

Cisco Prime Collaboration 9.0

Deliver superior end-user quality of experience and lower operating expenses with simplified, unified management across voice and video collaboration networks.

Enterprise networks are undergoing continuous transformation as organizations invest in next-generation collaboration technologies with integrated voice and video deployments. IT departments must be empowered to effectively manage this transformation and the lifecycle of these networks, services, endpoints, and collaboration architectures. They also must meet demands from end users for anywhere, anytime network access with consistent high quality of service. At the same time, these organizations are under increasing pressure to reduce operating expenses and optimize limited resources.

Traditional siloed, nonintegrated management tools have made it difficult for collaboration network operators to quickly and effectively troubleshoot issues, provision new users, or perform changes. The result is collaboration management operations that are complex, manual, error prone, and inefficient.

Cisco Prime™ Collaboration addresses these challenges by providing simplified, unified management for voice and video networks. The solution helps ensure a superior end-user quality of experience, lowers operating expenses, and allows enterprises to extract the full value from their unified communications and collaboration technology investment.

About Cisco Prime

The Cisco Prime portfolio of IT and service provider management offerings empowers IT organizations to more effectively manage their networks and the services they deliver. Built on a service-centered foundation, the Cisco Prime portfolio of products supports integrated lifecycle management through an intuitive workflow-oriented user experience and a set of common operational attributes.

Cisco Prime Collaboration Overview

Cisco Prime Collaboration removes management complexity and provides automated, accelerated provisioning, real-time monitoring, and proactive troubleshooting in one integrated product. The solution delivers a premier operations experience through an intuitive user interface and optimized operator methodology, including automated workflows that ease implementation and ongoing administration.

Provisioning features include automated processes for Cisco® Unified Communications initial deployments and for “day-2” moves, adds, changes, and deletions (MACDs). An intuitive user interface provides a single view of a subscriber and the subscriber's services (see Figure 1) as well as a consolidated view of subscribers across the organization. With these capabilities, Cisco Prime Collaboration significantly accelerates site rollouts and dramatically reduces the time required for ongoing changes, resulting in exceptional productivity gains and lower operating expenses. In addition, by significantly simplifying moves, adds, and changes, the solution facilitates delegation of these tasks - allowing organizations to optimize IT resources and further reduce total cost of ownership. In addition, a self-care portal (see Figure 2) allows end users to control preference settings (for example, call forwarding, speed dials, and passwords), which helps drive a greater quality of experience.

Figure 1. User/Subscriber Services View

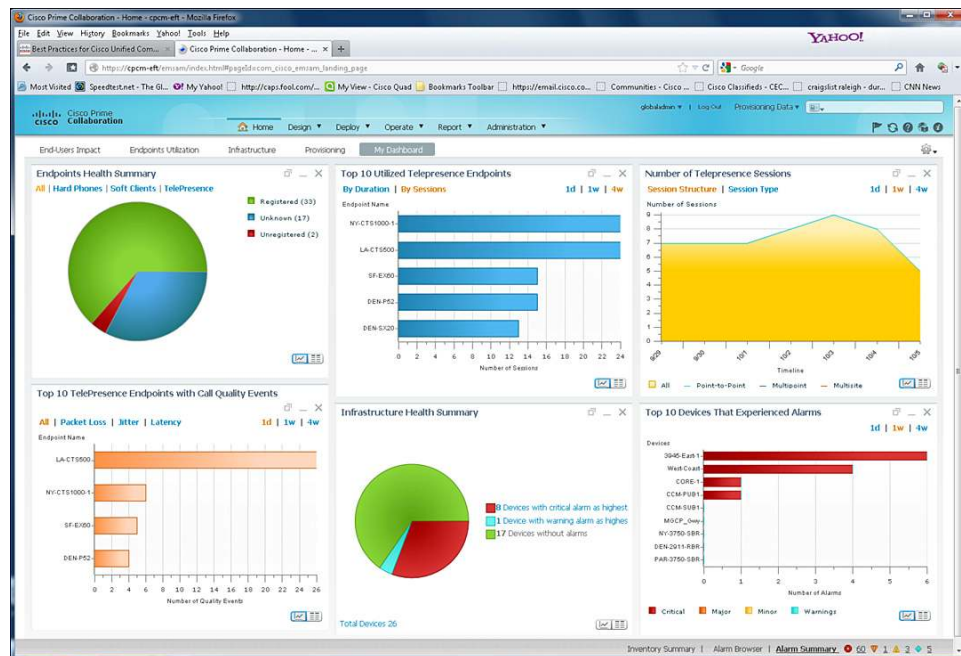
The screenshot displays the Cisco Prime Collaboration web interface. At the top, there's a navigation bar with tabs like Home, Design, Deploy, Operate, Report, and Administration. The main content area is titled 'Search Subscribers' and shows a search for 'Armani (Georgio)'. On the left, there's a sidebar with 'Subscriber Record Options' and 'View Orders'. The 'View Orders' section shows a table of 4 orders. The main area displays 'Subscriber Record Details' for 'Armani (Georgio)', showing 'Found 23 Products'. A table lists these products with columns for ProductName, Location, Status, and Last Update. The products include various services like 'Enable Mobility Support', 'Extension Mobility Access', and multiple 'Phone' and 'Line' entries for different extensions and services.

