

TOMORROW starts here.



Cisco *live!*

Implementing Video Scheduling and WebEx Enabled TelePresence

BRKEVT-2664

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WebEx Enabled TelePresence

Agenda

Welcome

- Solution Overview

Why?

- Integration key to any-to-any video solution

What?

- Detailed Architecture – scheduling and user experience

How?

- Configuration and deployment.

Q&A

- Interactive discussion

TelePresence and WebEx Working Together

Cisco TelePresence



- Live, face-to-face communication experience over the network
- Share content
- Personal, desktop, multipurpose, integrated, and immersive endpoints

Cisco WebEx



- Meet anytime, anywhere, in real time
- Deliver presentations, show documents, and demonstrate applications
- Pass meeting control or control a remote desktop

Cisco TelePresence WebEx Integration

- Integrate Cisco TelePresence and Cisco WebEx into one solution
- Attend meetings using the most accessible collaboration technology
- Improve user experience and productivity
- OBTP TelePresence and WebEx
- Simplified scheduling



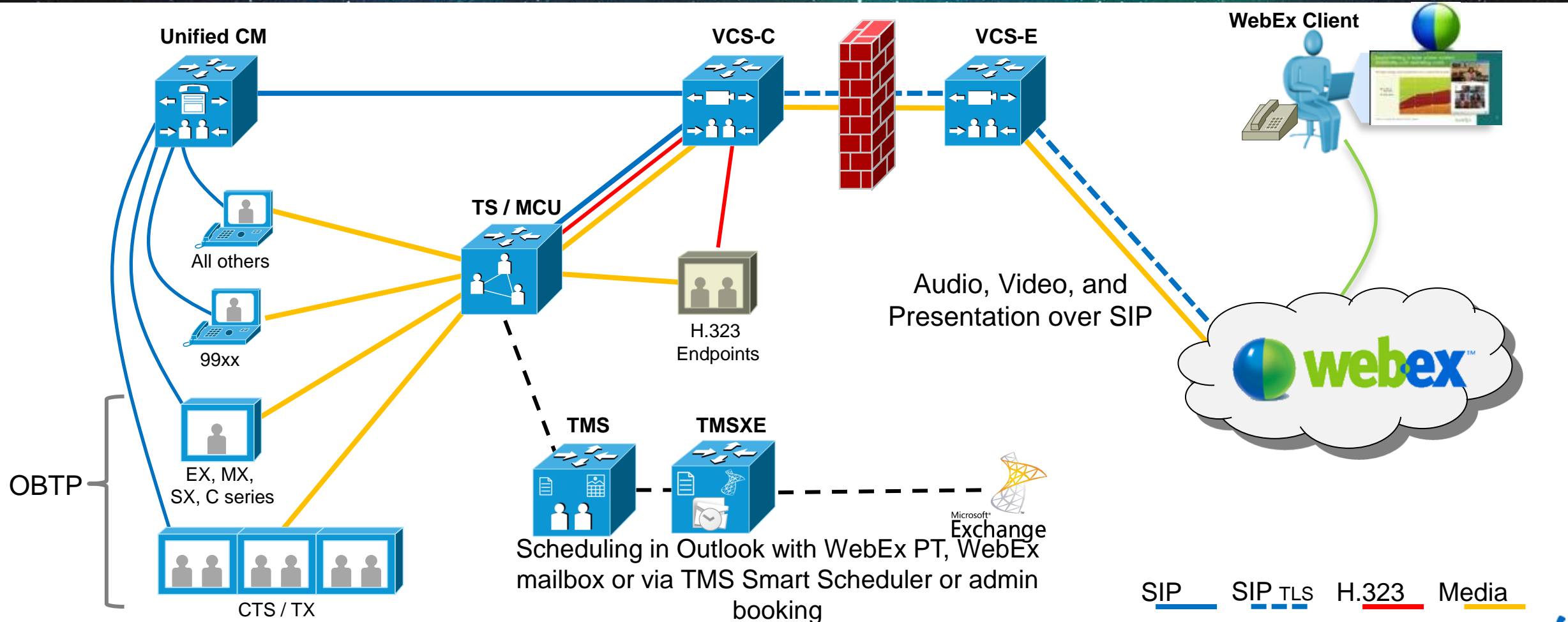
Cisco TelePresence Enabled WebEx

Main Features

- Two way video & audio with TelePresence Server (TS) or TelePresence MCU for conferencing
- Easy scheduling with TMS and Cisco Outlook Productivity Tool (PT)
- Any TelePresence endpoint registered to CUCM or VCS
- One Button to Push/*?* to join TelePresence with WebEx
- Two way data content sharing
- Audio via SIP/IP, or PSTN audio including third party TSP Audio providers
- WebEx Meeting Centre and mobile clients
- VCS Expressway to WebEx Cloud

WebEx Enabled TelePresence

Solution overview



Updates & Current Positioning

- WebEx in the Cloud (not on premise)
- Meeting Centre and TelePresence scheduled meetings (no adhoc)
- MCU or TP Server required
- WebEx Audio or Certified Telephony Service Provider only
- 4 Scheduling Options
- US/EU Interconnect

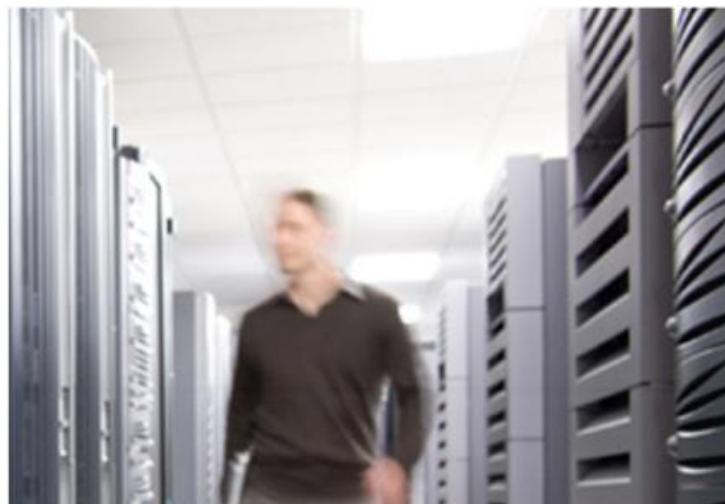
Solution Pricing

- No additional charge for WebEx and TelePresence working together
- Standard WebEx host licensing required. Customer must order a zero dollar SKU for provisioning
- TMS WebEx scheduling Feature License Key also required, zero dollar cost
- Standard VCS Expressway Traversal Licensing, one traversal per concurrent TelePresence with WebEx meeting
- For Microsoft Exchange & Outlook scheduling, standard TMS Extension for Microsoft Exchange (TMSXE) 3.0 or higher for number of endpoints with Exchange Mailboxes to be scheduled
- Productivity Tool (PT) is free of charge, available from customer's WebEx site
- A2Q – Assessment 2 Quality process will be required



Solution Components

Product	Product model	Min. Software version
WebEx	Meeting Centre	T28.10 T28 Lockdown T29
CUCM	CUCM	8.6.2 or 9.0
VCS	VCS-C, VCS-E	X7.2.2
TMS TMS Extensions for Exchange TMS Provisioning Engine	TMS TMSXE TMSPE	TMS 14.3 TMSXE 3.1 TMSPE 1.1
TelePresence MCU	8510, 8420*, 5300 series, 4500 series, 4501, & 4200 series*	4.4
TelePresence Server	8710, 7010	3.0 or higher 3.1 for TSP
TelePresence Endpoints	Any supported by MCU or TS	All (focused testing**)
WebEx Outlook Productivity Tool plugin	PT for TelePresence	From WebEx site
WebEx Mobile Clients <small>* SD Only</small>	iPad & iPhone (iOS) or Android	WebEx Client 5.0 for iOS or Android
<small>** TX, CTS, EX, SX, MX, C, 8900, 9900, Jabber</small>		



Scheduling and User Experience

Scheduling and User Experience

Scheduling Options

Synchronous

Outlook with Exchange using [WebEx Productivity Tool](#) plug-in, Windows only initially

Asynchronous

TMS new Web [Smart Scheduler](#)

[WebEx Scheduling Mailbox](#); Any mail client sending invite via Microsoft Exchange with TelePresence rooms and the Scheduling mailbox to include WebEx

TMS [Admin Booking](#) Interface available to any user with TMS account (mostly for help desk)

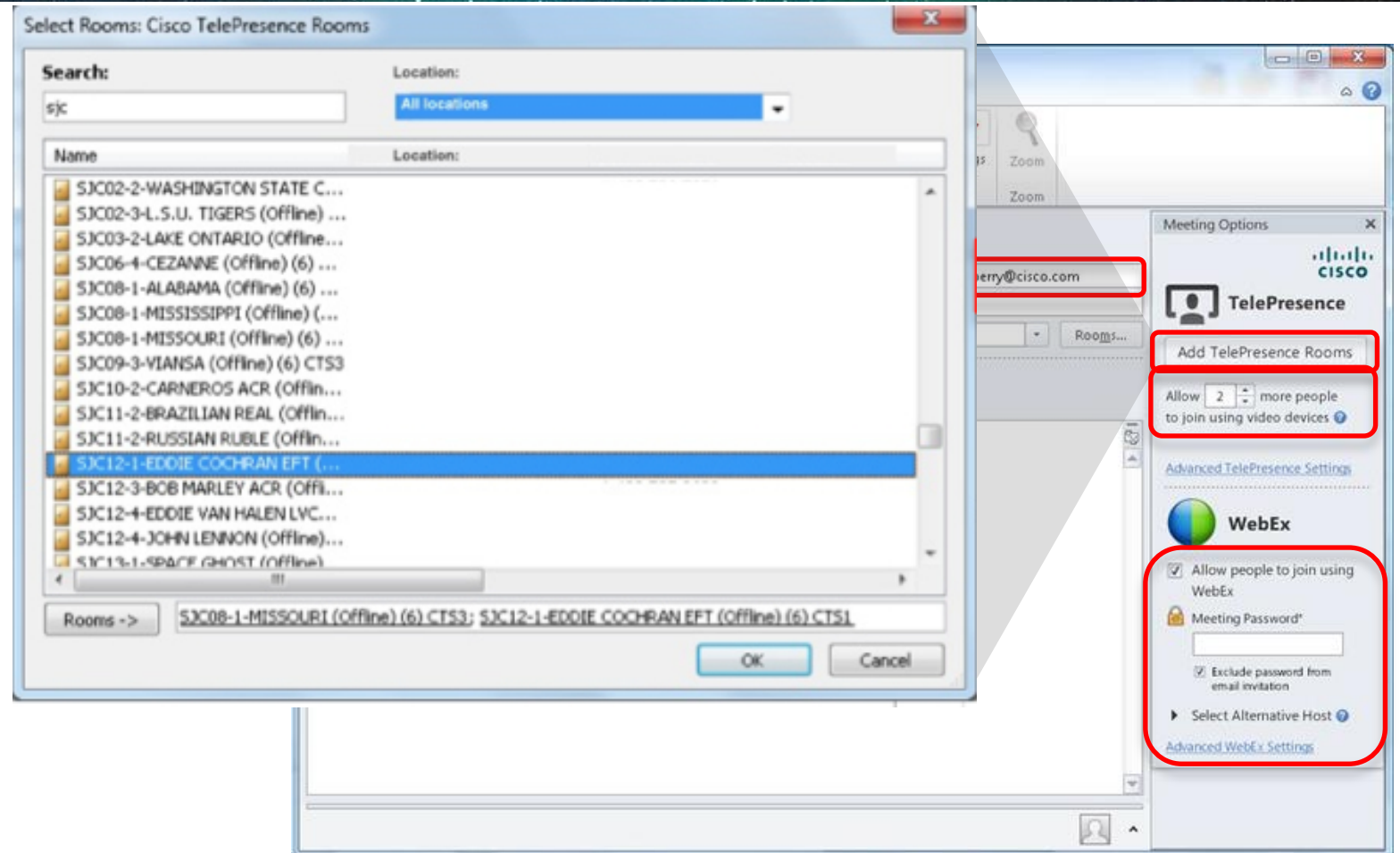
TMS Booking API available for developers who wish to integrate with WebEx Enabled TelePresence

With asynchronous scheduling, only the organiser receives email with details, they then have to use ICS attachment to other participants

Scheduling and User Experience

WebEx Productivity Tool

- Add participants, rooms, subject and body in usual fashion
- The TelePresence Rooms finder makes adding rooms easy
- Include dial-in ports for people to join from Jabber or EX Series
- WebEx Select by default, option to change password or other options



Scheduling and User Experience

WebEx Productivity Tool

- Synchronous Scheduling with Productivity Tool
- One Outlook invite sent to all participants from TMS in plain text
- Changes to invite, change original invite, resend to all or forward to others
- WebEx meeting email optional, admin option
- Invite includes ICS attachment, not needed

2 attendees accepted, 0 tentatively accepted, 0 declined.

