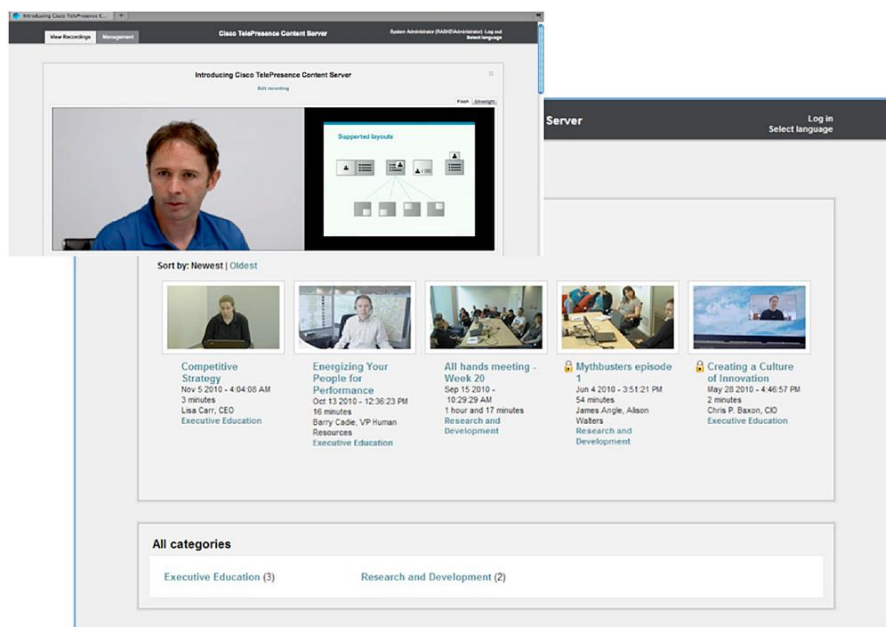ililili CISCO

Cisco TelePresence Content Server

Product Overview

With the Cisco TelePresence® Content Server, your organization can share knowledge and enhance communication by recording videoconferences. You can access live and on-demand presentations, distance education classes, and corporate training sessions - anywhere, anytime. In addition, you can distribute live or recorded content to any computer or download to your favorite portable media device. Cisco TelePresence Content Server is available as a dedicated appliance (Figures 1 and 2) or as a virtualized application on VMware.

Figure 1. Cisco TelePresence Content Server

Figure 2. Cisco TelePresence Content Server

Combine Cisco TelePresence Content Server with the Cisco® MXE 3500 Media Experience Engine (MXE 3500) to provide comprehensive multimedia transcoding capabilities, automatically converting video files into a wide array of formats and bitrates for optimal viewing on any device. Cisco MXE 3500 also creates a simple and automated way for customers to make their videos look more professional before posting through the addition of graphics, such as a "lower third" graphic containing the speaker's name and title or the company logo as a watermark. The MXE 3500 can also add a short introductory video known as a bumper, and add a closing "trailer" video to each recorded call before creating versions in different formats and speeds.

Features and Benefits

Table 1 summarizes the key features of the Cisco TelePresence Content Server.

Table 1.   Cisco TelePresence Content Server Feature Summary

Feature	Benefit
Design features	• Built-in, easy-to-use, web-based management interface • Built-in web-based content library • Ability to interoperate with a range of complementary multivendor products
Application features	• Live and on-demand streaming • Scheduled and impromptu call support with dial-in and -out capabilities • Ability to record and stream video and H.239 dual-stream presentations from any H.323 or Session Initiation Protocol (SIP) videoconferencing unit • Content creation from anywhere using Cisco TelePresence Expressway technology • Compatibility with all major streaming formats, including Windows Media, Flash, and QuickTime • Support for major distribution servers and corporate web portals • Editing and library features for simple content creation and retrieval • Support for download of content to PC, Mac, and portable media devices
Performance features	• Ability to host up to 5 concurrent calls (up to 10 calls with Additional Five Port Option), up to two of which can be streamed live • Videoconference bandwidth up to 4 Mbps (with premium Resolution Option) • Synchronized streaming of video and presentation in live and on-demand modes • Unicast and multicast streaming support • Internal and external storage capabilities • Support for Microsoft Active Directory authentication through Lightweight Directory Access Protocol (LDAP) • Call configuration and access-rights management • Support for SQL Server 2008 with content server clusters • Ability to export and import recordings from one content server to another
Scalability features	• Ability to cluster up to 10 content servers
Virtualization features	• Flexibility to deploy as virtual machine • Reduced total cost of ownership (TCO)

Product Specifications

Table 2 lists the physical specifications; Table 3 gives video and audio specifications; and Table 4 gives network, security, and management specifications for the Cisco TelePresence Content Server.

Table 2.   Product Specifications

Product compatibility	• Support for recording initiation from all standards-based endpoints
Components	• Simplified, common format, complete solution for streaming, all in one component
Recording	• Predefined template-based recording options • Recording flexibility through a built-in web-based template editor • Personal and system recording aliases for ultimate flexibility • Support for automated creation of personal recording aliases • Ability to record presentations or video from a live dual stream (H.264, H.239, or DuoVideo) • Support for H.323 endpoints, multipoint control units (MCUs), gateways, and the Session Initiation Protocol (SIP) • Ability to record up to five simultaneous H.323 or SIP video calls • Ability to receive calls at up to 4 Mbps, up to 1080p high-definition (HD) resolution for the main camera and for the second input source • Ability for calls to include main video or audio and H.264, H.239, or DuoVideo • Transcoding of recorded calls into streaming and downloadable file formats, including Windows Media, Flash, and MPEG4 formats • Recording of every call directly to disk for "offline" transcoding after the call completes

