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#CiscoLiveAPJC



Microsoft Interop for Calling, Meetings and RoomOS

Robert McAffery

BRKCOL-2523

CISCO *Live!*

#CiscoLiveAPJC

Cisco Webex App

Questions?

Use Cisco Webex App to chat with the speaker after the session

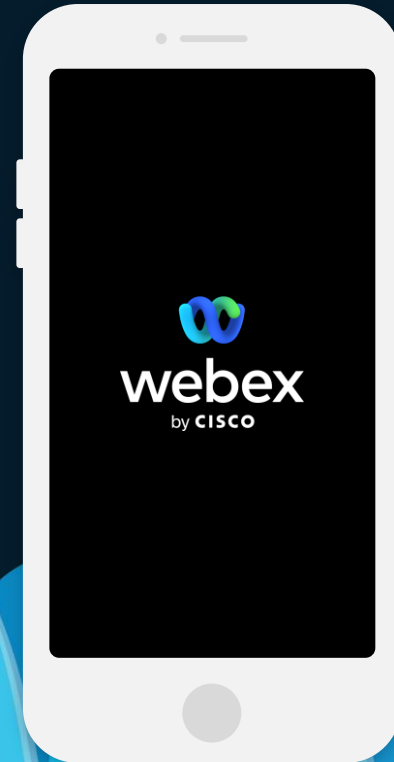
How

- 1 Find this session in the Cisco Live Mobile App
- 2 Click “Join the Discussion”
- 3 Install the Webex App or go directly to the Webex space
- 4 Enter messages/questions in the Webex space

Webex spaces will be moderated by the speaker until November 15, 2024.



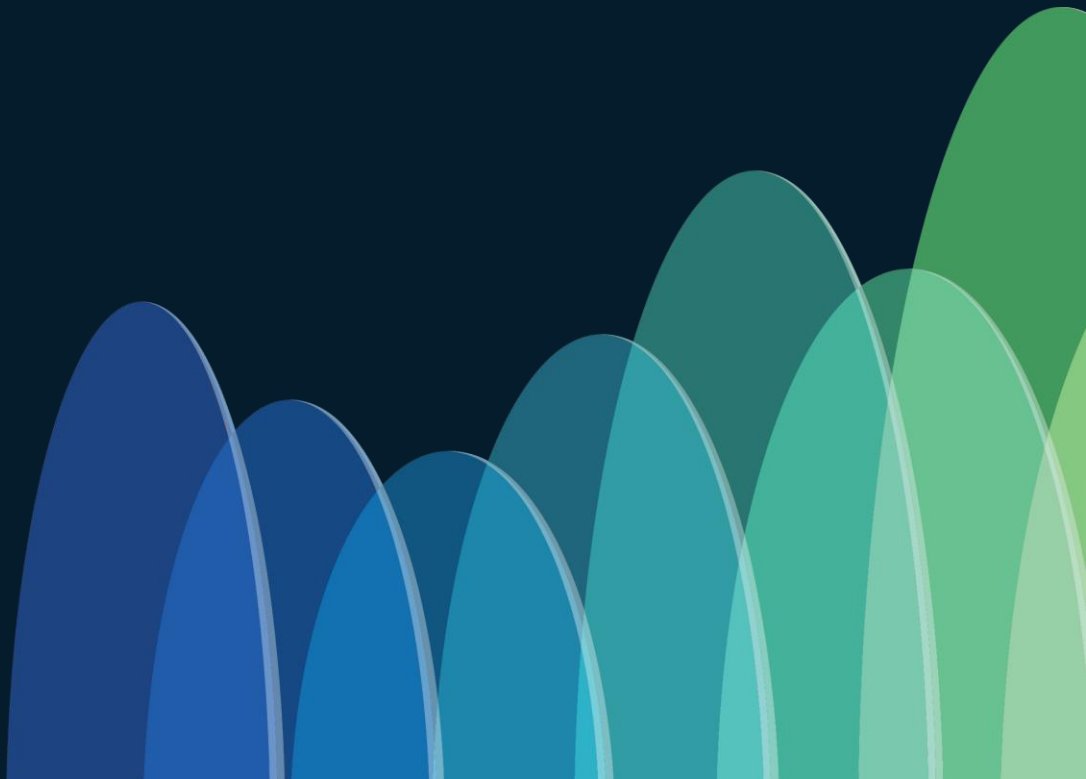
<https://ciscolive.ciscoevents.com/ciscolivebot/#BRKCOL-2523>



Agenda

- Introduction
- Using Cisco Phones and Peripherals with Microsoft Teams
- Direct Routing for Microsoft Phone System (overview)
- Webex Calling for Microsoft Teams
- Cisco video devices
 - Interoperability using VIMT (CVI)
 - Interoperability using WebRTC (Direct Guest Join)

Introduction



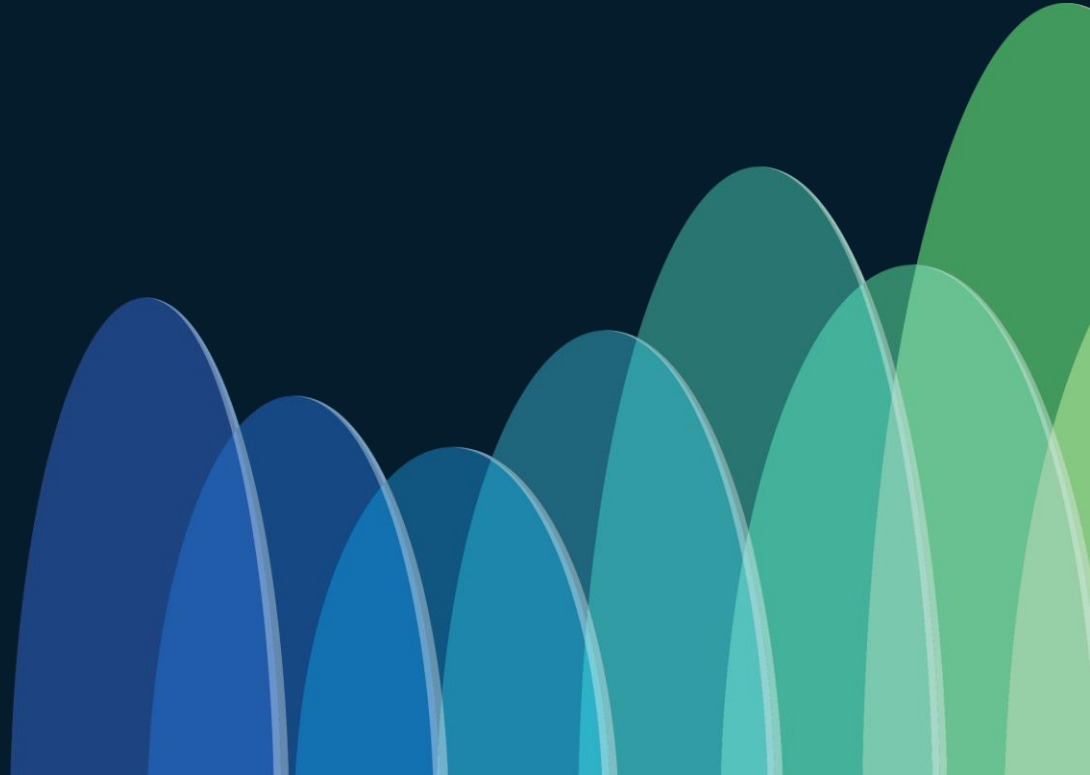
Who is Robert?

- Has been working in UC and collaboration for 17 years
- Worked in support, engineering and pre-sales – for customers & partners. Been there and felt the pain and joy.. and many late nights in cold data centres!
- Worked in Cybersecurity for 2 years but came back to Collaboration... my first love
- I was forced not to do Movember.....after last year...
- If I have a stronger than usual accent, I just got back from Scotland – Yesterday!

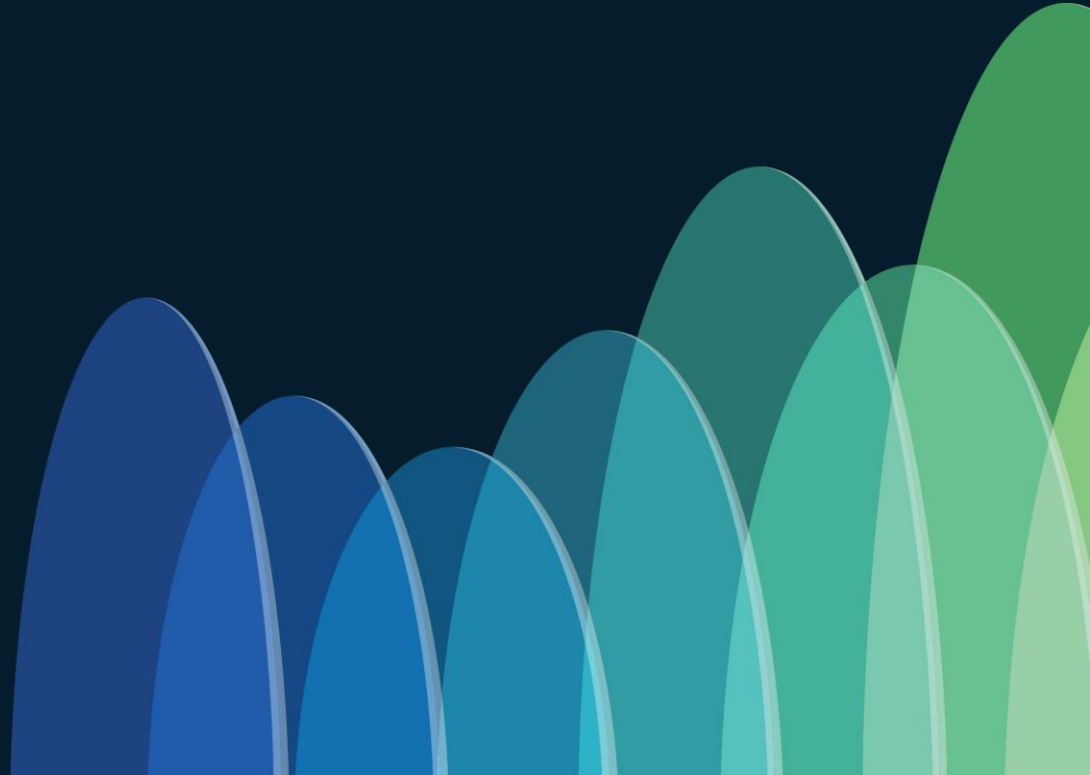


So... you use Cisco for your Collaboration

(CUCM / Webex Calling /
Meeting/ Devices / Phones)



Microsoft Certified Peripherals – by Cisco



Microsoft Teams certified peripherals

Desk Camera 4K



Up to 4K UHD intelligent USB webcam. Supports Windows Hello



Headset 320 series



Affordable dual or mono headset with USC-A, USB-C, or RJ-9 connections and in-line Microsoft Teams button



Headset 720 series



Everyday dual or mono Bluetooth® wireless headset with Voice Activated Microphones and on-ear Microsoft Teams button



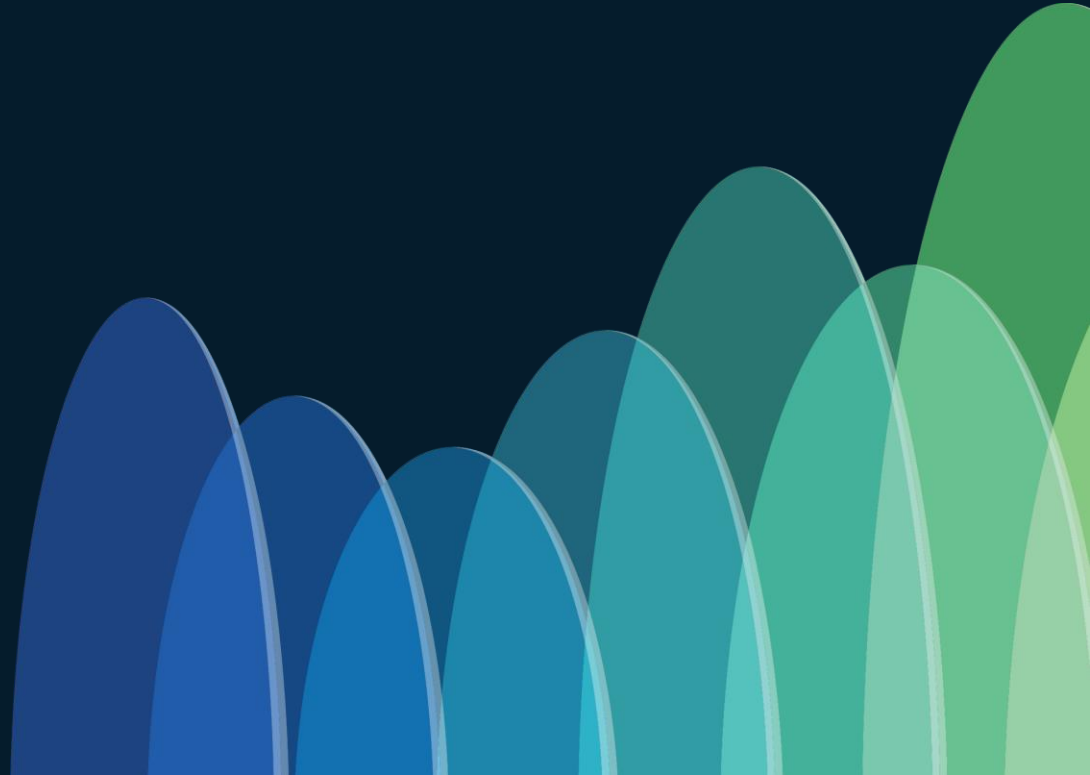
Bang & Olufsen Cisco 950



Headphones equipped for business communications, excels in immersive sound, and designed with elegance.



Cisco Phones and the Microsoft SIP Gateway



Microsoft SIP Gateway

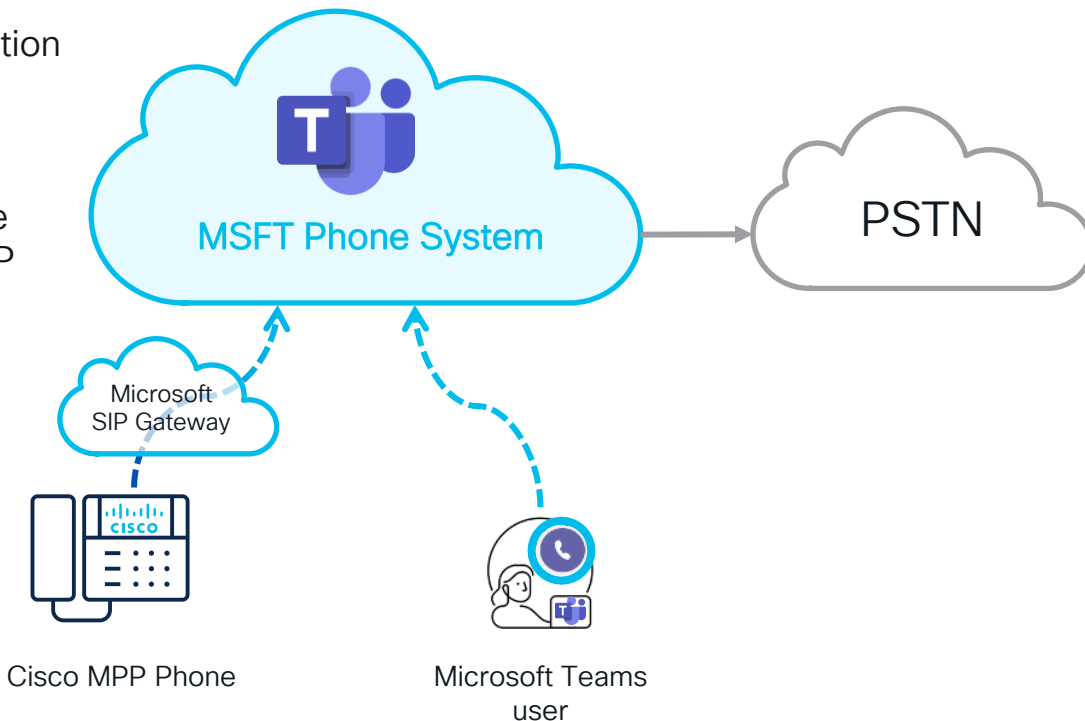
Concept

Microsoft SIP Gateway allows registration of SIP Phones in Microsoft Phone System.

Cisco Multiplatform Phones (MPP) are listed as **compatible** with Microsoft SIP Gateway, although this solution is **not certified by Cisco**.

Limitations include:

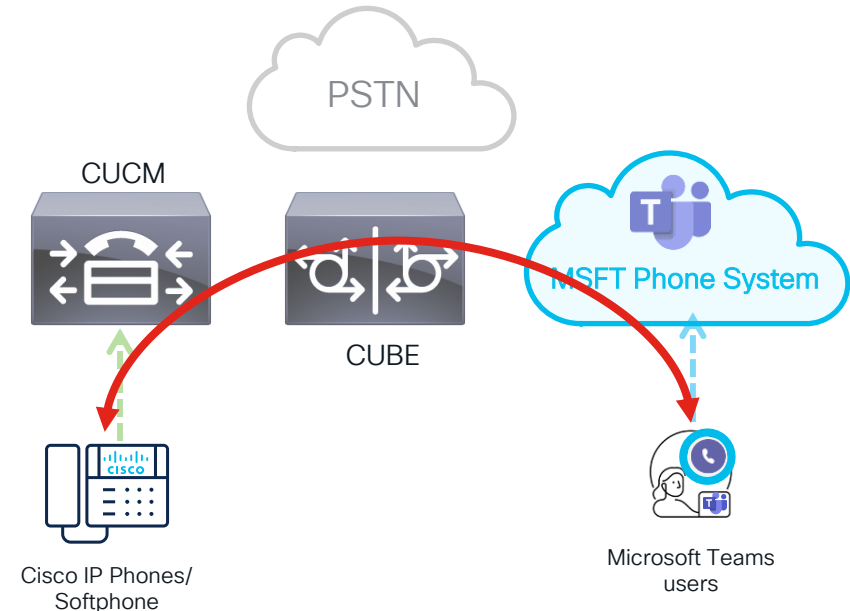
- No Presence on Call Queues
- No softkey templates
- No survivability (SBA)
- No shared-lines
- Incomplete device info on Teams Admin Center



Interworking Cisco UCM with Microsoft Phone System via CUBE

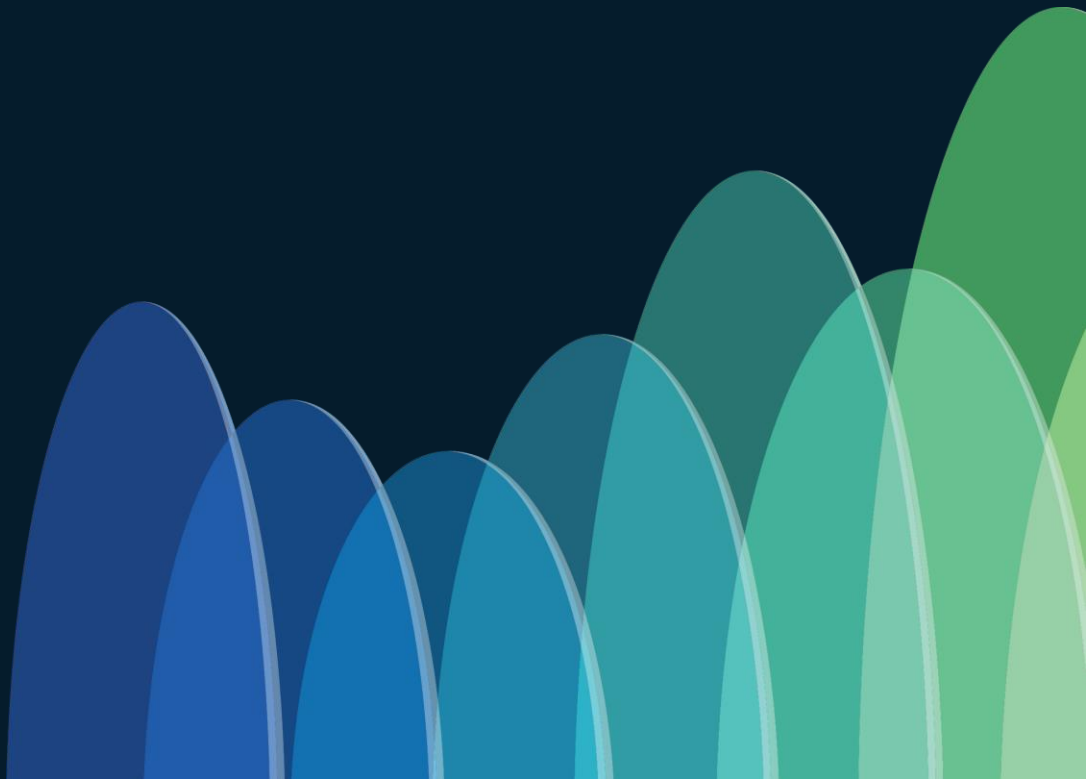
Limitations highlights

- Direct routing for Microsoft Phone System **does not support video codecs**, therefore only audio calls can be established between Cisco UCM and Microsoft Phone System clients using this solution.
- **Lines cannot be shared** between Cisco UCM and Microsoft Phone System clients.
- Call completion (**callback**, automatic callback) is **not possible** when calling a Microsoft Phone System number from Cisco UCM.

