

CISCO *Live!*



#CiscoLive



The bridge to possible

# Webex Video Interoperability with Microsoft Teams

Davide Preti – Technical Marketing Engineering Technical Leader  
BRKCOL-2184

# 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 June 17, 2022.



<https://ciscolive.ciscoevents.com/ciscolivebot/#BRKCOL-2184>

# Safe harbor statement

This presentation contains “forward-looking” statements that involve risks, uncertainties and assumptions. If the risks or uncertainties ever materialize or the assumptions prove incorrect, our results may differ materially from those expressed or implied by such forward-looking statements. All statements other than statements of historical fact could be deemed forward-looking, including, but not limited to, any projections of financial information; any statements about historical results that may suggest trends for our business; any statements of the plans, strategies, and objectives of management for future operations; any statements of expectation or belief regarding future events, technology developments, or enforceability of our intellectual property rights; and any statements of assumptions underlying any of the foregoing.

These statements are based on estimates and information available to us at the time of this presentation and are not guarantees of future performance. Actual results could differ materially from our current expectations as a results of many factors, including but not limited to: the unpredictable nature of our rapidly evolving market and quarterly fluctuations in our business; the effects of competition; and any adverse changes in our indirect channel relationships. These and other risks and uncertainties associated with our business are described in the company’s annual report on Form 10-K. The forward-looking statements in this presentation are made as of the date of the initial publication of this presentation, and we disclaim any obligation to update these statements at any time in the future.

# Abstract

This intermediate-level session provides attendees with a detailed understanding of how the Cisco UC solution can interoperate with Microsoft Teams, with a focus on the Video scenario

This session will cover architectures, supported capabilities and an overview of the End User experience:

- Microsoft Teams meetings & Webex video devices
  - Interoperability using VIMT (CVI) Gateway
  - Interoperability using WebRTC
- Microsoft Teams & Webex client-side integrations
  - Webex Meetings integration
  - Webex calling integration



# Agenda

## Introduction

- Microsoft Teams meetings & Webex video devices interoperability

- VIMT (CVI) Gateway
- Direct Guest Join (WebRTC)

## Microsoft Teams & Webex client-side integrations

- Webex Meetings integration
- Webex calling integration



# Agenda

## Introduction

- Microsoft Teams meetings & Webex video devices interoperability

- VIMT (CVI) Gateway
- Direct Guest Join (WebRTC)