Figure 2. End-User Self-Care

The screenshot shows the 'Cisco Telephone Self-Care' interface. It features a sidebar with icons for 'Phone Settings', 'Line Settings', and 'User Settings'. The main area displays a 'Speed Dial' section with a table of speed dial entries. The table has columns for Index, Number, and Label. There are also buttons for 'Edit', 'Delete', and 'Add'. At the bottom, there's a 'Save' button and a 'Cancel' button. The interface is designed for users to manage their own settings and speed dial list.

Cisco Prime Collaboration provides efficient, integrated service assurance management through a single, consolidated view of the Cisco voice and video collaboration environment. This includes continuous, real-time monitoring and advanced troubleshooting tools for Cisco Unified Communications and Cisco TelePresence® systems including the underlying transport infrastructures, as seen in Figure 3.

Figure 3. User-Defined Summary View



Cisco Prime Collaboration proactively notifies operators of issues and facilitates speedy resolution of problems through proactive fault detection and rapid isolation using purpose-built diagnostic tools. For video, the solution allows operators to view end-to-end session paths over Cisco and third-party devices, and on Cisco Medianet routers, jitter and packet loss statistics help pinpoint hotspots affecting session quality (see Figures 4 and 5). As a result, Cisco Prime Collaboration expedites operator resolution of service quality issues before affecting end users - for a superior end-user collaborative experience.

Figure 4. Video End-to-End Session Path Trace View

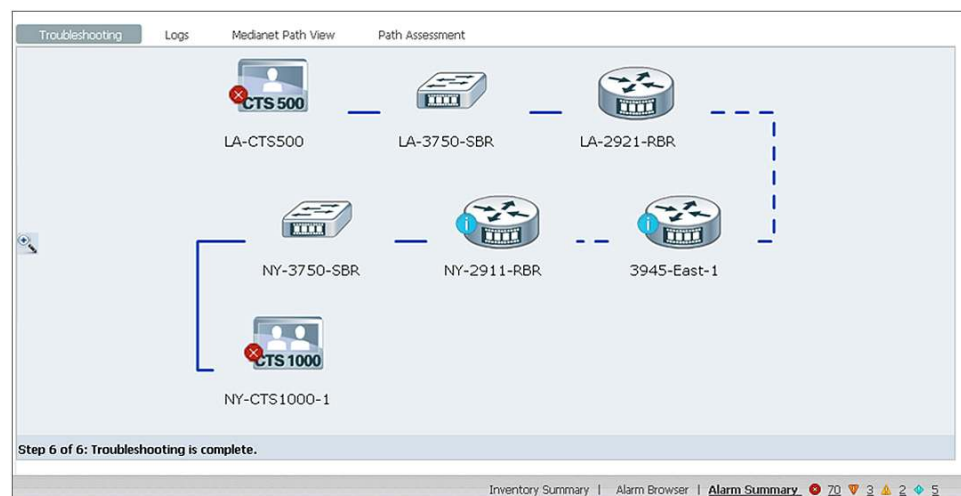


Figure 5. Medianet Path View



Features and Benefits

Table 1 gives a summary of the features and benefits of Cisco Prime Collaboration.