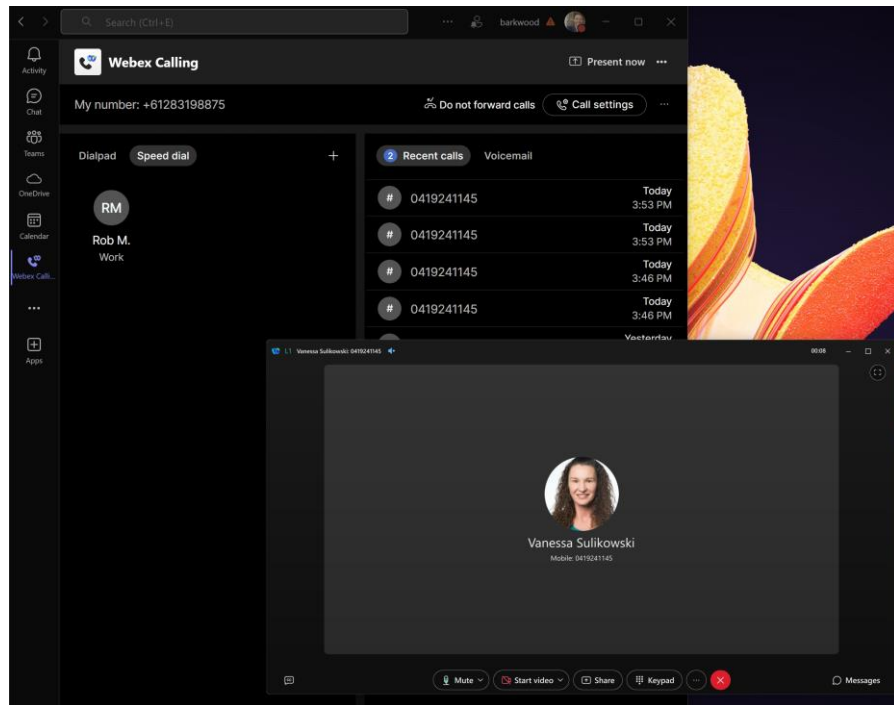


Deployment Guide - <http://cs.co/directrouting>

Webex Calling for Microsoft Teams



Cisco Webex Calling for Microsoft Teams

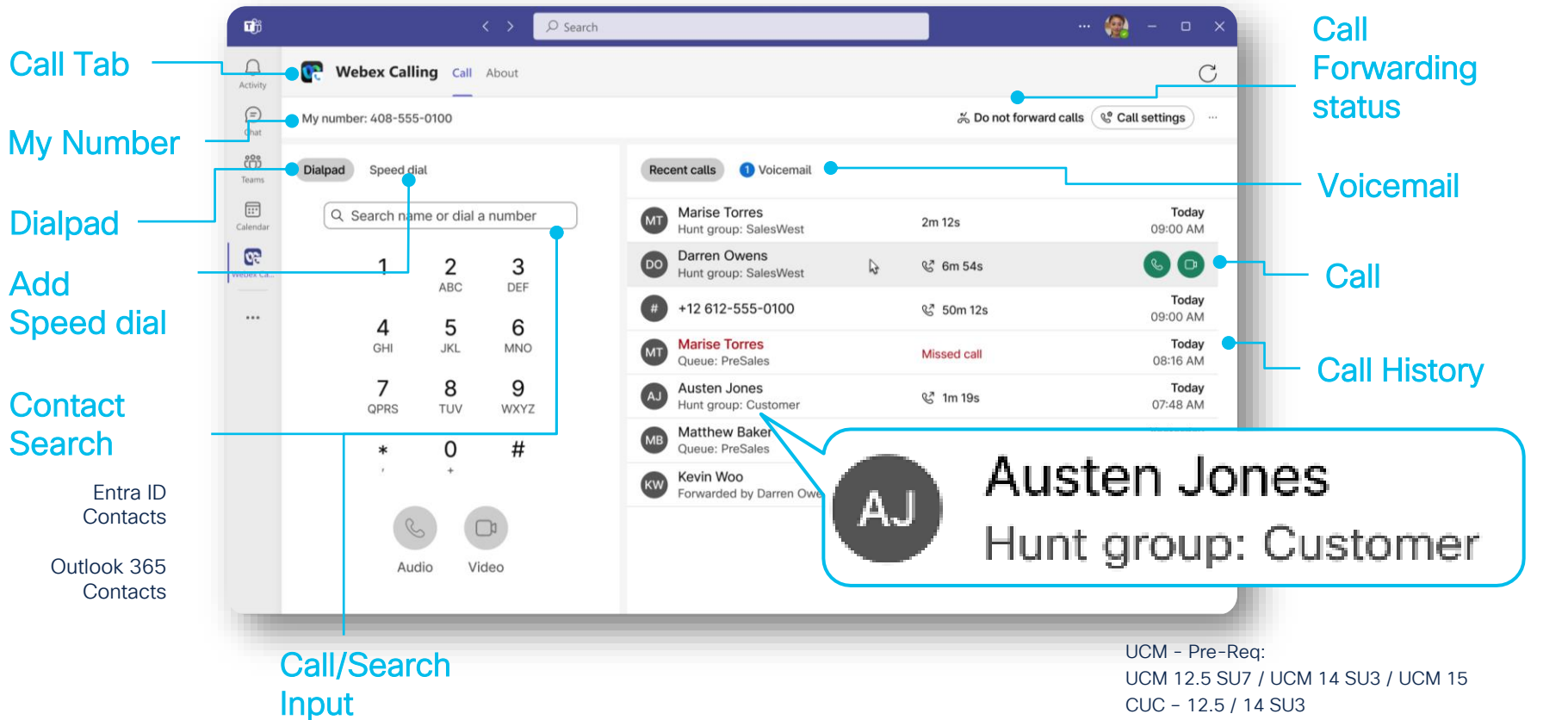


The simplest way to integrate Microsoft Teams Messaging and Cisco Calling

- Use existing Cisco calling infrastructure: Webex Calling (including Multitenant, Wholesale and Dedicated Instance) or CUCM
- Click to call with your existing Cisco phones from MS Teams
- No compromise on calling features
- No dial plan or routing re-configuration required
- No additional license costs

This is the recommended solution in which Cisco is investing the most to achieve interoperability between Cisco Calling platforms and Microsoft Teams

Webex Calling for Microsoft Teams



UCM – Pre-Req:
UCM 12.5 SU7 / UCM 14 SU3 / UCM 15
CUC – 12.5 / 14 SU3
On-premises: Webex Cloud-Connected UC (CCUC)

What's available on Webex Calling for MSFT Teams



Click to Call from MSFT Teams Support audio/video calls



Make a call by keying in the number in the dial pad



Bidirectional Presence status sync



Make 1:1 calls from MSFT Teams Chat and Channels



See Call History



Search contacts from Outlook/Azure



Listen to voicemails



Use Calling Dock

NEW!



Use your existing Calling infrastructure Webex Calling (Multitenant, Dedicated Instance or Wholesale) or CUCM



Available on Desktop Windows and Mac



Available on Mobile



VDI support

NEW!



Webex app can be deployed in Calling Only mode



Hide Webex App option keeps the Webex App hidden



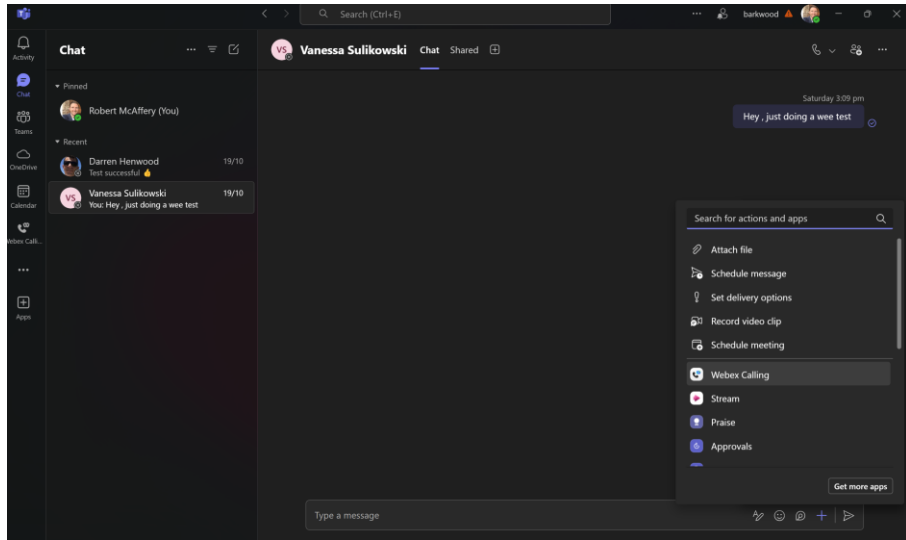
Call Forwarding status

See your call forwarding status at a single glance

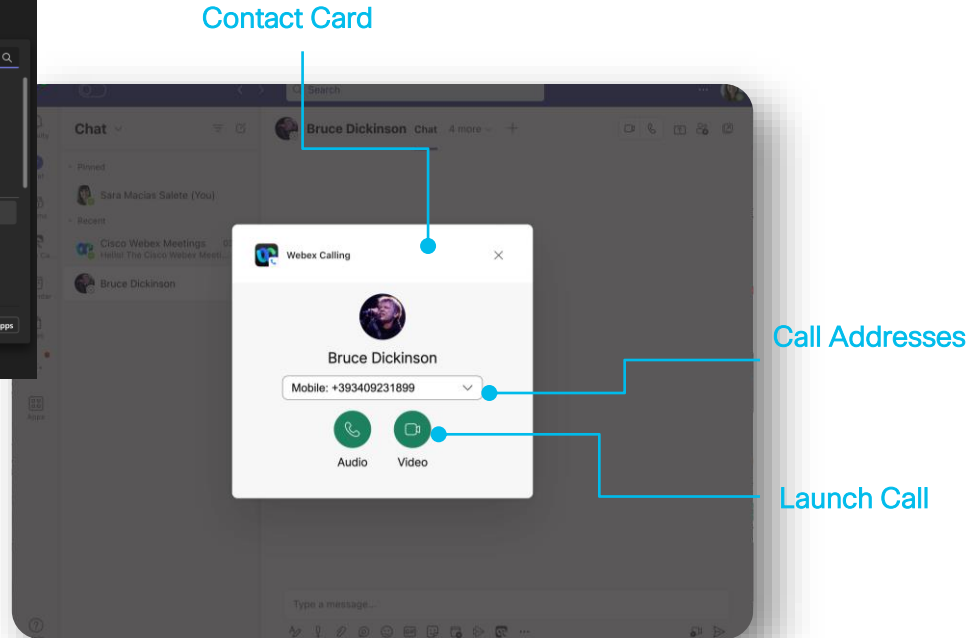
Demo



Webex Calling from a MS Teams conversation



+ more button > Webex Calling



In-Call Window

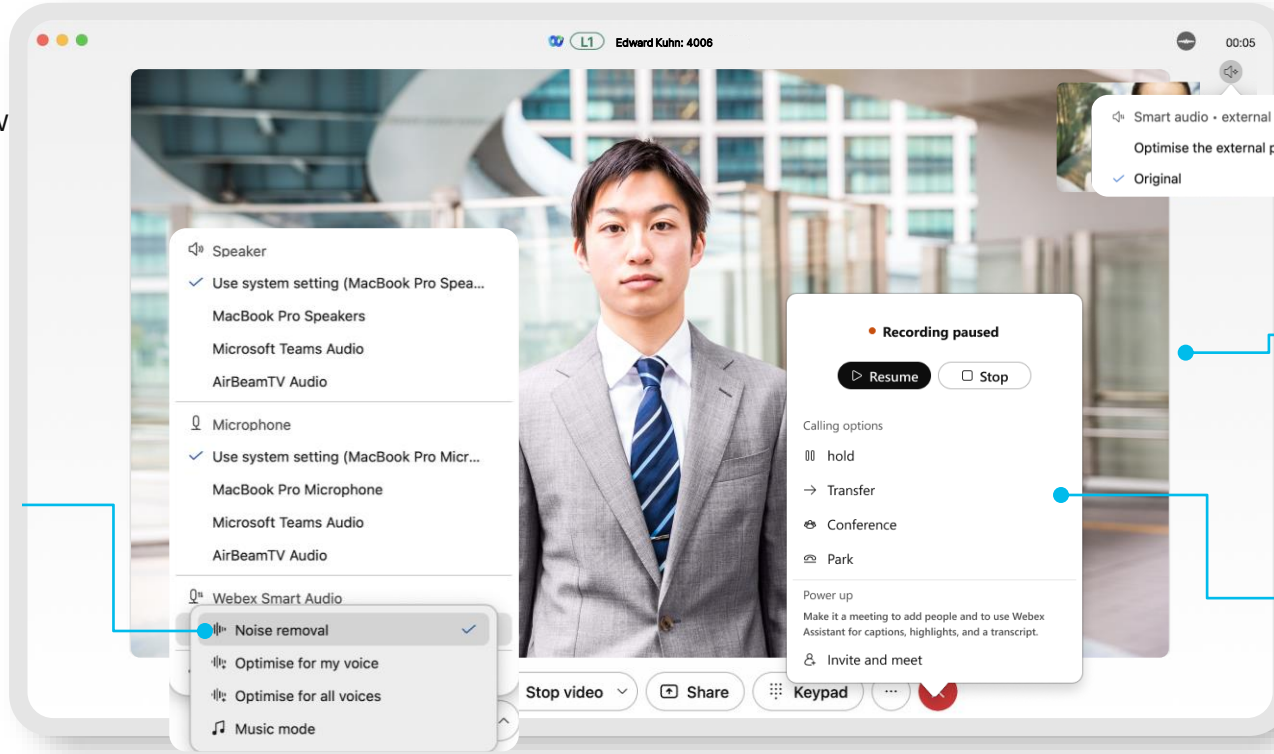
In-Call window provides complete Webex Calling capability set

Noise Removal

Smart Audio

Audio and Video Calling

Mid-Call Controls

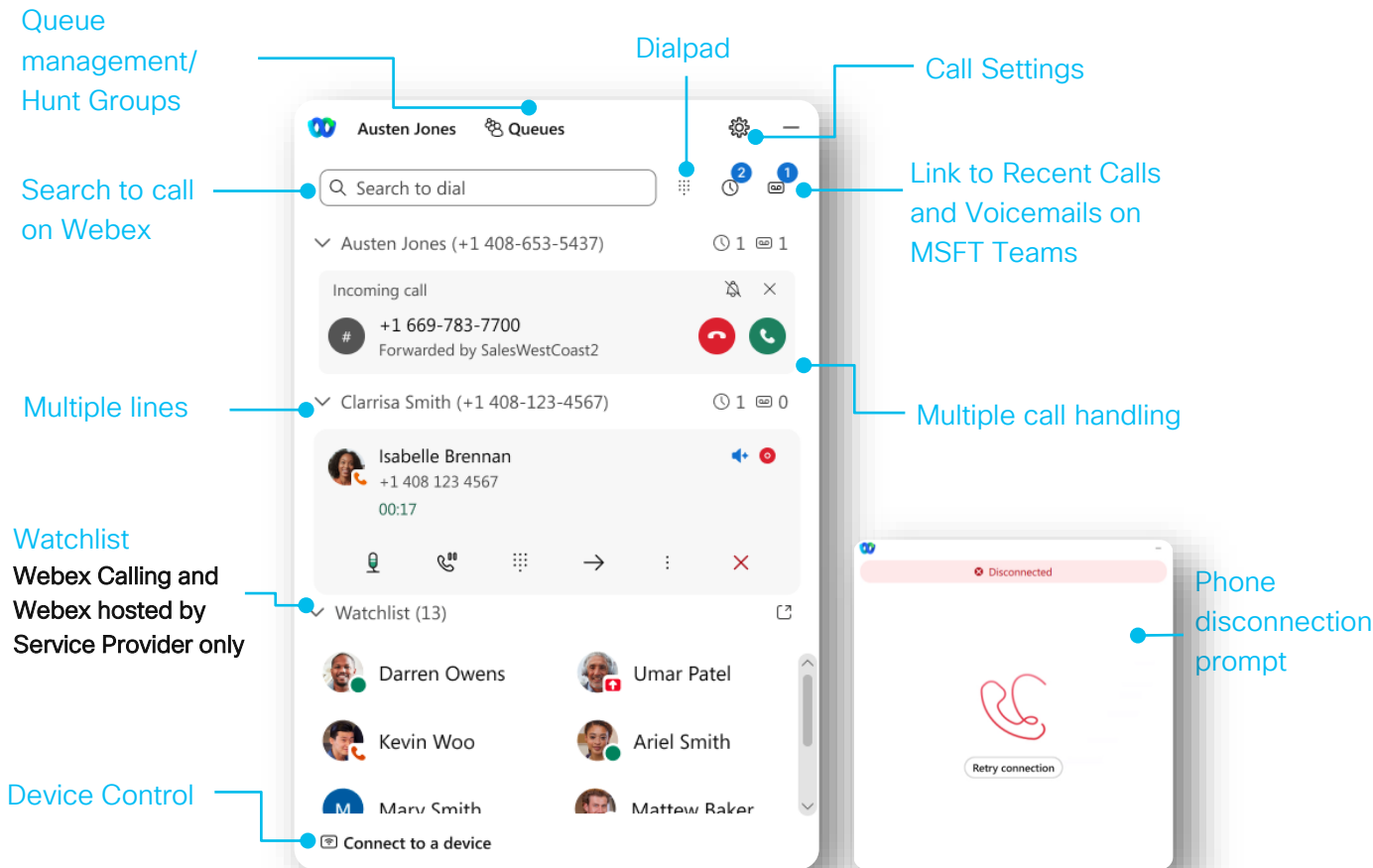


Webex Calling dock

The Webex Calling dock (formerly multi call window) is useful to **maximize calls for multiple lines and manage calls effectively.**

It is part of the Webex App and it works with **all the Calling platforms.**

Windows only today.