## Microsoft Teams & Webex client-side integrations

- Webex Meetings integration
- Webex calling integration

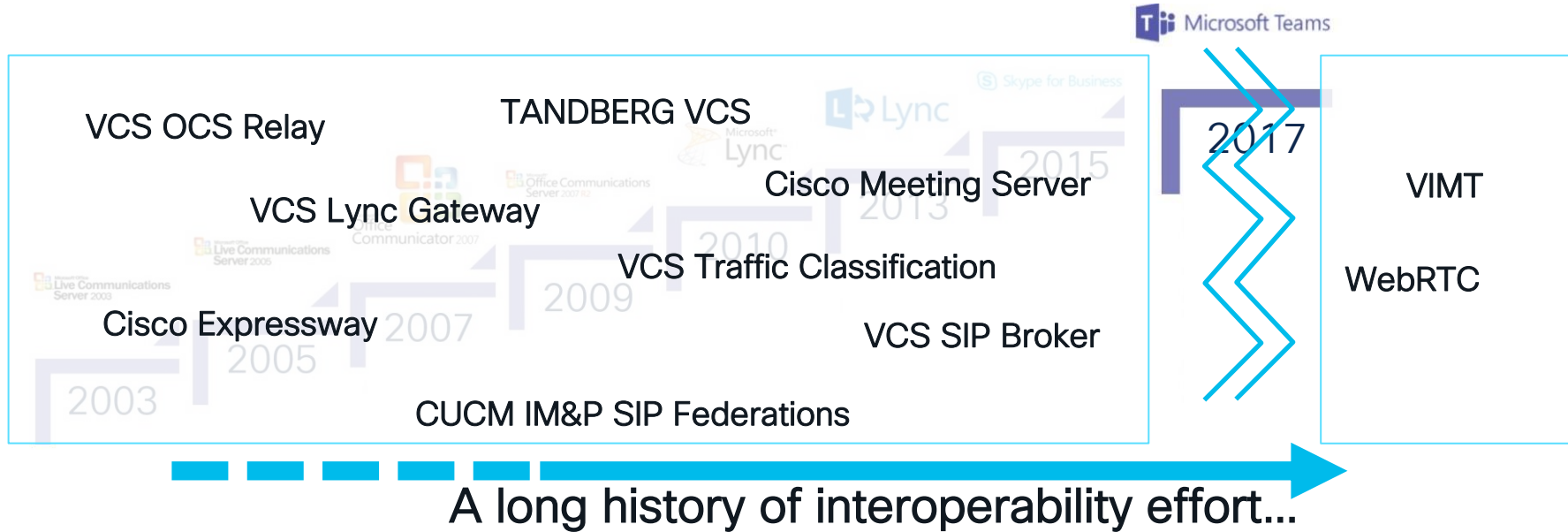
# Introduction



# The interoperability journey with Microsoft

No partner program

CVI partnership program



# The interoperability journey with Microsoft

## Microsoft Teams Cloud Video Interop – a partnership program

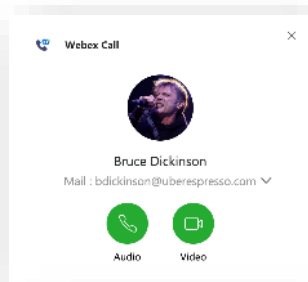


- 2017
  - Microsoft Teams is released
  - Microsoft creates a “Cloud Video Interop” (CVI) partnership program and provides qualified partners with a CVI SDK
- 2019
  - Cisco & Microsoft sign a CVI partnership
- 2020
  - Cisco releases its own CVI implementation called **“Cisco Webex Video Integration for Microsoft Teams”** (VIMT)
  - Cisco supports Direct Guest Join based on WebRTC

# A long journey, bringing us here today

## Webex Calling

Launch enterprise-grade calls powered by Webex directly from Microsoft Teams



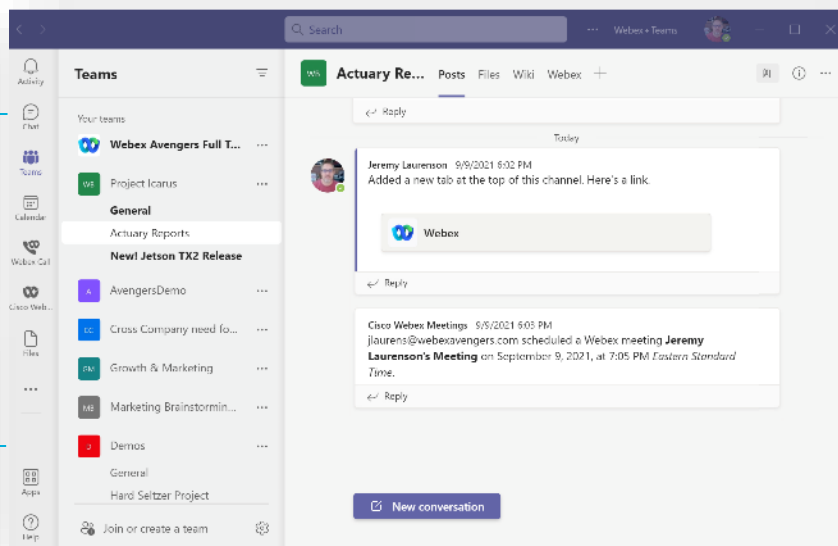
## Webex Meetings

Enable high-security meetings with Webex end-to-end encryption



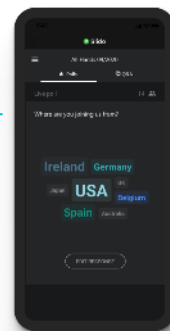
## Webex Messaging

High-security messaging powered by Webex interoperates with Microsoft Teams through a simple third-party integration