To...	Kevin McMenamy (kvinmm); Ron Lewis (ronlewis); Jo Ellen Wagner (jewagner); Prafull Navak (prafnava); SJC21-3-MACKINAW ALPHA 3200 (18);		
Subject:	WebEx and TelePresence working together		
Location:	SJC21-3-MACKINAW ALPHA 3200 (18); SJC21-3-PEARLFISH ALPHA 3000 (6)		
Start time:	Tue 4/9/2013	3:30 PM	<input type="checkbox"/> All day event
End time:	Tue 4/9/2013	4:00 PM	

Hey, let's get together to go over those sales reports guys and gals. We need to provide our report by early next week.

Go Team!

***** DO NOT DELETE OR CHANGE ANY OF THE TEXT BELOW THIS LINE *****

Kieron Quigley invites you to this meeting.

WebEx and TelePresence working together

Tue, Apr 9, 3:30 PM | 30 min

(UTC-06:00) Saskatchewan

JOIN USING WEBEX

Go to:

<https://otalpha.webex.com/otalpha/j.php?J=382205207&PW=NZWQwN2U2N2Vk>

Meeting password - 3267381

Meeting number - 382205207

JOIN USING TELEPRESENCE

Video address:

----- <sip:81125952@cisco.com>

LOCATIONS

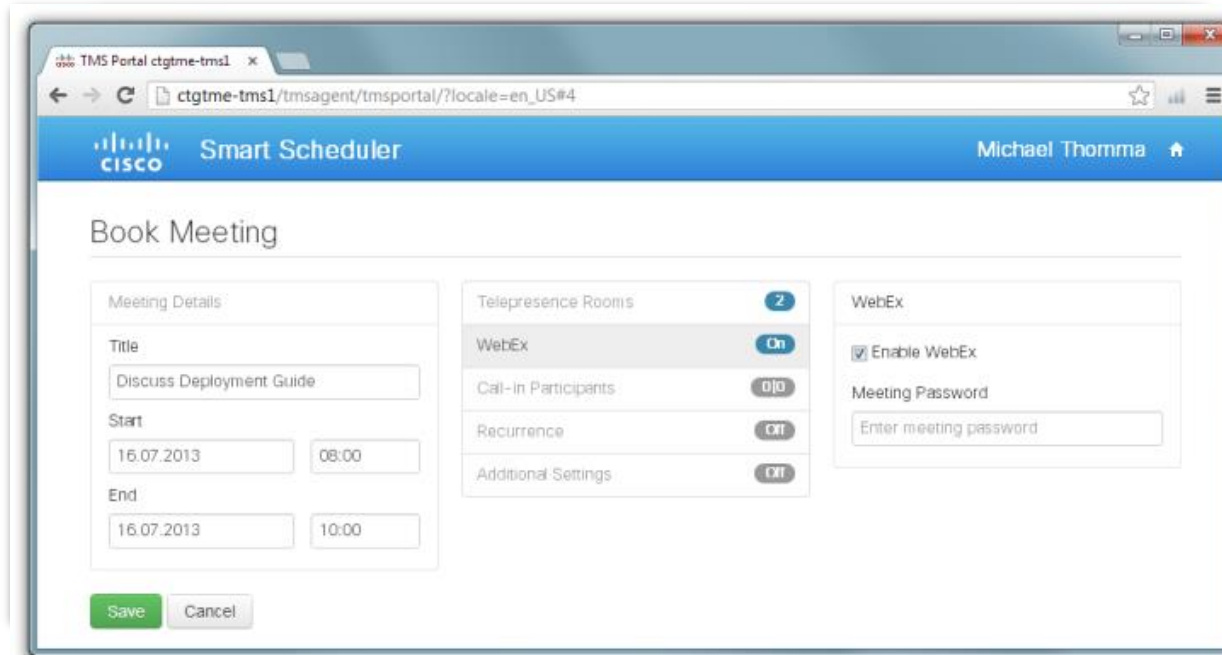
CTS9000-SJC21_3 Pearlfish_Conf_Room (89027985) (SEP1CDF0F770378)

CTS9200-SJC21_3 Mackinaw_Conf_Room (89027979) (SEP1CDF0F770274)

Scheduling and User Experience

TMS Smart Scheduler

- New tool replacing the existing TMS Web scheduler
- Browser based, tested on PC and Mobile devices including iPad or iPhone
- Part of TMS Provisioning Engine (TMSPE)



The screenshot displays the 'Book Meeting' interface in a web browser. The browser's address bar shows the URL 'ctgtme-tms1/tmsagent/tmsportal/?locale=en_US#4'. The page header includes the Cisco logo, the title 'Smart Scheduler', and the user name 'Michael Thomma'. The main content area is titled 'Book Meeting' and contains three columns of settings:

- Meeting Details:** Title: 'Discuss Deployment Guide'; Start: 16.07.2013 at 08:00; End: 16.07.2013 at 10:00.
- Telepresence Rooms:** WebEx: On; Call-in Participants: Off; Recurrence: Off; Additional Settings: Off.
- WebEx:** Enable WebEx; Meeting Password: Enter meeting password.

At the bottom of the form, there are 'Save' and 'Cancel' buttons.

Scheduling and User Experience

WebEx Scheduling Mailbox

- For any Email client connecting to Exchange, including Outlook for Mac, iPad or mobile phone clients, or Outlook Web Access
- WebEx Scheduling Mailbox is an Exchange Mailbox designated in TMSXE to add WebEx to any TelePresence Meeting
- To schedule, organiser creates invite with TelePresence rooms/resources and includes WebEx Scheduling Mailbox
- Can be any name (e.g., Add WebEx or Cisco). TMSXE keeps this mailbox empty, allowing overlapping scheduling
- A-synchronous scheduling, only the organiser receives email with details, has to cut/paste into invite for other participants

Scheduling and User Experience

WebEx Scheduling Mailbox

The screenshot displays the Outlook meeting invitation interface. At the top, there is a 'Meeting' tab with various action buttons: Send, Scheduling, Cancel, New E-mail, Reply All, Status (Busy), Reminder (15 Minutes), Recurrence, Time Zone, Request Responses, Check Names, Categorize, and Private. Below the toolbar, the meeting details are shown: From: Cisco (Exchange 2010) (Ron Lewis (ronlewis)), To: Kevin McMenamy, Chuck Churchill (cchurchi), webex-add-on-participant@cisco.com, SJC21-3-MACKINAW ALPHA 3200 (18), SJC21-3-PEARLFISH ALPHA 3000 (6), Subject: Scheduling Telepresence and Webex on a Mac, Location: SJC21-3-MACKINAW ALPHA 3200 (18); SJC21-3-PEARLFISH ALPHA 3000 (6), Starts: 4/ 8/2013 8:00 AM, All day event (unchecked), Ends: 4/ 8/2013 8:30 AM, Duration: 30 Minutes. A message at the bottom states 'This invitation has not been sent.' and there are buttons for 'Message' and 'Scheduling Assistant'.

Example invite from Outlook on Mac using scheduling mailbox method

Scheduling and User Experience

TMS Admin Booking

Basic Settings

Title: Customer Meeting
Type: One Button To Push
Owner: Thomma, Michael
Language: English (US)

Start Time: 9/17/2013 11:00 AM
End Time: 9/17/2013 2:55 PM
Duration: 3:55
Time Zone: (UTC-08:00) Pacific Time (US & Canada)
Recurrence: None

Include WebEx Conference
WebEx Meeting Password: _____

Advanced Settings

Picture Mode: Continuous Presence
IP Bandwidth: 2048 kbps
ISDN Bandwidth: 6b / 384 kbps
Secure: If Possible

Billing Code: _____
Password/PIN: _____
Extend Mode: Automatic Best Effort

Setup Buffer: 5 Minutes
Tear Down Buffer: 0 Minutes

ISDN Restrict

Participants | WebEx Details | Conference Information

Availability Tuesday, September 17, 2013

Name	01	02	03	04	05	06	07	08	09	10	11am	12pm	01	02	03	04	05	06	07	08	09	10	11pm
Cisco WebEx Meeting																							

Remove Add Participants... Refresh

Video Conference Master: Not available

Start time End time Available Busy No Information

Save Conference

Michael Thomma (ciscotme\mithomma) Server Time: 02:56 PM S/N: 80A99997 Version: 14.2.0alpha1

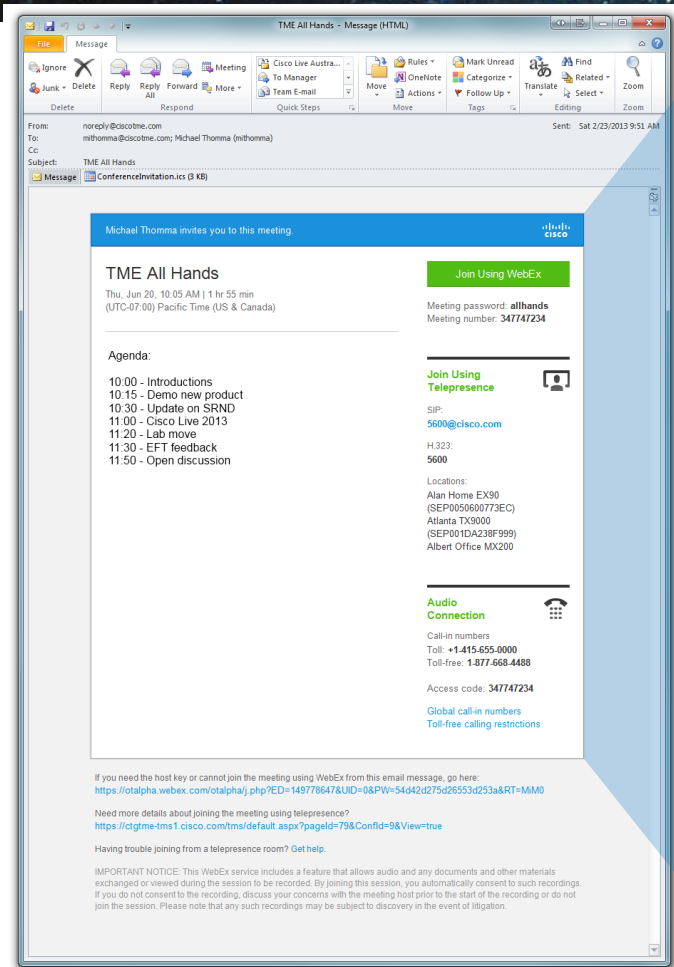
Scheduling and User Experience


TMS Booking API

```
<ExternalConference>
  <WebEx>
    <MeetingKey>string</MeetingKey>
    <SipUrl>string</SipUrl>
    <ElementsToExclude>None or MeetingPassword or HostKey or LocalCallInTollFreeNumber or GlobalCallInNumberUrl</ElementsToExclude>
    <MeetingPassword>string</MeetingPassword>
    <JoinMeetingUrl>string</JoinMeetingUrl>
    <HostMeetingUrl>string</HostMeetingUrl>
    <HostKey>string</HostKey>
    <JoinBeforeHostTime>string</JoinBeforeHostTime>
    <Telephony xsi:nil="true" />
    <TmsShouldUpdateMeeting>boolean</TmsShouldUpdateMeeting>
    <SiteUrl>string</SiteUrl>
    <UsePstn>boolean</UsePstn>
    <OwnedExternally>boolean</OwnedExternally>
    <Warnings xsi:nil="true" />
    <Errors xsi:nil="true" />
  </WebEx>
</ExternalConference>
```

Scheduling and User Experience

Confirmation Email



Michael Thomma invites you to this meeting. 

