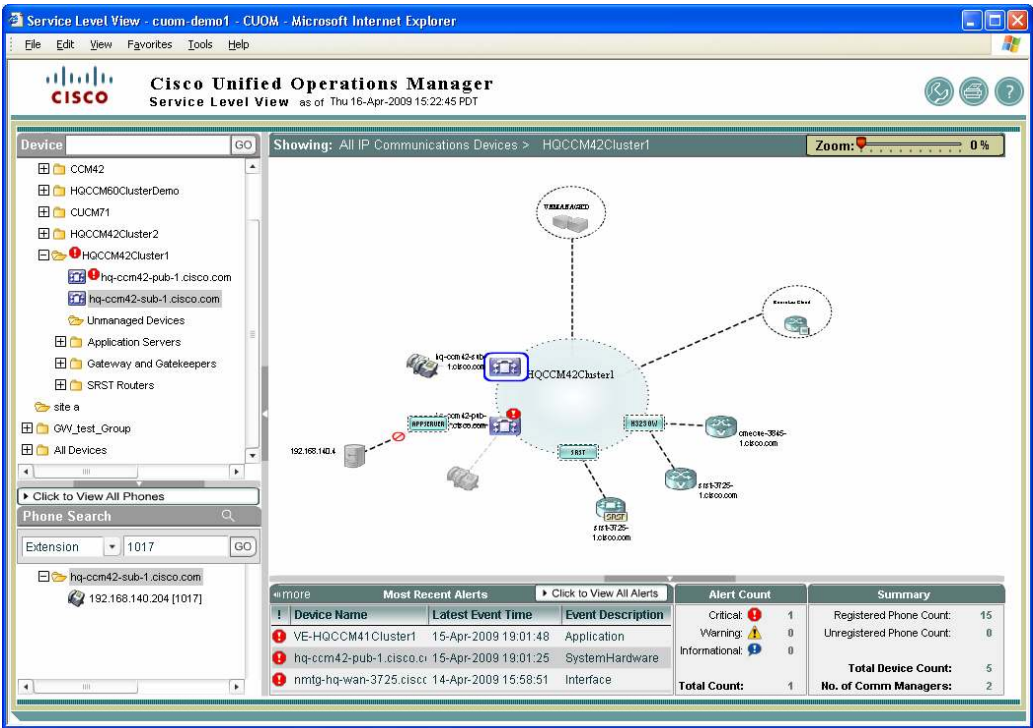
Cisco Unified Operations Manager identifies the role of every device and application in the Cisco Unified Communications network and monitors them, detecting operational faults with voice application-aware intelligence. The resulting alerts facilitate rapid troubleshooting of outages, with context-sensitive links to the appropriate services for that device. There are no workflow rules to write, no thresholds to define, and no time-consuming management setup to budget for.

Features and Benefits

Reduces Downtime with Real-Time Visualization

Cisco Unified Operations Manager presents the current operational status of the Cisco Unified Communications System through dynamic, service-level views of the network showing the current status of monitored devices, applications, and phones. You can navigate to views that display detailed information for each element and diagram the relationships to other elements in the solution. Logical entities such as trunk groups and route lists are also fully managed in these views (Figure 1).

Figure 1. Cisco Unified Operations Manager: Service-Level View

Saves Time with Autodiscovery and Actionable Alerts

Cisco Unified Operations Manager automatically discovers the network and updates its knowledge base by identifying the role of every device and application in the Unified Communications network. It monitors the discovered network elements to detect problems using its built-in intelligence to notify the network operations staff. Using the highly actionable alerts displayed, operations staff can launch context-sensitive monitoring and diagnostic tools to troubleshoot the problem. The IP phone status display, for example, provides detailed information about a phone's switch, such as switch port, serial number, and application load, to help the operations staff locate the phone and troubleshoot the problem very quickly. Cisco Unified Operations Manager also provides a customized display for threshold-crossing alerts generated by Cisco Unified Service Monitor on voice-quality exceptions at an individual phone level.

Anticipates Problems with Scheduled Tests on the Network

Cisco Unified Operations Manager comes with a powerful set of diagnostic tests that can be executed on demand or through calendar control for proactive network health monitoring and trouble isolation. The diagnostics can be used to validate that the phone's features are set up as expected, including call, call hold, call park, call transfer, message light activation, and conference calling. Operational tests simulate user activities such as getting a dial tone, making phone calls, leaving voicemail, and creating or joining conference calls; the tests also log any issues encountered. Dial-plan tests provide an easy mechanism to validate all the dial plans. Node-to-node testing uses the Cisco IOS® Software IP service-level agreement (SLA) feature in Cisco routers and switches to simulate traffic through the network. After the test, network characteristics such as status, response time, latency, jitter, packet loss, and network quality are recorded in a results report.