## Webex Devices

Take advantage of award winning Webex devices for immersive and inclusive collaboration experiences



## Webex Slido

Integrate Cisco's industry-leading audience engagement platform with Microsoft Teams



# Agenda

## Introduction

### Microsoft Teams meetings & Webex video devices interoperability

- **VIMT (CVI) Gateway**
  - Direct Guest Join (WebRTC)

### Microsoft Teams & Webex client-side integrations

- Webex Meetings integration
- Webex calling integration

# Microsoft Teams meetings & Webex video devices interop – VIMT (CVI) Gateway



# Pre-meeting and in-meeting experience

# Example Teams invite (generated by Microsoft)

## Microsoft Teams meeting

Join Link for App &  
Web App

**Join on your computer or mobile app**

[Click here to join the meeting](#)

IVR Video Address

**Join with a video conferencing device**

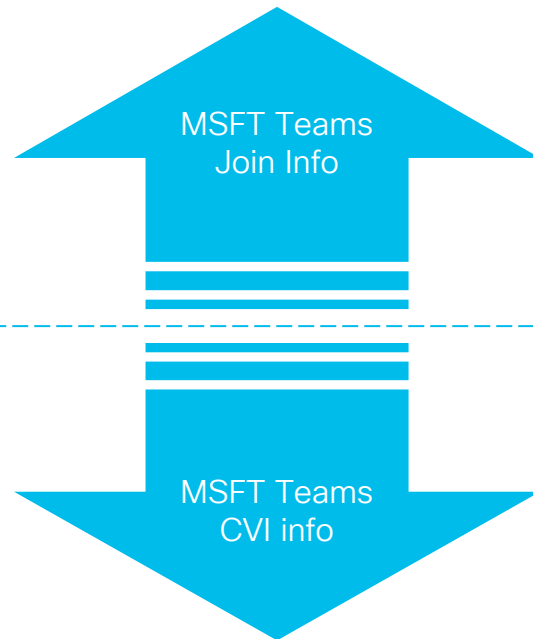
[example@m.webex.com](#)

