Cisco Meeting Server, Cisco Meeting App, and Cisco Meeting Management

Cisco® Meeting Server, Meeting App, and Meeting Management revolutionize team collaboration through high scale and advanced interoperability in audio, web, and video conferencing.

Product overview

Cisco Meeting Server brings video, audio, and web communication together to meet the collaboration needs of the modern workplace. Cisco Meeting App allows anyone to create, join, and run meetings easily, from room or desktop video systems, mobile clients, or browsers. Cisco Meeting Management allows operators to monitor and control meetings, providing a white glove service.

Cisco Meeting Server helps ensure that everyone gets a consistent, familiar meeting experience, whether they're joining a meeting using Cisco or third-party video endpoints, a Cisco Jabber® client, Cisco Meeting App (native or via a WebRTC-compatible browser), or Skype for Business. Any number of people can join a meeting, up to the limit of the available underlying hardware, and bandwidth usage is optimized to reduce cost. Cisco Meeting Server provides a user experience that is simple, intuitive, and easy. It scales easily for small or large deployments, allowing capacity to be added incrementally as needed. The all-in-one, user-based licensing model allows you to buy the services you need today and add more licenses as your organization grows. Combined, Cisco Meeting Server and its licensing model provide you with flexibility to meet the changing needs of your organization.

Cisco Meeting App runs on multiple platforms (Mac, PC, iOS, and WebRTC-compatible browsers), allowing a wide range of end users access to its capabilities. The app is the user's portal to create one or multiple spaces, which they can then modify (change the space's name, manage members, add PINs, etc.). Joining spaces is as simple as clicking one button, which then provides a simple, intuitive interface to manage the meeting (see who is in the meeting, add, drop, or mute participants, etc.).

Cisco Meeting Management is a tool for operators to monitor and manage meetings on Cisco Meeting Server (Cisco Meeting Server 2.1.5 or above is required). Administrators can easily monitor all meetings as well as control them (add, drop, or mute participants, change layouts, start or stop recording or streaming, etc.).

Cisco Meeting Server, Cisco Meeting App, and Cisco Meeting Management have been optimized to be deployed with Cisco Unified Communications Manager, Cisco Expressway™, or Cisco TelePresence® Video Communication Server (VCS) for call control; Cisco Expressway for firewall traversal; and Cisco TelePresence Management Suite for scheduling (third-party on-premises infrastructure is also supported).

Prominent features

Advanced interoperability

Anyone can join a meeting and enjoy a high-quality, consistent, and familiar experience using:

- Cisco or third-party video endpoints

- Cisco Jabber client

- Cisco Meeting App (native or with a WebRTC-compatible browser)

- Skype for Business/Office 365

High scalability and geographic distribution

Meetings scale easily, with:

- Low-cost virtualized Cisco UCS® servers for entry-level deployments (Cisco Meeting Server 1000 supports up to 96 HD ports), as well as Cisco UCS servers running as an appliance for large-scale deployments (Cisco Meeting Server 2000 is the industry's highest-capacity single server and supports up to 500 HD ports).

- Seamless scalability between hardware platforms, enabling customers to deploy different servers where they are needed and for meetings to easily expand across multiple platforms.

- Bandwidth optimization for meetings between offices in different locations.

- Grouping of conferences onto the same call bridge and load balancing of conferences across call bridges to maximize capacity.

- Up to 24 call bridge nodes within each cluster (R&D will assist in designs that require eight or more servers).

  ◦ Up to 12,000 HD concurrent calls per cluster

  ◦ Calls are connected at up to 40 calls per second

  ◦ Spaces on a single server support up to 450 participants or up to 2600 participants across multiple servers

- Conference recording and streaming when you need to archive or to extend beyond the Cisco Meeting Server deployment.

- Ability to synchronize up to 75,000 Lightweight Directory Access Protocol (LDAP) users across a 24-node cluster, with each user having their own meeting space. Up to 500 concurrent Cisco Meeting App users can be logged in at any given time.

Intuitive user experience

End users can concentrate on collaborating without needing to worry about how the technology works.

