COLLABORATION TRANSITIONS

Meetings:

Transitioning from TelePresence Server / CMR-H Bridging to Cisco Webex

CTG Technical Marketing Engineering Team

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Collaboration Transitions

Meetings: Transitioning On-Premises Bridging to Cisco Webex

Scenario Introduction
Meetings: Transitioning On-Premises Bridging to Cisco Webex
Scenario Introduction: Decision Tree
This scenario applies specifically to customers transitioning to Cisco Webex cloud meetings.

Keep meetings on-premises* if the requirements include:

» High touch white glove
» On-premises Microsoft interop
» “No cloud” policy

* OUT OF SCOPE FOR THIS SCENARIO
Meetings: Transitioning On-Premises Bridging to Cisco Webex

Scenario Introduction: Overview

Meeting transitions scenario covering the transition from an on-premises to a Cisco cloud meeting environment

Scenario Objective

- To evaluate the transition FROM TelePresence Server (TS)\(^1\) (traditional on-premises meeting solution) TO Cisco Webex and video mesh (cloud meeting solution).

- To explore the meeting solution transition with a focus on:
  - **User experience:** Scheduling, meeting features and functions.
  - **Administrative experience:** Provisioning, management, and troubleshooting.

\(^{1}\) For transitions from Collaboration Meeting Room (CMR) Hybrid, refer to the Alternate Transitions: CMR-H to Cisco Webex section near the end of this document.
Meetings: Transitioning On-Premises Bridging to Cisco Webex
Scenario Introduction: Base Architecture

» Architecture based on the Enterprise On-Premises Preferred Architecture (version 11.0)\(^1\)

» Video deployment with Conductor, TelePresence Server (TS), and TelePresence Management Suite (TMS)

» Video endpoints register to on-premises call control: Unified CM or Expressway (formerly VCS).

» Expressway-C/E pairs for firewall traversal

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1 While later versions of the Enterprise On-Premises PA are available, version 11.0 is the last version that included TelePresence Server (TS). After that version, TS was replaced with Cisco Meeting Server. All other aspects of the latest Enterprise On-Premises PA still apply to this transition.
Meetings: Transitioning On-Premises Bridging to Cisco Webex

Scenario Introduction: Scope

• Video conferencing resources are moved from on-premises (Conductor/TS) to cloud hosted (Cisco Webex).
  » Note that the Cisco Webex Video Mesh Node (VMN), as a part of Cisco’s cloud hosted architecture, is an on-premises component of the cloud solution and included in this scenario.

• Only features and functions for on-premises video conferencing deployment were evaluated with the Cisco Webex meeting solution.
  » 80/20 Rule: It is expected this scenario will be applicable to ~80% of enterprise customers, understanding that ~20% of customers may have additional considerations or requirements not covered. However, even in those cases, this transition map may still be used as a potential future path of transition.

• Only Cisco Jabber (desktop and mobile), the Cisco Webex Meeting application (desktop and mobile), and on-premises registered Cisco CE endpoints were evaluated.
  » All endpoints remain registered to on-premises call control: Unified CM or Expressway (formerly VCS).
  » Cisco Webex Teams application and Webex cloud-registered endpoints are not considered for this scenario.
Collaboration Transitions

Meetings: Transitioning On-Premises Bridging to Cisco Webex

Mapping the Transition
Meetings: Transitioning On-Premises Bridging to Cisco Webex
Mapping the Transition: High-Level Transition Map

**0**
Cisco Video Deployment

**1**
Cisco Cloud Meetings

**2**
Cloud Registered Endpoints

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**Note:** This map is a visual representation of the workload transition(s), highlighting the primary architectural changes during the deployment.

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Collaboration Transitions – Meetings: Transitioning From TS / CMR-H Bridging to Cisco Webex

1 Optional component
Meetings: Transitioning On-Premises Bridging to Cisco Webex
Mapping the Transition: High-Level Transition Map

Note: This map is a visual representation of the workload transition(s), highlighting the primary architectural changes during the deployment.