CVI Specific  
Conference ID

Video Conference ID: 1113174191

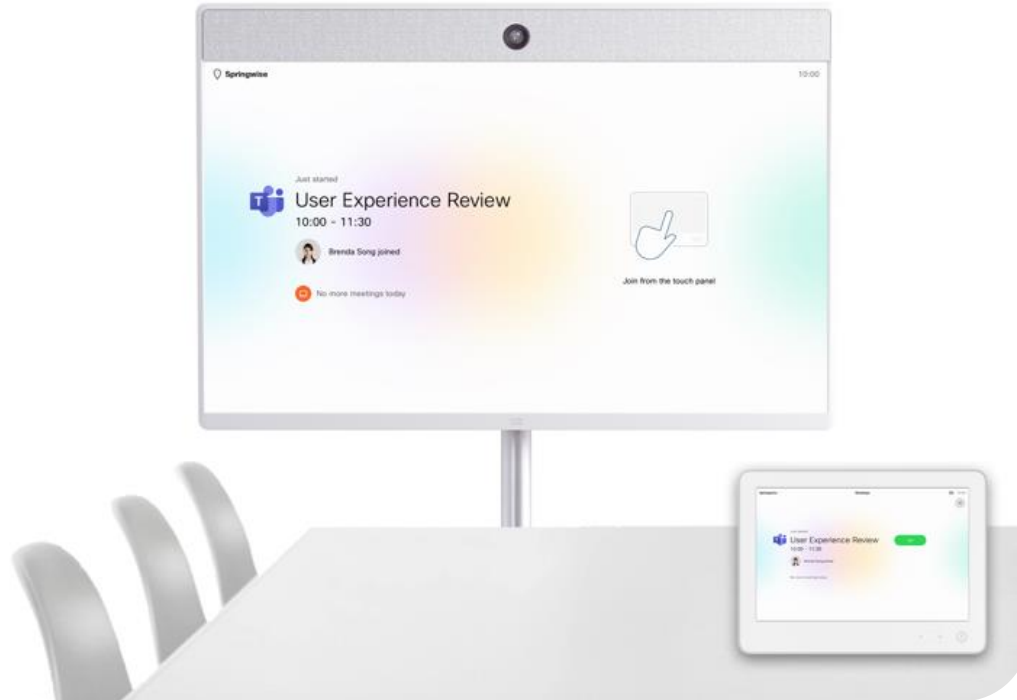
Link to CVI Partner  
web page

[Alternate VTC dialing instructions](#)