Table 1. Cisco Prime Collaboration Features and Benefits Summary

Feature	Benefits
Voice and Video Management on a Single Pane of Glass	
Single product with an integrated view of all statistics and alarms	<ul style="list-style-type: none"> • Simplify management of voice and video and lower costs • Reduce hardware expense and administration • Reduce training expenses
Single login for all options with Lightweight Directory Access Protocol (LDAP) support	Increase operating efficiencies
Day-1 Voice Provisioning	
Automated Cisco Unified Communications site setup	Reduce deployment time
Single interface for call control, messaging, and presence	Accelerate provisioning tasks
Configuration templates	<ul style="list-style-type: none"> • Create consistent overall network implementation by defining standard configurations that can be used in situations such as rolling out new offices, locations, remote sites, or organizational overlays • Reduce troubleshooting time
Provisioning policy settable at several levels	Provide policy and domain control for administrators handling day-2 provisioning by automating provisioning based on preset policies for services, service areas, and subscriber types
Batch provisioning	Increase operating efficiencies and reduce costs with scheduled scripts and templates for batch provisioning that let an operator rapidly and consistently add or modify a large number of users or a large number of phones/device profiles (and the corresponding configuration settings). A single batch can act across an entire unified communications network
Day-2 Voice Provisioning	
Automated processes	<ul style="list-style-type: none"> • Greatly reduce the time required to move, add, change, or delete voice users and their services • Easily delegate MACD tasks for operational efficiencies and savings

Feature	Benefits
Delegation of MACD tasks	<ul style="list-style-type: none"> • Allow MACD requests to be met without requiring an underlying knowledge of the voice applications • Assign domain and service areas to administrators and promote greater operational control by making sure that MACD activities are limited to parameters set for each administrator
Batch operations	Perform mass user additions or changes using a consistent approach for easier system maintenance
End-user policy assignment	Promote greater operational control with policy for services and devices defined by the roles of the user
Operational Tracking for Provisioning	
Order tracking	Provide greater operational control by tracking changes made to infrastructure and user services, including order number, operator placing the order, end user, and date and time
Audit trail	Promote accountability and network security and facilitate troubleshooting by tracking login, logout, IP address, time and date, time logged in, and reason for logout (as well as PIN and password changes)
End-user self-care portal	Increase customer satisfaction by allowing end user to adjust preference settings (for example, speed dials and passwords)
Summary Views	
Key performance indicator (KPI) views	<ul style="list-style-type: none"> • Improve mean time to repair (MTTR) with statistics summary displays that focus the operator on the KPIs for the devices most affected • Promote proactive troubleshooting and efficient operations with information tailored to each operator's preference
Direct launch into troubleshooting and diagnostic screens	<ul style="list-style-type: none"> • Reduce key clicks • Reduce training requirements
Performance Monitoring	
Element monitoring	Enjoy greater visibility into critical performance metrics of each managed element
Graphical views for side-by-side comparison of selected metrics with "zoom-in" capabilities	Reduce troubleshooting time and effort with statistical charts that overlay multiple KPIs for a device with up to one week's worth of data, allowing the operator to zoom in to any part of the display time frame
Export of tabular content in comma-separated value (CSV) format	Promote further data analysis and collaboration among teams
Fault Monitoring	
At-a-glance and real-time status views of all faults in the voice and video collaboration network	Expedite operator resolution of issues
Event correlation that streamlines dependent events into fewer alarms	Reduce alarm notification
Direct launch of all activities, with automatic limiting of only the actions appropriate for the selected device	Promote operator efficiency
View of alarms created from any syslog, basic MIB 2 device or Linux/Windows server	Enjoy greater operator flexibility to monitor more device types
Automatic forwarding of alarms as emails (with URL links) to access assurance features directly from the email with device context	Notify operators even when they are not viewing the management system, reducing downtime and helping to ensure that critical alarms are not missed
Automatic forwarding of filtered alarms as traps to other management systems	Integrates the actionable alarms created by the Cisco Prime Collaboration Assurance module into other management systems, providing easy integration with existing operational support systems
Quality of Service Monitoring	
Mean Opinion Scores (MOSs) that measure and identify jitter, packet loss, and delay that notify operators of impairments in the network	Improve quality of service by isolating quality issues in each device pool and identify site-level problems
Deployment of the Cisco 1040 Sensors or the Cisco Cisco Prime Network Analysis Module (NAM) to improve the MOS granularity, sampling and reporting every 60 seconds	Improve quality of service and sample in multiple locations to reduce the time needed to isolate problems