TME All Hands


Thu, Jun 20, 10:05 AM | 1 hr 55 min
(UTC-07:00) Pacific Time (US & Canada)

Agenda:

- 10:00 - Introductions
- 10:15 - Demo new product
- 10:30 - Update on SRND
- 11:00 - Cisco Live 2013
- 11:20 - Lab move
- 11:30 - EFT feedback
- 11:50 - Open discussion

Join Using WebEx


Meeting password: **allhands**
Meeting number: **347747234**

Join Using TelePresence 

SIP:
5600@cisco.com

H.323:
5600

Locations:
Alan Home EX90 (SEP0050600773EC)
Atlanta TX9000 (SEP001DA238F999)
Albert Office MX200

Audio Connection 

Call-in numbers
Toll: **+1-415-655-0000**
Toll-free: **1-877-668-4488**

Access code: **347747234**

[Global call-in numbers](#)
[Toll-free calling restrictions](#)

Click to join WebEx

WebEx meeting details

SIP and H.323 dial-in details for non-OBTP TelePresence endpoints

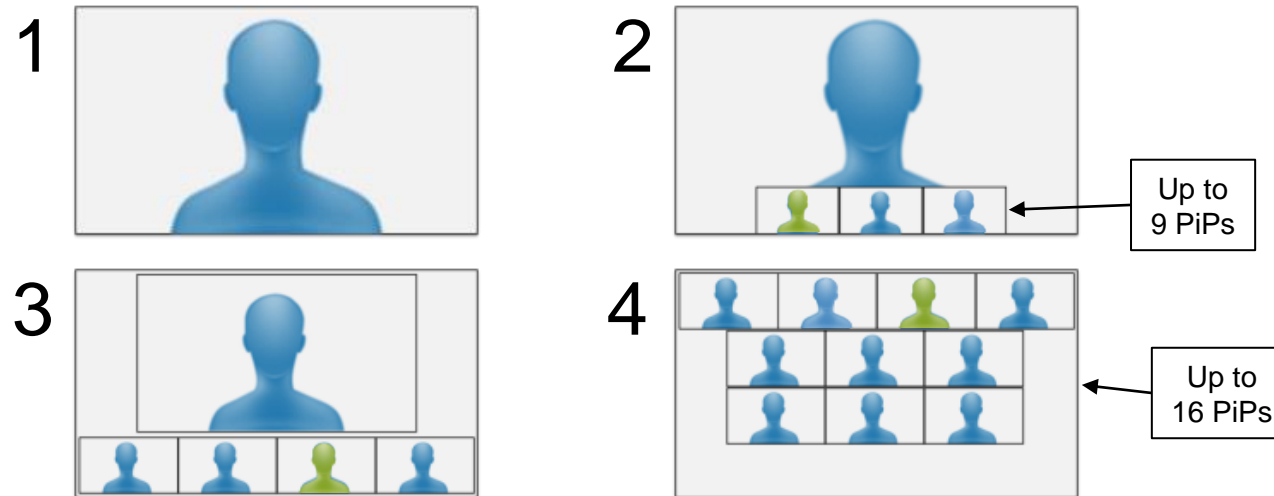
Scheduled TelePresence endpoints


Audio dial in details for WebEx

In Meeting User Experience

User experience with TelePresence Server

■ User experience with TelePresence Server



- One WebEx user visible at a time ()
- If WebEx user is active speaker they are shown in larger active speaker window (applies to layouts 1-3)
- The last speaking WebEx user is visible




TelePresence User's Perspective

Content from TP system or WebEx sent on separate channel via BFCP, TIP or H.239



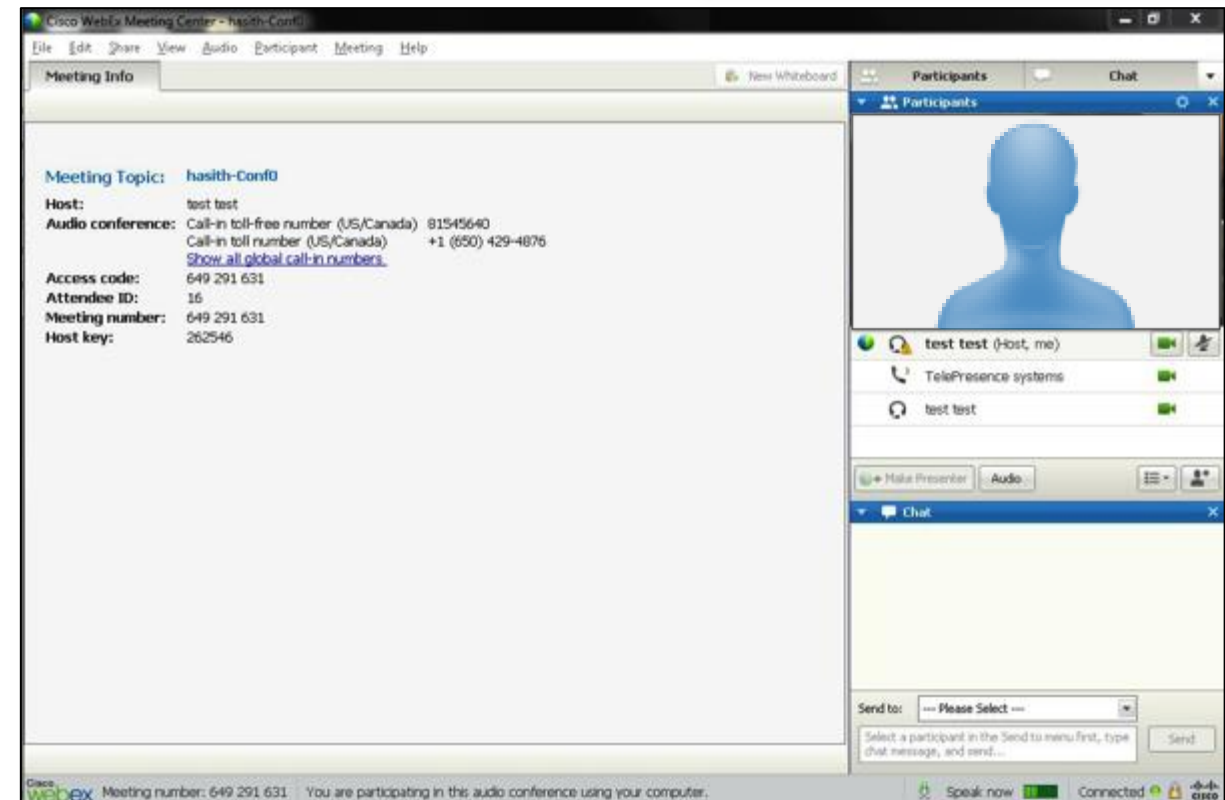
In Meeting User Experience

User experience with TelePresence Server

- Full-screen view of TelePresence endpoints seen (), when TelePresence endpoint is the active speaker
- Video of the active speaker from TelePresence Server:
 - Video: qCIF to 720p
 - Content: TS3.0 XGA to 720p
- Video resolution may downgrade to preserve best experience for all



WebEx User's Perspective



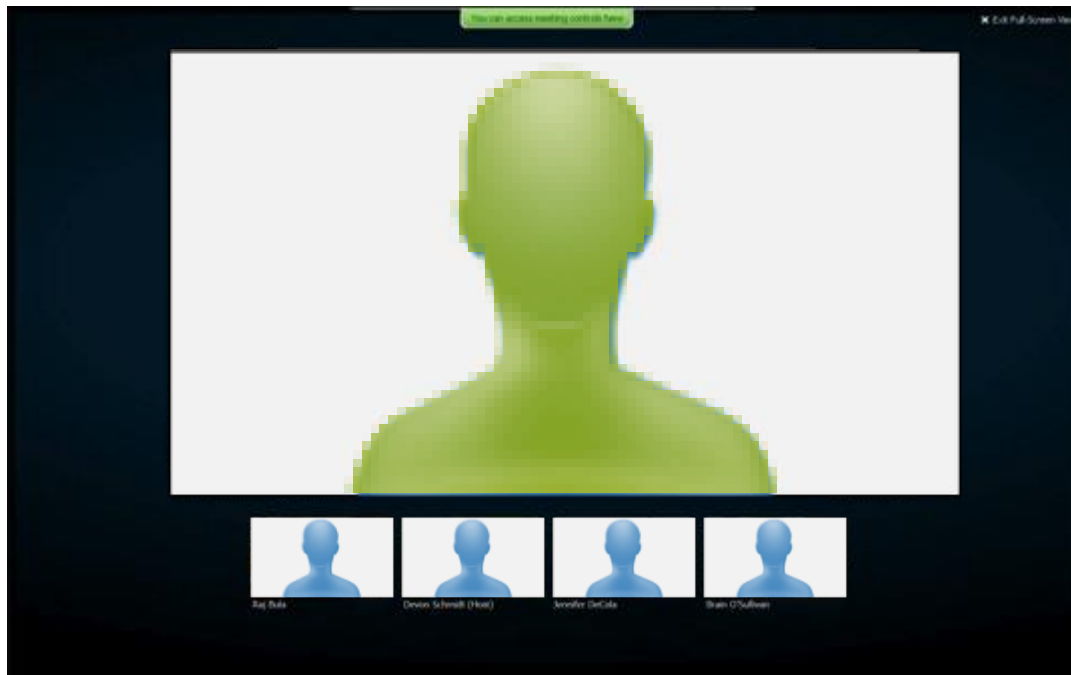
In Meeting User Experience

User experience with TelePresence Server

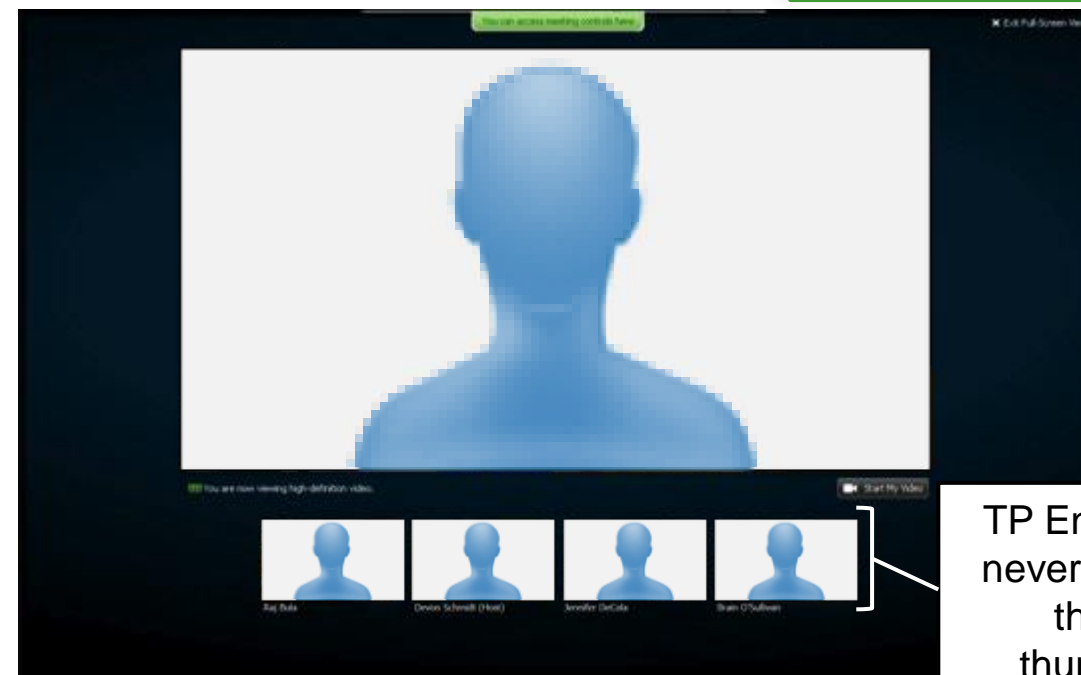
- WebEx Meeting Centre full screen “Theater View”