Docking for Calling Dock

This widget
opens/minimizes
the Calling dock



Bidirectional Presence Sync

The following presence status will be synchronized between Webex and Microsoft Teams:



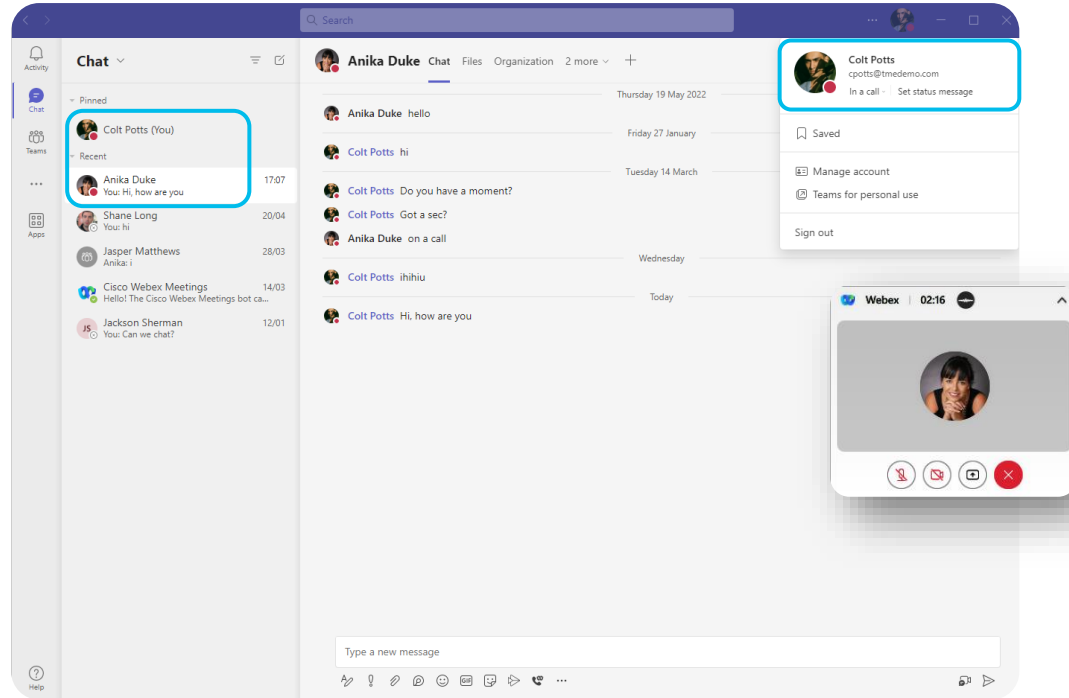
 On a call	→	 In a call
 DND	→	 DND
 Presenting	→	 Presenting
 In a meeting	→	 In a call



 In a call	→	 On a call
 DND	→	 DND
 Presenting	→	 Presenting

When in a MSFT Teams meeting, MSFT sets the status as *In a call*

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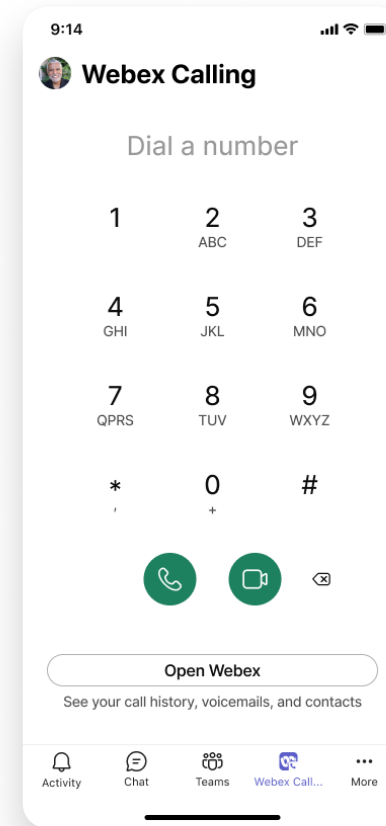


Mobile experience

Webex Calling app is available from the Microsoft Teams apps on **mobile**.

To access Call History, Voicemails and Contacts, Webex App must be open.

Presence sync is supported on mobile.



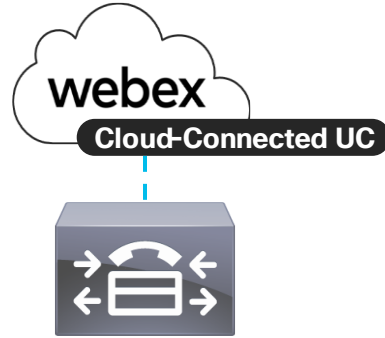
High Level Architecture



Cisco Calling Infrastructures



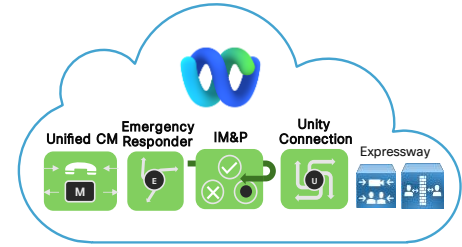
Webex Calling Multitenant
(preferred)



Cisco Unified
Communication Manager
(CUCM)

+

Webex Cloud Connected
UC (CCUC)



Webex Calling Dedicated
Instance

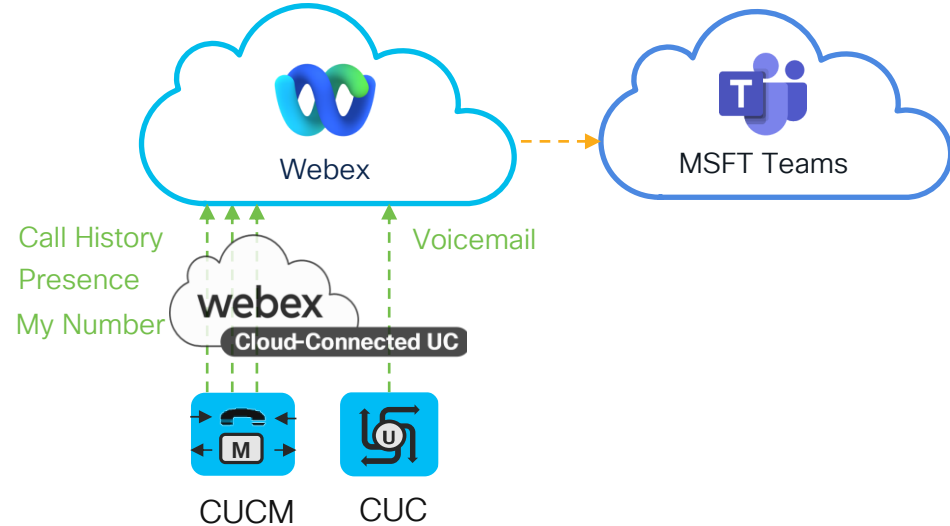
Note: Webex for BroadWorks is also supported, but not covered in this presentation

Why do we need CCUC with CUCM?

Webex Calling for Microsoft Teams is a Cloud solution, and some services are taken from the Cloud.

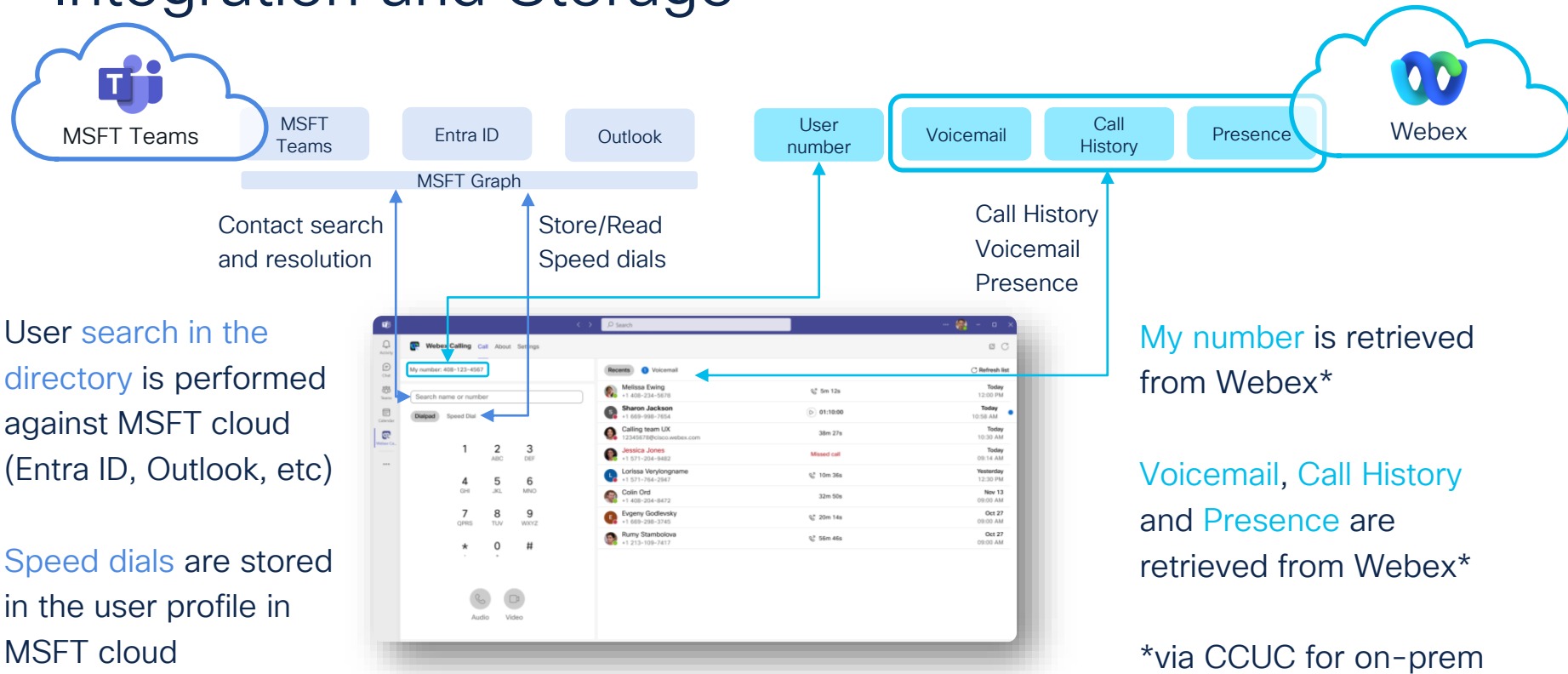
We need a **connector: Webex Cloud Connected UC**

If CCUC is not enabled, a user can still make calls through the integration, but **Call History**, **Voicemail**, **My Number** and **Presence** won't be synced.



CCUC is required to push Call History, Presence, My number and Voicemail from CUCM and CUC to the Webex Cloud

Integration and Storage

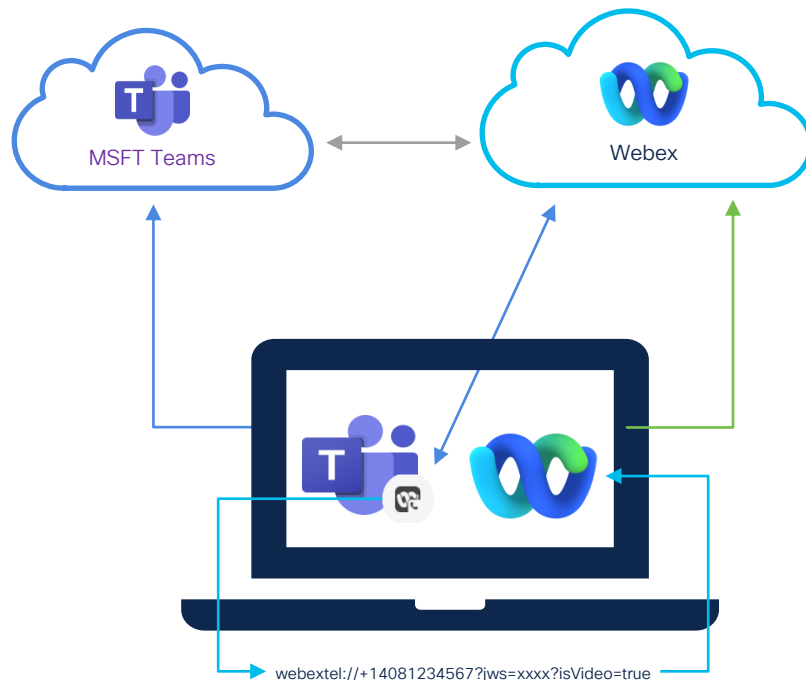


This means that Contact Resolution for Dialpad/speed dial comes from Microsoft, while for Call History/Voicemail it comes from Webex/UCM

Webex Calling for Microsoft Teams Architecture

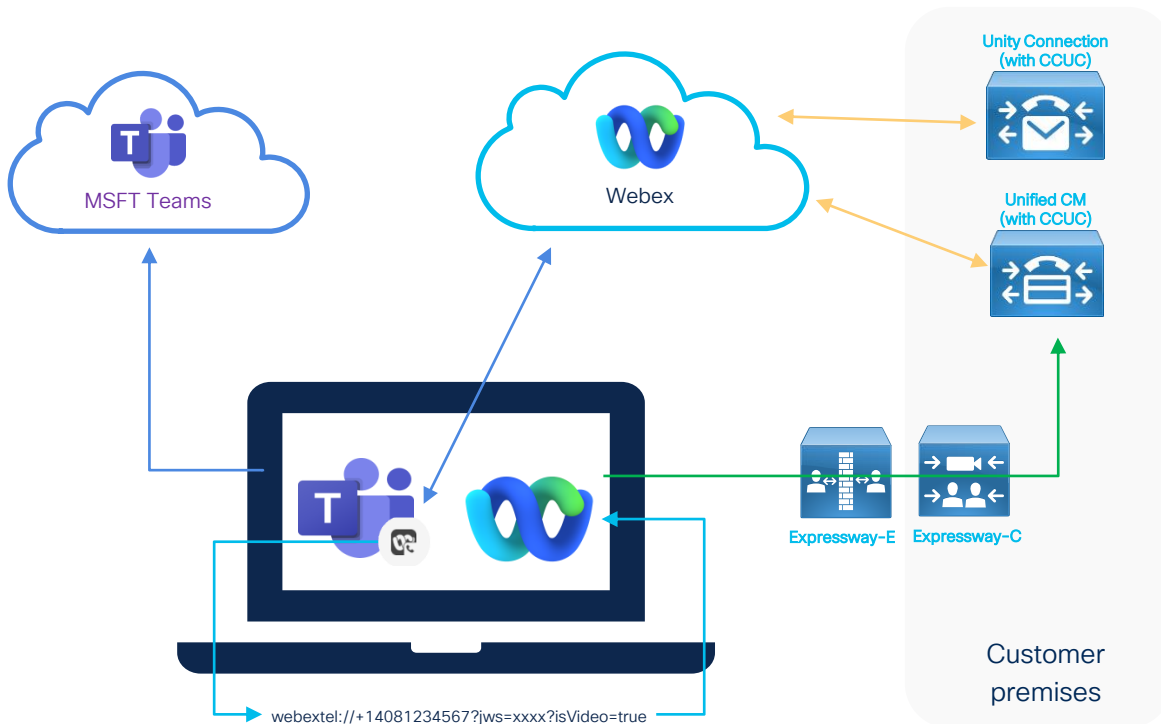
For Webex Calling (Multitenant and DI)

1. User launches **MSFT Teams**
2. Webex App registers to **Webex Calling**
3. User signs in and authorizes **Webex Calling integration**. Integration downloads and displays Speed Dials, Call History, Voicemail, etc
4. Users makes a call via the integration. **webextel://** protocol handler launches Webex App call window to make the call.

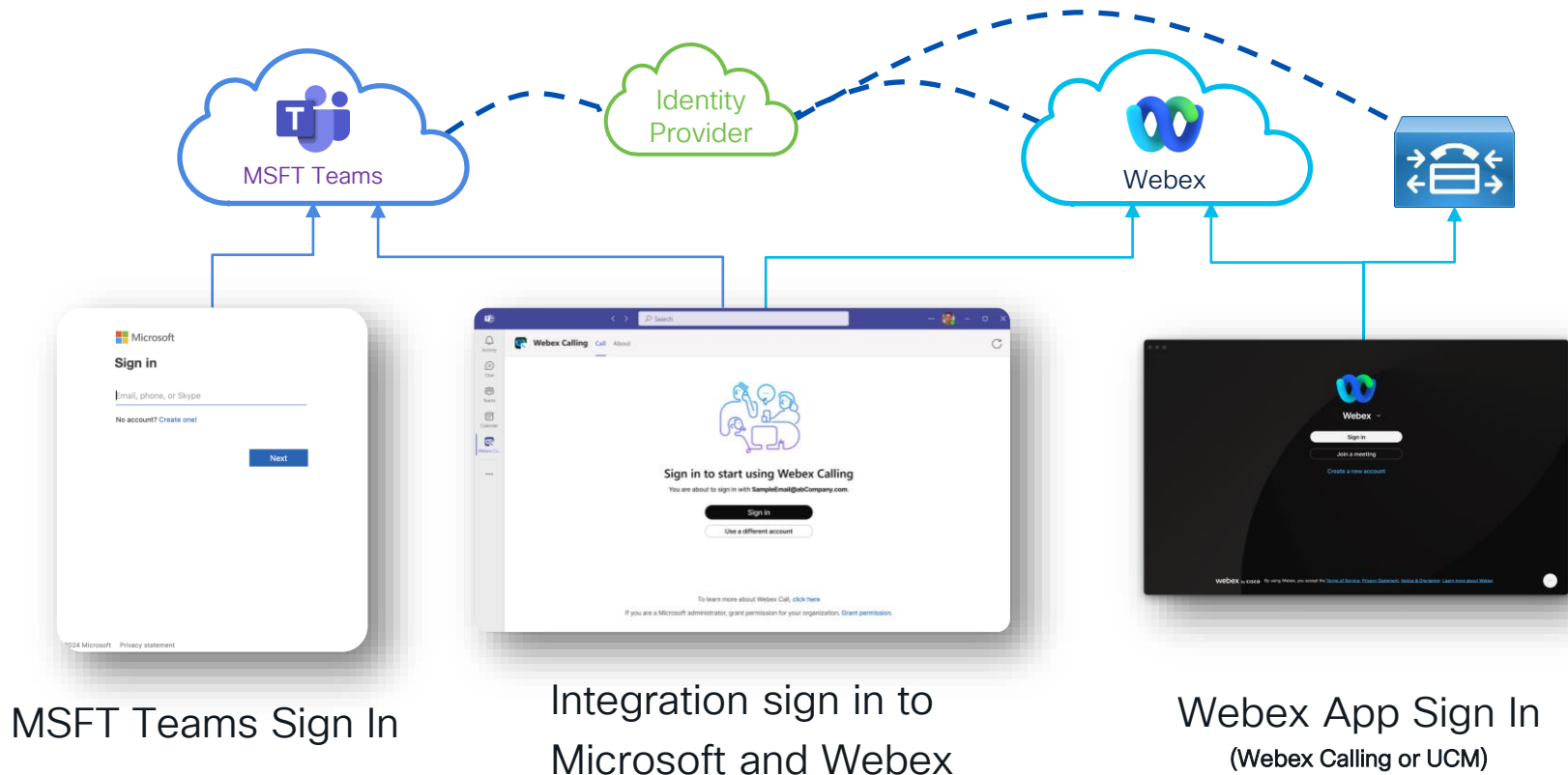


Webex Calling for Microsoft Teams Architecture For CUCM

1. User launches **MSFT Teams**
2. Webex App registers to **Unified CM**
3. User signs in and authorizes **Webex Calling Integration**. Integration downloads and displays Speed Dials, etc
4. If Unified CM is **CCUC enabled**, Call History and My number will be retrieved and displayed on Integration tab, and Presence will be synced
5. If Unity Connection is **CCUC enabled**, Voicemail will be retrieved and displayed on the Integration tab
6. Users makes a call via the integration. **webextel://** protocol handler launches Webex App call window to make the video call.