	• Optional record start countdown • Record PIN-protected MCU Conferences • Personal sandbox for safe working on recorded content before publishing • Optional automated email notifications to content owners on completion of recording • Recording indicator on Cisco TelePresence MCU calls
Live and on-demand streaming	• Ability to live stream up to two calls (of the total five) in a single format and size • Embedded Native Windows Media Streaming Server • Ability of the content server to stream Flash[*] content when integrated with customer-provided Wowza Media Server • Ability of the content server to stream MPEG4 QuickTime content when integrated with customer-provided Apple Quicktime or Darwin Streaming Servers • Ability to view Flash and QuickTime Media as a progressive download without external streaming servers • Static URLs for live streaming of MPEG-4 for Flash content from a Wowza Media Server
Streaming	• Live (unicast supported natively and multicast supported by external Microsoft Windows Media Server) • On demand (unicast) • Native support for streaming Microsoft Windows Media through an embedded Windows Media Server • Support for external streaming servers (Microsoft Windows Media Server, Wowza Media Server, and Apple QuickTime Streaming Server)
Portable devices	• Support for media download, then sync with Apple iPod- and MPEG-4-capable devices
Distribution server	• Support for Cisco MXE 3500 transformation engine • Support for Cisco Show and Share® web and video sharing application
Content library	• Download options • Really Simple Syndication (RSS) feed subscription to provide alternate access to content library • Searchable content library web interface, with thumbnail images and categories for easy content searching • Ability to preconfigure recording outputs, media access, and metadata • Ability to share links to recording, allowing you to easily identify and share recordings • Ability to view live and recorded content through content viewer web interface and telepresence endpoints (PIN Protection available) • Editable indexes • Content editor that enables trimming and joining recordings • Support for major web browsers (Internet Explorer, Mozilla Firefox, and Safari) • Context-sensitive help in the interface • Simplified graphical template editor for easy creation of new recording templates • Automatic and manual bandwidth detection, to provide the best viewing experience for your Internet connection
Content viewer	• An intuitive content viewer that supports Windows Media, Adobe Flash, Microsoft Silverlight, and QuickTime plug-ins • Support for multiple video layouts, including: 　◦ Switching layout 　◦ Joined layout 　◦ Fixed aspect ratio 16:9 joined layout 　◦ Picture-in-picture video layout 　◦ Stacked layout • Ability to present dual-stream or still-image content fully synchronized with the main video • Fully synchronized video, audio, and content • Pause and seek in recordings
Storage	• Support for external network storage using network-attached storage (NAS)
Language support	• English, French, Simplified Chinese, and Japanese

[*] Requires Flash Player 9 Update 3 or later

Table 3.   Video and Audio Specifications

Bandwidth	• H.323 and SIP up to 4 Mbps
Video standards	• H.261 • H.263 • H.263+ • H.264
Live video resolutions	• QCIF (176 x 144 pixels) • CIF (352 x 288 pixels) • VGA (640 x 480) • 4CIF (704 x 576) • SVGA (800 x 600) • XGA (1024 x 768) • 448p (576 x 448) • w288p (512 x 288) • w448p (768 x 448) • w576p (1024 x 576) • 720p (1280 x 720): Supported for H.264 only
Audio standards	• G.711 • G.722 • G.722.1 • AAC-LD
Frame rates	• Up to 60 frames per second (requires premium resolution option)

Table 4.   Network, Security, and Management Specifications

System management and scheduling	• Allows for easy configuration using serial port management console • Allows for total management through embedded web server • Provides application programming interface (API) for customized integration with third-party solutions • Allows for one click to record scheduled conferences with Cisco TelePresence Management Suite • Allows for simple addition of audio-only outputs for recording of scheduled conferences with Microsoft Outlook or IBM Lotus Notes • Uses Cisco TelePresence Management Suite to monitor Cisco TelePresence Content Server status, such as free disk space • Allows administrators to set maximum streaming bandwidth limits to fit their network rules
Firewall traversal	• Cisco TelePresence Expressway technology • Auto Network Address Translation (NAT) • H.460.18 • H.460.19 Firewall Traversal
Quality of service (QoS)	• Dynamic jitter buffering • Packet-loss concealment
Security features	• Secure management through Secure HTTP (HTTPS) • Integration with Active Directory through LDAP for access • Password-protected recordings • Full access control lists (ACLs) on all content library items

Warranty Information

Find warranty information on Cisco.com at the Product Warranties page.

Ordering Information

To place an order, visit the Cisco Ordering Home Page and refer to Table 5 or contact your local Cisco representative. To download software, visit the Cisco Software Center.

Table 5.   Ordering Information

Product Name	Part Number
Cisco TelePresence Content Server (TCS Appliance)	TCS-C220-5RP-K9
Cisco TelePresence Content Server (Virtualized Application)	R-VMTCS-5RP-K9
Ordering Options	
Clustering Option	LIC-TCS-CLUSTER
Premium Resolution Option	LIC-TCS-PRO
Additional 5 Port Option	LIC-TCS-ADD5RP
10 Port Premium Resolution Bundle (TCS Appliance)	TCS-C220-PRO10P-K9
10 Port Premium Resolution Bundle (Virtualized Application)	R-VMTCS-PRO10P-K9

Cisco Services

Cisco and our partners provide a broad portfolio of intelligent, personalized services and support that can help you realize the full value of your Cisco TelePresence investment by increasing business agility and network availability. This portfolio of services accelerates business innovation through a network-based collaboration platform that enables businesses to collaborate anywhere, anytime. For more information about these services, please visit: http://www.cisco.com/go/telepresenceservices.

For More Information

For more information about the Cisco TelePresence Content Server, please visit http://www.cisco.com/go/videoplatform or contact your local Cisco account representative or authorized Cisco partner. Product specifications are estimates and subject to change without notice.