

TelePresence & Video

Konrad Olszewski

Piotr Głosek

Cisco TelePresence

Od web-konferencji do naturalnych spotkań „twarzą w twarz”

Terminal dopasowany do potrzeb użytkownika



Cisco Telepresence

Nowa jakość pracy



NATURALNE SPOTKANIA

Wirtualne spotkania wzmacniające relacje i przyspieszające procesy decyzyjne



BIURO DYREKTORA

Zarządzanie „bezpośrednio z biurka”



ROZWIĄZANIA „BIURKOWE”

Codziennie spotkania wideo zintegrowane z narzędziami biznesowymi



POKÓJ SPOTKAŃ

Pokój wirtualnych spotkań rozproszonych geograficznie zespołów.



RECEPCJA

Obsługa gości na odległość

...dla każdego, wszędzie

BIURO DOMOWE

Produktywność nie ma granic,
niezależnie czy pracujesz w
biurze czy w domu.



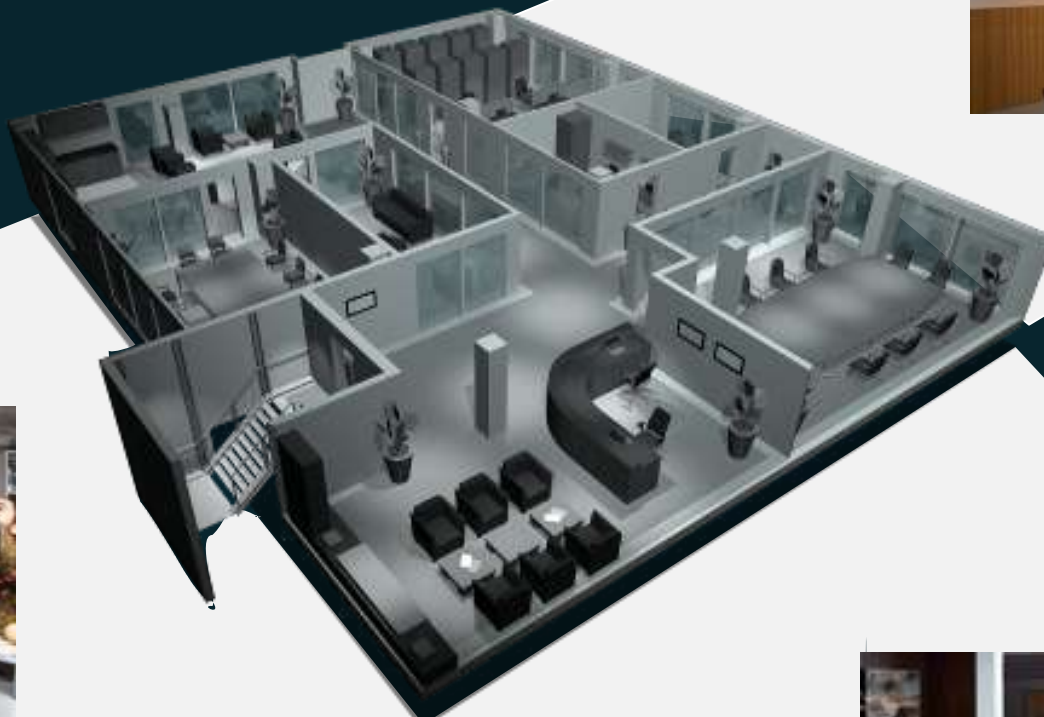
OBSŁUGA KLIENTA

Dostęp do ekspertów



GDZIEKOLWIEK

Rozwiązania dla osób mobilnych.
Webex Exchange.
HD Recording Studio.



PRZEMYSŁ

Dostęp do dostawców, inżynierów
przebywających w swoich zakładach,
dostęp do służb ratowniczych
przebywających w terenie



ENDPOINTS

Endpoint Software Options

- **MultiSite – internal MCU, 4 site**

Available on C40, C60, C90, EX90

All systems have one additional audio call

- **Premium Resolution**

Allows transmitted resolutions greater than 720p30

...up to 1080p30, 720p60, WUXGA at 25fps

- **Dual Display**

Applies to C20, C40, and EX90

Enables the 2nd high-definition video output

- **Natural Presenter Package**

Brings presentations to life adding PCs, document cameras, streaming and video

Free of charge in C-series

Simplify & Unify Our Product Naming

MX

(Multipurpose
Category)

