DATA SHEET

CISCO IPVC 3500 SERIES VIDEO MULTIPOINT CONFERENCING UNIT

Multipoint Video for Cisco IP Communication Solutions

PRODUCT OVERVIEW

Cisco® IPVC—part of the Cisco IP Communications system—is a complete portfolio of IP video Multipoint Control Units (MCUs) and ISDN gateways for traditional video conferencing networks, and Cisco Video Telephony and Cisco MeetingPlace® solutions. Cisco Video Telephony integrates video into Cisco CallManager to enable desktop video communications—making video as easy to use and administer as a telephone. Cisco MeetingPlace enables rich-media conferencing (voice, video, and Web) to make remote meetings as natural as face-to-face meetings.

The Cisco IPVC 3500 series MCUs, part of Cisco's complete IP videoconferencing solution (Figure 1), enable multi-party conferences for traditional video conferencing networks, ad-hoc conferencing for Cisco Video Telephony, and enables scheduled and reservation-less video conferences for Cisco MeetingPlace rich-media conferencing.

Figure 1. Cisco IPVC 3500 Series Solution Including IOS Gatekeeper

KEY FEATURES AND BENEFITS

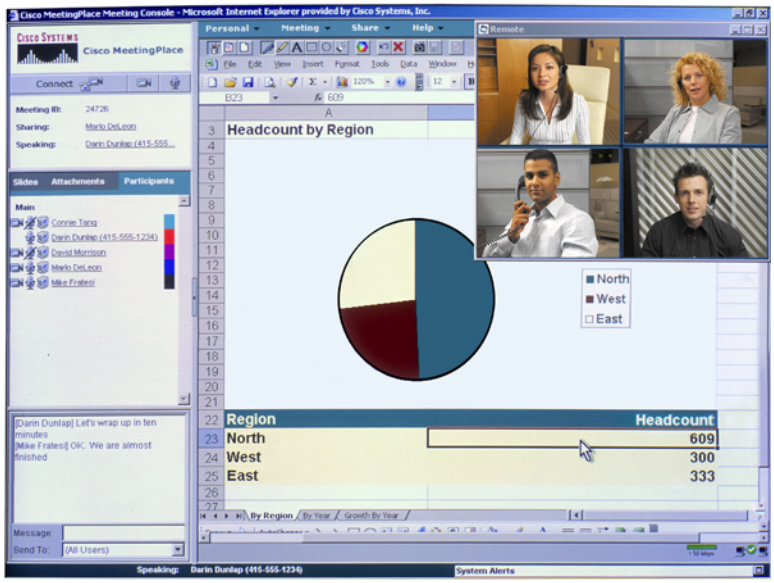
Rich-media Conferencing

Cisco® MeetingPlace®—part of the Cisco IP Communications system—is a complete rich-media conferencing solution that seamlessly integrates voice, video, and Web conferencing capabilities to make remote meetings as natural and effective as face-to-face meetings for unmatched productivity gains. Cisco IPVC 3500 Series MCU version 3.5plus with the Cisco MeetingPlace Video Integration application integrates video conferencing into the Cisco MeetingPlace solution—enabling users to set up, attend, and manage voice, video and Web rich-media conferences.

For easy setup and attendance of integrated voice, video, and Web conferences, Cisco MeetingPlace offers a Web browser interface and the most advanced, proven integrations with the Microsoft Outlook and Lotus Notes calendaring environments. Meeting coordinators simply schedule the meeting and Cisco MeetingPlace does the rest—reserving voice, video, and Web conference resources. Meeting invitees automatically receive notification by e-mail or calendar invitation and can attend rich-media conferences with a single click. Cisco MeetingPlace also allows users to initiate rich-media conferences, including video, from common instant messaging clients like America Online (AOL) Messenger, Lotus Sametime, MSN Messenger, and Yahoo Messenger.