Table 1 lists features and benefits of Cisco Unified Operations Manager.

Table 1. Features and Benefits of Cisco Unified Operations Manager

Feature	Benefits
Automatic discovery	• Autodiscovery of Cisco Unified Communications Manager cluster elements and associated Unified Communications applications, phones, and gateways • Automatic grouping and population of network topology views
Service-level view	• Single view to visualize and monitor the entire Cisco Unified Communications System • Context-sensitive, right-click menus for diagnostics, Layer 2 physical connectivity, and status and performance monitoring
Alerts and events	• Quick glance, real-time status of all the faults in the Unified Communications network • Customizable views for selective and focused monitoring
Performance monitoring	• Visibility into critical performance metrics of each element, such as resource usage (CPU, memory, media digital signal processor [DSP] resources), active calls, trunk statistics (trunk usage, port usage, gateway statistics), and so on • Graphic chart views for side-by-side comparison of selected metrics
Diagnostics tests	• Synthetic tests (call processor to phone) and phone-to-phone tests, helping to ensure end-to-end service connectivity • Phone batch and status tests to help ensure that phone features operate as provisioned • IP SLA node-to-node testing
Northbound notifications	• Email, Simple Network Management Protocol (SNMP) traps, and syslog formats • Event-filtering user interface to select specific types of fault notifications for a set of devices to be sent to specific subscribers • Context-sensitive hyperlink forwarding to allow operators convenient access to Cisco Unified Operations Manager to quickly determine the nature of the outage and rapidly resolve the problem
Service-level and inventory reports	• Reports that can be viewed, archived, exported, or sent to the subscribers on a scheduled basis by email • Historical alert, event, and service-quality reports that can document past outages for long-term trending • Phone reports that provide information about phone moves, changes, and status information for every IP phone and every video-enabled IP phone deployed in the network • Customizable reports to collect and periodically email the information about a specific set of the devices, phones, and diagnostic tests • Line graph, bar chart, or area chart formats to display utilization and IP SLA test results

Premium and Standard Editions

Cisco Unified Operations Manager is available in a Standard Edition or Premium Edition. The Premium Edition is required to get support for diagnostic testing, video-enabled phones, and Cisco TelePresence™ endpoints.

Supported Cisco Unified Communications Applications and Devices

Cisco Unified Operations Manager supports Cisco Unified Communications Manager, Cisco Unity® software, Cisco Unity Connection, Cisco Unified Contact Center, Cisco Unified MeetingPlace® Express, Cisco Unified Communications Manager Express, Cisco Unity Express, Cisco Unified Contact Center Express, Cisco Conference Connection, Cisco Personal Assistant, Cisco Emergency Responder, Cisco Unified Presence Server, routers, gateways, switches, and IP phones (including Cisco IP Communicator and Cisco Unified Personal Communicator).

System Requirements

VMware is now supported on all Cisco Unified Communications Management products. To view complete server requirements and the supported configuration options for VMware and coresident applications, please refer to the Cisco Unified Operations Manager Installation Guide. Table 2 lists system requirements, and Table 3 lists the system capacity for a single Cisco Unified Operations Manager without VMware installed.

Table 2. Processing Platform Requirements*

Description	Specification	
Server Requirements		
System parameters	Up to 30,000 phones and 1000 IP devices	Up to 45,000 phones and 2000 IP devices
Processor	Intel Pentium/Xeon dual-core processor or AMD Opteron dual-core processor, 2 GHz minimum	Two Intel Pentium/Xeon dual-core processors or two AMD Opteron dual-core processors, 2 GHz minimum
Memory	4 GB	8 GB

Page file	4 GB	4 GB
Software	Windows Server 2003 with Service Pack 2, Standard Edition	Windows Server 2003 with Service Pack 2, Enterprise Edition; VMware ESX 3.5
Disk space	72 GB recommended	
Client Requirements		
Processor	1 GHz minimum (PC or Mac)	
Memory	1 GB RAM minimum	
Browser	Microsoft Internet Explorer 6.x or 7.0, Mozilla Firefox 2.x	
Resolution	1024*768 minimum	

* Note: VMware and coresident system requirements are listed in the Cisco Unified Operations Manager Installation Guide.