EX

(Personal
Category)

SX

(Solutions
Category)

VX

(Vertical
Category)

TX

(Immersive
Category)

- **Product names** = category + number
 - e.g. MX200
 - Full name: Cisco TelePresence MX200
- **New structure** will be used as new products are introduced



Network requirements

Parametr	Jakość bardzo dobra	Jakość akceptowalna	Jakość słaba
Pasmo	$\geq 120\%$ wybranej szybkości połączenia	$> 75\% - 100\%$ wybranej szybkości połączenia	$< 75\%$ wybranej szybkości połączenia
Straty pakietów	$< 0,03\%$	$> 0,03 - 1,5\%$	$> 1,5\%$
Opóźnienie	$< 100\text{ms}$	$> 100\text{ms} - 250\text{ms}$	$> 250\text{ms}$
Jiter	$< 7\%$ OWD	$> 7\% - < 14\%$ OWD	$> 14\%$ OWD

Resolutions & Bandwidth

30 fps	w288p30	w448p30	w576p30	720p30	1080p30
NORMAL	256 kbit/s	512 kbit/s	768 kbit/s	1152 kbit/s	2560 kbit/s
MEDIUM	128 kbit/s	384 kbit/s	512 kbit/s	768 kbit/s	1929 kbit/s
HIGH	128 kbit/s	256 kbit/s	512 kbit/s	768 kbit/s	1472 kbit/s
60 fps	w288p60	w448p60	w576p60	720p60	
NORMAL	512 kbit/s	1152 kbit/s	1472 kbit/s	2240 kbit/s	
MEDIUM	384 kbit/s	768 kbit/s	1152 kbit/s	1472 kbit/s	
HIGH	256 kbit/s	512 kbit/s	768 kbit/s	1152 kbit/s	

Codec overview



Codec C90, Ultimate HD Collaboration Engine



Powerful, flexible and inspiring for integration into TelePresence Studios, collaboration rooms, auditoriums and telemedicine

- Crisp, clear video with optimal definition up to full 1080p
- Full duplex audio with high quality stereo sound
- 2U high, rack mountable, with rack mounting solution
- H.323/SIP up to 6Mbps point-to-point
- End-to-end 1080p quality with 1080p video, 1080p30 HD individually transcoded embedded MultiSite and HD Collaboration with 1080p and UXGA*
- Connect up to 12 HD video sources & 8 microphones directly into the interface
- Develop applications quickly with an advanced API
- Available as an Integrator Package including Codec C90, PrecisionHD 1080p camera, microphones, remote control and camera cable kits.

Codec C60, Advance HD Collaboration Engine



Unmatched 1080p video and collaboration for streamlined integration into dedicated video conferencing boardrooms, meeting rooms and industry applications

- Crisp, clear video with optimal definition up to full 1080p
- Full duplex audio with high quality stereo sound
- 1U high, rack mountable, with rack mounting solution
- H.323/SIP up to 6Mbps point-to-point
- End-to-end HD quality with 1080p video, 720p HD individually transcoded embedded MultiSite* and HD Collaboration with 1080p and UXGA*
- Connect up to 4 HD video sources & 4 microphones directly into the interface
- Develop applications quickly with an advanced API
- Available as an Integrator Package including Codec C60, PrecisionHD 1080p camera, microphone, remote control and camera cable kits.

Codec C40, HD Collaboration Engine



- Crisp, clear video with optimal definition up to full 1080p
- Full duplex audio with high quality stereo sound
- 1U high, rack mountable, with rack mounting solution
- H.323/SIP up to 6Mbps point-to-point
- End-to-end HD quality with 1080p video, 576p individually transcoded embedded MultiSite and HD Collaboration with 720p and WXGA
- Connect up to 3 HD video sources & 2 microphones directly into the interface
- Develop applications quickly with API
- Available as an Integrator Package including Codec C40, PrecisionHD 1080p camera, microphone, remote control and camera cable kits.