Cisco MeetingPlace rich-media—integrated voice, video, and Web—conferencing (Figure 2) dramatically simplifies the process for scheduling and attending conferences and drives significant productivity gains. Integrating Cisco IPVC into Cisco MeetingPlace leverages once disparate conferencing investments to maximize utilization of conferencing resources and to provide new levels of user satisfaction and productivity.

Figure 2. Cisco MeetingPlace Rich-Media Conferencing (integrated voice, video and Web conferencing)



Cisco Video Telephony

Cisco Video Telephony is a capability of Cisco CallManager that extends the phone use and administration models to desktop video communications. Video calls are as easy to place as telephones calls (Figure 3) and now have familiar phone features such as hold, transfer, and call forward, etc., the dial plans for video and telephony are integrated, and call detail records (CDRs) and administration points are integrated. Cisco Video Telephony was first introduced with Cisco CallManager 4.0 and Cisco IPVC 3500 Series MCU version 3.2plus—the Cisco IPVC 3500 series MCU provides multi-party ad-hoc conference support for video telephony endpoints, providing a user experience equivalent to the standard conference button on the voice private branch exchange (PBX) today.

Cisco Video Telephony extends the benefits of video communications from the conference room out to the end-users desktop and dramatically simplifies the user interface. Video telephony personalizes communications and the investment in Cisco IPVC video conferencing infrastructure is leveraged used across traditional video conferencing and video telephony environments.

Figure 3. Cisco Video Telephony

IP Video Conferencing

In addition to the newer video telephony and rich-media conferencing environments the Cisco IPVC 3500 series MCUs also support standard video conferencing for IP and ISDN video endpoints—ISDN video endpoints require the use of the IPVC ISDN Gateway.

BENEFITS

Seamless Interoperability and Investment Protection

Cisco IPVC MCUs are built on the strong foundation of market leading H.323 and Session Initiation Protocol (SIP) software, ensuring full compliance and unmatched interoperability with IP and ISDN networks, when used with a Cisco IPVC ISDN gateway. In addition, the Cisco IPVC MCU enables Skinny Client Control Protocol (SCCP) video devices to participate in the same video conferencing session.

FEATURES

New in Cisco IPVC 3500 series MCU 3.5plus:

Rich-Media Conferencing (integration with Cisco MeetingPlace 5.3)

- Integrates video conferencing into the Cisco MeetingPlace solution. Enables the Cisco IPVC 3500 Series MCU to be controlled through Cisco MeetingPlace, providing an integrated voice, video, and Web conferencing solution.
- Scheduling—Enables the Cisco MeetingPlace Web user interface, Microsoft Outlook, and Lotus Notes interfaces to set-up scheduled and reservation-less video conferences on the Cisco IPVC 3500 Series MCUs.
- Notification—Cisco MeetingPlace meeting notifications include meeting dial in and dial out information for video conferences
- Management—New Cisco MeetingPlace information and commands targeted at video end points.

(See Cisco MeetingPlace data sheets for more information.)

Session Initiation Protocol Support

Targeted at enabling the creation of many diverse end points and video-enabled applications, Session Initiation Protocol (SIP) is becoming a fundamental driver for the desktop conferencing. The Cisco IPVC MCU provides multi-party voice and video conferencing for SIP-enabled video end points (examples: Microsoft Messenger, eConf, and Polycom VSX 8000). Further more, inter-working functionality is provided allowing multi-protocol end points—SIP, SCCP, H.323, and H.320—to attend the same conference.

FEATURES

Table 1 outlines the IPVC Multipoint Control Units specifications and features.