Feature	Benefits
Video quality measurements during sessions and pre-session simulations	Help ensure that each video session is the highest quality
Diagnostics and Testing	
End-to-end testing	Help ensure end-to-end service connectivity
Jitter, packet loss, differentiated services code point (DSCP), and utilization trouble spots information for Cisco IP service-level agreement (IP SLA) and Medianet-equipped Cisco devices	Quickly and efficiently isolate network impairments with testing and diagnostic features built into Cisco network devices
Scheduling and pretesting of key components and circuits	Assure service readiness and the highest quality end-user experience
Automatic display of technology-specific diagnostic views based on the device selected	Reduce time to isolate problems and training expense with guided troubleshooting workflows and smart-links to the recommended test or measurement display
KPI charts that display, in a single view, the most important information for the device or device grouping	Expedite troubleshooting by reducing the number of key clicks and open windows needed to collect enough information to identify and resolve a problem
Dynamic statistical overlay charts that allow multiple KPI charts to be overlaid, providing a single time reference	Improve diagnostic efficiency with user-selected statistical overlays that align related measurements in time to make it easier to identify cause and effect
Northbound Interfaces	
Web services interface	Ease automation of provisioning workflow and query of service inventory
Northbound provisioning API	Integrate easily with custom applications, web service portals, and human resources systems for automated, consistent service provisioning. An SDK is provided with example code
Northbound alarms in Simple Network Management Protocol (SNMP) trap format based on Cisco Prime Collaboration MIB	Integrate easily with existing operational support systems, providing the same actionable collaboration alarms and events to another network management system
SNMP MIB for Cisco Prime Collaboration server that performs status queries from an external management system	Help enable a data center management application to monitor the Cisco Prime Collaboration server without adding additional client software, preventing unanticipated interference from a third-party application
Web services interface to request phone inventory	Integrate easily with existing inventory reporting tools, making the rich phone details available to other applications, reducing the need for manual information transfers
Reports	
Complete collaboration inventory of infrastructure and endpoints with serial numbers, firmware versions, locations, and much more	Reduce time spent collecting inventory information by providing flexible reporting from the Cisco Prime Collaboration database
Tracking of patterns with quality history information including call quality measurements and event reports	Improve uptime by reviewing key metrics and event history across the collaboration network in a concise report format
Tracing of Cisco TelePresence usage patterns and resource loading video session utilization	Identify over- or underused endpoints for better capacity planning and to drive efficient usage practices
Provisioning details on the voice users, services, and resource configurations	Quickly generate a services summary to efficiently identify service and asset deployment across the voice part of the collaboration network
Activity details on phone moves and changes	Help manage a large phone deployment by tracking all phone movement in a networkwide report, reducing troubleshooting time and improving overall inventory management
Cisco Best Practices	
Alignment with Cisco collaboration products	Help ensure high network availability and quality of service using monitoring and troubleshooting capabilities that are fine-tuned to Cisco collaboration applications
Day-1 Support	Enjoy day-1 support of new Cisco collaboration product releases to help ensure up-to-date coverage with no manageability gaps

Licensing

Cisco Prime Collaboration is a licensed software product that is secured to the MAC of the host server. Licensing is ordered based on the collaboration management options required (Assurance or Provisioning) and the endpoint type (Phone or Cisco TelePresence) and the quantity of those endpoints.

Ordering Information

Cisco Prime Collaboration manages many types of endpoints. Table 2 describes the categories into which each device type falls for ordering purposes.