WebEx User's Perspective



When TelePresence endpoint is active speaker



When WebEx user is active speaker

In Meeting User Experience

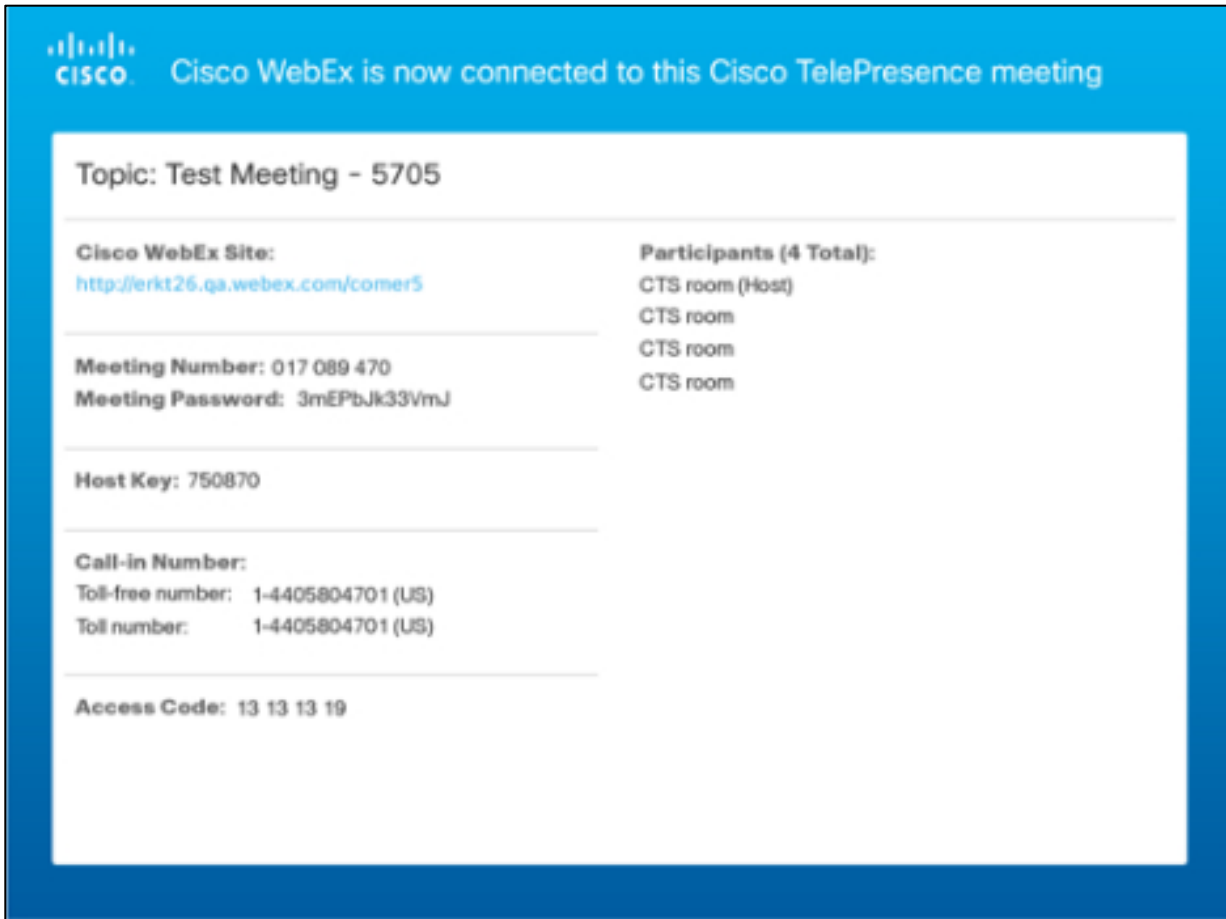
Data Sharing Experience

- Automatic content sharing between all WebEx and telepresence endpoints
- Sharing from WebEx supports the ball being grabbed by any WebEx user, or ball being passed by host (customer option)
- Host ID published in welcome screen allowing remote user to reclaim host role
- TelePresence user uses usual process to start data sharing, TelePresence endpoint automatically 'grabs' the ball to start presenting



In Meeting User Experience

Welcome screen for TelePresence endpoints



The screenshot shows a Cisco WebEx welcome screen with a blue header. The header contains the Cisco logo and the text "Cisco WebEx is now connected to this Cisco TelePresence meeting". Below the header, the screen displays the following information:

Topic: Test Meeting - 5705

Cisco WebEx Site:
<http://erkt26.qa.webex.com/comer5>

Meeting Number: 017 089 470
Meeting Password: 3mEPbJk33VmJ

Host Key: 750870

Call-in Number:
Toll-free number: 1-4405804701 (US)
Toll number: 1-4405804701 (US)

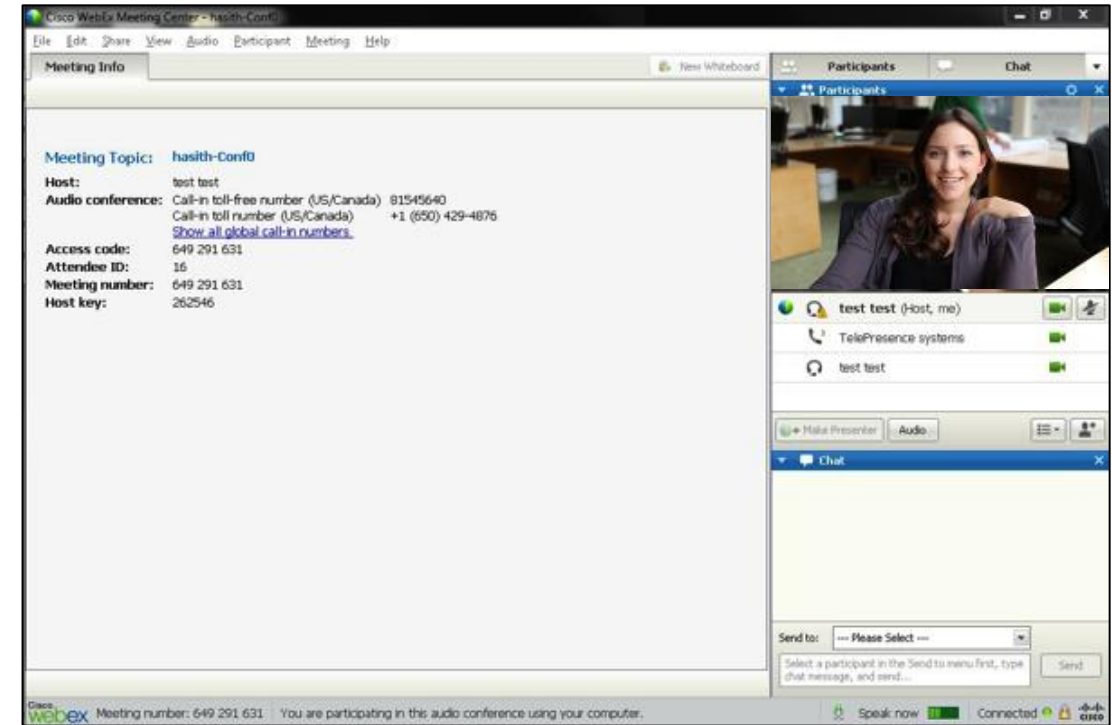
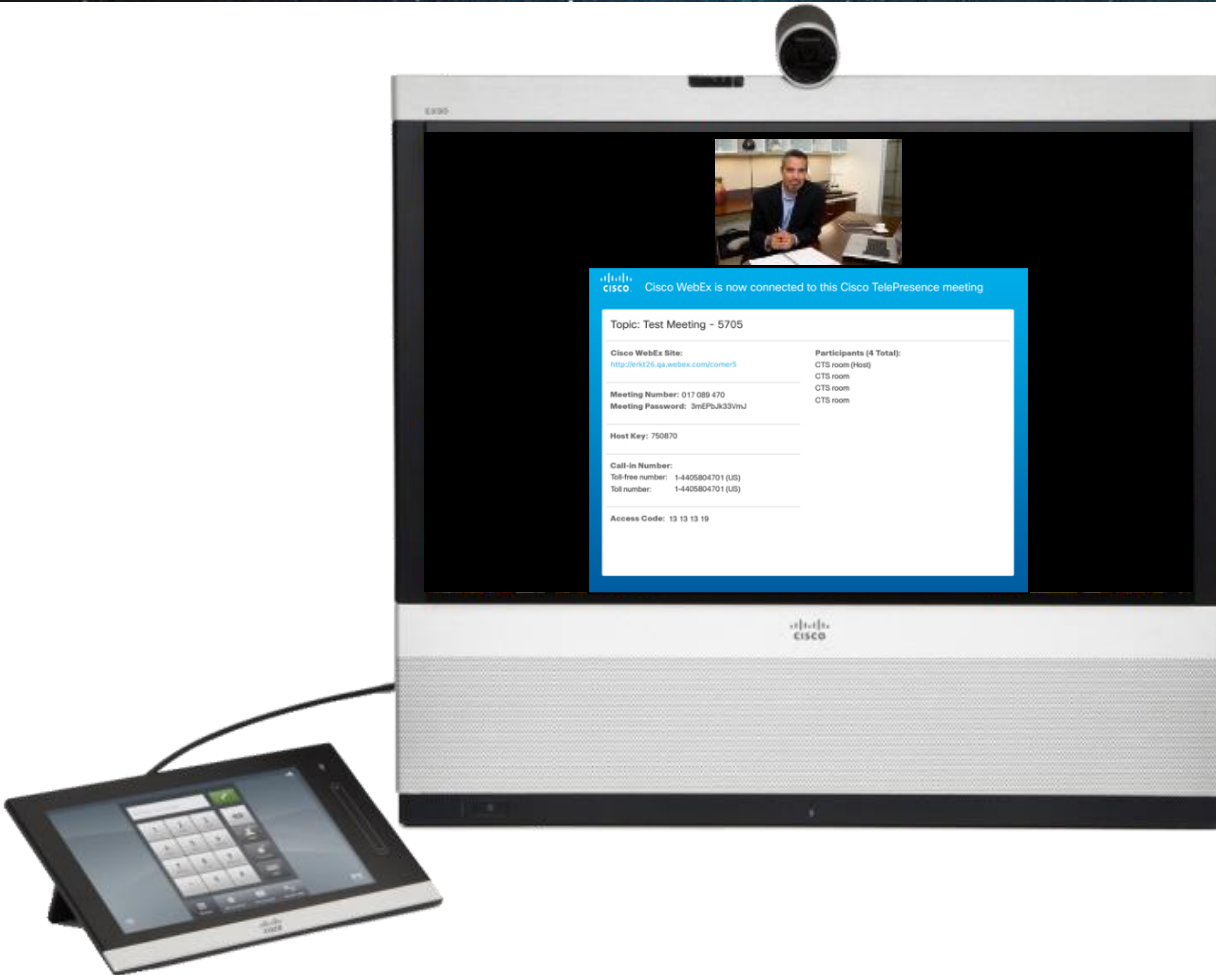
Access Code: 13 13 13 19

Participants (4 Total):
CTS room (Host)
CTS room
CTS room
CTS room

- The WebEx welcome screen is displayed on dedicated data-share monitor or as PiP for single screen
- Provides notification to TelePresence users that WebEx is connected
- Displays WebEx meeting info and WebEx participants list
- Admin option in T29 planned to disable welcome screen as content is maximised by default, creating non desired user experience for single screen endpoints

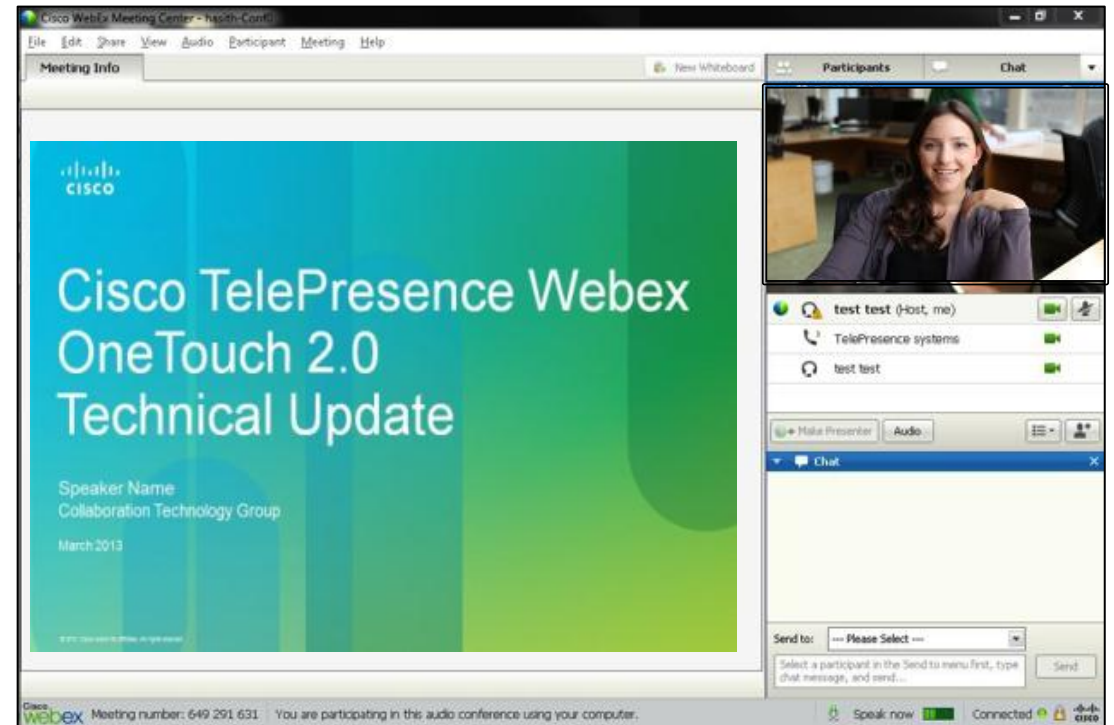
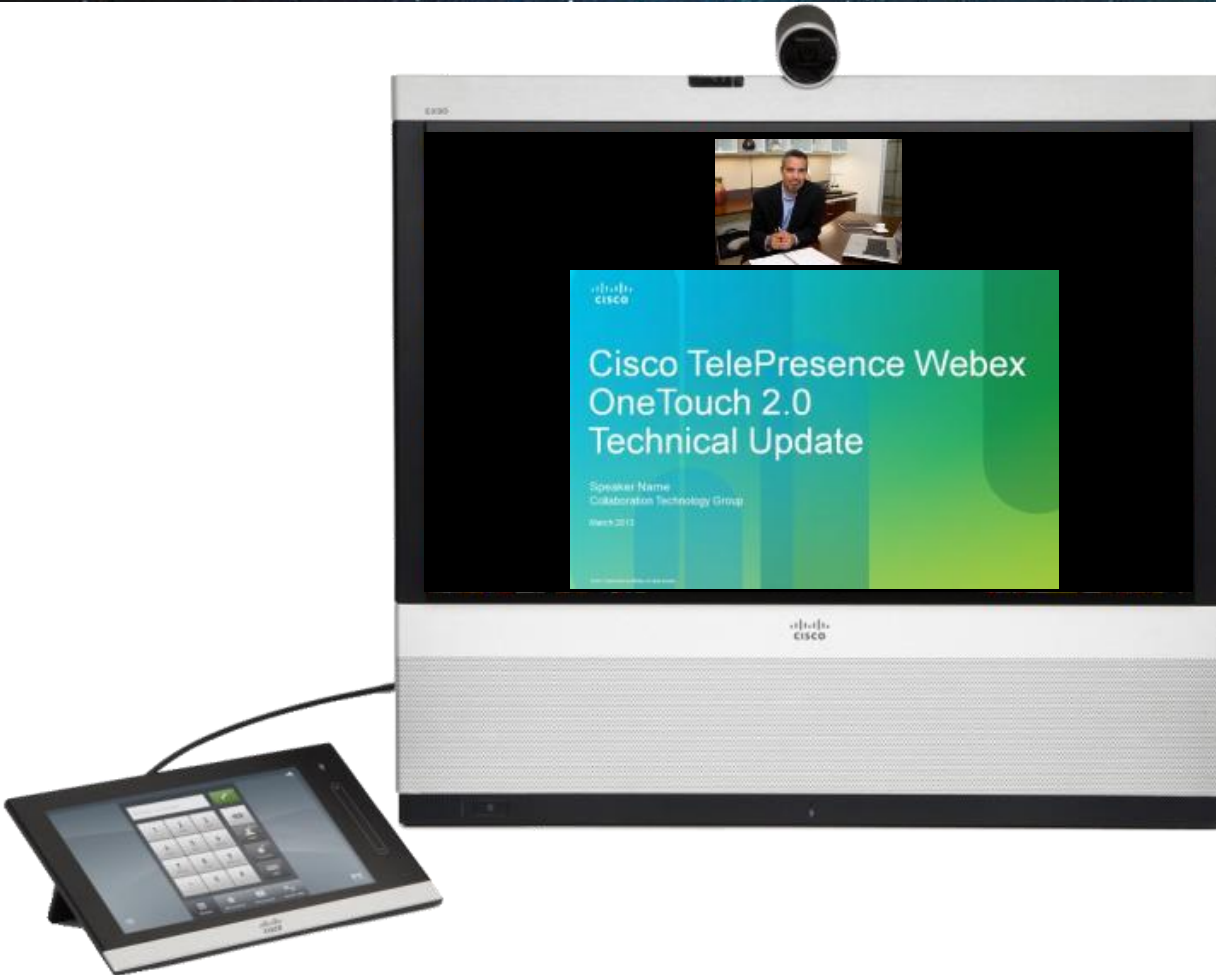
In Meeting User Experience