Cisco TelePresence Quick Set SX20

High Performance and Flexibility

Key features

- Transforms a flat panel display into a 1080p HD meeting space
- Provides up to 1080p60 main video and 1080p15 content sharing
- 4-way embedded MultiSite
- Sleek, compact design
- Same UI, feature set, and APIs as C-Series portfolio (TC 5.0)
- Cisco Telepresence Touch 8 (optional)

Customer benefits

- Best value offering in the market
- Compact and flexible for your individual video needs.
- Consistent and easy – Part of the Cisco Total Solution



SX20 Details

Video

- Input: 1 x HDMI (custom) + DVI-I
- Output: 2 x HDMI

Audio

- Microphones: 2 x mini-jack
- Input: 1 x line in (mini-jack)
- Output: 1 x line out (mini-jack)

Connectivity

- 1 x Gigabit Ethernet
- IR for remote control
- 2 x USB (future use)

Other

- 1 x Power Input



Cisco TelePresence TX9000

TX9000 Glance

New Immersive Benchmark

Award Winning Video Products

- Native 1080p TelePresence
- Native 1080p/60fps Cameras
- 65" Native 1080p Plasmas
- 3 x 2-Seat Table Segments (6 people)

Cisco TelePresence Experience

- Full Size, Life Like
- Spatial Audio
- Auto Collaborate for Data Video Sharing
- One Button to Push for Scheduled Meetings
- Audio Add-in



Cisco TelePresence TX9200

TX9200 Glance

Multi-Row room design

- Same front row as TX9000 (6 people)
- Extra 2nd row table (12 people)
- Room for “spectators” along back wall
- No raised seating

Designed to fit in large rooms

- Additional data display required for back row viewing
- 10’ ceiling height for optional data display
- Acoustic Wall Panels will be needed

Full “TelePresence Experience”

- Inherited all features from the TX9000
- All participants in the room have a full “seat at the table”
- Spatial audio microphone at each seat, tuned 1080p video



Profile with the C Series



- Teams collaborate as if they are in the same room
- True-to-life, unmatched 1080p quality
- Colleagues connect at the touch of a button and share multimedia

Performance

- Unmatched 1080p High Definition Video
- Sleek Scandinavian design is not just attractive, it places the camera and display at the ideal height for eye contact
- Choice of 1080p LCD display: 65" Dual, 65", 52" dual, 52" or 42"
- Choice of base configuration: Foot Stand, Wheel Base or Wall Mount
- HD Collaboration with full 1080p HD with superior motion handling
- High bandwidth IP: SIP/H.323 up to 6 Mbps (10 Mbps MultisiteTM* & Multiway)
- Support for Total Solution: Expressway, FindMe, IPv6, etc.

Profile Series

Large Rooms and Collaborative Space



Small Rooms



Medium Rooms



Cisco TelePresence MX300

Value line of plug & play team solutions expanded

Key information

- Fully-integrated room system with Cisco touch, brilliant 1080p HD video and collaboration on a **55" display**
- Easy to install with auto-provisioning and self-configuration
- Low price for performance
- Cisco TelePresence Touch 8
- Two mounting options (floor stand or wall mount)
- Integrated microphone and ships with 2 external microphones

Customer benefits

- Extend TelePresence to all team meeting rooms for basic face-to-face meetings
- Out of the box and on video in 15 minutes
- Rapid global service network that is unmatched
- Consistent, natural meeting experience



MX300

MX200

MX300 has the same plug & play simplicity; and now includes:

- 55" display (42" for MX200)
- Ships with a second table-top microphone
- Enhanced audio system

MX200 Extended Height Cart

Key features

- Custom mounting hardware for MX200 ensures stability, differentiation
- Gas assist lift cylinder for easy end user height adjustment
- Egress holes in column simplify cable management
- Lockable storage shelf secures touch interface, mic, XGA cable
- Heavy duty premium casters with rear locking mechanism

Customer benefits

- All the benefits of MX200, now in a mobile form factor
- Adjustable height ensures students in back of classroom can participate
- Ideal for price sensitive opportunities where mobility is required





EX90
Revolutionary Personal Telepresence

EX Series



- EX90 and EX60 are personal desktop products
- LCD Screen – Single 25" and 20.5"
- Codec – built-in.
- EX90 has options for Dual Display and MultiSite. Also has an extra HDMI input

INFRASTRUCTURE SOLUTIONS

Jabber Video™



Sleek, Modern Full Screen Video

Resizable window

Business Quality HD video (720p 30 frames per second), Superb Audio

Also the PC Video Industry's best audio (AAC-LD MPEG4 G.722.1 / G.711,) CD Quality audio – 20khz wideband Acoustic echo cancellation