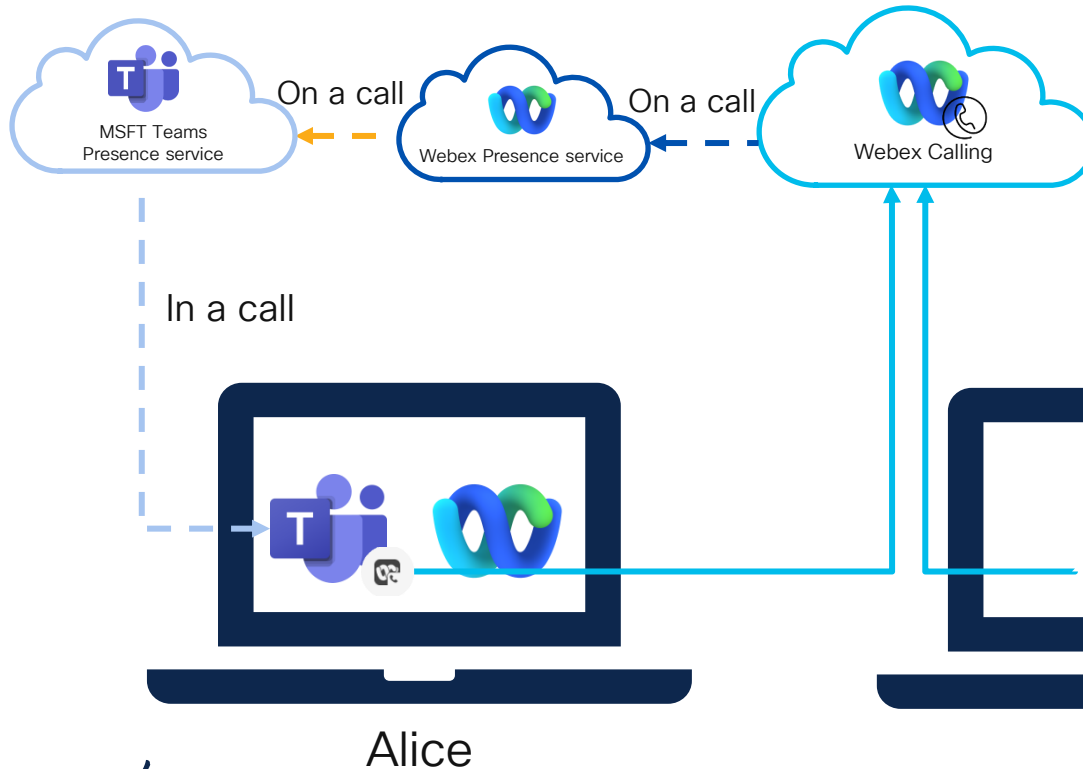


Single Sign On across Microsoft and Webex



Presence Sync Architecture

Making calls through the Calling integration



Alice **calls** Bob using the integration → Alice's Webex presence is set to "**On a call**"

Webex presence service pushes "**On a call**" update to MSFT Teams presence service for Alice

Alice's MSFT Teams **presence** is updated to "**In a call**"

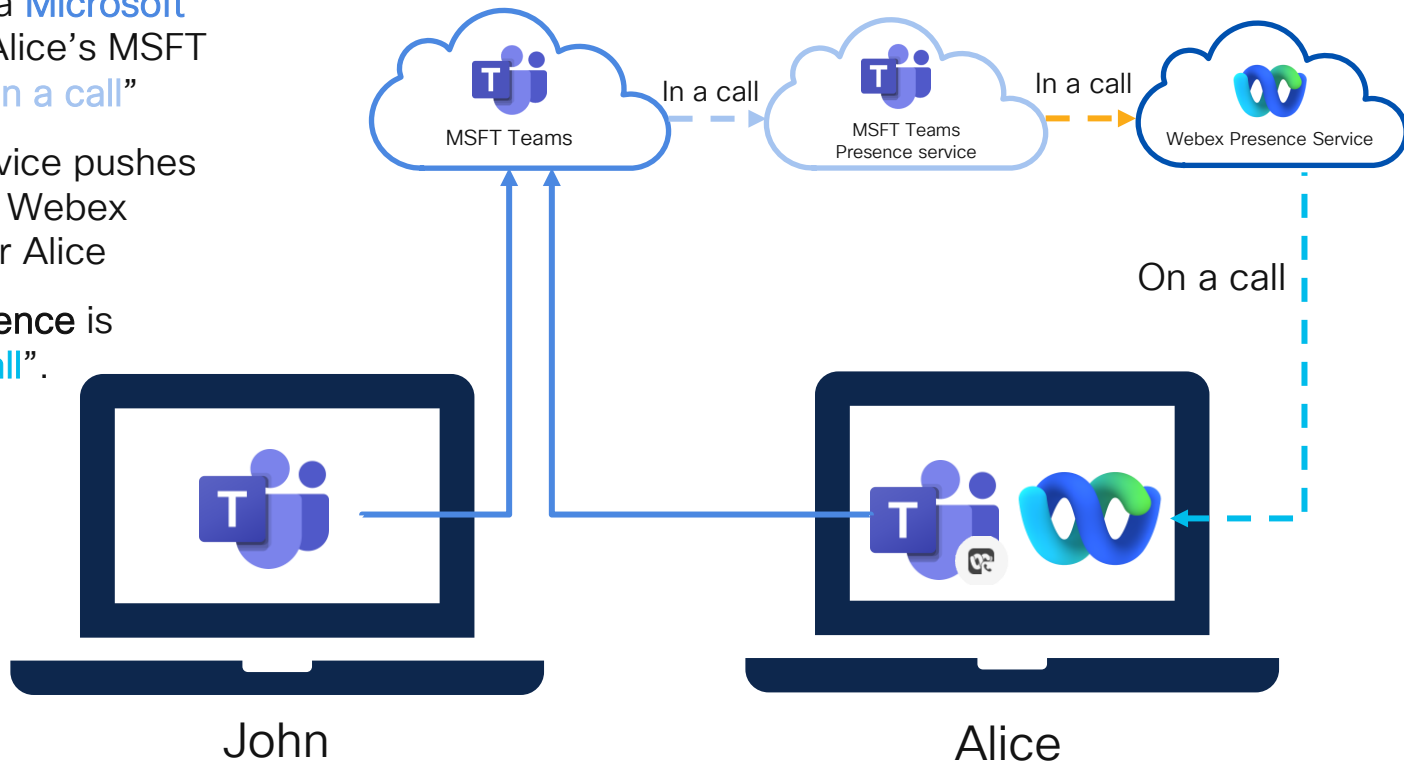
Presence Sync Architecture

Joining a Microsoft Teams meeting

Alice and John join a **Microsoft Teams meeting** → Alice's MSFT presence is set to **"In a call"**

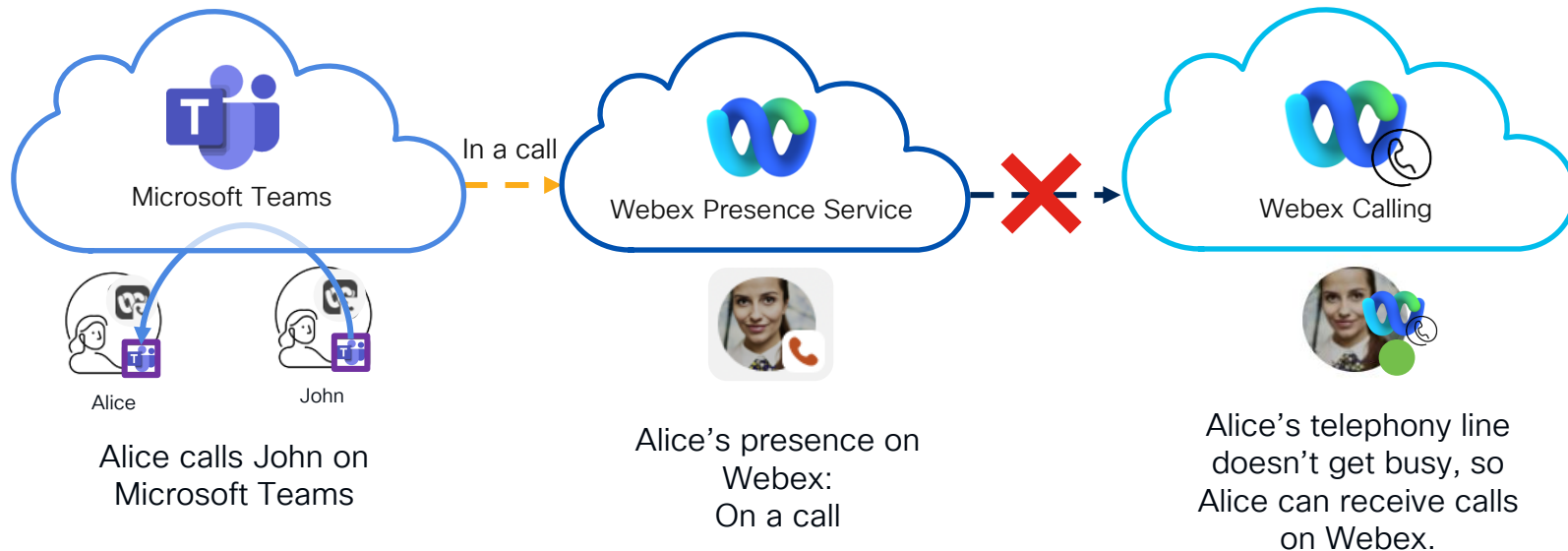
MSFT presence service pushes **"In a call"** update to Webex presence service for Alice

Alice's Webex presence is updated to **"On a call"**.



Presence Sync Architecture

Microsoft to Webex Presence Sync behavior



This behavior is expected because the Presence Service does not influence the Call Control status

Presence sync expected behaviors

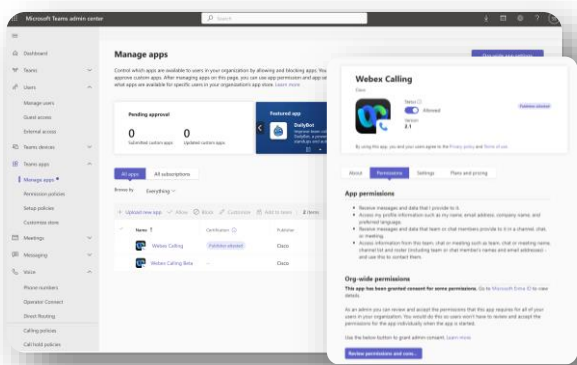
Some frequent scenarios

If the user is...	Microsoft Teams status 	Webex App status 	Can the user receive calls on Webex?	Does the “Call Forwarding during busy lines” service work?
In a Microsoft Teams call	 In a call	 On a call	Yes. User appears on a call at application level, but their line is not busy	No. User appears on a call at application level, but their line is not busy

Solution deployment

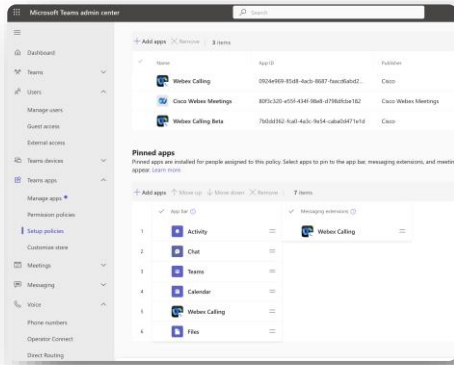


Enable Webex Calling for Microsoft Teams



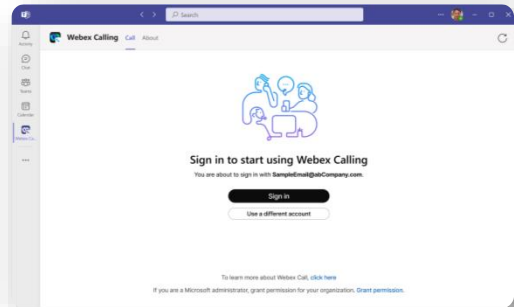
Customer admin **allows third party apps** → **Webex Calling** app.

Admin can grant **Microsoft permissions**



Customer admin can **pre-install Webex Calling** App or allow users to install it themselves

Webex Calling App can be deployed to all or groups of users with MS Teams App Setup policy



End users will log in to the integration for the first time. **Webex permissions will be auto-accepted** in the back end.

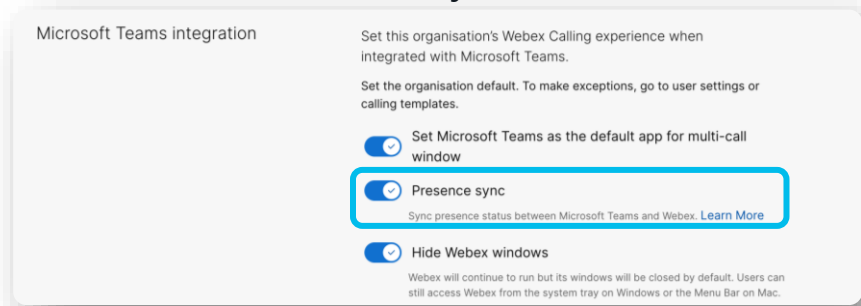
Admin will also accept **Microsoft permissions** at this step if they have not been granted by admin from Teams Admin Center

Configure Webex Calling for MS Teams

Presence Sync configuration

Admin tasks

Enable Presence Sync on Control Hub



Accept Microsoft related permissions*

- *Read Presence information of all users in your organization*
- *Read and write Presence information for all users*

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End user tasks

Sign in to the integration **at least once** after enabling presence sync

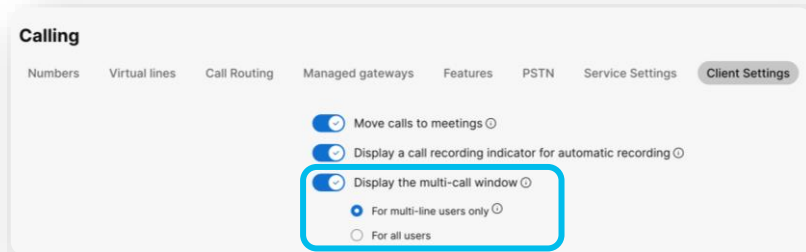
Sign in to the integration **once every 90 days**

*These Microsoft permissions are accepted when enabling the integration on MSFT Teams. They won't need to be accepted again after enabling Presence Sync on Control Hub

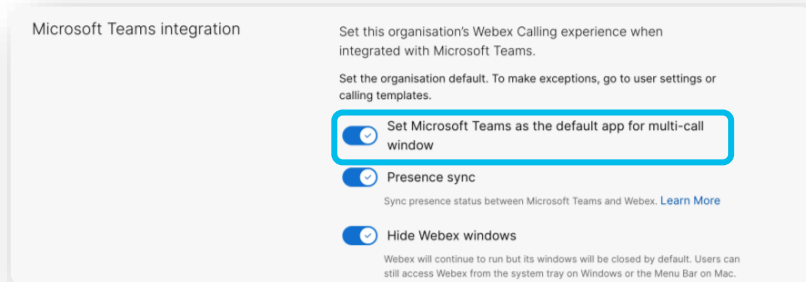
Calling dock/Multi call window configuration

Admin tasks

Enable Multi Call window on Control Hub



Link Multi Call window with Microsoft Teams

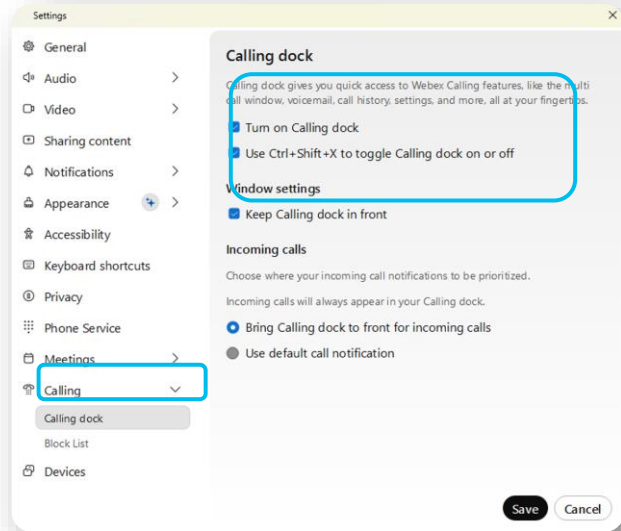


These settings can be applied to individual users, groups or to the whole org.

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End user tasks

Users can decide whether to show it or not from the Webex App **Calling Settings**



This feature is changing its name from “multi call window” to “Calling dock”, but we can still find it on Webex Control Hub as “multi call window”

Using on-prem CUCM or Webex Calling DI as the calling platform

Pre-requisites

Access to Control Hub

Set up Webex **Cloud-Connected UC** for CUCM (for Call History, My Number and Presence) and Unity Connection (for Voicemail)

For **Webex Calling DI**, these are enabled by default.

CUCM configuration

(also valid for Webex Calling DI)

CUCM Version: **12.5 SU7+, 14 SU3+ or 15**

The **line number** on CUCM needs to be **associated to the User ID** for the call presence to be populated with the username

Users sync to Control Hub

Users need to be synced either from on-prem Active directory or from Cloud AD such as Entra ID to Control Hub common identity (CI).

The User ID/email address of the users must be **the same** as the **email address** configured in **Control Hub**.



	Full Name	User ID
☒	Brown, Alison	test_msplugin_015

Associate End Users Select All Clear All Delete Selected

Using CUCM as the calling platform

Enable Voicemail, Call History and Presence Sync

To enable Call History, Voicemail or Presence for CUCM, extra configuration is required from [Cloud Connected UC](#) settings (under UC Management/Inventory)

- Enable [Centralised call history](#) and [Presence Sync](#) on Cisco Unified CM (CUCM) cluster groups
- Enable [Voicemail](#) toggle on Cisco Unity Connection (CUC) cluster group

Note: After enabling Presence/Call History/Voicemail for the first time, It takes up to 8-12 hours for changes to be reflected

CUCM cluster group

Service management

Changes to these settings will take a short time to take effect.

Analytics	☒	Enabled
Directory service	☒	Enabled
Certificate Management	☒	Enabled
Operational metrics	☒	Enabled
Presence status sync	☒	Enabled
Webex app provisioning for Unified CM Calling	☒	Enabled
Centralised call history	☒	Enabled
Deployment Insights	☒	Enabled

CancelSubmit

Webex App and Microsoft Teams customisation

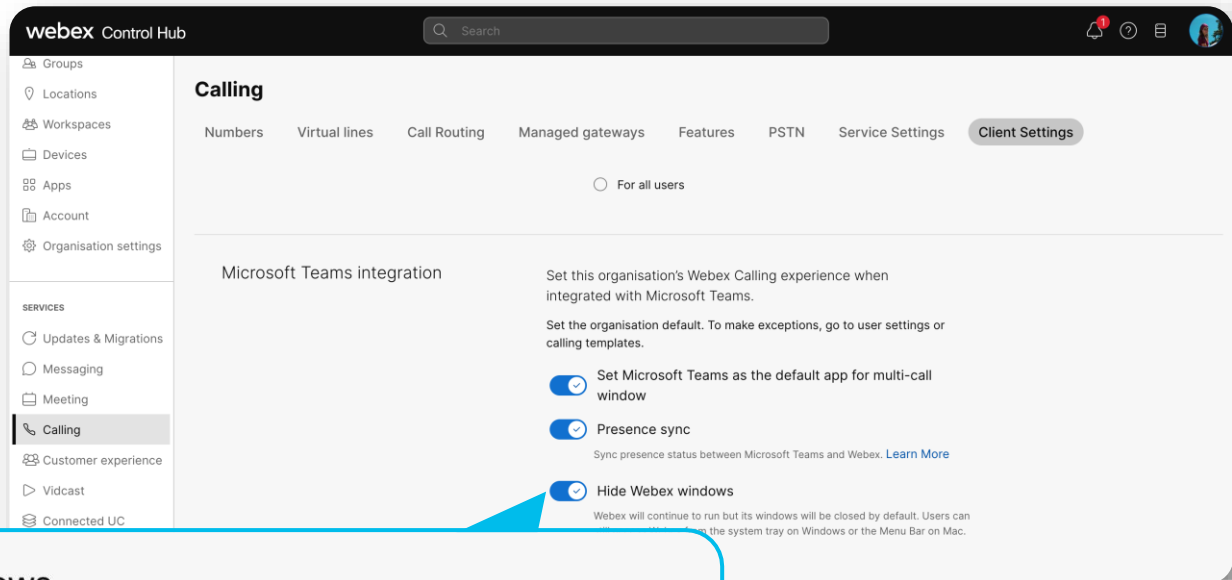


Hiding Webex App

Configure setting to hide Webex App in Webex Control Hub

Webex App will be **hidden**.
The app will cross-launch showing only the relevant windows (Calling, Calling settings, Calling dock...) but not the full Webex App.

This setting can be applied to individual users, groups or to the whole org.



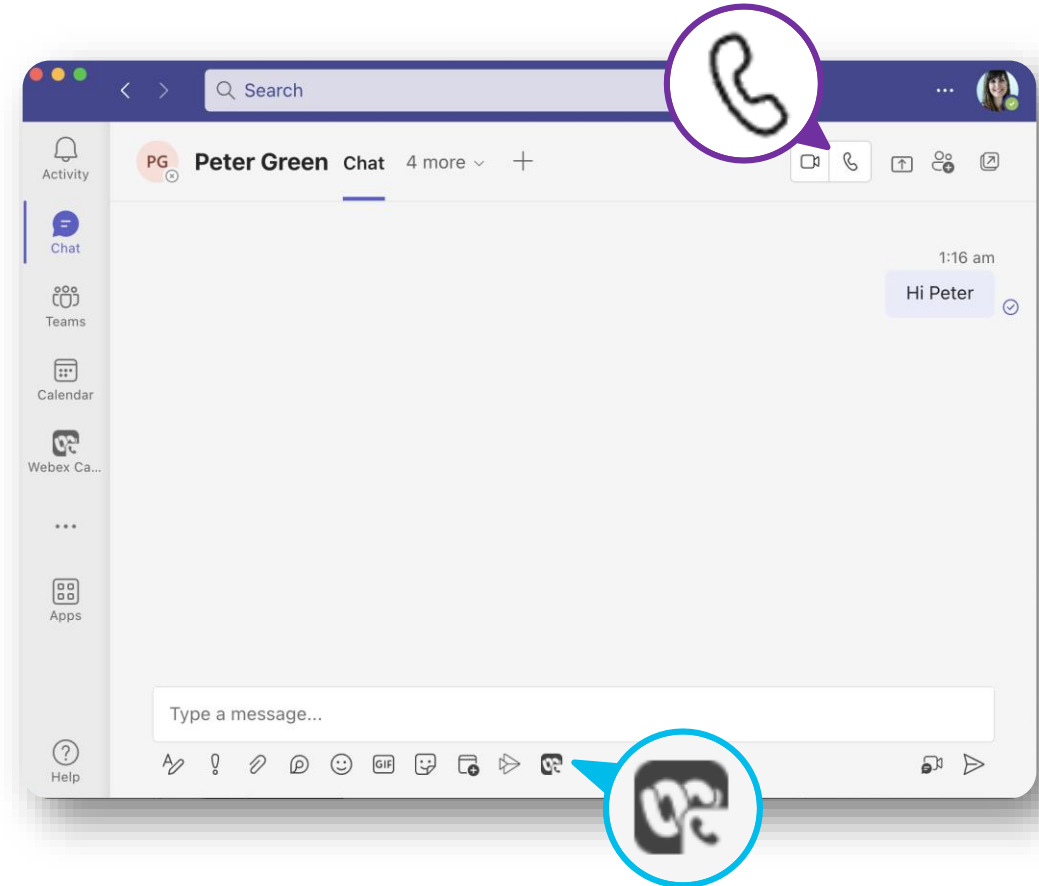
Hide Webex windows

Webex will continue to run but its windows will be closed by default. Users can still access Webex from the system tray on Windows or the Menu Bar on Mac.