Table 1. Product Specifications

Scalability	Create large conferences by cascading conferences between multiple Cisco IPVC 3511 Multipoint Control Units and Cisco IPVC 3540 Series Multipoint Control Units. Cascaded conferences can be centralized in the data center or geographically distributed utilizing WAN bandwidth more efficiently Increase the conferencing capacity by creating an MCU cluster of up to six Cisco IPVC 3540 MCUs

Protocols	H.323 V.4, SCCP, SIP, H.320 through the IPVC Gateway, H.239, H.235, H.281 FECC G.711 H.261, H.263, H.263++, H.264 T.120
SCCP Protocol Support	All Cisco IPVC MCU platforms support SCCP and/or H.323 /SIP ports active Port designation is strictly for call control and MCU port access IPVC MCU Port Designations: Cisco IPVC 3540 MCU—Port protocol designation can be applied by a percentage to MCU port resources Cisco IPVC 3511 MCU—Port protocol designation can be applied as SCCP or H.323/SIP modes only IPVC MCU ports integrate video media from all protocols—SCCP, H.323, SIP, H.320 (through IPVC Gateway)
SIP Protocol Support	Fully interoperability with ISDN, H.323 network solutions
Audio Transcoding	H.323 conference participants may use G.711, G.722, G.722.1, G.723.1, G.728, or G.729 audio encoding SCCP conference participants may use G.711, G.722, G.728, or G.729 audio encoding SIP conferencing participants may use G.711, G.722.1, G.723.1, or G.729 audio encoding
Resolutions	Quarter Common Intermediate Format (QCIF), CIF, 4CIF, SIF, 4SIF, Video Graphics Array (VGA), Super-eXtended Graphics Array (SXGA), eXtended Graphic array (XGA)
Features and Functions	
Web-Based Monitoring and Management	With simple user-friendly configuration, the Cisco IPVC 3500 Series MCU Administration Web interface provides remote monitoring and configuration from any location using a Java-enabled Web browser: • Real- time conference control • Password protection • Multiple access level: – Administrator – Conference manager – User • Conference statistics • Drag and drop • Sub-conferencing • Conference admission • Operator assistance

Display and Layout Options	Voice-activated conference: • Options require new EMP hardware now available with the Cisco IPVC 3511 Multipoint Control Units and Cisco 3540 Series MCUs • Voice-activated switching with adjustable switching delay (H.261, H.263, and H.264 video) Continuous Presence conference: • Basic windowed display shows four conference participants at a time • In conferences with five or more participants, voice detection automatically switches an off-screen speaker into one of the display windows Enhanced Continuous Presence (options) • Continuous Presence mode enables an enhanced and simultaneous view of conference participants, with a choice of 26 different layouts that can vary from 16, 1+12, 2+8, 9, 1+7, 3+4, 1+5, 4, 3, 2, and 1 • Unique “Picture in Picture” display • Dynamic layout according to the number of conference participants • Multiple voice-activated modes, including All See One, You See Me, Auto-Zoom, and recent Automatic Switching • Text and frame overlay • Supports symmetrical and asymmetrical up and down streams for optimal bandwidth utilization
Rate Matching	Each endpoint in a video conference can participate according to individual video bandwidth capabilities without affecting the connection of other participants
Downspeeding	Enables the completion and maintaining of a call during the loss of ISDN B channels
Quality of Service (QoS)	Support for Differentiated Services (DiffServ) markings
Security and Privacy	Password protection for conferences helps to ensure privacy for participants Administrative functions are password-protected
DuoVideo Support	In addition to standard-based H.239 support, MCU also supports Tandberg end point when transmitting more than one video channel (DuoVideo)
LAN Interface	One 10/100 Ethernet port, IEEE 802.3, 8-pin RJ-45
Physical Dimensions	IPVC 3540 Chassis 3.50 in. x 17.25 in. x 10.0 in. (4.445 cm x 43.815 cm x 25.4 cm) IPVC-3511-MCU(E) 1.75 in. x 17.25 in. x 10.0 in. (4.445 cm x 43.815 cm x 25.4 cm)
Weight	Cisco IPVC 3540 Chassis: 15.43 lb (7 kg) Cisco IPVC 3511 Multipoint Control Unit: 7.50 lb (3.5 kg) Cisco IPVC 3511 Multipoint Control Unit with EMP: 8.00 lb (3.75 kg)

Power	100 to 240 VAC autosense, 50 to 60 Hz, 75W maximum U.S. power cable included Other power cables available separately
Environment	Operating temperature: 0 to 40°C (32 to104°F) Storage temperature: -25 to 70°C (-13 to 158°F) Humidity: 5 to 90 percent noncondensing

SYSTEM CAPACITY

Table 2 provides the IPVC 3511 MCU port capacities when operating in SCCP or H.323 and SIP mode.