- Provide a range of options optimized for multiple collaboration scenarios:

  ◦ Capable Cisco endpoints can display video across one, two, or three screens

  ◦ Use APIs to configure which participants are seen on screen

  ◦ Choose from a range of layouts

  ◦ Participant lists with end-user controls can be displayed on compatible Cisco endpoints and the Cisco Meeting App, as well as Cisco Meeting Management

Meeting management

Cisco Meeting Management displays the meeting information and controls for managing the Cisco Meeting Server deployment without requiring the operator to understand the complexities of the underlying video bridge configuration and call setup. Supported functions are:

- List all active meetings across Cisco Meeting Server cluster(s), with the ability to sort, filter, and search meetings.
- List participants in active meeting:
  - Sort, filter, and search participants
  - Mute and unmute audio
  - Mute and unmute video
  - Change the layout (meetingwide or individually)
  - Add or drop participants
  - View call statistics (audio, video, or presentation)
- Meeting event log.

Simple, predictable, all-in-one commercial model

Get users up and running easily, with licensing that:

- Is available in Cisco Unified Workplace Licensing Meetings or can be purchased on a per-meeting basis.
- Includes spaces (virtual meeting room environments), Cisco Meeting App, Cisco Meeting Management, scheduling, and firewall traversal in one license.
- Enables customers to purchase the license entitlements they need today and scale up as needed.

Features and benefits

Table 1 lists the features and benefits of Cisco Meeting Server.

Table 1.　　Features and benefits of Cisco Meeting Server

Feature	Benefit
Interoperability	**Collaboration becomes easier and joining meetings simpler** because users can choose the device and application they connect with. Whether they choose Cisco or third-party room or desktop endpoints, a Cisco Jabber client, Cisco Meeting App (native or via a WebRTC-compatible browser), or Skype for Business/Office 365, on a laptop, tablet, or mobile phone, they can collaborate from anywhere, on any device, at any time.
Geographic distribution with bandwidth optimization	Preserves the user experience in larger video conferences while reducing bandwidth costs.
High scalability	Multiparty licensing does not restrict meeting size; spaces on a single server support up to 450 participants and can be cascaded where greater scale is required. Table 3 (call capacity) shows what can be achieved in certain scenarios. However, individual servers can be configured to allow more participants to join meetings by incrementally changing the quality experienced by existing participants. In larger deployments with groups of servers, conferences can be load balanced first and then set to allow more participants to join by incrementally changing the quality of existing deployments.
One solution	By supporting all major video standards in one solution and optimizing the experience regardless of the underlying technology or device, Cisco Meeting Server provides a consistent user experience for audio, video, and content sharing while reducing the complexity and cost of the deployment.
Everyone's invited	Collaborate with other businesses and customers by inviting them to meet, just by sending them a link.
Security	Collaboration is highly secure, as **Cisco Meeting Server** uses "clean slate" technology and a secure development lifecycle. With Federal Information Processing Standards (FIPS), Joint Interoperability Test Command (JITC), and Common Criteria certifications, **Cisco Meeting Server** adheres to the most stringent security models.

Feature	Benefit
End-user control	End-user adoption increases because they can create and edit their own spaces with **Cisco Meeting App** as well as run their meetings (view participant lists, mute[*], make important[*] and remove participants, start and stop recording[*] etc.) with **Cisco Meeting App and Cisco TelePresence endpoints.**[**]
Simple, all-in-one, user-based licensing model	Reduces purchasing complexity and enables IT managers to easily enable user services.

[*] The ability to mute participants, make participants important and start and stop recording is not currently supported by Cisco TelePresence endpoints.

[**] Cisco TelePresence endpoints need to be running CE 8.3 or higher in order to enable this functionality.

Table 2 lists the features and benefits of Cisco Meeting Management.

Table 2.   Features and benefits of Cisco Meeting Management

Product feature	Benefits
Security and auditing	• All control data is authenticated and encrypted (industry-standard Transport Layer Security [TLS]). • IPv6 support. • Network Time Protocol (NTP) authentication key support. • Support for integrated application audit logging to monitor system changes.
Account management and permissions	• Supports role-based permissions by integrating with Microsoft Active Directory (AD) or Open Lightweight Directory Access Protocol (OpenLDAP). • Synchronization with the enterprise directory provides for automatic user account creation and maintenance. • Up to 25 concurrent logged-in users are supported.

Diagnostics and troubleshooting	• Syslog – local and remote.
	• Crash logs.
	• Log bundle.
	  ◦ System log
	  ◦ Audit log
	  ◦ System configuration
	  ◦ Application configuration
	  ◦ System information
	• Configuration backup and restore.

High availability	Cisco Meeting Management supports an active-active high-availability model. Each Cisco Meeting Management node builds its own view of the ongoing meetings on the Meeting Server clusters. As such, no information is shared between Meeting Management nodes.