Hiding the Microsoft Teams Calling button

Finding **MSFT Teams-to-Teams** calling button and the **Webex Calling button** on a chat window could be confusing.

We will look at **different scenarios** to evaluate when to hide the MSFT Teams calling button.

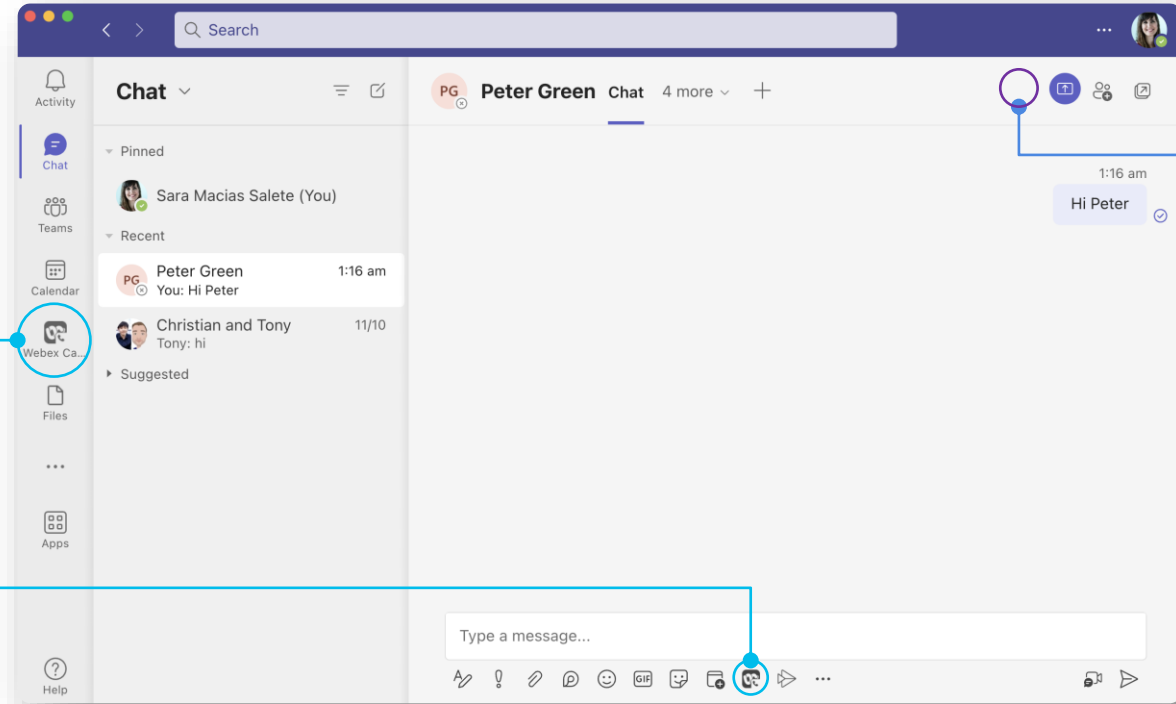


Recommendations for Full Webex scenario

Webex for internal, external and PSTN calls

Webex
Calling button
available from
the apps bar

Webex Calling
button
available from
the messaging
extension



Teams-to-
Teams calling
button
disabled

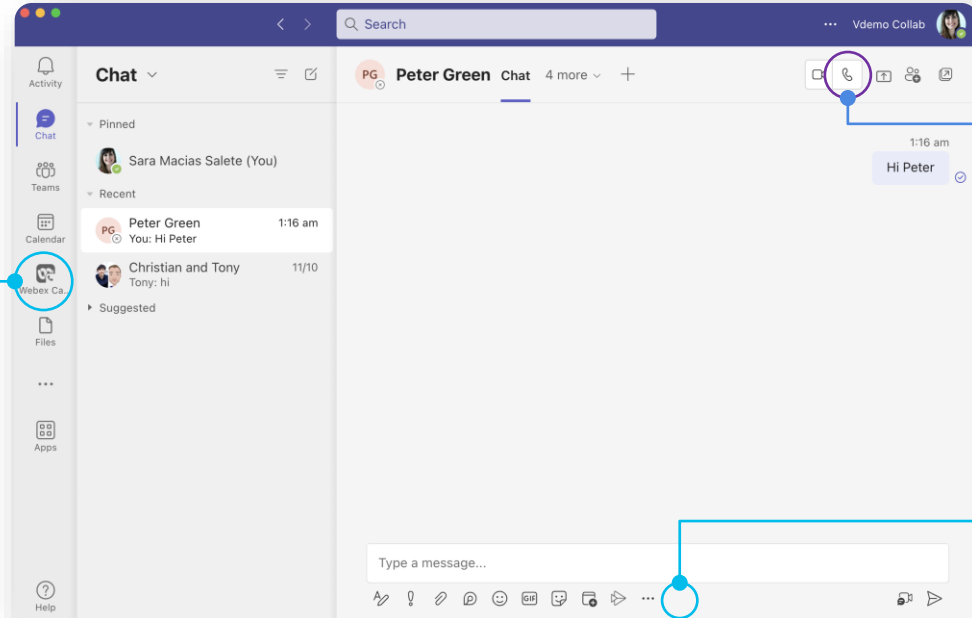
Recommendations for Hybrid scenario (suboptimal)

Webex for enhanced VoIP and PSTN and Teams-to-Teams for VoIP

Teams-to-Teams calls will be used for VoIP calls

Webex will be used for PSTN Calling or any VoIP calls with enhanced capabilities

Webex Calling button available from the bar to make PSTN or internal calls with advanced capabilities



Teams-to-Teams calling button available from the chat when chatting with any Teams user

Webex Calling button disabled from the messaging extension*

*Webex Calling button (and all the apps) is disabled by default on chats with external (federated) users

Cisco Video Devices

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Giving our customers extra flexibility and choice


RoomOS experience




Includes native Webex Meetings and Events
with interop support for Microsoft Teams, Google, and Zoom



OR


Teams experience




Includes native Microsoft Teams
Support for Webex Meetings¹, Events² and Zoom¹

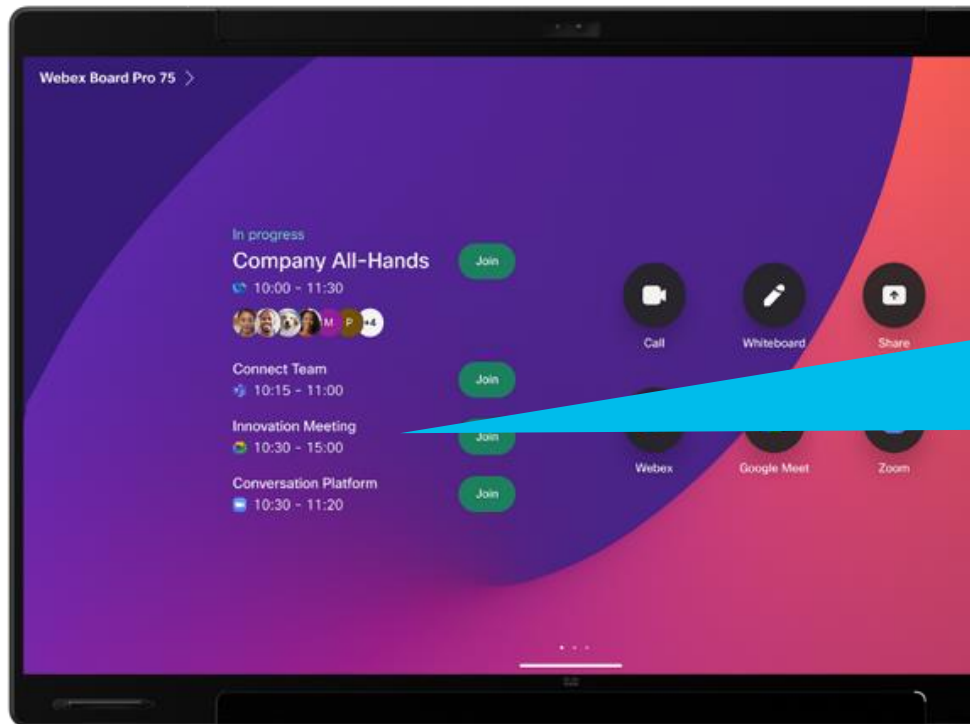


Same device, powered by Cisco RoomOS

¹Native (with CH registration) or DGJ

²Native (with CH registration) only

Open Platform strategy



In progress

Company All-Hands

10:00 - 11:30



Connect Team

10:15 - 11:00

Innovation Meeting

10:30 - 15:00

Conversation Platform

10:30 - 11:20

Video Integration with Microsoft Teams (VIMT) – CVI Gateway

Example Teams invite generated by Microsoft

"NEW" INVITE

Microsoft Teams [Need help?](#)

Join Link for App &
Web App

[Join the meeting now](#)

Meeting ID &
Passcode

Meeting ID: 123 456 789 012
Passcode: TZ23456

IVR Video Address

Join on a video conferencing device

CVI specific
Conference ID

Tenant key: [example@m.webex.com](#)

Video ID: 987 654 321 0

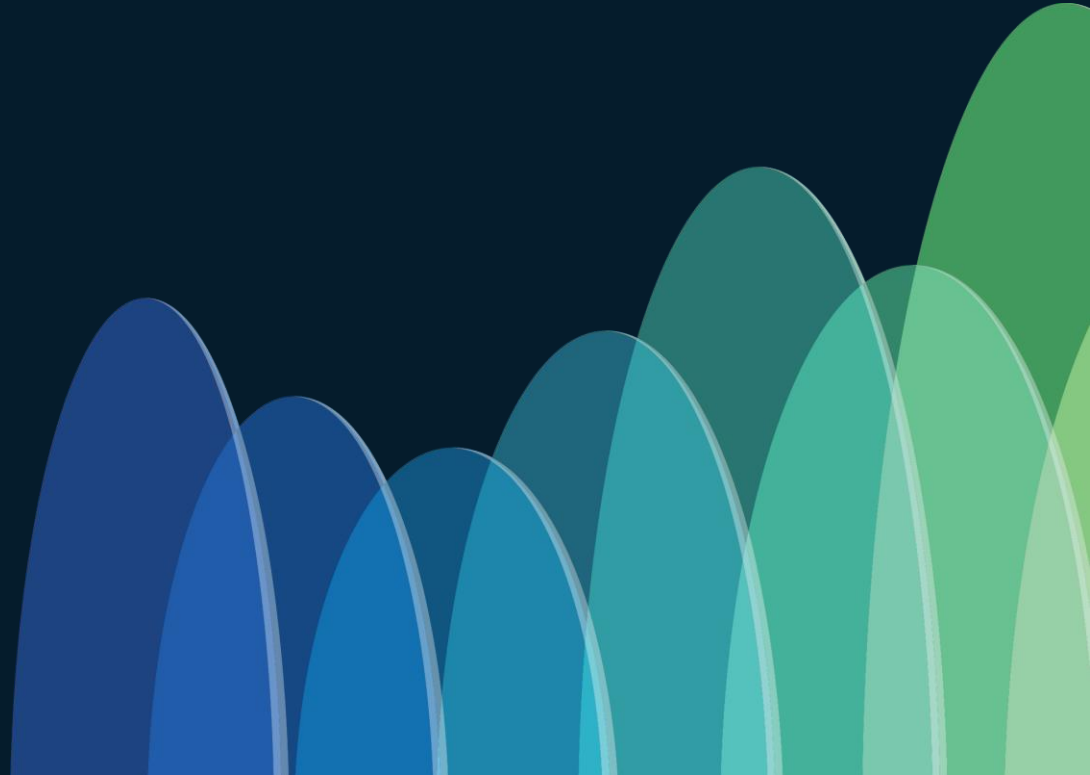
Link to CVI Partner
web page for direct
dialing info
(new Microsoft wording)

[More info](#)

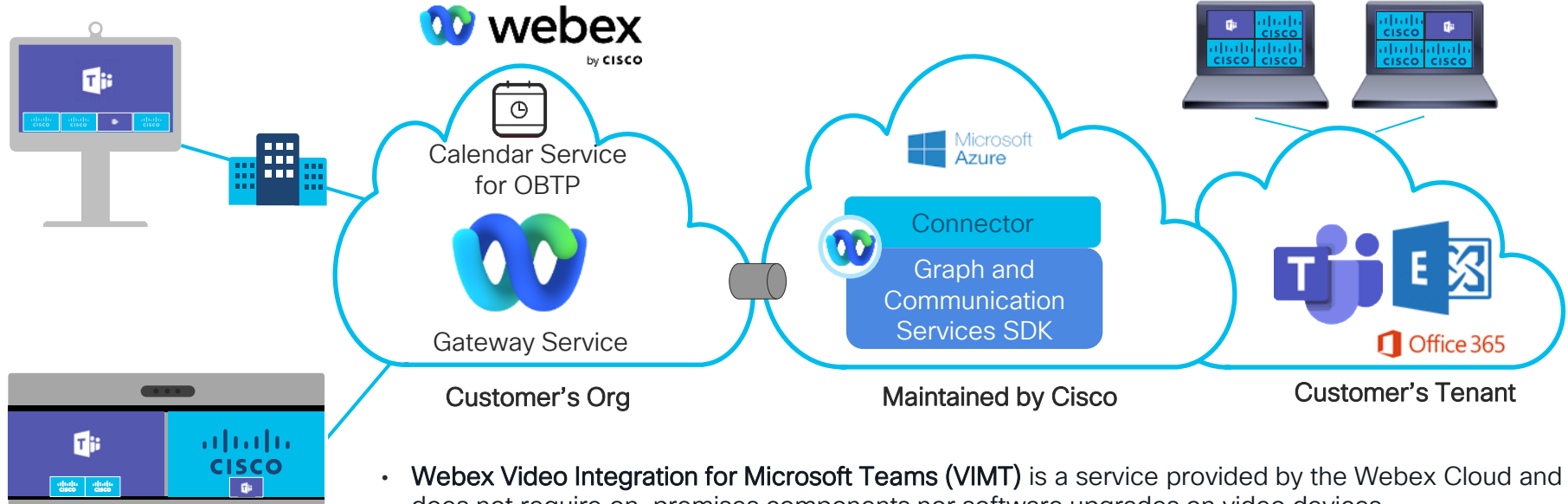
MSFT Teams
Join Info

MSFT Teams
CVI info

VIMT Architecture

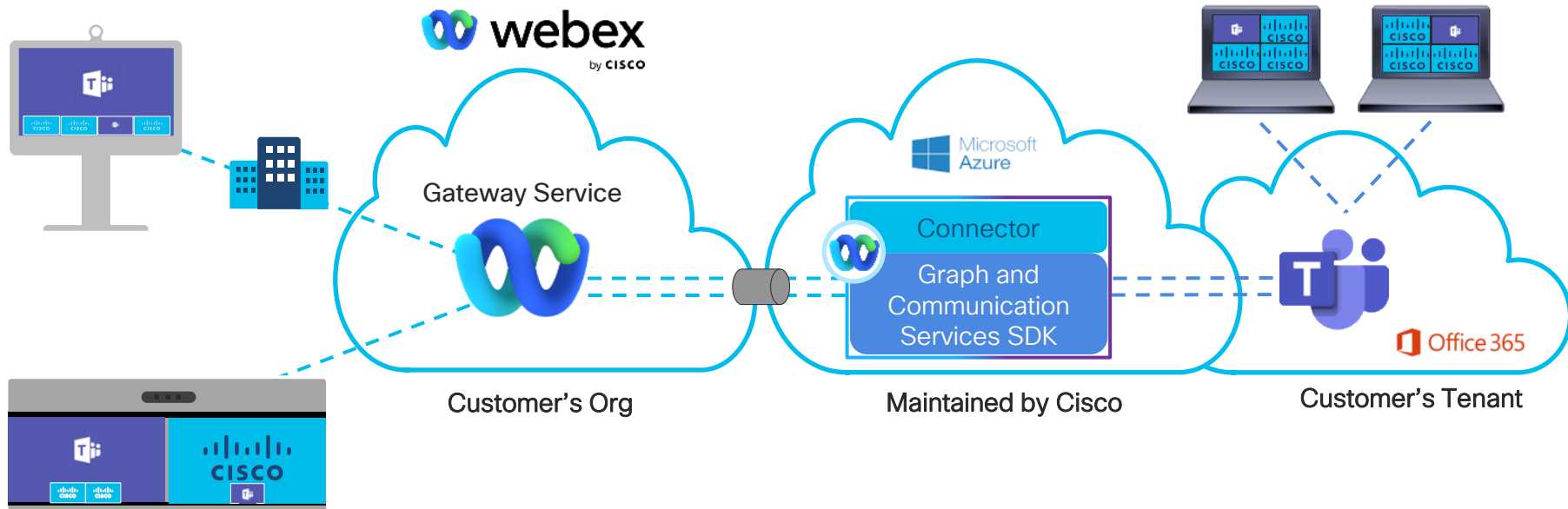


Video Integration for Microsoft Teams (VIMT) gateway



- **Webex Video Integration for Microsoft Teams (VIMT)** is a service provided by the Webex Cloud and does not require on-premises components nor software upgrades on video devices
- Webex video infrastructure and Microsoft SDK are hosted in Azure and maintained by Cisco on behalf of customers
- Available to **On-prem** Registered, **Cloud** Registered/Aware Webex Rooms, and 3rd party SIP endpoints

Video Integration for Microsoft Teams Gateway – Signaling path



- On-prem video devices must be able to call the Webex domain for VIMT over SIP
 - Interworking to H.323 can be provided by local on-prem infra (i.e. VCS/Expressway)
- Example: Endpoint<->CUCM<->Expressway-C<->Expressway-E<-internet->Webex Cloud

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Devices connect to closest Azure Datacenter



- US East 2 (VA)
- US West 2 (WA)
- West Europe (Amsterdam)
- South UK (London)
- Southeast Asia (Singapore)
- Australia East (Sydney)

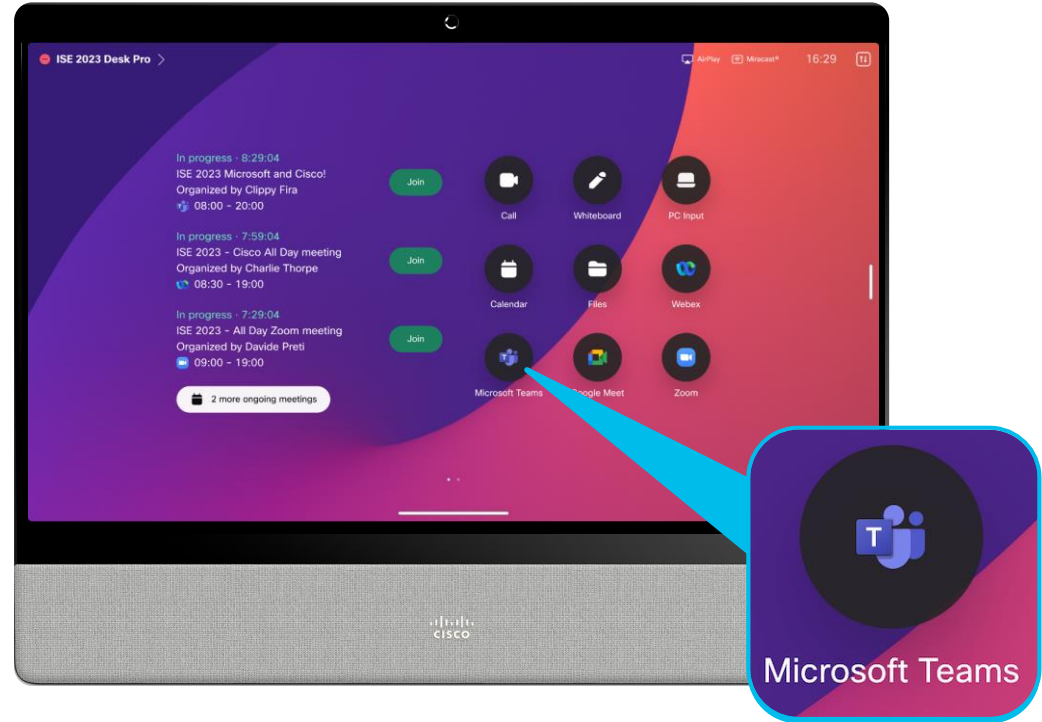
Joining methods

New Microsoft Teams button to join VIMT and WebRTC meetings

New!