Designed for real-world performance

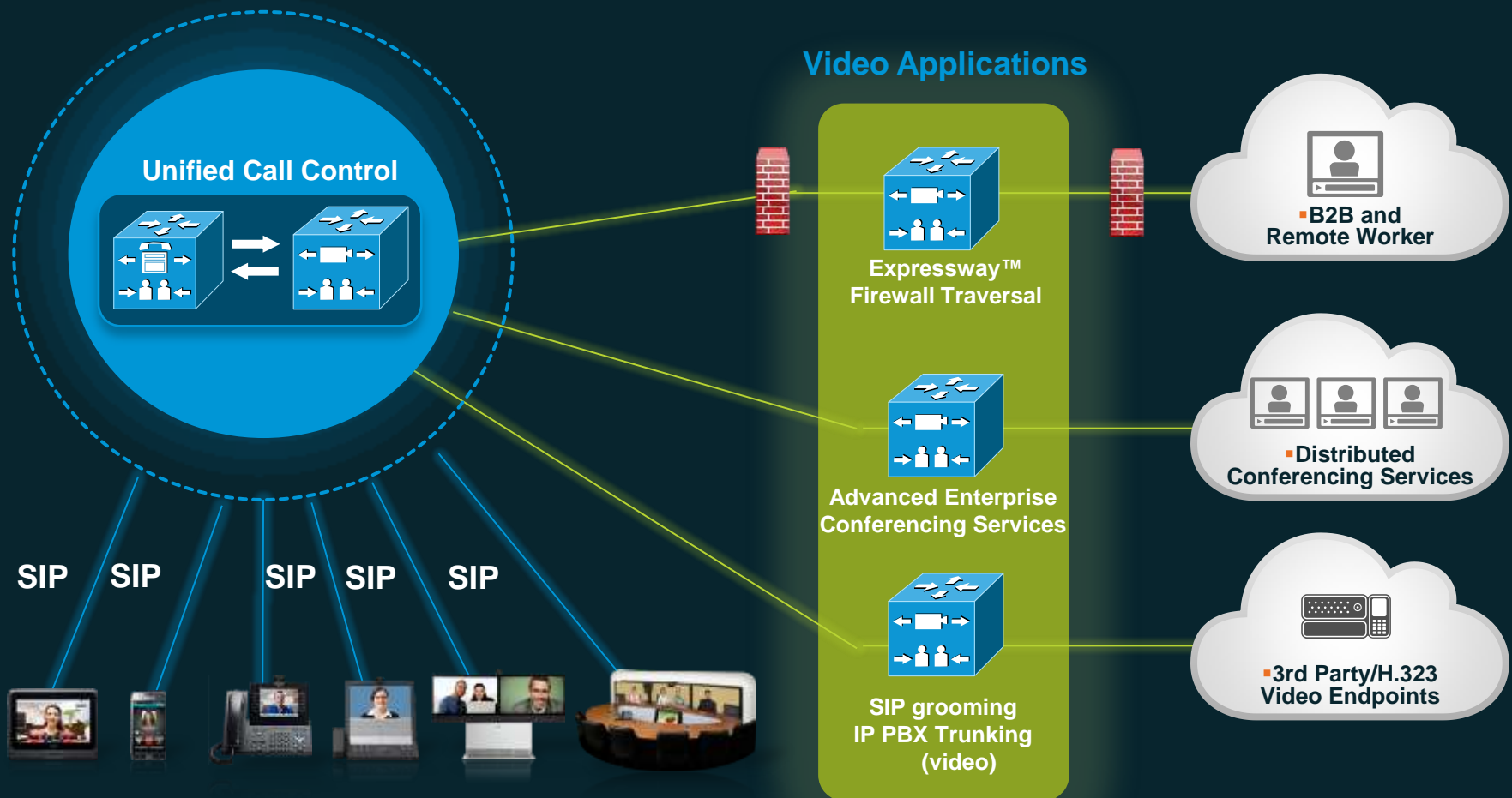
Flexible and adaptive to changing network conditions with functionality from 128k up to 2MB