Platform support

Cisco Meeting Server software is optimized to run on **Cisco Meeting Server** 1000 and 2000. In terms of scale, Table 3 shows the capacity a call bridge on **Cisco Meeting Server** can support on each server (video calls assume 720p5 content and up to 2.5-Mbps bandwidth, and audio calls assume G.711).

One of the key benefits of Cisco Meeting Server is its ability to scale flexibly. Although Table 3 (call capacity) shows what can be achieved in certain scenarios, individual servers can be configured to allow more participants to join meetings by incrementally changing the quality experienced by existing participants. In larger deployments with groups of servers, conferences can be load balanced first and then set to allow more participants to join by incrementally changing the quality of existing deployments.

Table 3.   Call capacity on supported servers

Type of call	Cisco Meeting Server 1000[*]	Cisco Meeting Server 2000[**]
Full HD calls (1080p30)	48	250
HD calls (720p30)	96	500
SD calls (448p30)	192	1000
Audio calls	3000	3000

[*] Cisco Meeting Server 1000 is a preconfigured version of the Cisco UCS® C220 M4 Rack Server, full specifications for which can be found at https://www.cisco.com/c/en/us/products/collateral/servers-unified-computing/ucs-c220-m4-rack-server/datasheet-c78-732386.html. For Cisco Meeting Server 1000, Cisco Meeting Server runs on top of VMware, and a separate VMware license is required.

[**] Cisco Meeting Server 2000 is a preconfigured Cisco UCS 5108 chassis with eight Cisco UCS B200 M4 blades, full specifications of which can be found at https://www.cisco.com/c/en/us/products/collateral/servers-unified-computing/ucs-5100-series-blade-server-chassis/data_sheet_c78-526830.html and https://www.cisco.com/c/en/us/products/collateral/servers-unified-computing/ucs-b200-m4-blade-server/datasheet-c78-732434.html. For Cisco Meeting Server 2000, Cisco Meeting Server runs directly on the server and does not require VMware.

Cisco Meeting Server is also supported on the Cisco Multiparty Media 410V, 410VB, and 400. If a license for Cisco TelePresence Virtualization Software 5.5 was purchased with the Multiparty Media 410V, 410VB, or 400, it can be reused with Cisco Meeting Server. HD and SD capacities will be the same with Cisco Meeting Server software as with the Cisco TelePresence Server software (64 HD, 128 SD, and 2000 audio ports for the Multiparty Media 410V and 410VB and 36 HD, 72 SD, and 1000 audio ports for the Multiparty Media 400).

Cisco Meeting Server requirements for specs-based servers can be found at https://www.cisco.com/c/dam/en/us/td/docs/voice_ip_comm/uc_system/virtualization/virtualization-cisco-meeting-server.html.

Cisco Meeting Management runs on top of VMware and requires ESXi 5.5 and above. It has different platform requirements depending on whether it is for a small- or medium-scale or a large-scale deployment.

- Small- or medium-scale deployments (up to 8 nodes of Meeting Server 1000 or 1 node of Meeting Server 2000; up to four nodes of X Series servers) need four vCPUs at 2.0 GHz or above, 4 GB RAM, and 100 GB storage (thick provisioned, eager zeroed) that provide.
  - 10 call legs per second (peak usage)
  - 15 concurrent users (operators)
- Large deployments (up to 24 nodes of Meeting Server 1000 or up to 4 nodes of Meeting Server 2000; up to 10 X Series servers) need 8 vCPUs at 2.0 GHz or above, 8 GB RAM, and 100 GB storage (thick provisioned, eager zeroed) that provide.
  - 20 call legs per second (peak usage)
  - 25 concurrent users

Product specifications

Table 4 lists the specifications for Cisco Meeting Server.