A combined button to choose between CVI and WebRTC experience.

Available for both Cisco CVI and WebRTC



New joining button for VIMT

Microsoft Teams meeting

Join on your computer or mobile app

[Click here to join the meeting](#)

Meeting ID: 271 647 284 91

Passcode: xrV5a9

[Download Teams](#) | [Join on the web](#)

Join with a video conferencing device

[example@m.webex.com](#)

Video Conference ID: 118 489 176 5

[Alternate VTC instructions](#)

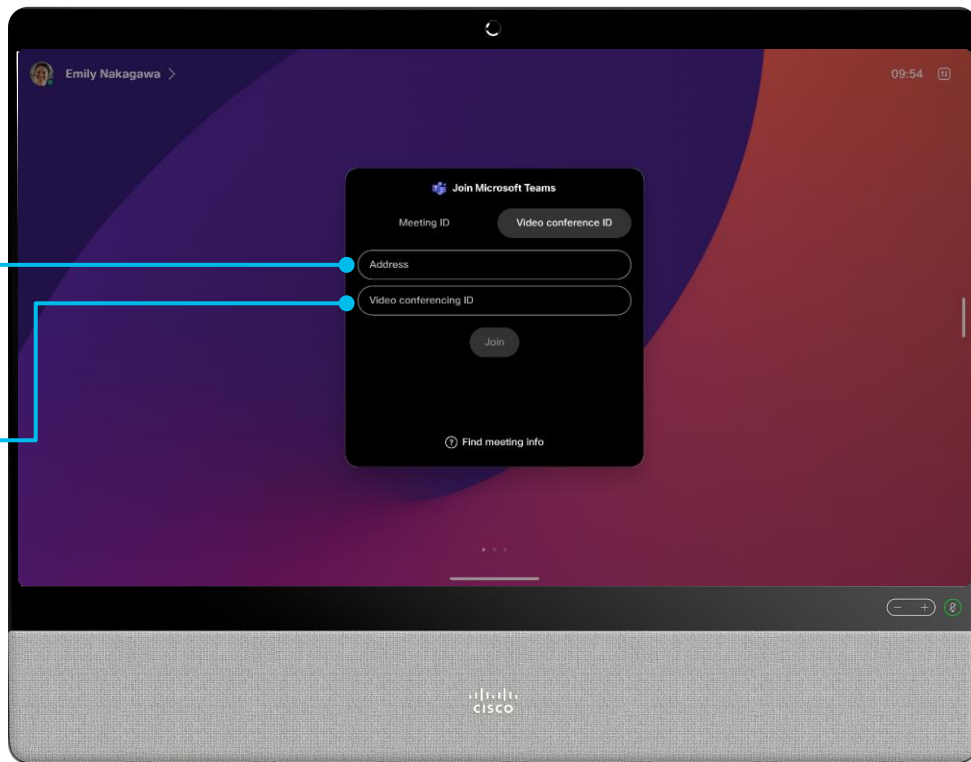
Or call in (audio only)

+1 469-998-6090, 401374203# United States, Dallas

Phone Conference ID: 401 374 203#

[Find a local number](#) | [Reset PIN](#)

[Learn More](#) | [Meeting options](#)



Configuring CVI option on join button

- Option 1: From Control Hub Device configuration

Select configurations

Select one or more configurations to apply to the selected device.

409 configurations ⓘ

Q cvi|

User Interface > Features > Call > Join Microsoft Teams **CVI**

User Interface > Meeting Join **CVI** Tenants

CVI tab: Auto/Hidden
Field to write the tenant

Option 2: From Device Command Line Interface

```
xConfiguration UserInterface Features Call JoinMicrosoftTeamsCVI: Auto  
xConfiguration UserInterface MeetingJoin CVITenants: "mySIPdomain@m.webex.com"
```

Hybrid Calendar OBTP for Pexip CVI

One Button To Push for third-party CVI providers

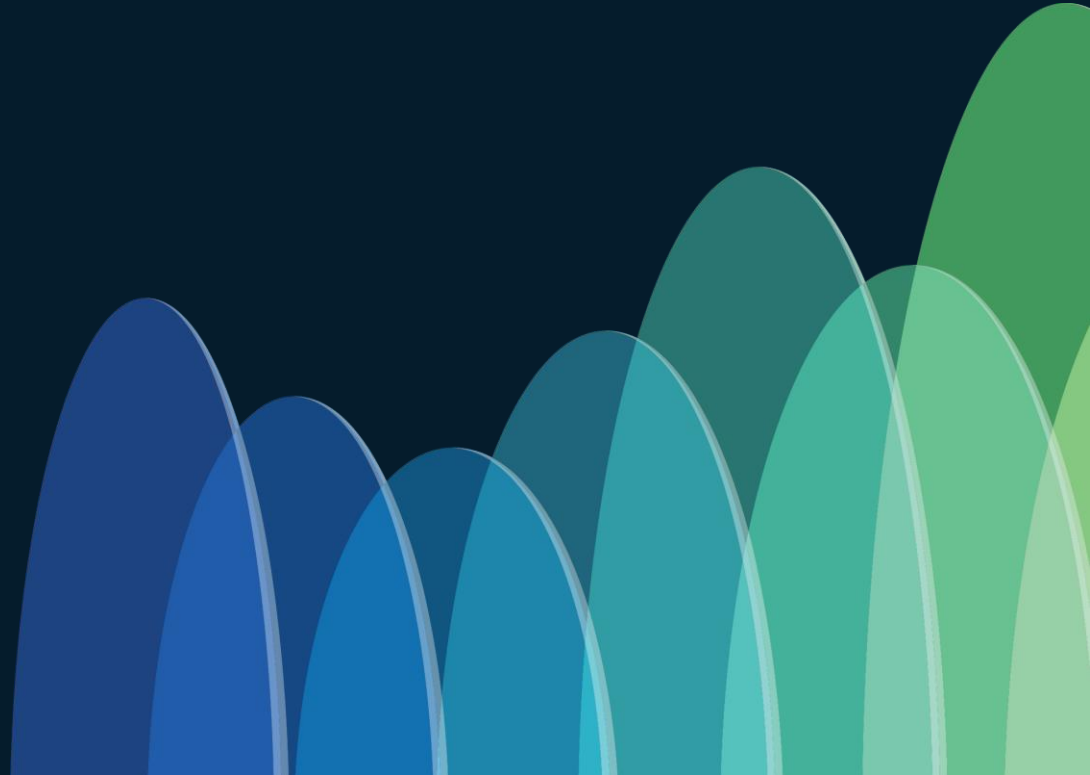
Now GA!

In addition to <https://www.webex.com/msteams> Hybrid Calendar will now support 3rd Party Microsoft CVI providers when **common ‘More info’ instruction’** links are used.

Supported ‘More info’ instruction’ link URLs:

- <https://pexip.me/teams>
- <https://dialin.bluejeans.com/teams>
- <https://dialin.plcm.vc/teams>

In-meeting experience



Layouts

Flexible layouts

Up to 49 participants on screen, with Large Gallery

- CVI can display up to 9 concurrent participants.
- Large Gallery is a [Microsoft Teams transcoded video layout](#)
- With VIMT, video participants are prioritized over audio-only in the layout composition

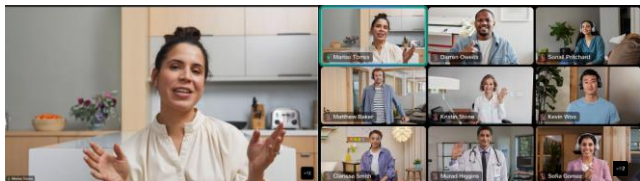
Single, dual and triple screen supported



Joining Microsoft Teams meetings

Dual screen devices

For your
reference



Prominent - Default



Focus



Large Gallery



Grid

New!



With content being shared any of the 6 single screen layouts can be selected

- Maximum number of participants seen is up to 9 except for Large Gallery
- Hide non-video participants #5 on any device

VIMT Functionality



VIMT development

In 2024, VIMT has received many updates.

In the next months we will release many new features and improvements. Major roadmap items include:

- Cross Tenant Join (Microsoft name: SIP Guest Join)
- LTRF (Long Term Reference Frame) support
- Multitenancy
- Spotlight support

You can stay up to date visiting the VIMT changelog available at <https://help.webex.com/en-us/article/n5m305x/Webex-Video-Integration-for-Microsoft-Teams>

Webex VIMT (CVI) Features – Summary

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(H.323 via on-prem interworking)

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Full HD 1080p for main video

New! → [Family of layouts for video devices + Large gallery](#)

Layout control via DTMF

2-way content sharing

Server-side Mute/Unmute management via DTMF

New! → [Notifications including recording, lobby, PowerPoint live content, hand raised, & transcription is active](#)

Configurable lobby management policy
(guest access / lobby bypass)

Presenter with Live Events

New! → [Speaker highlighting, and watermarking support](#)

cisco *Live!*

Unique features for Cisco Rooms (*)

OBTP Join (One Button To Push)

Multi-screen support

Integrated Participants List

Active Layout Control (via Navigator)

Server/Local Mute status sync

Webex Assistant

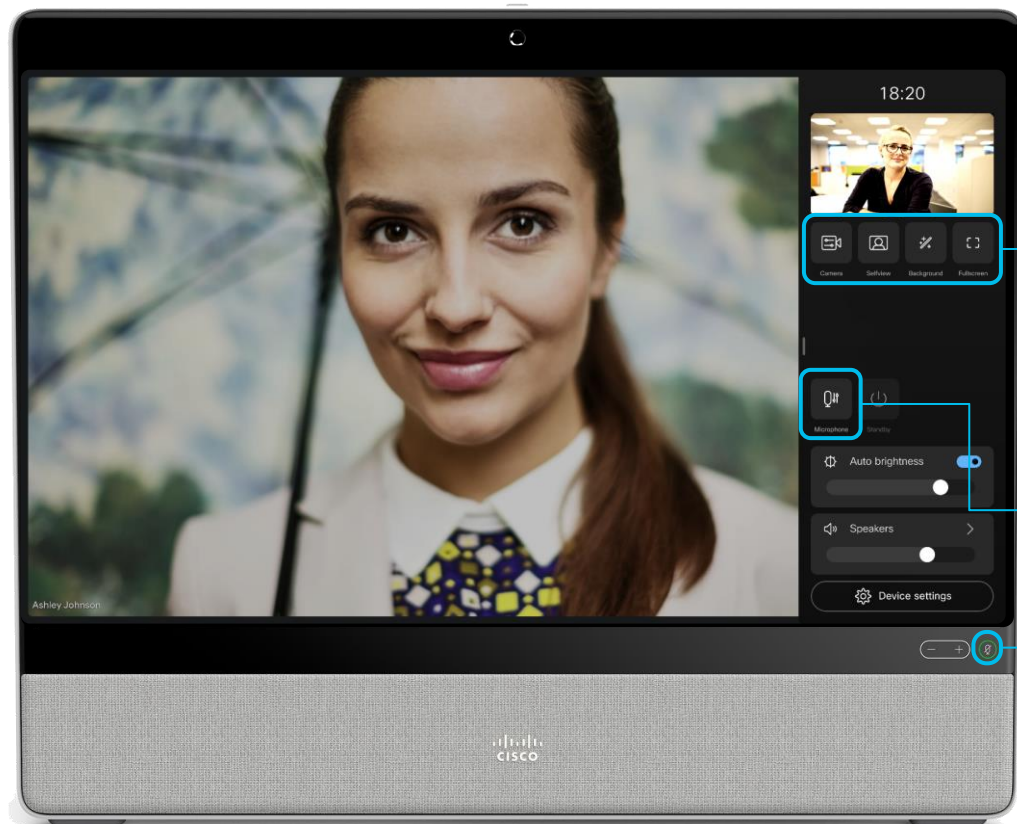
Frames

Unidirectional Whiteboarding from Cisco Board and DeskPro

New! → [Call Trouble-shooting in Control Hub and ThousandEyes](#)

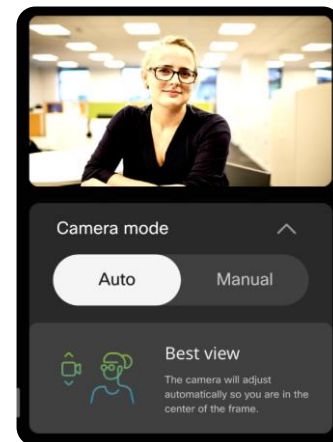
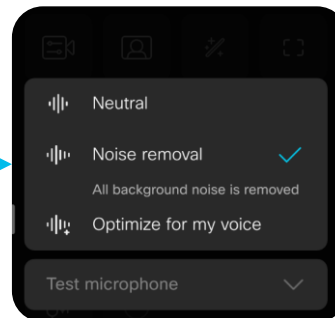
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Local in-call device features are supported for any deployment model
(i.e. best overview, speaker track, noise canceling, etc)

Local device controls



Camera settings

Camera settings such as Best View, SpeakerTrack or Frames work on any meeting platform



Audio settings

Users can benefit from local Cisco Devices audio settings

Mute/unmute sync

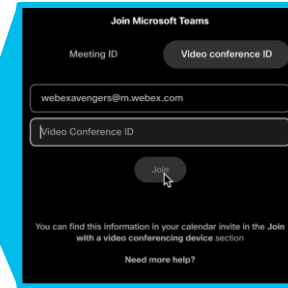
Mute sync depends on the meeting service

Webex Video Integration for Microsoft Teams

Joining Methods overview

Joining meetings options:

1. One Button To Push – add the Cisco Devices email address to the MS Teams calendar invite
2. IVR – calling a customer-specific video address (example@m.webex.com) and manually dialing the "Video ID" listed in the Microsoft Teams meeting invitation.
3. Direct Dial-in – calling directly the meeting's address ([9876543210.example@m.webex.com](tel:9876543210.example@m.webex.com)) available through the "More Info" instructions link in the meeting invitation.
4. Cisco devices Teams button for ad-hoc join by entering Video Conference ID



Join any Teams meeting with RoomOS Button

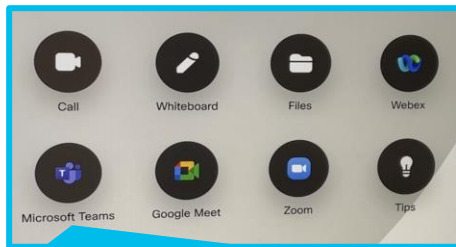
Ad-hoc join with Teams Button

Join a meeting without Video ID in the invite

- WebRTC Direct Guest Join or **Cross-tenant Join** for VIMT customers **when available**
- Passcode is case sensitive
- Teams clients hosting the B2B meeting have to admit you from lobby

Microsoft Teams [Need help?](#)
[Join the meeting now](#)
Meeting ID: 123 456 789 012
Passcode: TZ23456

Example invite with join details



Join Microsoft Teams

Meeting ID Video ID

Enter meeting ID

Enter passcode

Join

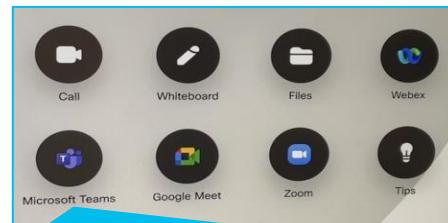
[Find meeting information](#)

Join a meeting with Video ID

- Join VIMT calls ad-hoc
- Set VIMT Tenant default URI with xAPI in Control Hub

Microsoft Teams [Need help?](#)
[Join the meeting now](#)
Meeting ID: 123 456 789 012
Passcode: TZ23456

Join on a video conferencing device
Tenant key: [example@m.webex.com](#)
Video ID: 987 654 321 0
[More info](#)



Join Microsoft Teams

Meeting ID Video ID

tenant@m.webex.com

Video ID

Join

[Find meeting information](#)

[Setup instructions](#)

cisco Live!

VIMT Notifications now available

Teams Meeting notifications to devices



- 1) Teams client participant raised hand with on screen name, hand icon & roster list icon
 - VIMT Participants can't raise or lower hands
- 2) PowerPoint Live content being shared
 - View using a Teams client, can't view on VIMT. Or ask presenter to share via screen sharing
- 3) Participant(s) waiting in Lobby, use Teams to admit
 - VIMT devices can't admit from lobby, have to use Teams client
- 4) Teams Transcription active
 - View using Microsoft Teams client

All notifies in English today, translations planned

Enabled for all customers, can't disable. All device types; cloud registered, edge or SIP connected

Cross Tenant Join (aka SIP Guest Join)

- Cross Tenant Join feature is now out and in GA
 - Feature description: VIMT customers can forward invites from other Tenants/companies to their Cisco Device Room Calendars to use OBTP to join that meeting with the VIMT user experience.
 - Cisco Devices Teams button to allow ad-hoc Cross Tenant Join
 - VIMT offers a more consistent and higher quality User Experience than Direct Guest Join (WebRTC).
 - Devices have to be trusted (Cloud registered, Edge or TLS cert with SAN=verified domain defined in Control Hub)
 - VIMT used to join another Teams tenant meeting hosted in Azure Worldwide Commercial

In simple terms:

Users from CompanyA will be able to use their own CVI gateway (i.e. VIMT) to join MS Teams meetings hosted by CompanyB – who has NO CVI Available through OBTP and MS Teams RoomOS button

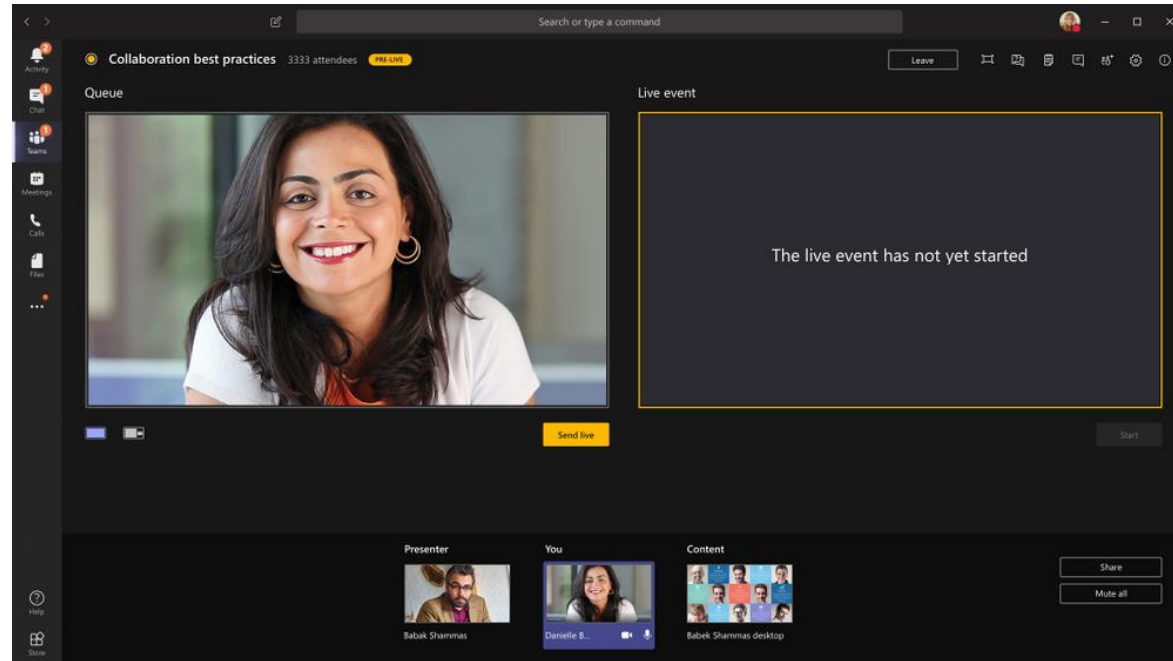
Live events – roles

Teams Town Hall replacing live events. CVI with Town Hall planned for 2HCY24 (pending Microsoft)

Producer: The director of the live event. This role is assigned by the event organizer during scheduling. **Producers join with a Microsoft Teams client.** They use the Microsoft Teams dashboard to control the video stream, who's in the event group, and to start and stop the event.

Presenter: A participant who speaks or presents content during the live event. Presenters join from a Microsoft Teams client or from a **video device using VIMT**.

Attendees: Participants who watch the live events from the **Microsoft Teams client**. The broadcast is one way for audio and video only. Furthermore, attendees do not send audio or video.