Without content being shared



In Meeting User Experience










With content sharing



Detailed Architecture

Endpoints

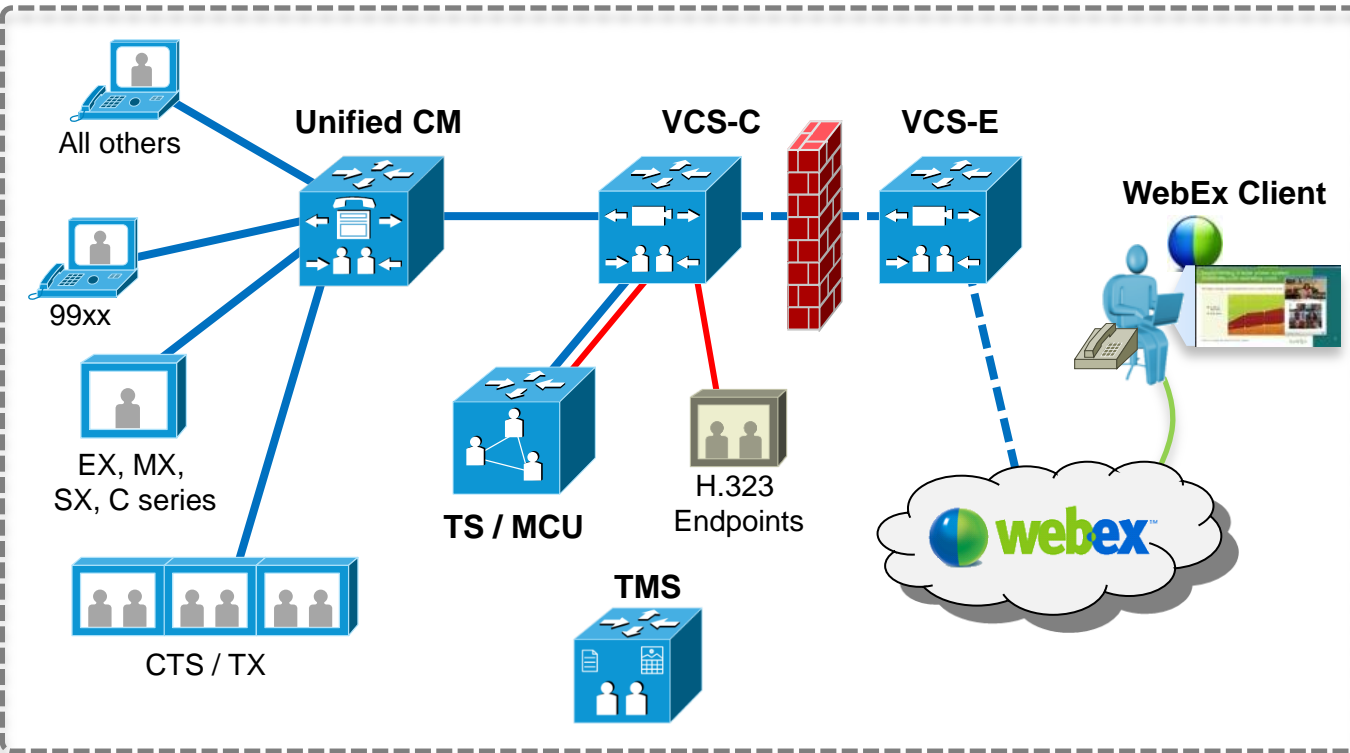
- Endpoints can be registered to CUCM or VCS

Endpoint Type	OBTP	Automatic Connect
CTS, TX Series		
EX/MX/SX/C Series registered to CUCM		
EX/MX/SX/C Series registered to VCS		
Jabber, MXP-Series, T-Series, or Third party		
WebEx Meeting Centre or Mobile Clients	Click to Launch	

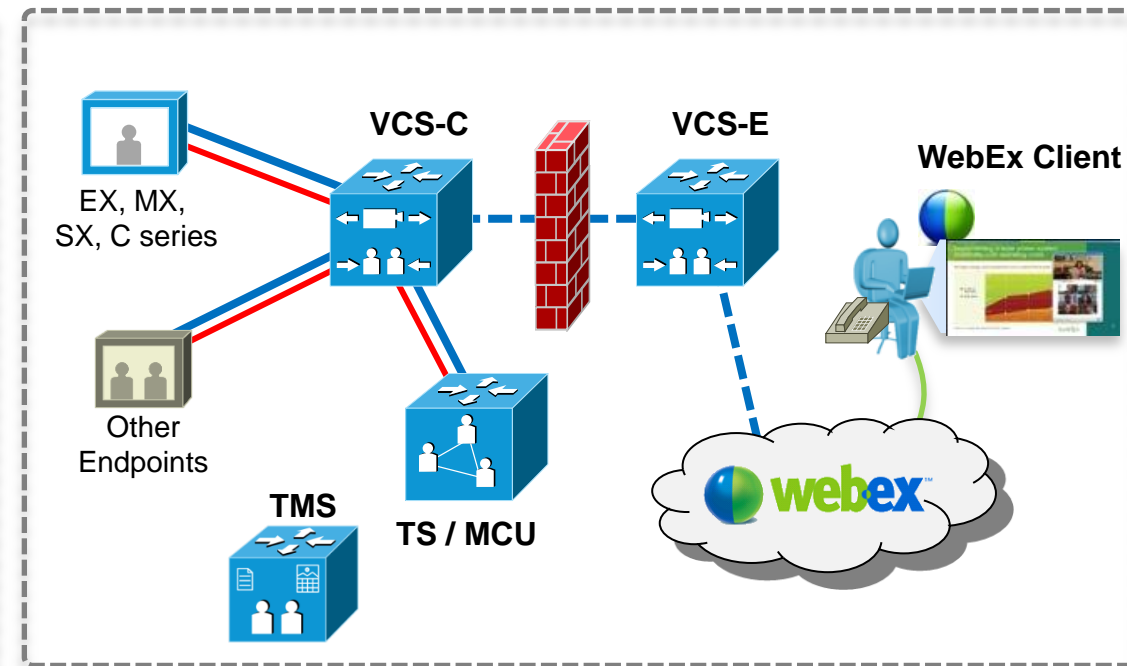
Detailed Architecture

Call Control

Preferred Architecture



Also supported with VCS only



SIP SIP_TLS H.323 Media

Cisco live!

Detailed Architecture

Audio Options

- WebEx Audio
 - WebEx provided audio bridges, small share of WebEx customers. Position WebEx Audio for a single vendor solution. Can be VoIP or PSTN Connection.
- Telephony Service Provider (TSP) Audio provided by Service Providers
 - Audio bridges provided by different SP's around the world including BT, Qwest, Intercall, etc. TSP is intelligent link between WebEx cloud and audio bridge providing advanced features.
 - Highest percentage of WebEx customers use this option.
- WebEx Cloud Connect Audio
 - New WebEx offering for large enterprise customer with SIP trunk between customer prem and WebEx audio data centre
- Third party audio (without TSP)
 - SP audio bridge services without TSP link, where WebEx and Audio are not linked during call, nor is callback service provided. **Not supported – do NOT position.**

Detailed Architecture

Audio options

- WebEx audio via VoIP (SIP based via Expressway) or PSTN where required by in-country rules
- TSP Audio with MCU 4.4 or TP Server 3.1
- TSP partners; Level 3, PGI, BT, InterCall, Verizon, Arkadin plan to test in Cisco lab for certification starting in Q2CY13
 - Status of TSP partners on IWE page
- If your customer's TSP not in list
 - During A2Q process get TSP involved
 - Get TSP partner to be certified in Cisco AST lab
 - Minor integration development required by TSP
 - Need 1 month to plan, develop and schedule test
- CCA audio is not yet supported