Table 4.   Specifications

Video standards	• H.261 • H.263 (+, ++) • H.264 AVC (Baseline and High Profile) • H.264 SVC • WebM, VP8 • Microsoft RTV • HTML5/WebRTC • SIP, H.323, TIP
Audio standards	• AAC-LD • Speex • Opus • G.722, G.722.1, G.722.1c, G.728, G.729a, G.711a/u
Bandwidth	Up to 6000 kbps
Resolution and frame rate	Up to 1080p at 60 fps for main video and up to 1080p30 for content Up to 720p30 for recording or streaming
Management	• Server management • LDAP-driven scripting language for configuration • Representational State Transfer (REST) API for assets, monitoring, and diagnostics • Call Detail Record (CDR) streaming for auditing • Syslog for diagnostics • Multitenancy support • Simple Network Management Protocol (SNMP) • Backup and restore
Security	• IP media (video and audio) is Advanced Encryption Standard (AES) encrypted (industry-standard Secure Real-Time Transport Protocol [SRTP]) • All control data is authenticated and encrypted (industry-standard TLS and Secure Sockets Layer [SSL]) • Domain Name System Security Extensions (DNSSEC) • IPv6 support • Security code or PIN option for spaces • On-screen visual indication of audio-only participants and encryption status • Field industry-standard strong cryptography protection of communications • JITC certified • FIPS-140-2
Cisco Meeting Management client requirements	The browser needs to support and have enabled the following technologies: • WebSocket • HTML5 • Javascript Cisco Meeting Management has been tested with the latest version of the following browsers: • Mozilla Firefox • Microsoft IE 11 • Google Chrome • Safari
Cisco Meeting App device compatibility	Windows, OS X, iOS, and WebRTC browsers (Chrome)

Ordering information

Below are the four main steps for ordering Cisco Meeting Server. Refer to the ordering guide (https://www.cisco.com/c/en/us/products/conferencing/meeting-server/sales-resources-listing.html) for more information:

1. Customers should select the platform. Cisco Meeting Server software has been optimized to run on the Cisco Meeting Server 1000 and 2000 (third-party servers are also supported).

2. Flexible-capacity licensing options enable customers to deploy Cisco Meeting Server capabilities in the way that best suits their needs. Cisco Meeting Server can be licensed on a per-meeting basis with Cisco Multiparty licenses. These licenses are available in the form of Personal Multiparty Plus (named host) and Shared Multiparty Plus (shared host) licenses (visit cisco.com/go/personalmultiparty). Alternatively, you can purchase capacity units for a concurrent call-based model (traditional license model).

   a. Cisco Multiparty licensing includes entitlement for Cisco Meeting Management as well as Cisco Meeting App.

3. Options such as branding or recording and streaming can be added. If you need to manage, transform, or distribute recordings or streams across the organization, solutions such as Rev and DME are available from our Solutions Plus partner VBrick (more details are in the ordering guide listed above).

4. Cisco Meeting Server, Cisco Meeting Management, and Cisco Meeting App can be downloaded from https://www.cisco.com (additionally, Cisco Meeting App for iOS devices can be downloaded from the App Store).

Table 5 provides ordering information for Cisco Meeting Server.

Table 5.   Ordering information

Platform	License	Options
CTI-CMS-1K-BUN-K9 (Cisco Meeting Server and a Cisco Meeting Server 1000)

CTI-CMS-2K-BUN-K9 (Cisco Meeting Server and a Cisco Meeting Server 2000) | TP-SMP-K9 (Shared Multiparty Plus license) | CMS-BRANDING (branding) |
| | CUWL-11X-K9/CUWL-10X-K9, then select NEW-UWL-11X-MTG/NEW-UWL-10X-MTG or CMS-PMP-K9 (Personal Multiparty Plus license) | CMS-RECORDING (recording and streaming) |
| | LIC-CMS-ACU= (Cisco Meeting Server capacity unit) | |

Third-party platforms are also supported, in which case the Cisco Meeting Server software can be ordered separately (R-CMS-K9).

Table 6 shows the number of participants that are entitled to join a meeting by license type.

Table 6.   Meeting capacity by license type

Type of call	Participants per shared Multiparty Plus license	Participants per Personal Multiparty Plus license	Participants per Cisco Meeting Server capacity unit
Full HD calls (1080p30)	Unrestricted	Unrestricted	0.5
HD calls (720p30)	Unrestricted	Unrestricted	1
SD calls (448p30)	Unrestricted	Unrestricted	2
Audio calls	Unrestricted	Unrestricted	12

Note that although the licensing does not restrict the number of participants, there might be another limitation that restricts the number of participants.

Cisco Capital

Financing to help you achieve your objectives

Cisco Capital® can help you acquire the technology you need to achieve your objectives and stay competitive. We can help you reduce CapEx. Accelerate your growth. Optimize your investment dollars and ROI. Cisco Capital financing gives you flexibility in acquiring hardware, software, services, and complementary third-party equipment. And there's just one predictable payment. Cisco Capital is available in more than 100 countries. Learn more.