Table 3.   System Limits for Each Cisco Unified Operations Manager Server

System Parameter	Capacity
Phones	Up to 45,000
Voice Network IP Devices*	Up to 2000
Cisco Unified Communications Managers	Up to 150
Cisco Unified Communications Manager Clusters	Up to 20
Cisco Unified Communications Manager Express and Cisco Unity Express	Up to 600
Survivable Remote Site Telephony (SRST) devices	Up to 1000
Concurrent User Logins	5

* The 1000-phone support license scales up to 300 IP devices. Support licenses for more than 1000 phones scale up to 2000 IP devices.

Note: Refer to the Supported Devices table in the Cisco Unified Operations Manager documentation for specific versions that have been certified in testing. Visit http://www.cisco.com/en/US/products/ps6535/products_device_support_tables_list.html.

Ordering Information

Cisco Unified Operations Manager 2.2 begins shipping on August 10, 2009, and can be ordered starting on June 5, 2009. The base part number includes licensing for the indicated number of phones, and licenses are added to increase the number of phones supported (Table 4). Cisco Unified Operations Manager can be ordered as part of a Cisco Unified Communications Management Suite bundle or as a standalone product. To place an order, visit the Cisco Ordering Homepage. The Cisco Unified Communications Management Suite Ordering Guide, available to Cisco sales staff and to partners, provides instructions on how to order management product bundles that deliver significant savings over the individual product pricing. Please contact your account representative for details.

Table 4.   Ordering Information

Product Description	Premium Edition	Standard Edition
Cisco Unified Communications Management Suite Bundle for 1000 License Cisco Unified Provisioning Manager (PM) 1.3, Cisco Unified Operations Manager (OM) 2.0 Premium, Cisco Unified Service Monitor (SM) 2.0, and Cisco Unified Service Statistics Manager (SSM) 1.0	CUCMS-A-1K-K9	
Cisco Unified Communications Management Suite Bundle for 5000 License PM 1.3, OM 2.0 Premium, SM 2.0, and SSM 1.0	CUCMS-A-5K-K9	
Cisco Unified Communications Management Suite Bundle for 10,000 License PM 1.3, OM 2.0 Premium, SM 2.0, and SSM 1.0	CUCMS-A-10K-K9	
Cisco Unified Communications Management Suite Monitoring Bundle 1000 License OM/SM 2.2	CUCMS22-MON1K-PK9	CUCMS22-MON1K-SK9
Cisco Unified Communications Management Suite Monitoring Bundle 2000 License OM/SM 2.2	CUCMS22-MON2K-PK9	CUCMS22-MON2K-SK9

Cisco Unified Communications Management Suite Monitoring Bundle 5000 License OM/SM 2.2	CUCMS22-MON5K-PK9	CUCMS22-MON5K-SK9
Cisco Unified Communications Management Suite Monitoring Bundle 10,000 License OM/SM 2.2	CUCMS22-MON10K-PK9	
Cisco Unified Communications Management Suite Monitoring Bundle 20,000 License OM/SM 2.2	CUCMS22-MON20K-PK9	
Cisco Unified Communications Management Suite Monitoring Bundle 30,000 License OM/SM 2.2	CUCMS22-MON30K-PK9	
Cisco Unified Operations Manager 2.2 1000 Phones	CUOM-2.2-1K-P-K9	CUOM-2.2-1K-S-K9
Cisco Unified Operations Manager 2.2 2000 Phones	CUOM-2.2-2K-P-K9	CUOM-2.2-2K-S-K9
Cisco Unified Operations Manager 2.2 5000 Phones	CUOM-2.2-5K-P-K9	CUOM-2.2-5K-S-K9
Cisco Unified Operations Manager 2.2 10,000 Phones	CUOM-2.2-10K-P-K9	
Cisco Unified Operations Manager 2.2 20,000 Phones	CUOM-2.2-20K-P-K9	
Cisco Unified Operations Manager 2.2 30,000 Phones	CUOM-2.2-30K-P-K9	

Note: To order support for 45,000 phones, a stacked licensing approach (30,000 + 10,000 + 5000) is used. For support bundle pricing for 45,000 phones, contact ask-ipc-management@cisco.com.

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, visit Cisco Technical Support Services or Cisco Advanced Services.

For More Information

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

CISCO

Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV
Amsterdam, The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at www.cisco.com/go/offices.

Printed in USA

C78-532160-01   06/09