Intuitive user interface

Learn easily and quickly

...Now the Standard for Video

Unified Call Control and Session Management for Voice *and* Video



VCS Control Application

Control Base Application Features



Control Base Package

- H.323 gatekeeper
- SIP controller (proxy registrar)
- Deployed inside the LAN
- Internal video network control and administration
 - **SIP:H.323 Interworking (transparent dialing/gateway)**
 - Includes Encryption and Dual Video
 - Includes call hold, forward and transfer (SIP REFER/Replaces), (H.323 facility message)
 - **Endpoint and Network Infrastructure Registration control**
 - **IPv4 to IPv6 Interworking (gateway)**
 - **Bandwidth control**

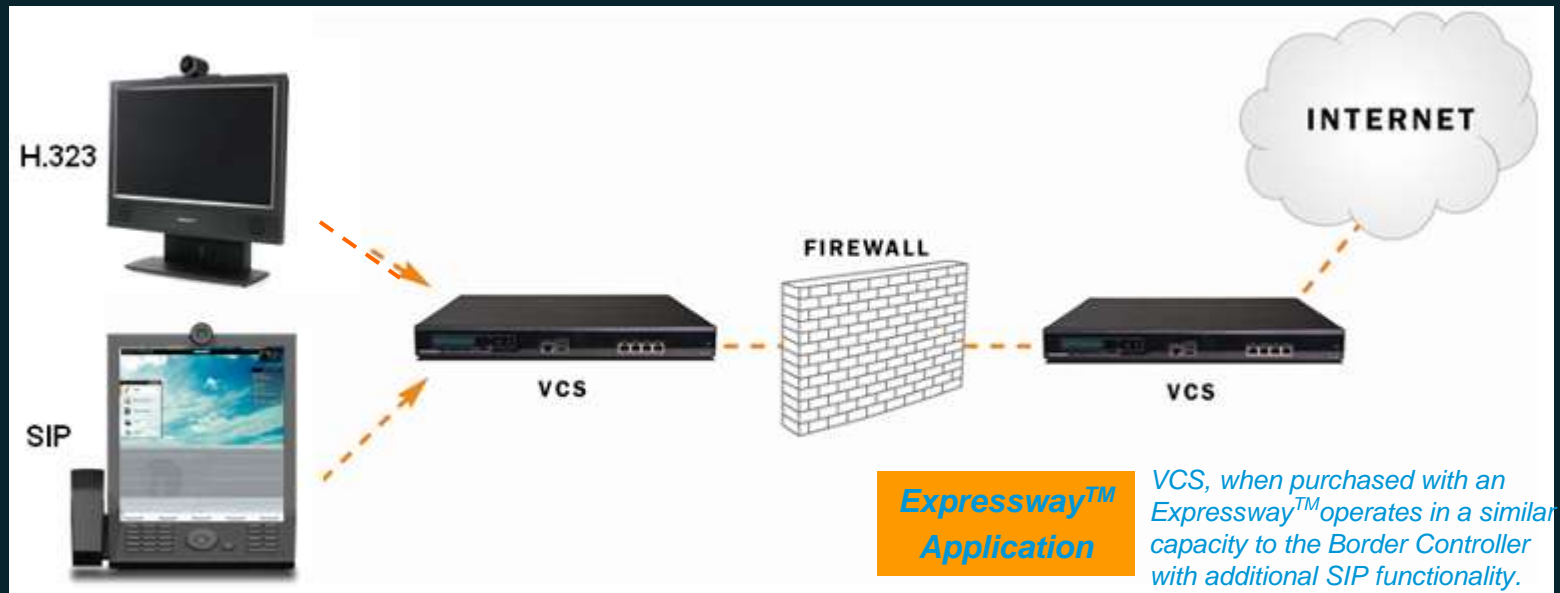


VCS Expressway™ Application



Expressway™ Base Application Features

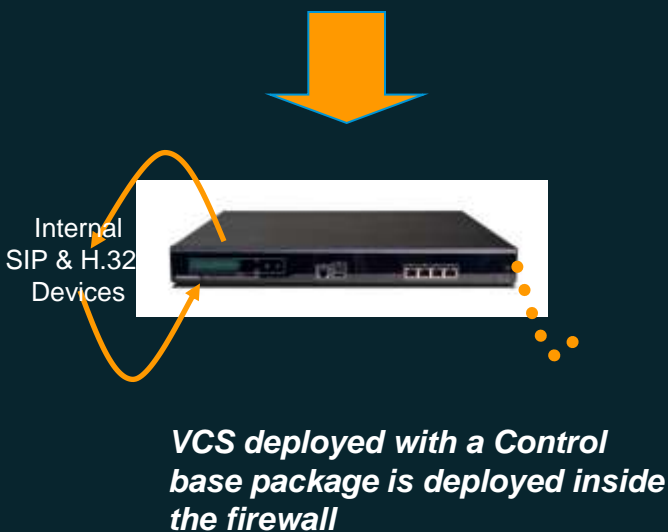
- H.323 and SIP Firewall Traversal
 - Expressway™, the same standards based Firewall Traversal capabilities in existing TANDBERG Border Controller.
 - H.323: ITU Standard H.460.18 & 19 and Assent
 - SIP: IETF Standard STUN Relay & Discovery



Video Communication Server

Two base application packages and the FindMe™ option...

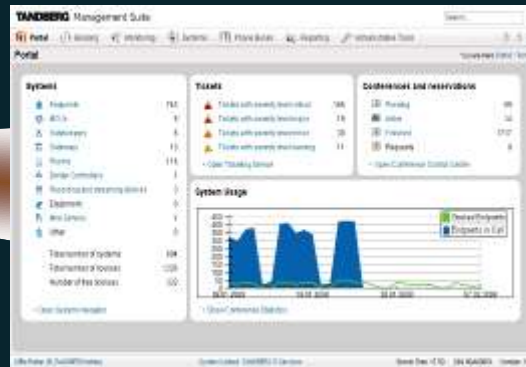
Control	FindMe™	Expressway™
SIP and H.323 Network Control and Administration <i>Base Package</i>	Call the Person not the Device <i>Option</i>	SIP and H.323 Network Firewall Traversal <i>Base Package</i>



Telepresence Management Suite

What is Telepresence Management Suite?

- **Systems management**
 - Multi-vendor endpoints
 - Infrastructure gear



- **Diagnostics, monitoring, notification & reporting**



- **Phone book management**

- **Multiple scheduling options**
 - Exchange (Outlook)
 - Domino (Notes)
 - Scheduler
 - XML API



Multipoint Control Unit Solutions

MCU Series

MCU 4500 Series

12,20,30,40 full HD (1080p)



MCU 4501

***6 full HD (1080p),
12 SD (480p)***



MCU 4200 Series

***6,12,20,30,40 Standard
Definition (480p)***



MSE 8000 Series