Optional component
Meetings: Transitioning On-Premises Bridging to Cisco Webex

Mapping the Transition: Step 0 – Cisco Video Deployment

Note: This map is a visual representation of the workload transition(s), highlighting the primary architectural changes during the deployment.
Meetings: Transitioning On-Premises Bridging to Cisco Webex
Cisco Video Deployment

Management: TMS/TMSXE enables provisioning, management, and scheduling of meetings and meeting resources.

Call Control: Unified CM or Expressway

Call control: Unified CM (or Expressway) provide endpoint registration and call routing.

Meeting URIs: Meeting1@xyz.com, Meeting2@xyz.com, ...

Video conference resources: TS is the conference bridge for on-premises multi-point meetings.

Conference resource allocation: Conductor orchestrates allocation of video conferencing resources.
Meetings: Transitioning On-Premises Bridging to Cisco Webex
Cisco Video Deployment Meeting Call Flow

Meeting URI: Meeting1@example.com

Signaling
Media
Meetings: Transitioning On-Premises Bridging to Cisco Webex

Mapping the Transition: Step 1 – Cisco Cloud Meetings

**Note:** This map is a visual representation of the workload transition(s), highlighting the primary architectural changes during the deployment.
Meetings: Transitioning On-Premises Bridging to Cisco Webex

What Changes with Cisco Webex Meetings?

• **Licensing:** Move to Flex Meetings licensing and Cisco Webex video platform.

• **Meeting URIs:** On-premises meeting URIs change to Cisco Webex domain URIs - e.g. Meeting1@example.com ➔ Meeting1@example.webex.com

• **Conference Resources:** Replace on-premises video conference resources Conductor/TS\(^1\) with Webex Video Mesh for local on-premises conference resources of cloud meetings

• **Hybrid Connectors:**
  » Deploy Directory Connector for on-premises to cloud directory integration.
  » Deploy Expressway-C Connector host and Calendar Connector\(^2\) for corporate calendar integration with cloud calendar service.
  » Deploy Webex Device Connector for hybrid device registration enabling cloud analytics and cloud features for on-premises registered endpoints.

\(1\) Maintain Conductor/TS if ad hoc conference escalations are required.

\(2\) As an alternative cloud Calendar Connector is available for cloud-based corporate calendar integrations (Google, O365)
Meetings: Transitioning On-Premises Bridging to Cisco Webex

Before – On-Premises Meetings

On-premises meetings

Call Control: Unified CM or Expressway

Video Endpoints

TMS/TMSXE

Conductor & TS

Expressway

Meeting1@example.com
Meeting2@example.com
Meetings: Transitioning On-Premises Bridging to Cisco Webex

After – Cisco Webex Cloud Meetings

Enterprise Directory: Directory Connector is the integration point for user identity.

On-premises conferencing resources: Video Mesh Nodes (VMN) provide local video conferencing resources.

Video conference resources: Cisco Webex is the conference bridge for multi-point meetings.

Call Control: Unified CM or Expressway

Video endpoints: On-premises registration with Unified CM (or Expressway).

Video Mesh

Expressway

Hybrid Connectors

Webex Meeting URIs:
Meeting1@example.webex.com
User2@example.webex.com
...

Cisco Webex cloud meetings

Device Connector

Device Connector enables cloud features and analytics.

Hybrid Registration: 

Enterprise Calendaring: Hybrid Connector is the integration point for @webex scheduling.

Optional components

• Meetings: Transitioning from TS / CMR-H Bridging to Cisco Webex

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Meetings: Transitioning On-Premises Bridging to Cisco Webex
Cisco Webex Cloud Meetings Call Flow

Meeting URI: Meeting1@example.webex.com

Signaling

Media

Media travels to the Video Mesh nodes (VMNs) with a cascade to Cisco Webex
OR
Without VMN, media travels directly from endpoints to Cisco Webex via the Expressway-C / Expressway-E
Meetings: Transitioning On-Premises Bridging to Cisco Webex

Webex Meetings Reduce Costs and Simplifies Support

• IT administrators struggle with deciding between building and managing a videoconferencing system or third-party management.

• Video conferencing deployments often introduce new technologies that many small and medium-sized businesses may not be familiar with (for example, H.323 and/or SIP).

• Using Cisco Webex cloud-based video conferencing saves companies time and money. Resources that would otherwise be expended to train IT teams to support new on-premises systems.