Table 2. Cisco Prime Collaboration Assurance Endpoint Categories

Mass Endpoints	Midrange Endpoints	High-End Single-Codec Endpoints	Multicodec Endpoints
Cisco IP Phones	Cisco Codec EX60	Cisco TelePresence System 1000	Cisco TelePresence System 3000
Cisco Cius	Cisco Codec EX90	Cisco TelePresence System 1100	Cisco TelePresence System 3010
Cisco Jabber Video for Cisco TelePresence (Movi™)	Cisco Codec C90	Cisco TelePresence System 1300	Cisco TelePresence System 3200
Cisco IP Video Phone E20	Cisco Codec C60	Cisco TelePresence System 1400	Cisco TelePresence System 3210
	Cisco Codec C40	Cisco Profile 42-C20	Cisco TelePresence System TX9000
	Cisco Codec C20	Cisco Profile 42-C60	Cisco TelePresence System TX9200
	Cisco TelePresence System 150 MXP	Cisco Profile 52-Dual	
	Cisco TelePresence System 1000 MXP	Cisco Profile 52	
	Cisco Tandberg 1500 MXP	Cisco Profile 65	
	Cisco TelePresence System 1700 MXP	Cisco Profile 65-Dual	
	Cisco TelePresence System Codec 3000 MXP	Cisco Profile 52-6000MXP	
	Cisco TelePresence System Codec 6000 MXP		
	Cisco TelePresence System MX200		
	Cisco TelePresence System MX300		
	Cisco TelePresence System 500		
	Cisco TelePresence SX20 Quick Set		
	Polycom		

The product numbers that follow may be ordered in multiple quantities to achieve the exact endpoint count required. For complete ordering support, including pricing, contact your Cisco representative. For an overview of the product numbers for Cisco Prime Collaboration 9.0, see Tables 3 through 5.

Table 3. Cisco Prime Collaboration Mass Endpoint Assurance Product Numbers - New Installation

Product Number	Description
R-PC-9.0-ASSW-K9=	Cisco Prime Collaboration 9.0 Assurance Software
L-PC-AS-DEVICE	Cisco Prime Collaboration Assurance Dev Lic - config required
L-PC-A-500-MA-LIC	500 mass endpoint Cisco Prime Collaboration license
L-PC-A-1K-MA-LIC	1000 mass endpoint Cisco Prime Collaboration license
L-PC-A-2K-MA-LIC	2000 mass endpoint Cisco Prime Collaboration license

Product Number	Description
L-PC-A-5K-MA-LIC	5000 mass endpoint Cisco Prime Collaboration license
L-PC-A-10K-MA-LIC	10,000 mass endpoint Cisco Prime Collaboration license
L-PC-A-20K-MA-LIC	20,000 mass endpoint Cisco Prime Collaboration license
L-PC-A-30K-MA-LIC	30,000 mass endpoint Cisco Prime Collaboration license
L-PC-A-60K-MA-LIC	60,000 mass endpoint Cisco Prime Collaboration license

Table 4. Cisco Prime Collaboration Midrange, High-End, and Multicodec Endpoint Assurance Product Numbers - New Installation

Product Number	Description
R-PC-9.0-ASSW-K9=	Cisco Prime Collaboration 9.0 Assurance Software
L-PC-AS-DEVICE	Cisco Prime Collaboration Assurance Dev Lic - config required
L-PC-A-50-MID-LIC	50 midrange endpoint Cisco Prime Collaboration license
L-PC-A-100-MD-LIC	100 midrange endpoint Cisco Prime Collaboration license
L-PC-A-200-MD-LIC	200 midrange endpoint Cisco Prime Collaboration license
L-PC-A-500-MD-LIC	500 midrange endpoint Cisco Prime Collaboration license
L-PC-A-1K-MID-LIC	1000 midrange endpoint Cisco Prime Collaboration license
L-PC-A-10-HI-LIC	10 high-end, single-codec endpoint Cisco Prime Collaboration license
L-PC-A-20-HI-LIC	20 high-end, single-codec endpoint Cisco Prime Collaboration license
L-PC-A-50-HI-LIC	50 high-end, single-codec endpoint Cisco Prime Collaboration license
L-PC-A-100-HI-LIC	100 high-end, single-codec endpoint Cisco Prime Collaboration license
L-PC-A-200-HI-LIC	200 high-end, single-codec endpoint Cisco Prime Collaboration license
L-PC-A-1-MULT-LIC	1 multicodec endpoint Cisco Prime Collaboration license
L-PC-A-10-MUL-LIC	10 multicodec endpoint Cisco Prime Collaboration license