Lobby Bypass for trusted Video Devices

Webex Org Domain used to trust a customers' devices



Expressway setup for Webex including SAN statement in TLS certificate info here:

https://help.webex.com/en-us/article/notkgfab/Configure-Expressway-for-Mutual-TLS-authentication#id_134328

Trusted devices will bypass the lobby, unless restricted by meeting organizer
'Who can bypass Lobby?' setting is 'Organizers and me' or 'People I invite'.

Lobby Bypass for untrusted Video Devices

Devices will honor the Microsoft Teams policies and meeting settings

Admins and meeting hosts have the option to allow “Everyone” to bypass the lobby. This can be configured:

- org-wide (admin)
- specific for a meeting (host)

Meeting policy

Participants & guests

Participant and guest settings let you control access to Teams meetings for people that dial in using a phone. [Learn more](#)

Let anonymous people start a meeting ☐ Off

Automatically admit people ☒ **Everyone**

Allow dial-in users to bypass the lobby ☒ Everyone

Allow Meet now in private meetings ☐ Everyone in your organization

Enable live captions ☐ Everyone in your organization and federated organizations

Allow chat in meetings ☐ Enabled

Meeting Options (meeting invite)

Meeting options

Who can bypass the lobby? **People in my organization**

Always let callers bypass the lobby ☒ Everyone

Announce when callers join or leave ☐ People in my organization and trusted organizations

Who can present? **People in my organization**

Everyone

Wireless sharing

VIMT Audio and Video wireless sharing

- VIMT support wireless sharing via Miracast®, AirPlay and Webex App
- Caveat: Webex App proximity only available via direct sharing (no cloud sharing)



Caveats

- No Video Mesh (Hybrid Media)
- IVR SIP URI address is based on the primary SIP address of the Webex Org and is not currently customizable
- VIMT only supports one Microsoft Tenant per Webex Org (multi-tenancy is a backlog item)
- Troubleshooting in Control Hub requires Webex registered or Edge enabled devices. It is not available for SIP and 3rd party devices
- Customers cannot change the default layout for VIMT calls (backlog item)
- Hand raised ICON requires ActiveControl or Cloud Registration (text notifications are always transcoded on-screen)

Example Invite with CVI Join info

Microsoft Teams [Need help?](#)

Join Link for Teams App

[Join the meeting now](#)

Meeting ID (new name) & Passcode

Meeting ID: 123 456 789 012

Passcode: TZ23456

IVR Video Address

Join on a video conferencing device

CVI specific Video ID (new name)

Tenant key: [example@m.webex.com](#)

Video ID: 987 654 321 0

Link to CVI Partner web page for direct dialing info (new name)

[More info](#)

MSFT Teams
Join Info

MSFT Teams
CVI info

"More Info" dialing instructions page

Cisco Webex

Video Meeting Invitation

Join meeting directly

Enter `12345678910.example@m.webex.com` on a Cisco Webex Room or other standard video endpoint

Join through a prompt for VTC conference ID

Enter `example@m.webex.com` and then the VTC conference ID `12345678910` followed by #

Powered by Cisco Webex Video Integration for Microsoft Teams

Webex Video Integration for Microsoft Teams (VIMT)

Supported joining methods

		Joining method			
		OBTP (Hybrid Calendar)	VIMT IVR	Direct dial-in	RoomOS Teams Button
Devices Deployment Model	Webex Registered (Cloud)	✓	✓	✓	✓
	Webex Edge for Devices (On-premises registration with cloud connection)	✓	✓	✓	✓
	Cisco and 3 rd party SIP capable (On-Premises registered)	✗	✓	✓	✗

Considerations about LTRF support and existing CVI issues with large Microsoft Teams meetings

As some of you might be aware, Microsoft CVI faces quality issues with Microsoft Teams large meetings (e.g. 50+ participants)

Over the last two years Microsoft TAC common answer to the problem has always been that this was due to the lack of LTRF support from CVI providers

Both Cisco and Pexip have evaluated to add LTRF support and have come to the conclusion that, while it is a benefit for some quality concerns, it is not a fix for all CVI quality issues commonly associated with larger Microsoft Teams meetings

Good news is that Microsoft is now working on a proper solution, allowing good media quality to CVI participants joining large MS Teams meetings

VIMT development

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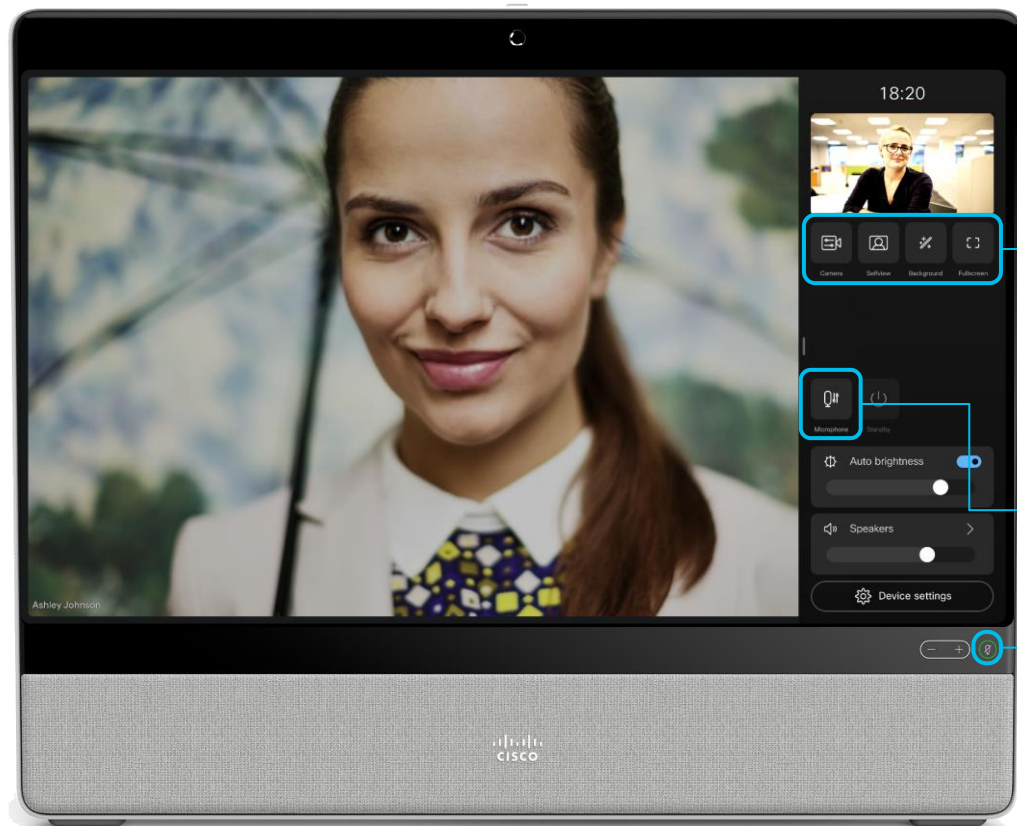
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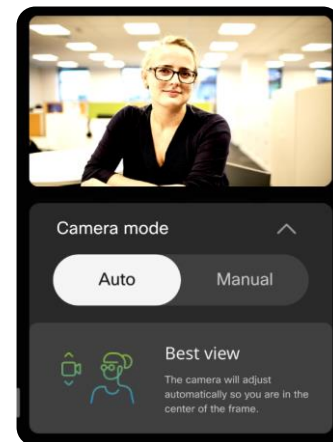
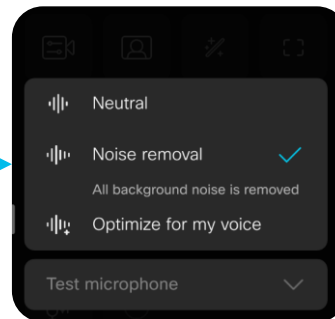
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Audio settings

Users can benefit from local Cisco Devices audio settings

Mute/unmute sync

Mute sync depends on the meeting service

VIMT Notifications now available

Teams Meeting notifications to devices



Ron Lewis raised their hand

Live content is being shared
View using a Microsoft Teams client

1 participant is waiting to join
Admit using a Microsoft Teams client

Teams meeting Transcription is now active
View using a Microsoft Teams client

Teams client participant raised hand with on screen name, hand icon & roster list icon

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PowerPoint Live content being shared

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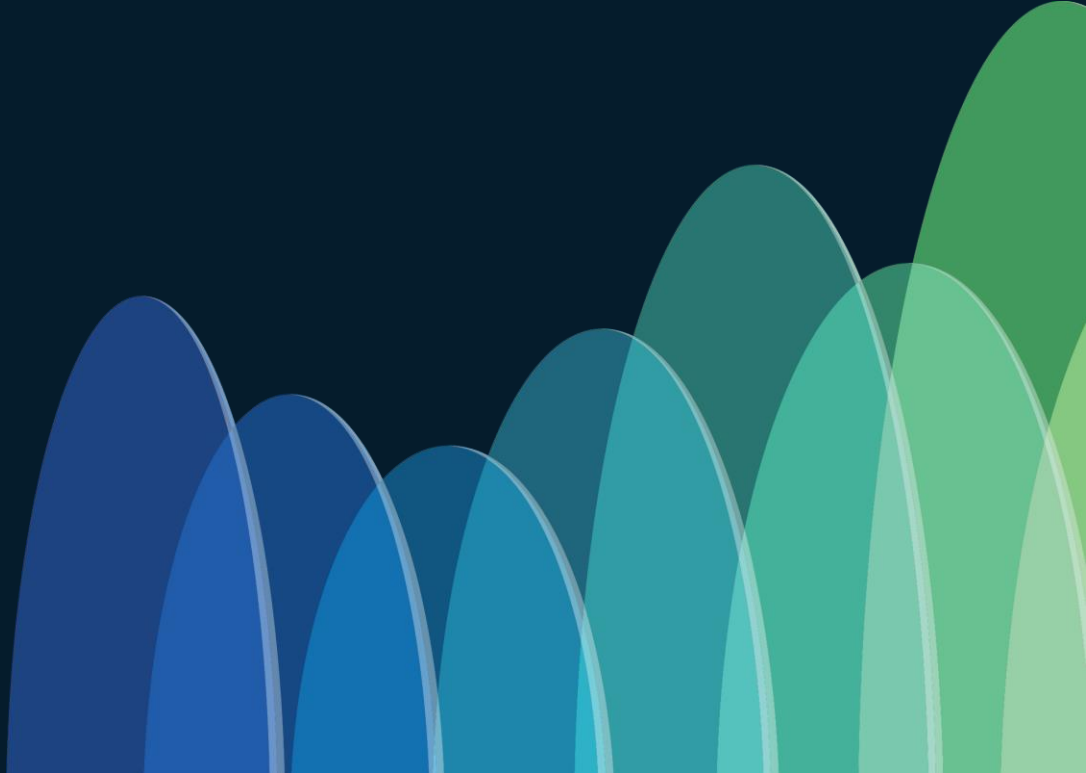
Teams Transcription active

- View using Microsoft Teams client

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VIMT troubleshooting – Overview



Device Troubleshooting for VIMT



By device name

Search by device name only. Search by meeting ID not available for Microsoft Teams meetings



Stats

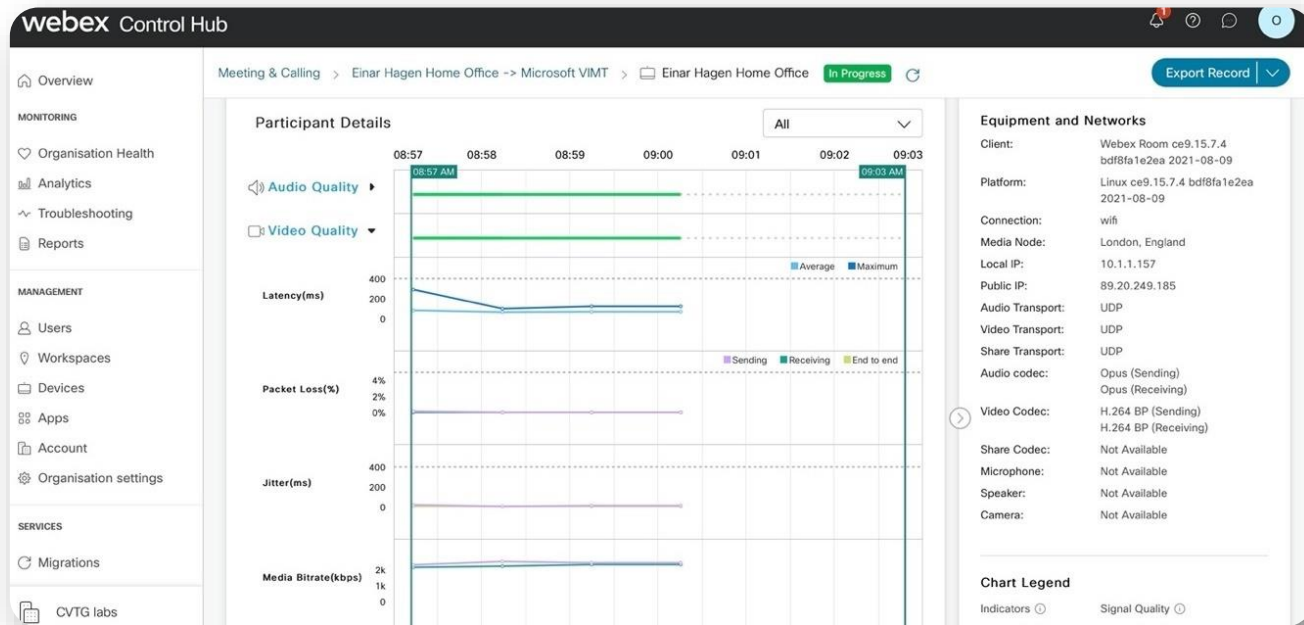
Stats per device, real time or historic



Availability

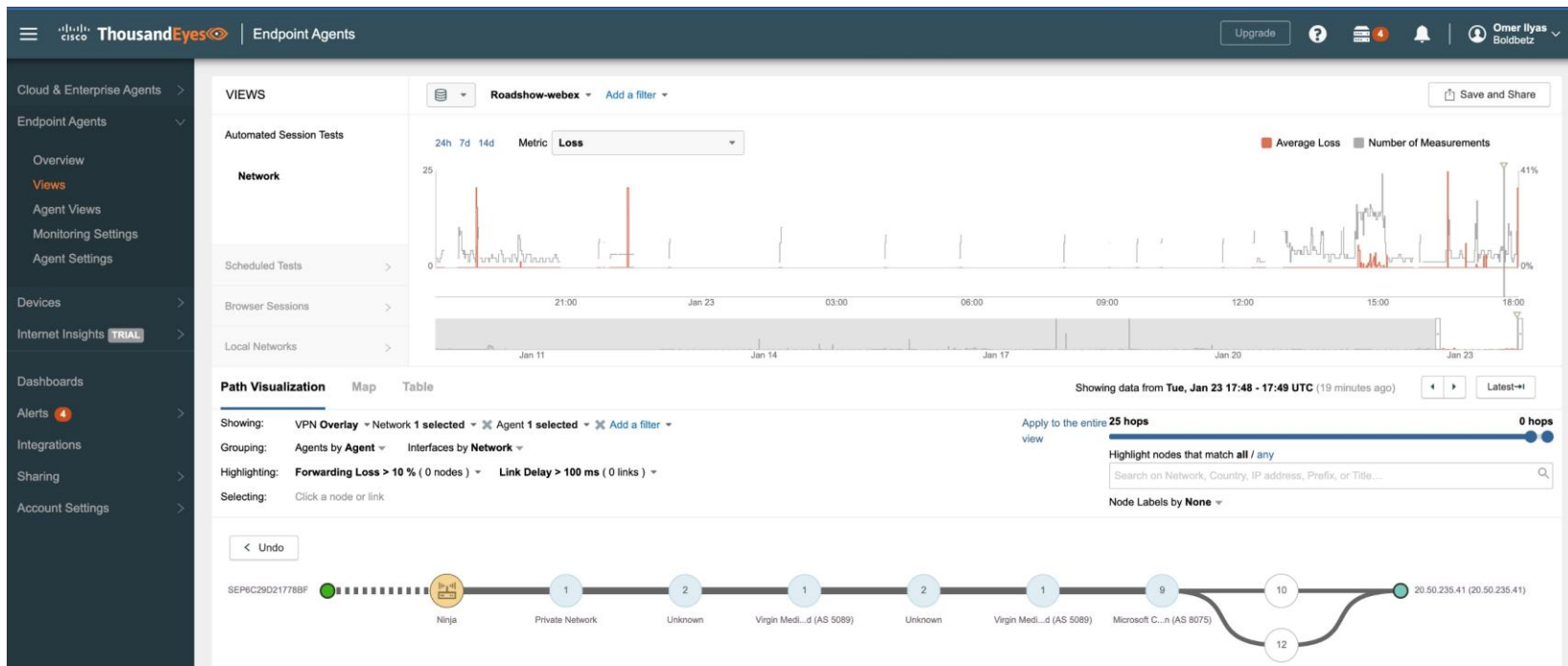
Tshoot is available for Cloud registered devices or for Webex Edge for Devices with Optimized Webex Meetings experience (NO SIP)

cisco Live!



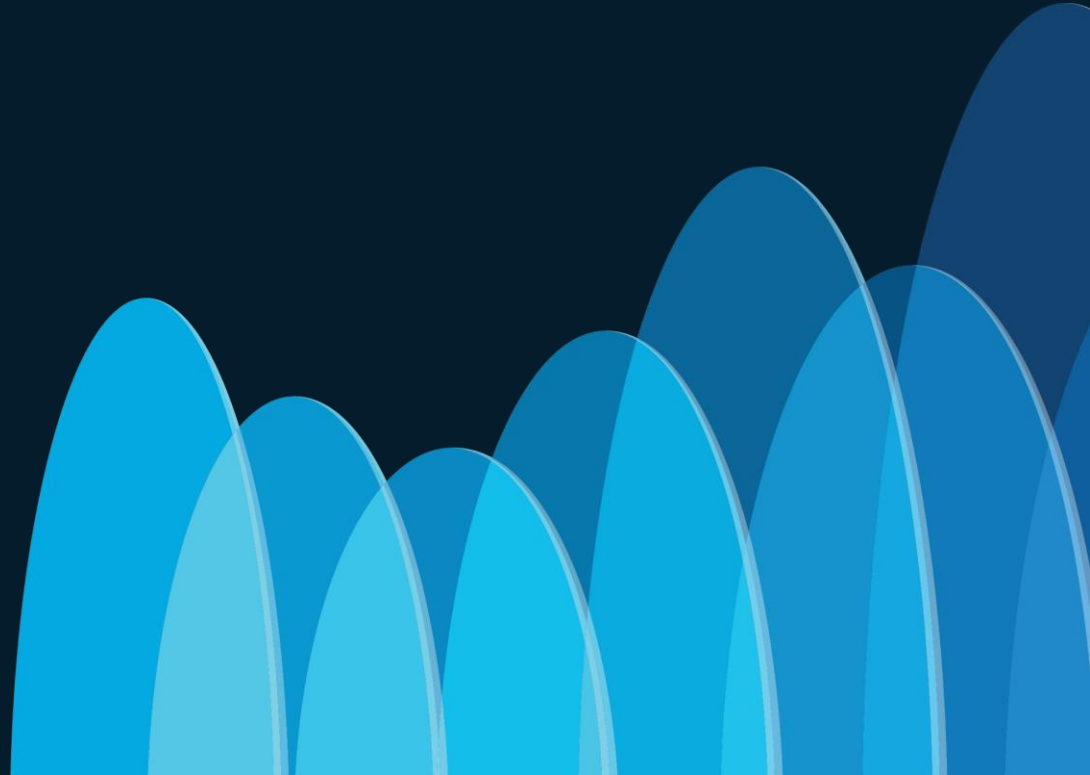
ThousandEyes integration with VIMT

NEW!