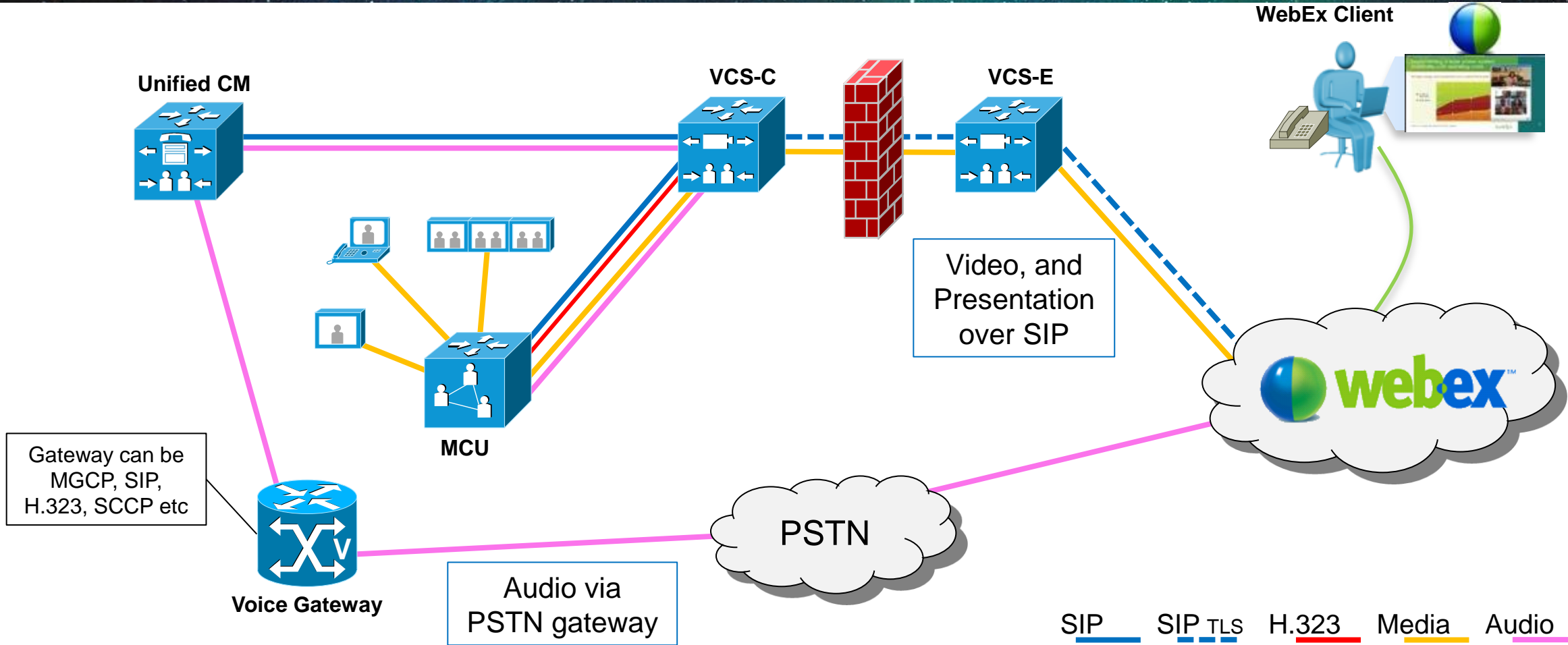
Detailed Architecture

Audio Options

- The TelePresence bridge always calls out to WebEx for video and audio. TMS tells the bridge when & what to dial.
- WebEx audio customers supported with TelePresence MCU and TelePresence Server with audio over SIP/IP via Expressway (WebEx mixes audio for PSTN call-in users).
- TelePresence MCU or TS will support TSP/PSTN optionally with this solution.
 - Two legs (ports) from TelePresence MCU/TS:
 - 1) Video & Content via SIP though Expressway
 - 2) Audio via PSTN Gateway.
- TSP audio support is planned for both CUCM (ISR with digital trunks using MGCP or SIP) or VCS (GW 3201 and MSE 8321) registered ISDN gateways.
- TSP Audio customers have to check with their Audio Service Provider for WebEx enabled TelePresence TSP feature capability.

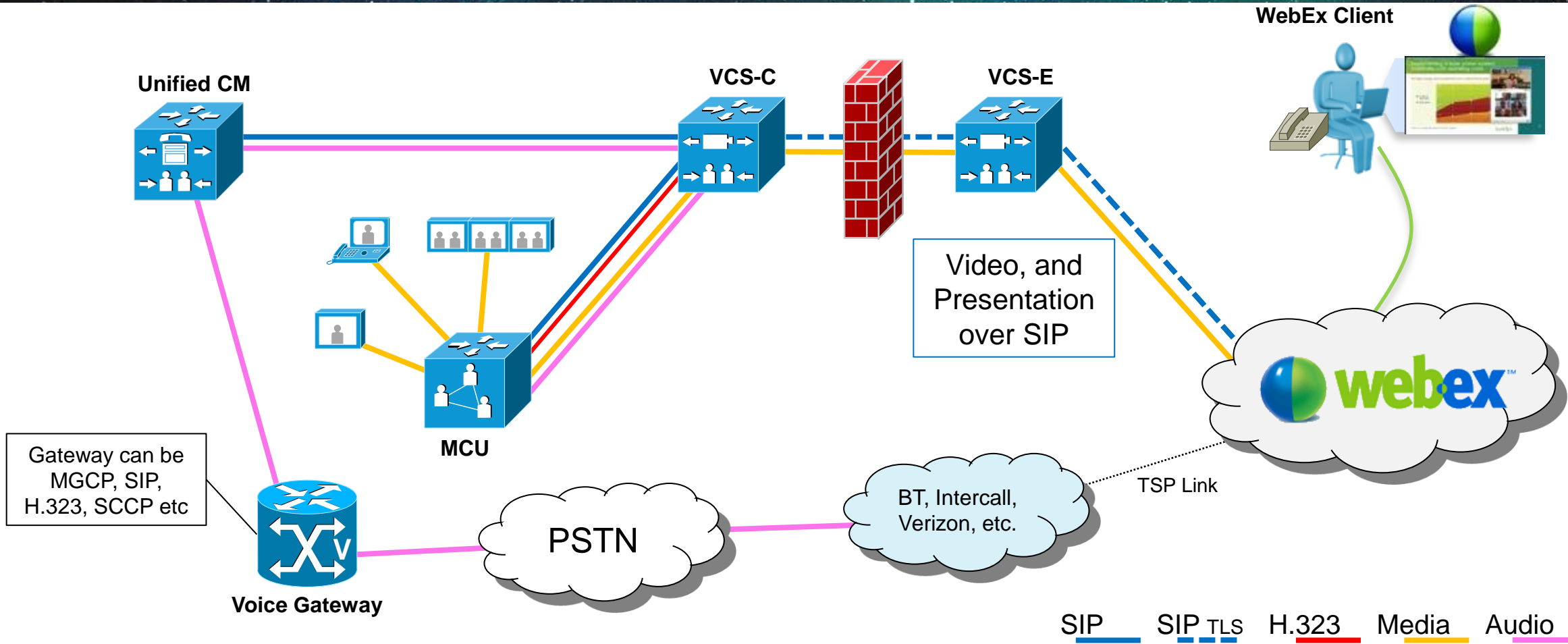
Detailed Architecture

Audio via PSTN



Detailed Architecture

TSP audio



Detailed Architecture

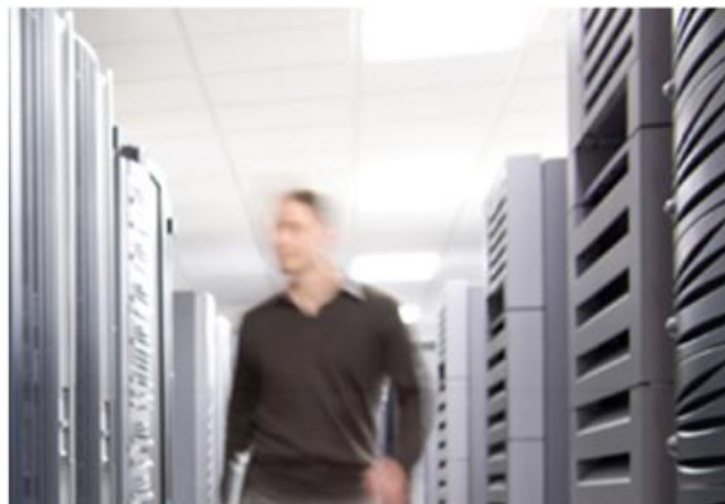
Audio solutions FAQs

- How to address MeetingPlace integration questions?
 - Our plans are to offer audio via the WebEx Meeting Server premise based offering in addition to WebEx or TSP audio. No plans for supporting TSP with the existing MeetingPlace products.
- Is WebEx Cloud Connect supported?
 - It is planned to support Cloud Connect customers with audio and video from customers site to WebEx
- What about WebEx node ASR?
 - WebEx node on ASR does not support WebEx enabled TelePresence meetings. WebEx node can still be used for WebEx only meetings.

Detailed Architecture

Audio solutions FAQs

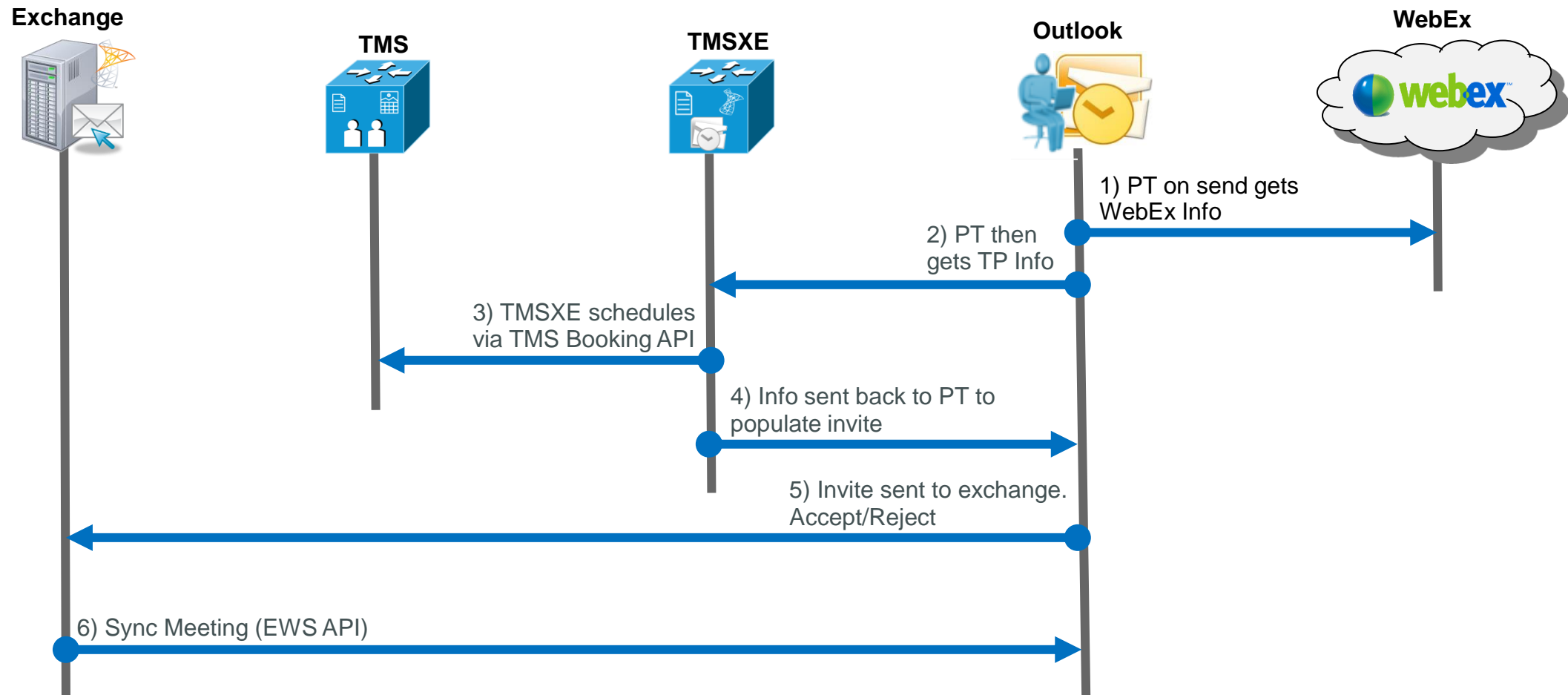
- How to address MeetingPlace integration questions?
 - Our plans are to offer audio via the WebEx Meeting Server premise based offering in addition to WebEx or TSP audio. No plans for supporting TSP with the existing MeetingPlace products. WebEx enabled TelePresence integration with WebEx on-premise product is planned.
- Is WebEx Cloud Connect supported?
 - It is planned to support Cloud Connect customers with audio and video from customers site to WebEx
- What about WebEx node ASR?
 - WebEx node on ASR does not support WebEx enabled TelePresence meetings. WebEx node can still be used for WebEx only meetings.