• Due to global reach, participants from anywhere can connect to meetings without costly on-premises bridging or WAN increases by using local Internet connections.

• Constant upgrades happen automatically in the cloud keeping customers up to date with the latest security fixes and features.
Meetings: Transitioning On-Premises Bridging to Cisco Webex

Why Move to Cisco Webex Meetings?

There are many other compelling reasons for transitioning from on-premises to Cisco cloud meetings:

- **Add web and audio-only** capabilities to your video meetings
- **Increased scale and global reach** for meetings
- **Ease of scheduling** with keywords (for example, @webex, using OBTP^{1})
- **Local optimization of media** with the Video Mesh
- **No change** to user join (Webex clients get upgraded to the new app, but can continue scheduling via the Outlook calendar)
- **No change** to endpoint administration and control

^{1} One Button To Push
Meetings: Transitioning On-Premises Bridging to Cisco Webex

What is Different When Moving to Webex Meetings?

The following tables highlight key technical considerations to be aware of when transitioning from the on-premises meetings deployment to the Cisco Webex Meetings deployment.

The considerations have been divided into the following categories:

» Video Mesh

» Meetings
Meetings: Transitioning On-Premises Bridging to Cisco Webex

Video Mesh Considerations (1 of 2)

Considerations for Video Mesh node deployment.

<table>
<thead>
<tr>
<th>Category</th>
<th>Considerations</th>
</tr>
</thead>
</table>
| Video Mesh   | • Video Mesh is designed to work with Webex Meetings cloud services and needs to be in constant communication with the cloud microservices for registration status, software updates, and logging, for example. This means that the Video Mesh needs direct connection to the Internet and does not use the firewall traversal mechanism of the VCS or Expressway solution.  
• Video Mesh supports Cisco call control integration via a SIP trunk (port 5060 or 5061) or via an Expressway neighbor zone (port 5060).  
• If the customer used the TS for an audio bridge then the Video Mesh node does not support audio only meetings.  
• Cisco Webex Meetings supports audio only meetings along with audio, video and content meetings. The users can reach the Cisco Webex Meeting service for audio connections using their infrastructure and the Internet with the new Cisco Webex Edge Audio offering or via PSTN. Cisco Webex Edge Audio, allows the customer to route the audio traffic over the Internet using their existing Cisco Unified CM and Expressway devices versus sending the audio via their PSTN trunks to Cisco Webex. More information on Cisco Webex Edge Audio can be found in the datasheet and in the configuration guide. |
Meetings: Transitioning On-Premises Bridging to Cisco Webex

Video Mesh Considerations (2 of 2)

Considerations for Video Mesh node deployment.

<table>
<thead>
<tr>
<th>Category</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video Mesh</td>
<td>• Video Mesh can utilize the direct peering connection within the Webex Edge Connect solution for cascade media.</td>
</tr>
<tr>
<td></td>
<td>• Ad hoc escalation: If the customer presently has the ability to have a point-to-point video call escalated to a bridge when a third participant is joined by an existing participant, this capability is not available in the Video Mesh or Cisco Webex Meetings. For this process to work the MCU or TS is registered to the Cisco Unified CM as a media resource and invoked when the third person is added. The point-to-point call is moved automatically to the bridge because the other two endpoints do not have a software bridge capability. If this is a requirement, this functionality would require keeping the existing MCU or TS until that functionality is developed in the Webex Meetings architecture or until the user behavior is changed to meet on a Personal Room. Additionally the MCU or TS could be transitioned to Cisco Meeting Server (CMS) to support this functionality on-premises.</td>
</tr>
</tbody>
</table>
Meetings: Transitioning On-Premises Bridging to Cisco Webex

Meeting Considerations

Considerations for meeting features and experience.