Table 5. Cisco Prime Collaboration Provisioning Product Numbers - New Installation

Product Number	Description
R-PC-9.0-PRSW-K9=	Cisco Prime Collaboration 9.0 Provisioning Software
L-PC-PR-DEVICE	Cisco Prime Collaboration Provisioning Dev Lic - config required
L-PC-A-PROV-API	Cisco Prime Collaboration Provisioning Application Program Interface Feature License
L-PC-A-500-PR-LIC	500 endpoint Cisco Prime Collaboration provisioning license
L-PC-A-1K-PR-LIC	1000 endpoint Cisco Prime Collaboration provisioning license
L-PC-A-2K-PR-LIC	2000 endpoint Cisco Prime Collaboration provisioning license
L-PC-A-5K-PR-LIC	5000 endpoint Cisco Prime Collaboration provisioning license
L-PC-A-10K-PR-LIC	10,000 endpoint Cisco Prime Collaboration provisioning license
L-PC-A-20K-PR-LIC	20,000 endpoint Cisco Prime Collaboration provisioning license
L-PC-A-30K-PR-LIC	30,000 endpoint Cisco Prime Collaboration provisioning license
L-PC-A-60K-PR-LIC	60,000 endpoint Cisco Prime Collaboration provisioning license

Upgrade Information

Cisco Prime Collaboration 9.0 is available with the new Cisco Prime Product Assured Software Subscription, which allows prepayment for major upgrades for 1-, 2-, 3-, or 5-year subscription contracts. It works in conjunction with the Cisco Essential Services (ESW) maintenance plan, whereby ESW provides Cisco Technical Assistance Center (TAC) support and access to minor updates and patches from the cisco.com software download site. Upgrades are provided from Cisco Prime Unified Communications Management Suite (UCMS) (Cisco Prime

Unified Operations Manager [UOM], Cisco Prime Unified Service Monitor [USM] and Cisco Prime Unified Provisioning Manager [UPM]) through a 3- or 5-year Cisco Prime Product Assured Software Subscription purchase, depending on the UCMS version.

To upgrade from previous UCMS versions to Cisco Prime Collaboration 9.0 without purchasing a Cisco Prime Product Assured Software Subscription, the use the upgrade product numbers given in Tables 6 and 7.

Upgrade Product Numbers

Tables 6 and 7 give product numbers for upgrades without Cisco Prime Product Assured Software Subscription.

Table 6. Prime Collaboration Mass Endpoint Assurance Product Numbers - Upgrade without Cisco Prime Product Assured Software Subscription

Product Number	Description
R-PC-9.0-ASSW-K9=	Cisco Prime Collaboration 9.0 Assurance Software
L-PC-A-OMV2UPG	Cisco Prime Collaboration UOM/USM V2.X Upgrade - Configuration required
L-PC-A-500-V2-UPG	500 mass endpoint tier upgrade license - from UOM 2.x
L-PC-A-1K-V2-UPG	1000 mass endpoint tier upgrade license - from UOM 2.x
L-PC-A-2K-V2-UPG	2000 mass endpoint tier upgrade license - from UOM 2.x
L-PC-A-5K-V2-UPG	5000 mass endpoint tier upgrade license - from UOM 2.x
L-PC-A-10K-V2-UPG	10,000 mass endpoint tier upgrade license - from UOM 2.x
L-PC-A-20K-V2-UPG	20,000 mass endpoint tier upgrade license - from UOM 2.x
L-PC-A-30K-V2-UPG	30,000 mass endpoint tier upgrade license - from UOM 2.x
L-PC-A-OMV8UPG	Cisco Prime Collaboration UOM/USM V8.X Upgrade - Configuration required
L-PC-A-500-V8-UPG	500 mass endpoint tier upgrade license - from UOM 8.x or 9
L-PC-A-1K-V8-UPG	1000 mass endpoint tier upgrade license - from UOM 8.x or 9
L-PC-A-2K-V8-UPG	2000 mass endpoint tier upgrade license - from UOM 8.x or 9
L-PC-A-5K-V8-UPG	5000 mass endpoint tier upgrade license - from UOM 8.x or 9
L-PC-A-10K-V8-UPG	10,000 mass endpoint tier upgrade license - from UOM 8.x or 9
L-PC-A-20K-V8-UPG	20,000 mass endpoint tier upgrade license - from UOM 8.x or 9
L-PC-A-30K-V8-UPG	30,000 mass endpoint tier upgrade license - from UOM 8.x or 9
L-PC-A-60K-V8-UPG	60,000 mass endpoint tier upgrade license - from UOM 8.x or 9