Behind the Scenes for Scheduling

Detailed Architecture

Scheduling – synchronous with productivity tool (PT)



Detailed Architecture

Scheduling – synchronous with productivity tool (PT)

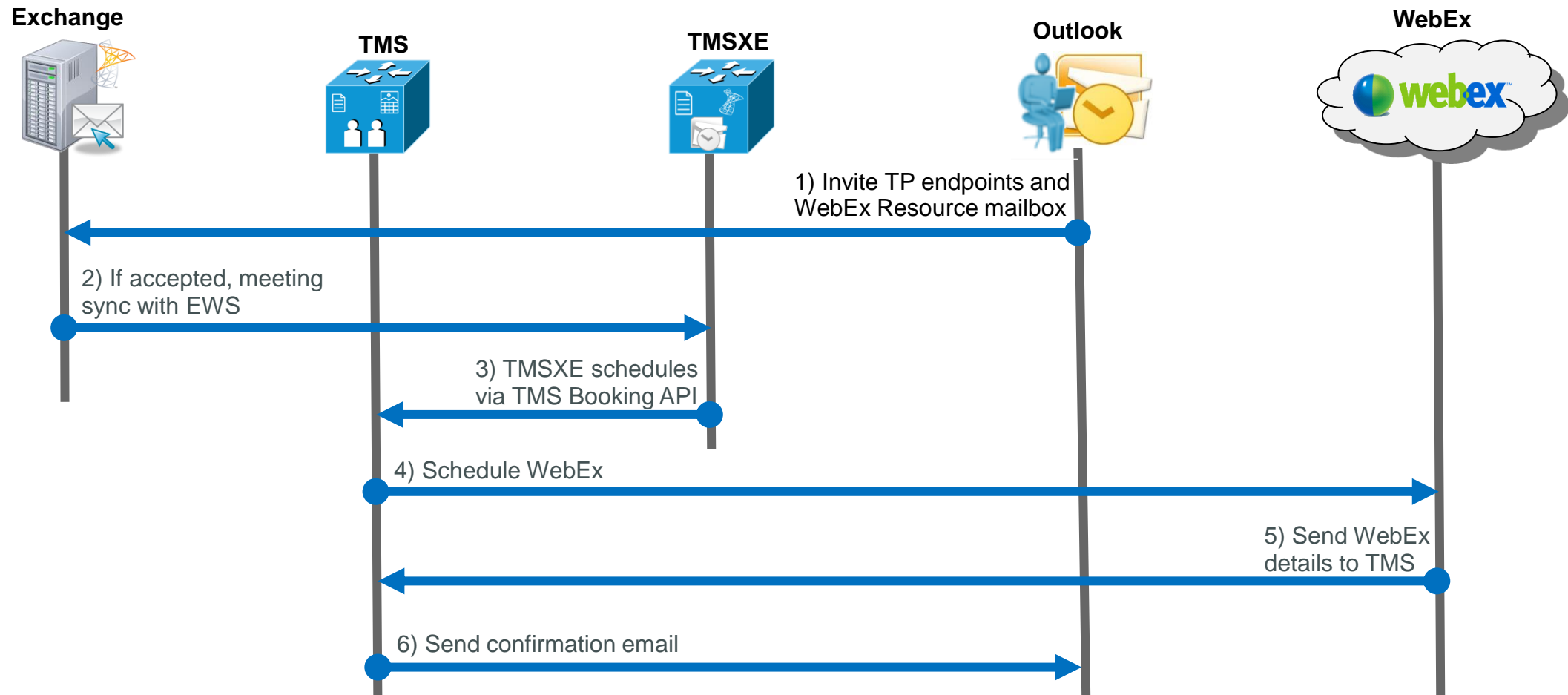
- On sending the invite, PT connects to WebEx first for scheduling WebEx meeting. PT then connects to TMSXE for TelePresence scheduling. TMSXE schedules and updates TMS via the Booking API.
- PT gets meeting details from both WebEx and TMSXE to add to Outlook invite before sending to Microsoft Exchange.
- Invite goes to MS Exchange to be accepted/rejected by standard acceptance resource rules. Invite is also copied to any additional recipients.
- TMSXE will see invite from Exchange and process as a meeting scheduled by Productivity Tools.
- Organiser may receive email from both WebEx and TMS based on admin settings confirming the meeting



Non Exchange or non PT Outlook users can use TMS Smart Scheduler or WebEx Scheduling Mailbox method

Detailed Architecture

Scheduling – asynchronous using WebEx mailbox



Detailed Architecture

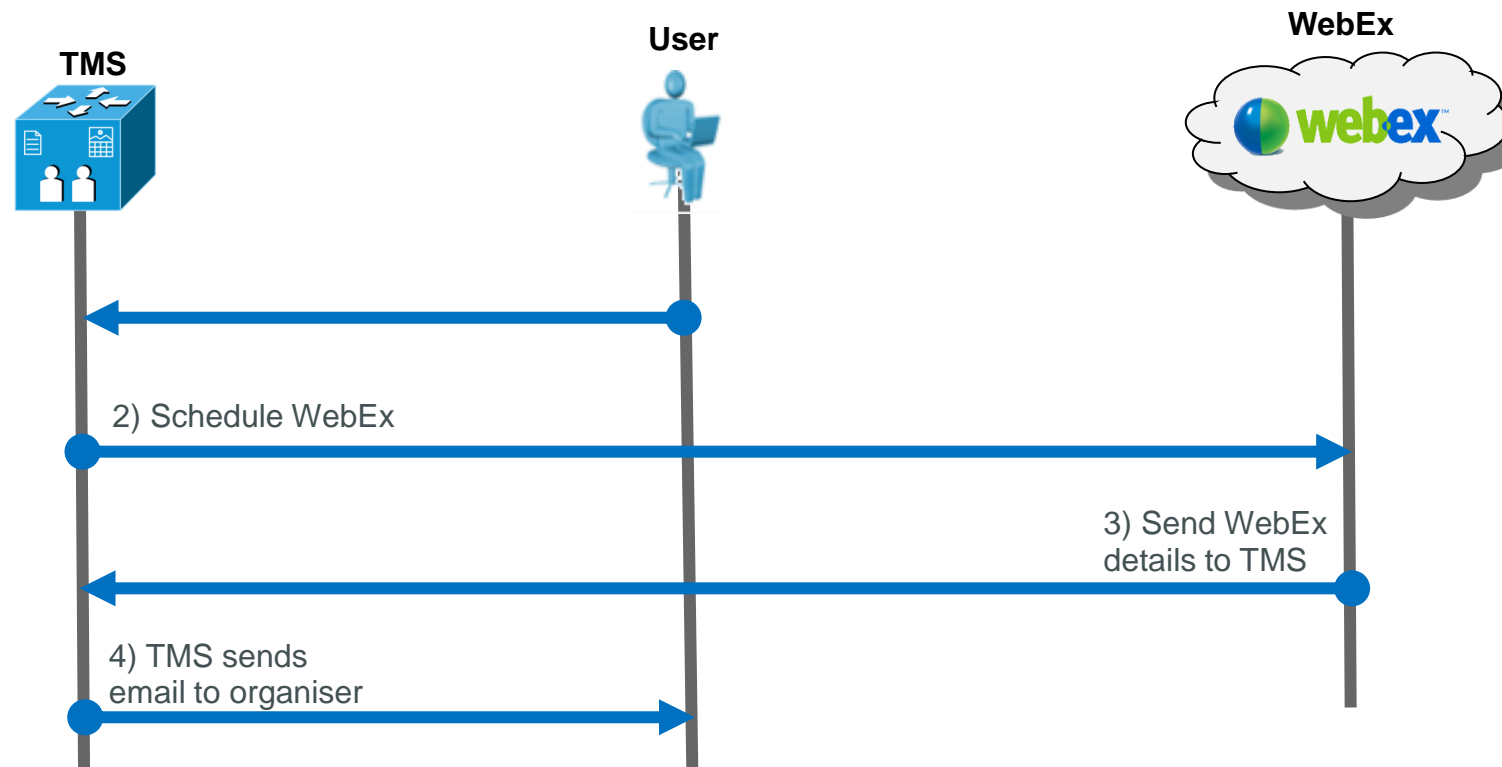
Scheduling – asynchronous using WebEx mailbox

- TMSXE, for Exchange only, will add WebEx to a TelePresence scheduled meeting by including the WebEx Scheduling Mailbox in the invite sent to Exchange.
- Admin defines mailbox resource name, e.g. `*?*@example.com`.
- Can be used by any client supported by Microsoft Exchange including Outlook 2011 for Mac, iPad, mobile phones, or Outlook Web Access.
- No option to set additional TelePresence Conference dial-in ports, or change defaults using this method
- Email to organiser a few seconds/minutes later confirms both WebEx and TelePresence resources available. Details have to be cut/paste to same invite or another invite for meeting participants.

Detailed Architecture

Scheduling – asynchronous using Smart Scheduler

- Users login to Smart Scheduler hosted by TMSPE (required)



Detailed Architecture

Scheduling – required services

Must enable these services for WebEx enabled TelePresence scheduling:

- TMS 14.3 or higher with WebEx Configured (Multiple WebEx sites supported)
- PT user can't change WebEx site in this release, set by WebEx Site
- TMSXE 3.1 if using Exchange integration including Productivity Tool, installed on companion server (TMS Core and Extensions are not recommended virtualised on same server)
- TMSXE standard licensing/keys which includes booking API enabled plus new license feature key
- TMSXE includes support for WebEx Scheduling Mailbox
- TMS web based Smart Scheduler requires TMS Provisioning Engine (TMSPE) on TMS Server, no additional licensing for just Smart Scheduler. Find-Me or other PE features require their licensing feature keys



Deployment

Deployment

Security considerations

- All communications between customer on-prem and WebEx are encrypted via VCS as per Cisco's Minimum Encryption Standard requirements.
- Customer's WebEx-facing VCS-E shall present a TLS certificate signed by a trusted Certificate Authority.
- Self-signed certificates cannot be used.
- For details on how to configure a client/server certificate, refer to the "Certificate creation and use with Cisco VCS Deployment Guide" at the following location:
- https://www.cisco.com/en/US/docs/telepresence/infrastructure/vcs/config_guide/Cisco_VCS_Certificate_Creation_and_Use_Deployment_Guide.pdf

Deployment

WebEx considerations

- North America at FCS in April 2013
- Europe data centre enabled Feb 2014
- APAC data centre turn up planned
- Any concerns from international customers on this should contact local account team



Deployment

WebEx Clients Bandwidth Information

- The bandwidth required to send WebEx enabled TelePresence video is higher.
- SVC technology is used in the client software and uses multilayer frames to send video and allows the receiving client to automatically select the best possible resolution to receive video.
- Actual bandwidth used is less than the maximum and is variable.

WebEx
Network
Bandwidth
White Paper



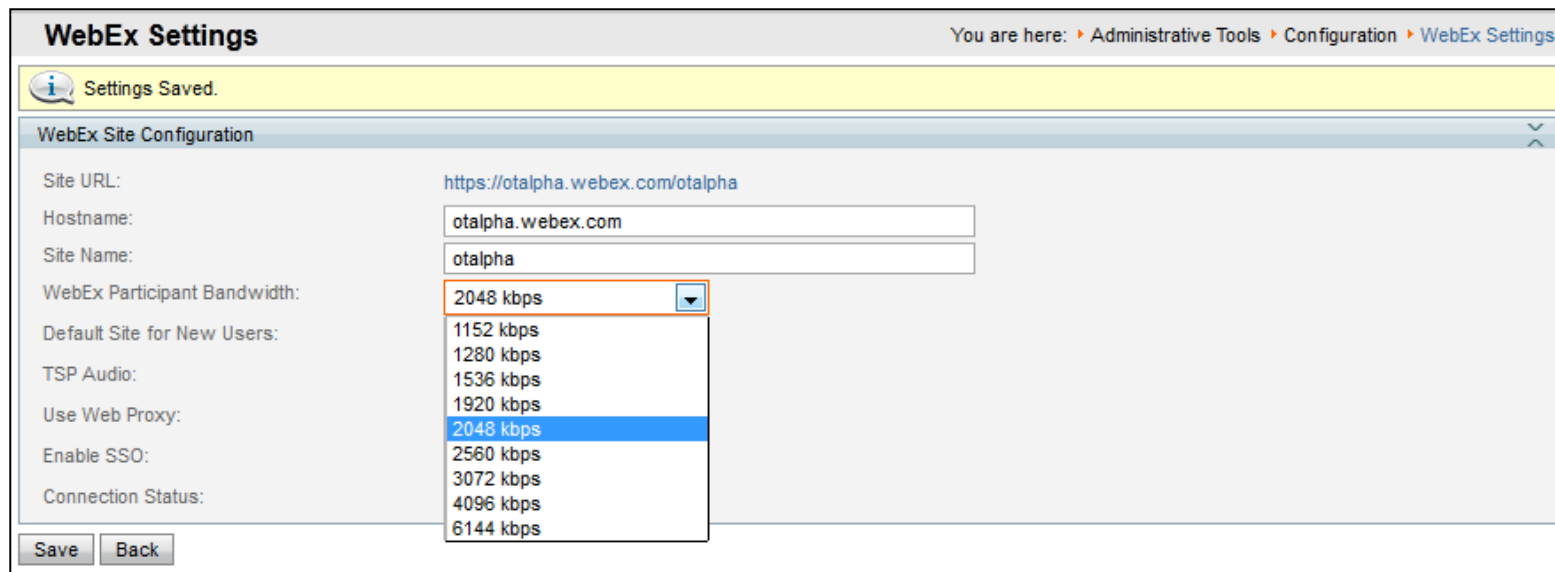
http://www.webex.com/pdf/wp_bandwidth.pdf

Experience	Resolution	Max bit rate (send)	Max bit rate (receive)
High Definition (HD)	720p (1280x720)	3.0 Mbps	2 Mbps
High Quality (HQ)	360p (640x360)	1.5 Mbps	1 Mbps
Standard Quality	180p (320x180)	500 kbps	500 kbps
6 thumbnails	90p	N/A	500 kbps
1 thumbnail	90p	50 kbps	N/A

Deployment

Bandwidth from On-Premise to WebEx

- In TMS, you can select the maximum WebEx participant bandwidth:



The screenshot shows the 'WebEx Settings' page in a web browser. The breadcrumb trail indicates the path: 'Administrative Tools > Configuration > WebEx Settings'. A yellow banner at the top says 'Settings Saved.' Below this is the 'WebEx Site Configuration' section. The 'WebEx Participant Bandwidth' dropdown menu is open, showing a list of bandwidth options: 1152 kbps, 1280 kbps, 1536 kbps, 1920 kbps, 2048 kbps (highlighted in blue), 2560 kbps, 3072 kbps, 4096 kbps, and 6144 kbps. Other settings visible include Site URL (https://otalpha.webex.com/otalpha), Hostname (otalpha.webex.com), Site Name (otalpha), Default Site for New Users, TSP Audio, Use Web Proxy, Enable SSO, and Connection Status. 'Save' and 'Back' buttons are at the bottom left.