<table>
<thead>
<tr>
<th>Category</th>
<th>Considerations</th>
</tr>
</thead>
</table>
| Meetings | • Webex Meetings supports a wide range of codecs for main video and content channel but it does not support H.263 content being sent to the meeting. This will not affect many customers, but customers that have older video endpoints and need to be able share the content channel using the H.263 codec to other participants in the meeting will be unable to do so. All modern video endpoints support H.264 codecs for both main and content channels. It is recommended to upgrade the older endpoint or not use that video endpoint in the meeting for the content source.  
• Webex Meetings does support H.323 and IP dialing for endpoints that are older or prefer to dial by IP addresses. |
Collaboration Transitions

Meetings: Transitioning On-Premises Bridging to Cisco Webex

References
Meetings: Transitioning On-Premises Bridging to Cisco Webex

References (1 of 2)

Licensing

- Cisco Collaboration Flex Plan:

Hybrid Services

- Set up Hybrid Services:

Webex Edge Video Mesh

- Cisco Webex Edge Video Mesh:
- Deployment Guide for Cisco Webex Video Mesh:

Call Control Integration

- Cisco Unified CM Configuration Guides:
- Cisco Expressway Configuration Guides:

Directory Integration

- Cisco Webex Hybrid Directory Service:
- Deployment Guide for Cisco Directory Connector:
Meetings: Transitioning On-Premises Bridging to Cisco Webex

References (2 of 2)

Users

• Getting Started with Cisco Webex Control Hub

• Ways to Add & Manage Users in Cisco Webex Control Hub

Conductor / TS / TMS

• Cisco TelePresence Conductor Deployment Guide:

• Cisco TelePresence Server Maintain and Operate Guides:

• Cisco TelePresence Management Suite:

@webex Scheduling (Calendar Integration)

• Cisco Webex Hybrid Calendar Service:

• Deployment Guide for Cisco Calendar Connector:

One Button to Push (OBTP)

• Make it Easier for Video Devices to Join Meetings w/OBTP:
  https://help.webex.com/en-us/nvibg1k/

Meetings Transition Deployment Guide

• Transitioning On-Premises Bridging to Cisco Webex Deployment Guide:
Collaboration Transitions

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Alternate Transition: CMR-H to Cisco WebEx
Meetings: Transitioning On-Premises Bridging to Cisco Webex

Alternate Transition: CMR-H to Cisco Webex

SCENARIO FOCUS

Note: This map is a visual representation of the workload transition(s), highlighting the primary architectural changes during the deployment.

Optional component
Meetings: Transitioning On-Premises Bridging to Cisco Webex

Before – CMR Hybrid

Video conference resources: **TS** is the conference bridge for ad-hoc/instant and scheduled on-premises multi-point meetings

Meeting URIs:
- Meeting1@xyz.com
- Meeting2@xyz.com
- ...

Video conference resources: **Cisco Webex** is a scheduled conference bridge for multi-point meetings

Webex Meeting URIs:
- Meeting1@xyz.webex.com
- Meeting2@xyz.webex.com
- ...

Call Control: Unified CM or Expressway

TMS/TMSXE

Conductor & TS

Expressway

Cisco Webex

Video Endpoints
Meetings: Transitioning On-Premises Bridging to Cisco Webex

After – Cisco Webex Cloud Meetings

Enterprise Directory: Directory Connector is the integration point for user identity

Video endpoints: On-premises registration with Unified CM (or Expressway)

On-premises conferencing resources: Video Mesh Nodes (VMN) provide local video conferencing resources

Call Control: Unified CM or Expressway

Device Connectors

Hybrid Registration: Device Connector enables cloud features and analytics.

Video conference resources: Cisco Webex is the conference bridge for multi-point meetings

Webex Meeting URIs: Meeting1@sitename.webex.com
User2@sitename.webex.com
...

Hybrid Connectors

Enterprise Calendaring: Hybrid Connector is the integration point for @webex scheduling.

Cisco Webex cloud meetings

Video conference resources:
- Video conference resources: Cisco Webex is the conference bridge for multi-point meetings

Hybrid Connectors

Enterprise Calendaring: Hybrid Connector is the integration point for @webex scheduling.

Webex Meeting URIs: Meeting1@sitename.webex.com
User2@sitename.webex.com
...

Hybrid Connectors

Enterprise Calendaring: Hybrid Connector is the integration point for @webex scheduling.
Meetings: Transitioning On-Premises Bridging to Cisco Webex

References: CMR-H to Cisco Webex

Webex Personal Rooms

• Manage Webex Personal Rooms

• Cisco Webex Personal Rooms in Cisco Webex Meetings:

Meetings Transition Deployment Guide

• Transitioning On-Premises Bridging to Cisco Webex Deployment Guide: