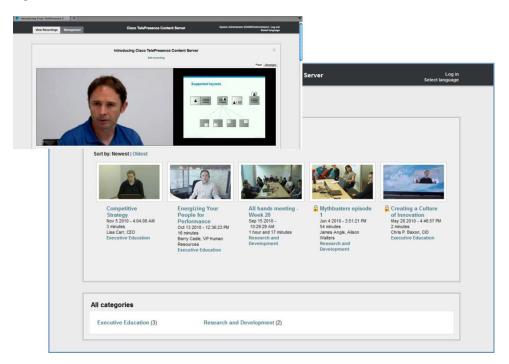


Cisco TelePresence Content Server

Figure 1. Cisco TelePresence Content Server



Product Overview

With the Cisco TelePresence® Content Server (Content Server), your organization can share knowledge and enhance communication by recording video conferences. 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, download to your favorite portable media device, or share through iTunes U (Figures 1 and 2).

Figure 2. Cisco TelePresence Content Server



Combine Cisco TelePresence Content Server with Cisco Media Experience Engine 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 Media Experience Engine 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	 Appliance-based architecture for easy deployment and high reliability One rack unit (1RU) rack-mountable 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) video conferencing 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	 Hosts up to five concurrent calls (up to 10 calls with Additional Five Port Option), up to two of which can be streamed live Video-conference 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 Active Directory authentication through Lightweight Directory Access Protocol (LDAP) Call configuration and access rights management Ability to cluster up to 10 content servers Support for SQL Server 2008 with Content Server clusters Ability to export and import recordings from one Content Server to another

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 countsown Record Phytoprotected MUC Conferences Personal sandbox for safe working on recorded content before publishing Optional automated earlier collisations to content owners on completion of recording Recording indicator on Closo TelePresence MCU calls Ability to live stream up to two calls (of the total five) in a single format and size Native Windows Media Streaming Server is embedded When integrated with customer-provided Wowar Media Server, the content server streams Flash content. When integrated with customer-provided Apple Quicktime or Darwin Streaming Servers, the service of Chick Time Content. When integrated with customer-provided Apple Quicktime or Darwin Streaming Servers, the content server streams in MPEG4 Quicktime content. Streaming I Live Unicast and multicost) On demand (unicast) On dem		
Vibra Integrated with custome-provided Apple Quicktime or Darwin Streaming Servers, the content severe streams MPEG4 Quicktime content: Flash and Quickt Time Media can be viewed as a progressive download without external streaming servers	Live and on-demand streaming	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 Ability to live stream up to two calls (of the total five) in a single format and size Native Windows Media Streaming Server is embedded
On demand (unicast) Native support for streaming Microsoft Windows Media through an embedded Windows Media Server (Nicrosoft 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 Support for Apple's Podcast Producer Support for Cisco MXE 3500 transformation engine Support for Cisco MXE 3500 transformation engine Support for Cisco Show and Share Download options Really Simple Syndication (RSS) feed subscription to provide alternate access to content library Searchable content library web interface, with thumbnall images and categories for easy content searching Ability to share links to recording, allowing you to easily identify and share recordings Ability to share links to recording, allowing you to easily identify and share recordings Ability to share links to recording and provide 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 supports Windows Media, Adobe Flash, Microsoft Silverlight, and Quick Time plug-ins Multiple video layout as a supported, including: Stocked layout Fixed aspect ratio 16:9 joined layout Fixed aspect ratio 16:9 joined layout Fixed aspect ratio 16:9 joined layout Fixed aspect ratio 16:9 one and service		When integrated with customer-provided Apple Quicktime or Darwin Streaming Servers, the content server streams MPEG4 QuickTime content Flash and QuickTime Media can be viewed as a progressive download without external streaming servers
Support for Apple's Podcast Producer Support for iTunes U Support for Cisco MXE 3500 transformation engine Support for Cisco MXE 3500 transformation engine Support for Cisco Show and Share 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 precorfigne recording outputs, media access, metadata 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 An intultive content viewer supports Windows Media, Adobe Flash, Microsoft Silverlight, and QuickTime plug-ins Multiple video layouts are supported, including: Switching layout 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 intultive content viewer supports Windows Media, Adobe Flash, Microsoft Silverlight, and QuickTime plug-ins Multiple video layouts are supported, including: Sirved aspect ratio 16-9 joined layout Fixed aspect ratio 16-9 joined layout Fixed aspect ratio 16-9 joined layout Fixed aspect ratio 16-9 joined layout Picture-in-picture video layout Content viewer and the province of the prov	Streaming	 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,
Support for iTunes U Support for Cisco MXE 3500 transformation engine Support for Cisco Show and Share 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, metadata Ability to preconfigure recording, allowing you to easily identify and share recordings 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 An intuitive content viewer supports Windows Media, Adobe Flash, Microsoft Silverlight, and QuickTime plug-ins Multiple video layouts are supported, including: Switching layout Joined layout Fixed aspect ratio 16:9 joined layout Fixed aspect ratio 16:9 joined layout Stacked layout Dual-stream or still-image content is presented fully synchronized with the main video Video, audio, and content are fully synchronized Pause and seek in recordings Storage Storage Storage Storage Storage Large-capacity internal storage (500-GB hard disk) Support for external network storage using network-attached storage (NAS)	Portable devices	Support for media download, then sync with Apple iPod and MPEG-4 capable devices
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, metadata Ability to siew 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 Content viewer who have a supported, including: Switching layout Joined layout Fixed aspect ratio 16:9 joined layout Fixed aspect ratio 16:9 joined layout Picture-in-picture video layout Stacked layout Dual-stream or still-image content is presented fully synchronized with the main video Video, audio, and content are fully synchronized Pause and seek in recordings Storage Large-capacity internal storage (500-GB hard disk) Support for external network storage using network-attached storage (NAS)	Distribution server	Support for iTunes U Support for Cisco MXE 3500 transformation engine
QuickTime plug-ins Multiple video layouts are supported, including: Switching layout Joined layout Fixed aspect ratio 16:9 joined layout Picture-in-picture video layout Stacked layout Dual-stream or still-image content is presented fully synchronized with the main video Video, audio, and content are fully synchronized Pause and seek in recordings Large-capacity internal storage (500-GB hard disk) Support for external network storage using network-attached storage (NAS)	Content library	 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, 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
Support for external network storage using network-attached storage (NAS)	Content viewer	QuickTime plug-ins Multiple video layouts are supported, including: Switching layout Joined layout Fixed aspect ratio 16:9 joined layout Picture-in-picture video layout Stacked layout Dual-stream or still-image content is presented fully synchronized with the main video Video, audio, and content are fully synchronized
Language support ● English, French, Simplified Chinese, and Japanese	Storage	
	Language support	English, French, Simplified Chinese, and Japanese

Physical dimensions (H x W x D)	 1.7 x 16.9 x 20 in. (44 x 430 x 508 mm) 19-in. rack-mountable, 1RU height, including rack rails 	
Weight	 13.89 lbs (6.30 kg); packaging and accessories weight 6.39 lbs (2.9 kg); total shipping weight 20.28 lbs (9.2 kg) 	
Power	• 100-240 VAC, 50-60 Hz, 350W maximum	
Environmental data	 Operating temperature: 50 to 86°F (10 to 30°C) Relative humidity: 10 to 90% Storage and transport temperature: -4 to 140°F (20 to 80°C) (noncondensing) 	
Approvals and compliance	 CE Declaration to EU Low Voltage Directive 2006/95/EC (Europe - EN60950-1) Directive 89/336/EEC (EMC Directive) Standard EN 55022, Class A Standard EN 55024 Standard EN 61000-3-2/-3-3 Approved according to UL 60950-1 and CAN/CSA C22.2 No. 60950-1-03 Compliance with FCC15B Class A 	

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 Content Server status, such as free disk space Allows administrators to set maximum streaming bandwidth limits to fit their network rules
Network interfaces	• Two Ethernet (10/100/1000 Mbps) (one for future use)

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 bufferingPacket-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 <u>Cisco Ordering Home Page</u> and refer to Table 5 or contact your local Cisco representative. To download software, visit the <u>Cisco Software Center</u>.

Table 5. Ordering Information

Product Name	Part Number	
Cisco TelePresence Content Server	CTI-TCS-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	CTI-TCS-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/telepresence or contact your local Cisco account representative or authorized Cisco partner. Product specifications are estimates and subject to change without notice.

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Printed in USA C78-626482-06 04/12