- Set to minimum 4MB for 720p plus content per concurrent meeting.
- In addition you can limit WebEx video at the site level (see WebEx site administrator guide) to HQ video or lower resolution.

Configuration & Troubleshooting

- http://www.cisco.com/en/US/docs/telepresence/infrastructure/tms/config_guide/webex_enabled_telepresence/cts_webex_solutions.pdf
- Troubleshooting
 - Contents
 - Verifying and Testing
 - Cisco WebEx Site Administration Online Help
 - Troubleshooting Tips
 - Problems with Scheduling a Meeting
 - Problems with Starting or Joining a Meeting
 - Problems During a Meeting
 - Managing System Behaviour
 - Managing the Cisco WebEx Video View Window



Single Sign On (SSO)

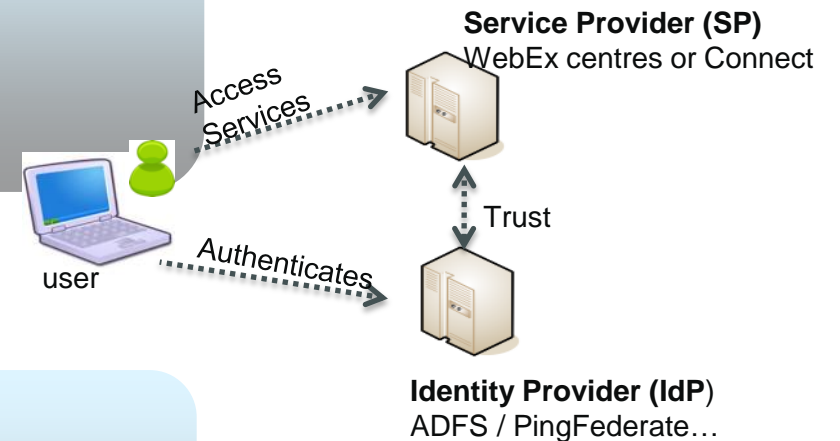
What is Federated SSO?

Federated SSO...

- Users single authentication token or ticket is trusted across multiple IT systems or Organisations eliminating the need for users to re-authenticate across services *Other terms: cloud Single Sign On, Internet Single Sign On, web SSO*
- Based on standards: WS Federate, OpenID, SAML 1.1, SAML 2.0

Federated SSO benefits include...

- Ability to offer secure, seamless, scalable, standards based cloud SSO
- Improved user experience and reduced administrative costs due to removal of additional user password management
- platform and technology agnostic



Cisco Collaboration Cloud SSO

Allows companies to use their on-premise Identity Management System to simplify the access & management of Cisco Collaboration Cloud services using Federated SSO

With Cisco Collaboration SSO:

Secure login to WebEx cloud services using corporate credentials

Automatically create and update user accounts

Benefits

- Eliminate the need for users to maintain and remember multiple usernames and passwords
- Increase security as no WebEx/Connect passwords will be stored or transmitted
- Reduce IT helpdesk costs related to maintaining account information for Collaboration Cloud Services



Cisco Collaboration Cloud SSO

Capabilities

	WebEx Centres	WebEx Meetings	Connect
Standards	SAML 1.1, SAML 2.0, WS - Federate	SAML 2.0, WS - Federate	SAML 2.0, WS - Federate
Clients	Windows, Mac, iOS, Android, Blackberry, Cius	Windows, Mac, iOS, Android, Blackberry, Cius	iOS, Windows, Mac, web IM, Blackberry, Android (future), Cius
SSO mechanism	SP-initiated, IdP-initiated	SP-initiated, IdP-initiated	SP-initiated, IdP-initiated
Other features	Productivity Tools SSO, Single Logout (centres site)	Productivity Tools SSO, Single Logout (meetings site)	NA
	Delegated Authentication, Integrated Windows Authentication, Automatic Account provisioning		

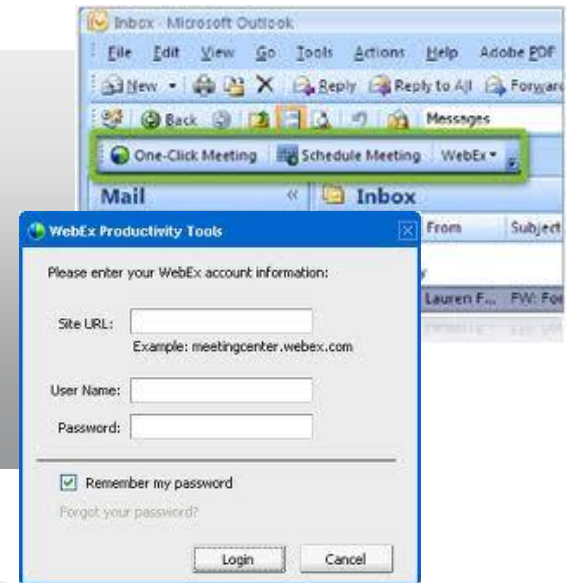
Cisco Collaboration Cloud SSO

WebEx Productivity Tool Authentication

- WebEx productivity tools allows users to schedule and launch meetings from Outlook.
- Productivity tools supports SAML 2.0 and WS-Federate for SSO

Single Logout

- WebEx as a SP can initiate a single logout request to the customer's IdP which will propagate the logout requests to other SPs
- Supported for SAML2.0 and WS-Fed



TMS Partner Delegated Authentication to Webex

TMS User Authentication for Scheduling WebEx Events

- Each TMS user must have WebEx user name defined for scheduling.
- Setup Delegated Authentication certificate on TMS to WebEx Cloud for user Authentication without SSO deployed as option. (TMS only stores user name)
- If the WebEx site has SSO enabled, Delegated Authentication must also be configured in WebEx provisioning to enable TMS Scheduling

Configuration Steps

- TMS Admin generates public and private certificate pair, sends public key to WebEx customer success team during site provisioning.
- WebEx gives customer this info for WebEx and TMS admin configuration;
 - ✓ Partner Name
 - ✓ Partner Issuer (IdP ID)
 - ✓ WebEx SAML Issuer (SP ID)

SSO Deployment Glossary

- IdP – Identity Management System (customer premise)
 - Common vendors: Ping Identity, CA SiteMinder , ADFS, Oracle Access Manager
 - (Other systems are supported: as long as conform to SAML specs)
- SAML 2.0 compliant or meets WS Federation 1.0 standard
- X.509 certificate uploaded to the WebEx Cloud
- Review documentation very important
- Option to use Cisco Advanced Services - Design, Configuration and Setup
 - Pre-deployment testing
 - Technical Expertise



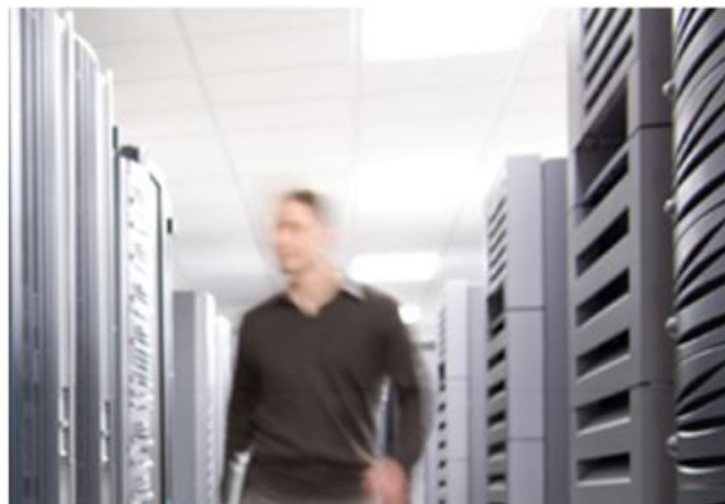
Existing WebEx Customers

Migrating Existing WebEx Customers

- Existing customers may need to be migrated to a different cluster which might use slightly different dial-in numbers for meetings.
- Customers using meetings hosted in US, but with a high volume abroad may experience minor delays in VoIP and video abroad. A cloud feature - Global Distributed Meetings can not be WebEx enabled TelePresence meetings.
- Provisioning of the new WebEx enabled TelePresence solution must be done in maintenance windows.

Existing WebEx OneTouch 1.0 Customers

- Onetouch 1.0 is not available to new customers, WXeTP 2.0 is much better solution
- Existing customers using OneTouch 1.0 with CTMS & CTS-Man need to start planning for migration to WebEx Enabled TelePresence infrastructure
- No plans to support WebEx Enabled TelePresence on CTS-Man or CTMS
- TMP Discount Program for CTS-Man to TMS, and CTMS to TelePresence Server



Ordering

WebEx with TelePresence Ordering

- No surcharge for WebEx with TelePresence integration
- Zero dollar SKU still required for provisioning WebEx Site, orders placed on compliance hold for mandatory A2Q process
- Use L-WBX-TPINT with new WebEx site orders
- Use L-WBX-TPINT= for adding on to existing WebEx sites
- Above SKU will also include TMS L-TMS-WXOT for enabling WebEx
- Supports unlimited number of Concurrent WebEx with TP Meetings
- Before order is released partner and account team needs to fill out A2Q questionnaire and submit for review

TMS Ordering

- TMS Server requires WebEx Scheduling License Feature Key
 - Zero dollar cost, auto expanded/included with WebEx provisioning L-WBX-TPINT
 - New TMS customers order TMS in standard fashion first
 - On WebEx provisioning new feature key for TMS sent to customer as e-license
 - Customer or partner has to install feature key before WebEx Scheduling or test call
- ★ TMS web Smart Scheduler requires TMS-PE add-on install, no TMS-PE endpoint or licensing required. Customers with TMS support contact can get TMS-PE Software add-on from Cisco.com

VCS Expressway and Traversal Licensing Ordering

- VCS-E Standard Traversal Licensing, no surcharge for WebEx + TelePresence meetings. Expressway x8 only via CUCM does not support WXeTP today
- One regular traversal license required per concurrent meeting/call
- Customer can use existing Expressway, appliance or virtualised, or build out new services just for this integration
- Expressway has enforced licensing, if not enough licenses at time of call, integration between TelePresence and WebEx will fail
- TMS does not track or reserve at scheduling time the number of traversal licenses available – Make sure you have enough!

Security Certificate for Customers VCS Expressway

- VCS-E in connecting to WebEx requires a security cert to connect
- Needs to be from trusted root level CA, no self signed certificates
- See WXeTP Config Guide and VOD's for details
- Many partners have trouble at this stage, watch the vod's for help
- http://www.cisco.com/en/US/products/ps11338/products_installation_and_configuration_guides_list.html

TelePresence Multipoint Bridge Ordering

- Standard pricing and ordering for TelePresence Server or TelePresence MCU
- Each concurrent meeting using WebEx Audio via SIP, will consume one additional bridge port, regardless of number of video or WebEx endpoints
- Each concurrent meeting using PSTN/TSP audio will consume two additional bridge ports, regardless of number of video or WebEx endpoints
- Make sure customer has enough bridge ports for anticipated meetings
- TMS will scheduled and track all necessary ports
- The Cisco Conductor is not supported for WebEx integration in this release, nor TP Server virtual edition or MM300
- All scheduled bridge resources with WebEx has to be registered to VCS-C

Cisco Advanced Services for Planning, Design and Implementation Services

Pre-Implementation Assessment

Usage and Network Path Analysis

Analyse network and usage pattern. Customer fills out questionnaire

Implementation Service

Planning, Design, Deploy

Requirements planning, upgrades, configuration design, provisioning, testing

Post-Implementation Support

Operation and Optimisation Services

Roadmap planning, service strategy, upgrade management, dedicated contacts, process management



Significantly Improving the Collaboration Experience

References

- Overview Page WebEx Enabled TelePresence
<http://www.cisco.com/en/US/netsol/ns1230/index.html>
- Partner Page
 - Quick Reference Guides for Scheduling
- <http://www.cisco.com/en/US/partner/netsol/ns1230/index.html#~Partners>
- Partner Community Site
 - Process Overview
 - Technical Presentations
 - Video's on Demand
- » https://communities.cisco.com/community/partner/collaboration/webex/webex_enabled_telepresence
- [Ask-WebExandTP@cisco.com](#) alias setup for the field and customers to ask questions



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