***Chassis - up to 720 ports of MCU.
Recording and Gateway Blades
available***



• [MCU update](#)

Cisco TelePresence MCU5300 Series

Invest in Conferencing

Key features

- Industry first hardware expandable appliance MCU in the market with new stacking capability
- Builds on Cisco's unrivalled heritage for investment protection and quality with its world leading range of MCUs
- Comprehensive conferencing capabilities, same core features as market leading MCU MSE 8510
- Field upgradeable via stacking and licensing
- Flexible licensing model, 360p through to 1080p
- Supports up to 40 720p30 when stacked

Customer benefits

- Protects customers' investment with unique field expandable capabilities
- Provides an entry-level appliance that can grow as TelePresence usage accelerates
- Entry point CUCM ad-hoc conferencing



Universal Encoding™

“The best experience possible
for every participant”

- Independent Port for Each User
- Constant Port Count
- Clearest images and audio
- Optimal layout of multiple images
- Smoothest motion
- Least delay



Universal Port™ Technology

Telepresence Streaming & Recording Products

TelePresence Content Server

The Content Server is a network device that enables organizations to easily create business-quality video and multimedia presentations for anytime, on-demand access



Telepresence Content Server

- Centralized network device built on Windows 2003 server
- Create content from any H.323 and SIP video device
- View content with leading formats for consistent look and feel



- Open API for easy integration with existing portals: Microsoft SharePoint, Blackboard, IBM WebSphere, Accordent, Content Delivery Networks
- Store content internally or add external storage
- Reach hundreds or thousands of viewers with external streaming services
- Download content for playback in Microsoft's Zune™, Apple's iPod™ and Windows Media-based portable media players
- Post content to iTunesU and leading collaboration portals