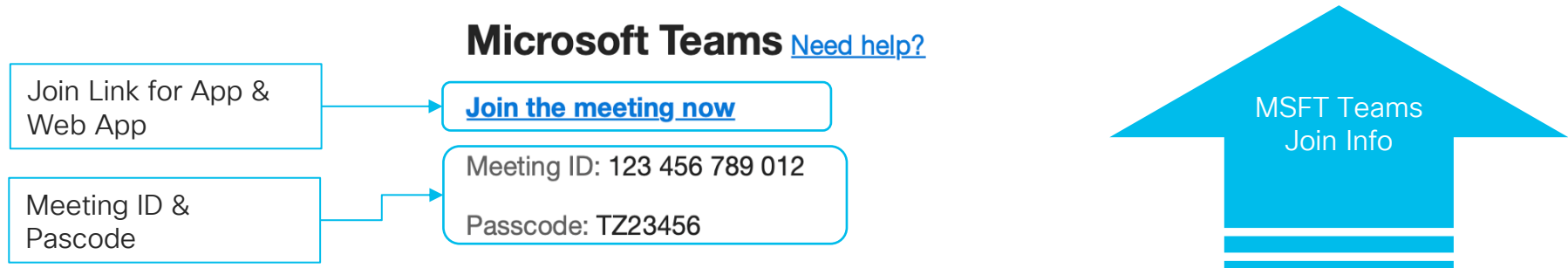


Phase 1 is GA. Available in TE dashboard
Phase 2 is coming and will make TE dashboard accessible from CH

Direct Guest Join (WebRTC)

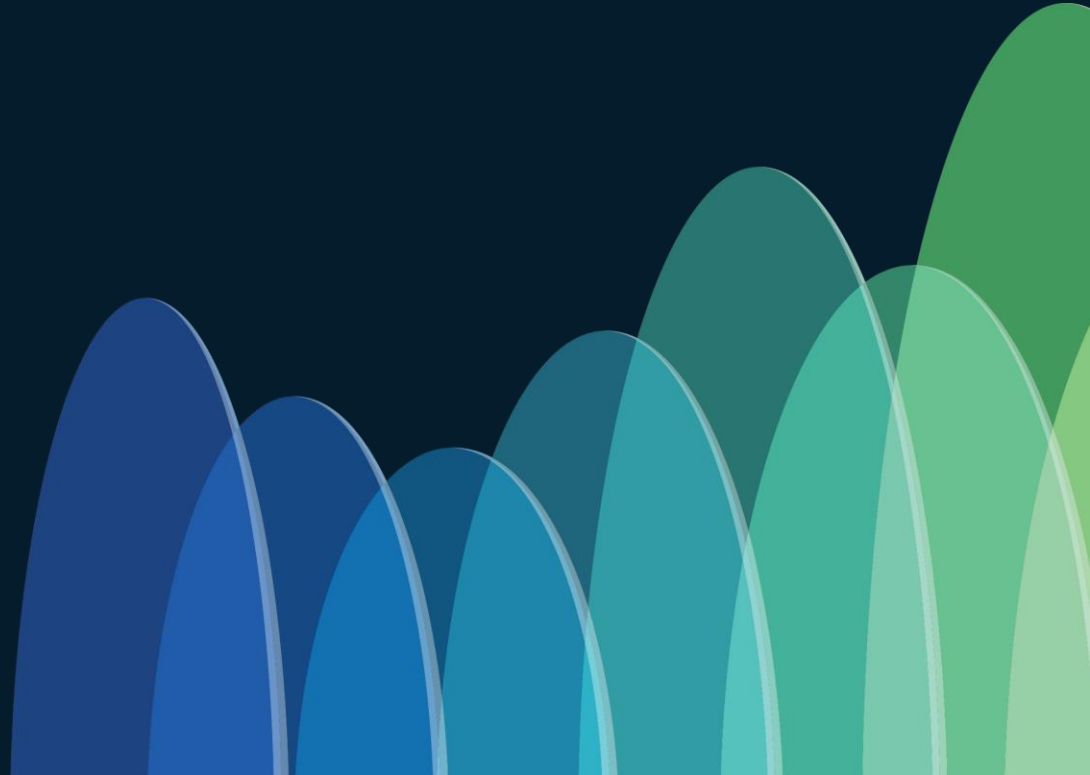


Example Teams invite generated by Microsoft



Direct Guest Join is mainly intended for
Business-to-Business non VIMT-enabled meetings

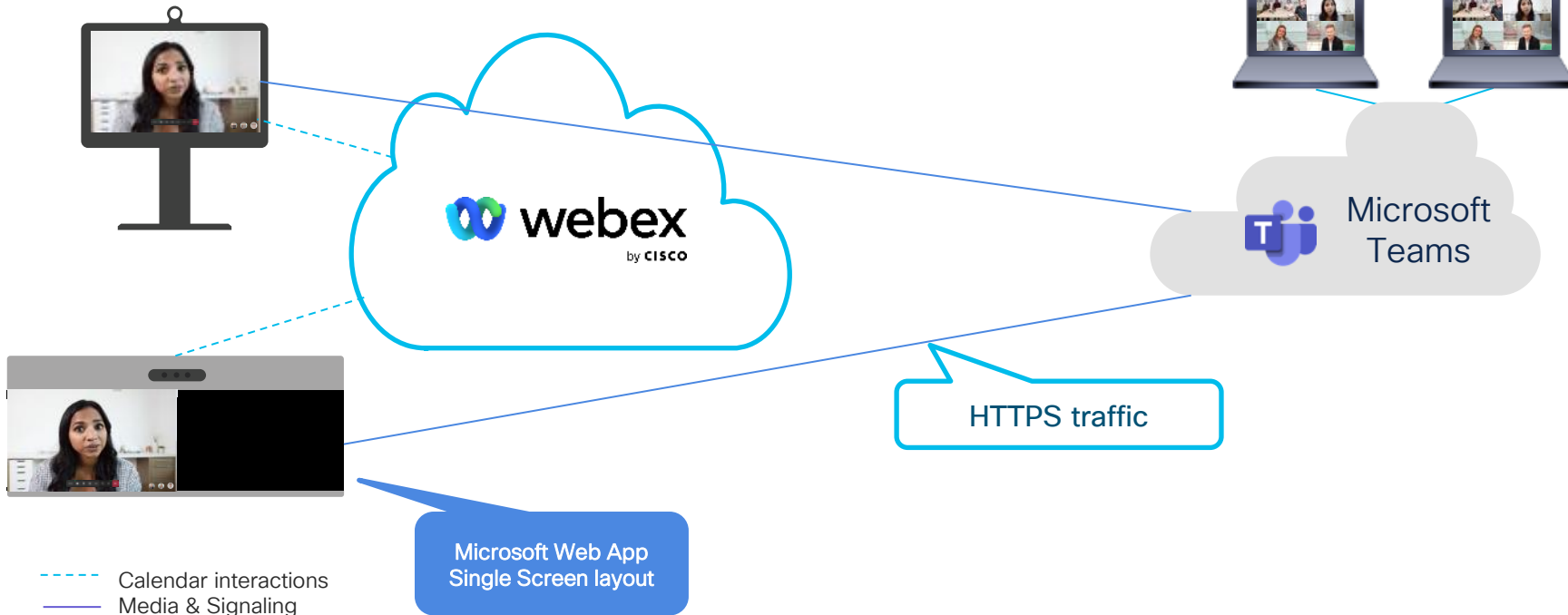
Architecture



Joining Microsoft Teams meetings – WebRTC

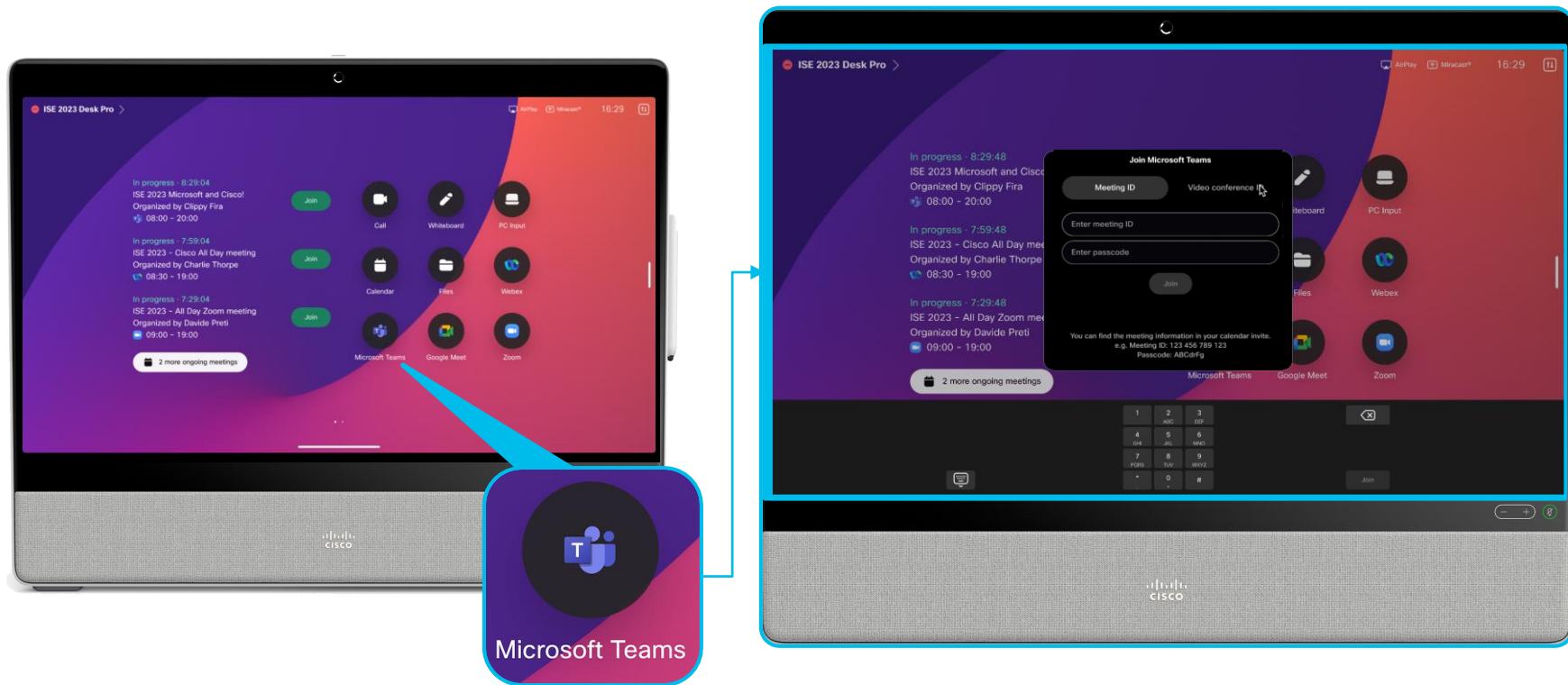
“Architecture” overview

Room Kits, Room Series, Boards, Desk series
(web-engine enabled devices) – devices must be cloud
registered or cloud aware (Webex Edge for Devices)



Joining methods

Joining by Meeting ID and passcode



New joining button for both WebRTC and VIMT

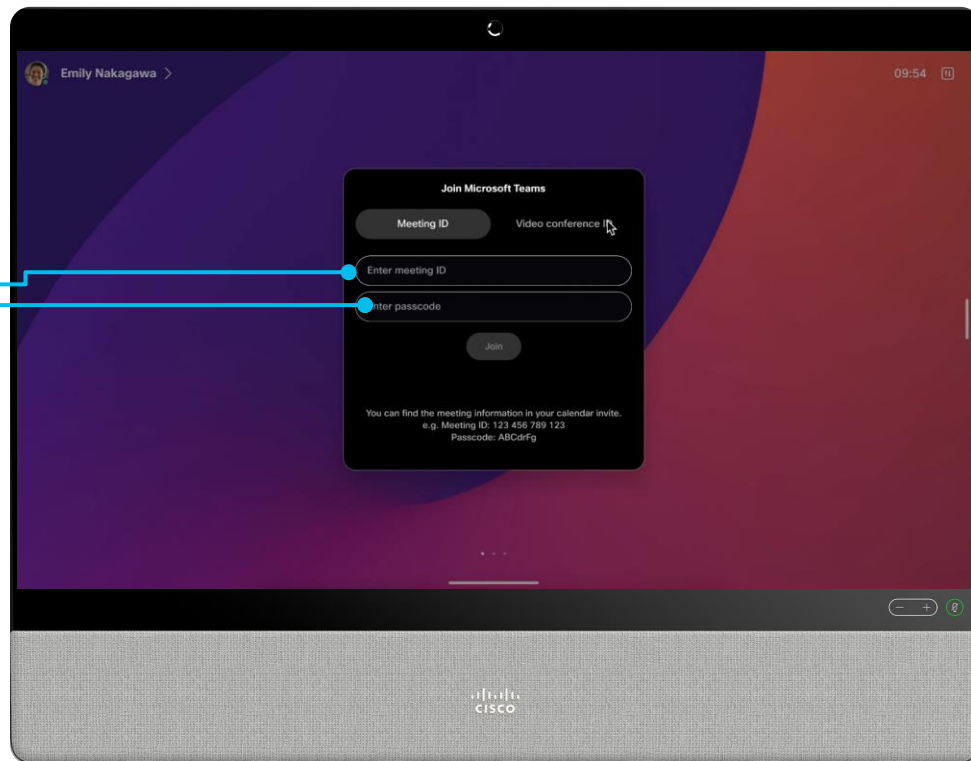
WebRTC experience

Microsoft Teams [Need help?](#)

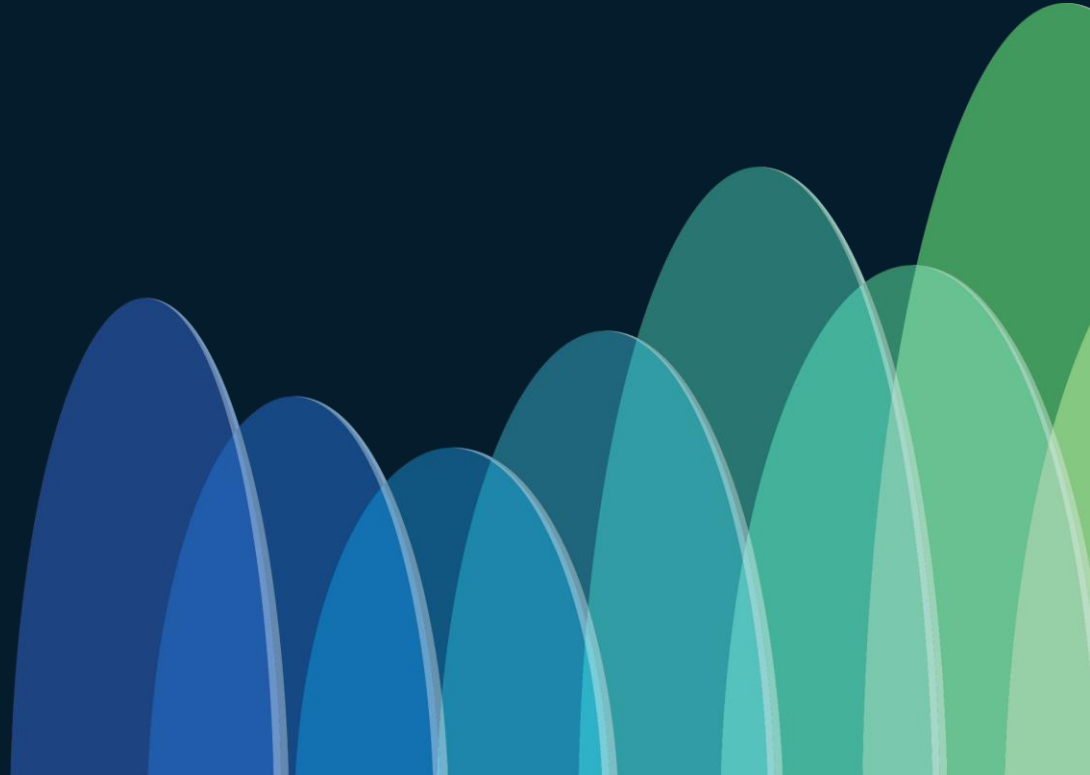
[Join the meeting now](#)

Meeting ID: 123 456 789 012

Passcode: TZ23456



In-meeting experience



WebRTC – Quality considerations

Cisco and Microsoft partnership is showing development improvements by lowering the joining time significantly on the WebRTC client and providing a new Teams client on Cisco devices.

Customers have now two options to join Microsoft Teams from Cisco devices, where the CVI/VIMT gives the best experience and WebRTC gives an alternative low-cost guest experience.

In-Meeting Experience – using WebRTC

Microsoft Teams WebRTC Direct Guest Join offers:

Basic, single screen layout controlled by Microsoft Teams

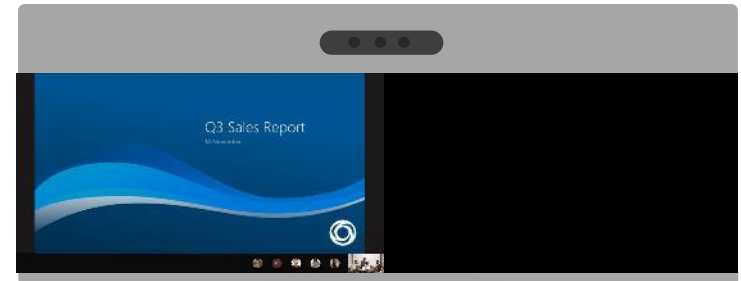
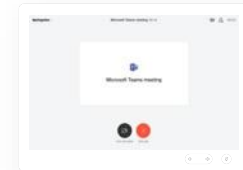
- Up to 9 Active Speakers are shown on video 
- Ability to view content share + live video streams (bottom bar)

Sharing content from Cisco device is not available

- Requires use of separate Microsoft Teams client

In-meeting controls are available with Interactive mode
(Available on touchscreen Cisco devices)

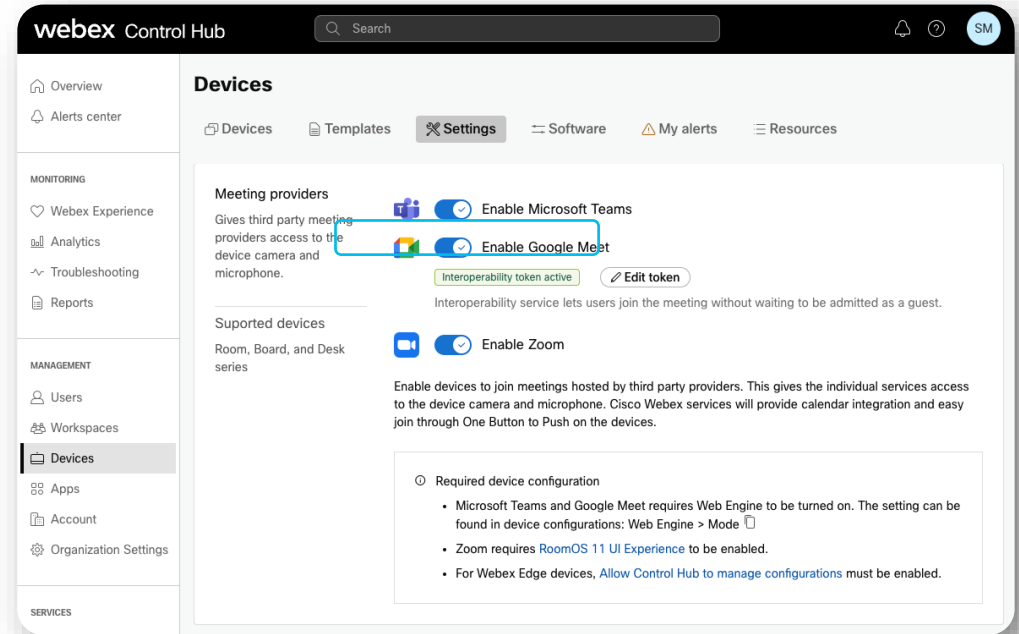
All local device features such as audio and camera intelligence are available



Enable WebRTC interoperability for Microsoft Teams

WebRTC interoperability for Microsoft Teams can be turned on under the **device settings** in Webex Control Hub.

This also enables the ad-hoc **Joining button** for Microsoft Teams meetings.
(CVI & WebRTC)



Keynote Deep Dives

Wednesday
10:30am – 11:30am



Experiences Amplified:
How AI Can Fuel
Better Employee
and Customer
Experiences

Level 1
Room 106



Smart, Secure,
Seamless:
Transforming
Experiences with
Next-Generation
Networking

Level 2
Room 204



Harness a Bold
New Era:
Transform Data
Centre and
Service Provider
Connectivity

Level 2
Room 203



Securing User to
Application and
Everything in
Between

Level 2
Melbourne Room 2



Unlocking
Digital Resilience
through Unified
Observability

The HUB
Centre Stage

Complete Your Session Evaluations



Complete a minimum of 4 session surveys and the Overall Event Survey to claim a **Cisco Live T-Shirt**.



Complete your surveys in the **Cisco Live mobile app**.



Continue your education



- Visit the Cisco Stand for related demos
- Book your one-on-one Meet the Expert meeting
- Attend the interactive education with DevNet, Capture the Flag, and Walk-in Labs
- Visit the On-Demand Library for more sessions at www.CiscoLive.com/on-demand



Thank you



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CISCO *Live!*

GO BEYOND

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