Table 2. Cisco IPVC 3511 Multipoint Control Unit Capacities

Voice-Activated or Continuous Presence Conference Sessions*		
Call Bandwidth	**Number of Sessions**	**Number of Sessions**
–	SCCP	H.323/SIP
128 kbps	16	15
192 kbps	16	15
384 kbps	16	12
512 kbps	12	12
768 kbps	12	12
1.5 Mbps	6	6
2.0 Mbps	4	4
Audio only	26	26

* With an Enhanced Media Processor

Table 3 provides the IPVC 3540 MCU port capacities when operating in SCCP, H.323 and SIP modes.

Table 3. Cisco IPVC 3540 MCU Capacities for both SCCP, H.323 and SIP Sessions

Voice-Activated or Continuous Presence Sessions*			
Call Bandwidth	**Number of Sessions**	**Number of Sessions**	**Number of Sessions**
	30-Port Module Cisco IPVC-3540-MC03A	60-Port Module Cisco IPVC-3540-MC06A	100-Port Module Cisco IPVC-3540-MC10A
128 kbps	30	60	100
192 Kbps	24	48	70
384 kbps	24	48	70

Voice-Activated or Continuous Presence Sessions*			
Call Bandwidth	**Number of Sessions**	**Number of Sessions**	**Number of Sessions**
512 kbps	24	48	60
768 kbps	24	48	48
1.5 Mbps	12	24	28
2.0 Mbps	8	16	22
Audio only	45	90	150

* With an Enhanced Media Processor module

ORDERING INFORMATION

To place an order, visit the Cisco Ordering Home Page.

Table 4 provides part numbers for ordering.

Table 4. Ordering Information

Product Name	Part Number
Cisco IPVC 3511 Multipoint Control Unit	
Cisco IPVC 3511 Multipoint Control Unit	IPVC-3511-MCU
Cisco IPVC 3511 Multipoint Control Unit and Enhanced Media Processor	IPVC-3511-MCU-E
Cisco IPVC 3540 Multipoint Conferencing System	
Cisco IPVC 3544 Four Slot Chassis	IPVC-3544-CHAS
Cisco IPVC 3540 Multipoint Conferencing Unit—30 Port Session Module	IPVC-3540-MC03A
Cisco IPVC 3540 Multipoint Conferencing Unit—60 Port Session Module	IPVC-3540-MC06A
Cisco IPVC 3540 Multipoint Conferencing Unit—100 Port Session Module	IPVC-3540-MC10A
Cisco IPVC 3540 Enhanced Media Processor	IPVC-3540-EMP
Cisco IPVC 3540 Enhanced Media Processor 3	IPVC-3540-EMP3
Cisco IPVC 3540 MCU Audio Transcoder Cards—30 Port MCU Daughter card	IPVC-3540-XAM03
Cisco IPVC 3540 MCU Audio Transcoder Cards—60 Port MCU Daughter card	IPVC-3540-XAM06

SERVICE AND SUPPORT

Cisco Systems® offers a wide range of services programs to accelerate customer success. These innovative services programs are delivered through a unique combination of people, processes, tools, and partners, resulting in high levels of customer satisfaction. Cisco services help you to protect your network investment, optimize network operations, and prepare the network for new applications to extend network intelligence and the power of your business. For more information about Cisco Services, see Cisco Technical Support Services or Cisco Advanced Services.

FOR MORE INFORMATION

For more information about the Cisco IPVC products, visit http://www.cisco.com/go/ipvc or contact your local account representative.

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