Table 7. Prime Collaboration Provisioning Product Numbers - Upgrade without Cisco Prime Product Assured Software Subscription

Product Number	Description
R-PC-9.0-PRSW-K9=	Cisco Prime Collaboration 9.0 Provisioning Software
L-PC-A-PMV2-8UPGR	Cisco Prime Collaboration UPM V2.X-8.X Upgrade - Configuration required
L-PC-A-500-PR-UPG	500 provisioning end point tier upgrade license
L-PC-A-1K-PR-UPG	1000 provisioning end point tier upgrade license
L-PC-A-2K-PR-UPG	2000 provisioning end point tier upgrade license
L-PC-A-5K-PR-UPG	5000 provisioning end point tier upgrade license
L-PC-A-10K-PR-UPG	10,000 provisioning end point tier upgrade license
L-PC-A-20K-PR-UPG	20,000 provisioning end point tier upgrade license
L-PC-A-30K-PR-UPG	30,000 provisioning end point tier upgrade license
L-PC-A-60K-PR-UPG	60,000 provisioning endpoint tier upgrade license

System Requirements

Tables 8 and 9 list system requirements for virtual machines for Assurance and Provisioning, respectively. Table 10 lists client machine requirements.

Table 8. Virtual Machine Requirements for Assurance

Endpoints Managed in Cisco Prime Collaboration	CPU	RAM	Network Interface Card (NIC)	Disk Space
Up to 1000 endpoints	4	8 GB	1 GB	150 GB
Up to 10,000 endpoints	8	16 GB	1 GB	200 GB
Up to 100,000 endpoints	12	24 GB	1 GB	500 GB
Up to 150, 000 endpoints	18	32 GB	1 GB	750 GB

Table 9. Virtual Machine Requirements for Provisioning

Endpoints Managed in Cisco Prime Collaboration	Total Number of Endpoints	Mass Endpoints	vCPU	vRAM (GB)	vDisk (GB)
	Up to 1000	Up to 1000	1	2	90
	1000-10,000	1000-10,000	4	8	120
Application server	10,000-100,000	10,000-100,000	8	16	120
Database server	10,000-100,000	10,000-100,000	8	16	120
Application server	100,000-150,000	100,000-150,000	8	16	150
Database server	100,000-150,000	100,000-150,000	8	16	150

Table 10. Client Machine Requirements

Parameter	Requirement
Display resolution	1024 x 768 or higher
Supported browser	<p>The following browsers are supported:</p> <ul style="list-style-type: none">• Mozilla Firefox 10.0.5 ESR and 15.0• Windows Internet Explorer 9.0 <p>Cisco Prime Collaboration provides a self-signed certificate (HTTPS). To allow access of the Cisco Prime Collaboration client, you must ensure that security is set to either medium or low in Internet Explorer.</p> <ul style="list-style-type: none">• Make sure you set English (United States) [en-us] as the language in the browser.• Make sure you enable cookies in the browser.
Adobe Flash Player	You must install Adobe Flash Player on the client machine for Cisco Prime Collaboration features to work properly. We recommend that you download and install Adobe Flash Player version 10.x or later from the Adobe website.

To place an order, visit the [Cisco Ordering Home Page](#). To download trial software, visit the [Cisco Promotional Store](#).

Service and Support

Using the Cisco lifecycle services approach, Cisco and its partners provide a broad portfolio of end-to-end services and support that can help increase your network's business value and return on investment. This approach defines the minimum set of activities needed, by technology and by network complexity, to help you successfully deploy and operate Cisco technologies and optimize their performance throughout the lifecycle of your network.

For More Information

For more information about Cisco Prime Collaboration, visit <http://www.cisco.com/go/primecollaboration> or contact your Cisco account team or channel partner.



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