# Joining Microsoft Teams meetings – VIMT gateway

## One Button to Push experience





# VIMT Layouts

For single screen devices

For your reference

## Video participants only



Grid



Overlay



Focus



Prominent

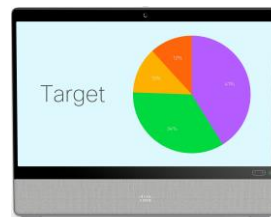
## With content being shared



Stack



Side by side



Focus



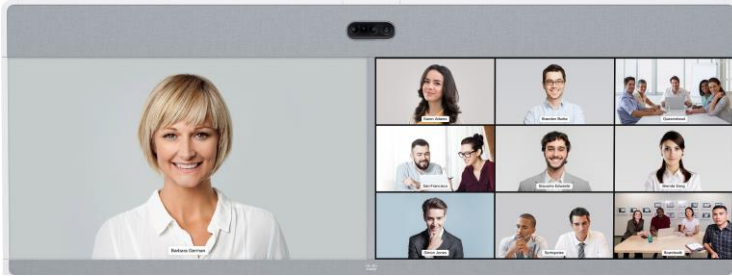
Prominent

Note: Maximum number of participants seen is up to 9

# VIMT layouts

For dual screen devices

Video participants only



Prominent is the only layout available for dual screen Cisco devices using VIMT

With content being shared



All single screen layouts apply to the left screen

# VIMT layouts

For 3 screens devices

Video participants only



With content being shared

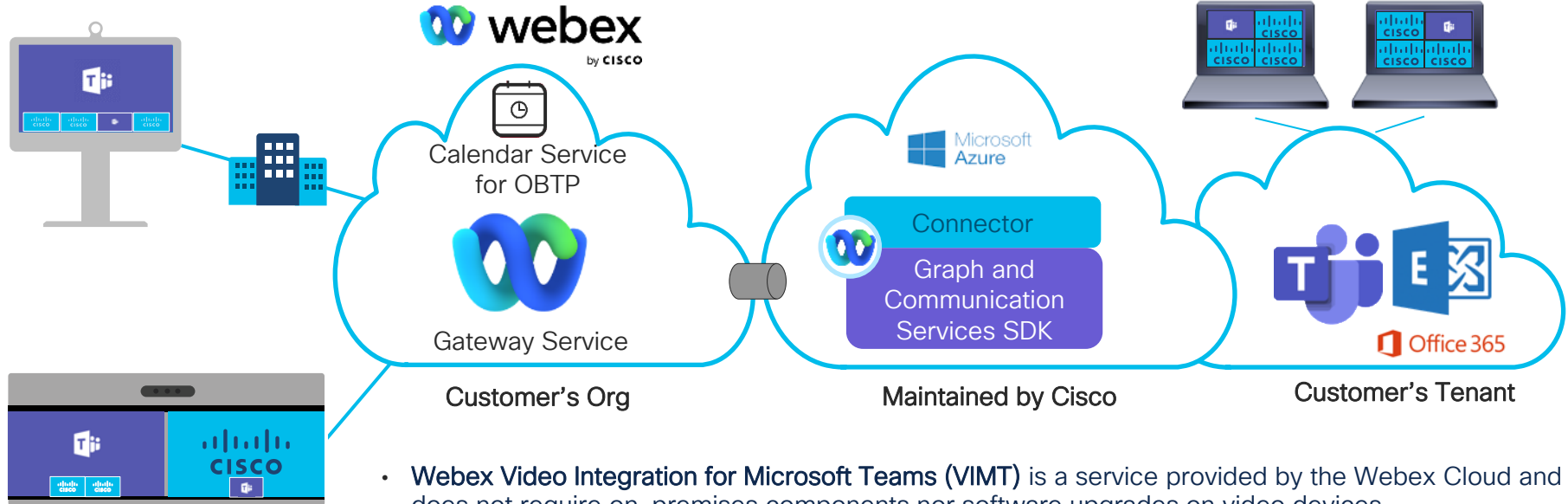


Prominent + content is the only layout available for dual screen Cisco devices using VIMT

# VIMT Architecture



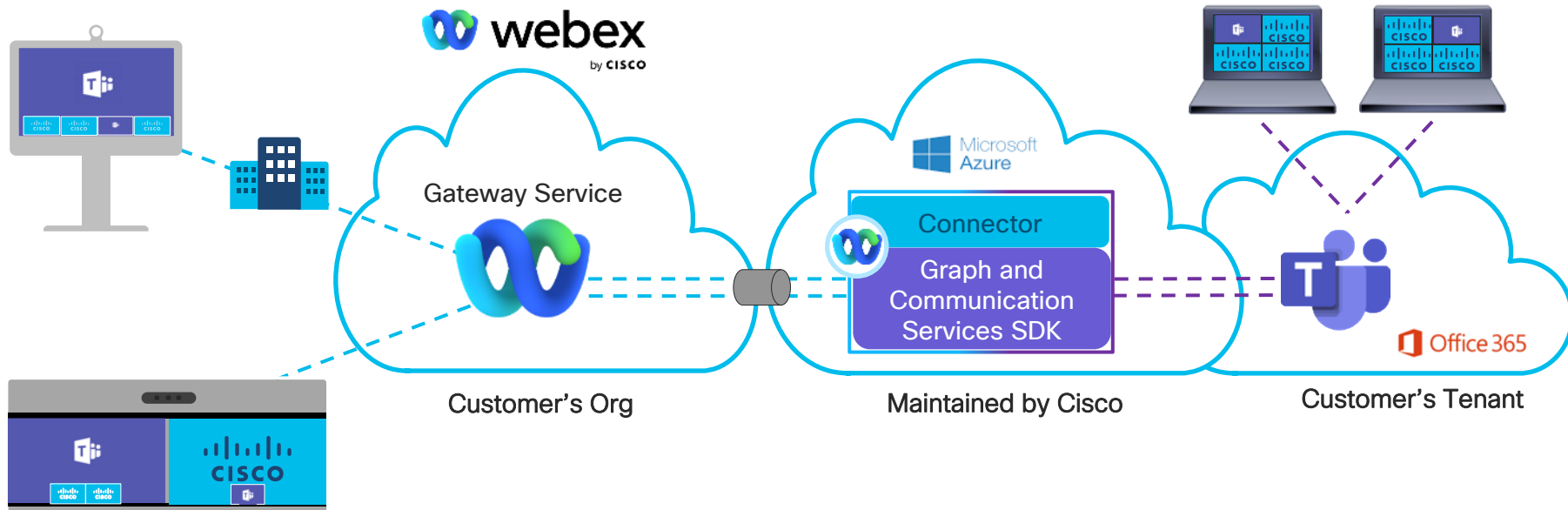
# Video Integration for Microsoft Teams (VIMT) gateway



- **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 3<sup>rd</sup> party SIP endpoints

# Video Integration for Microsoft Teams Gateway Signaling path

For your reference



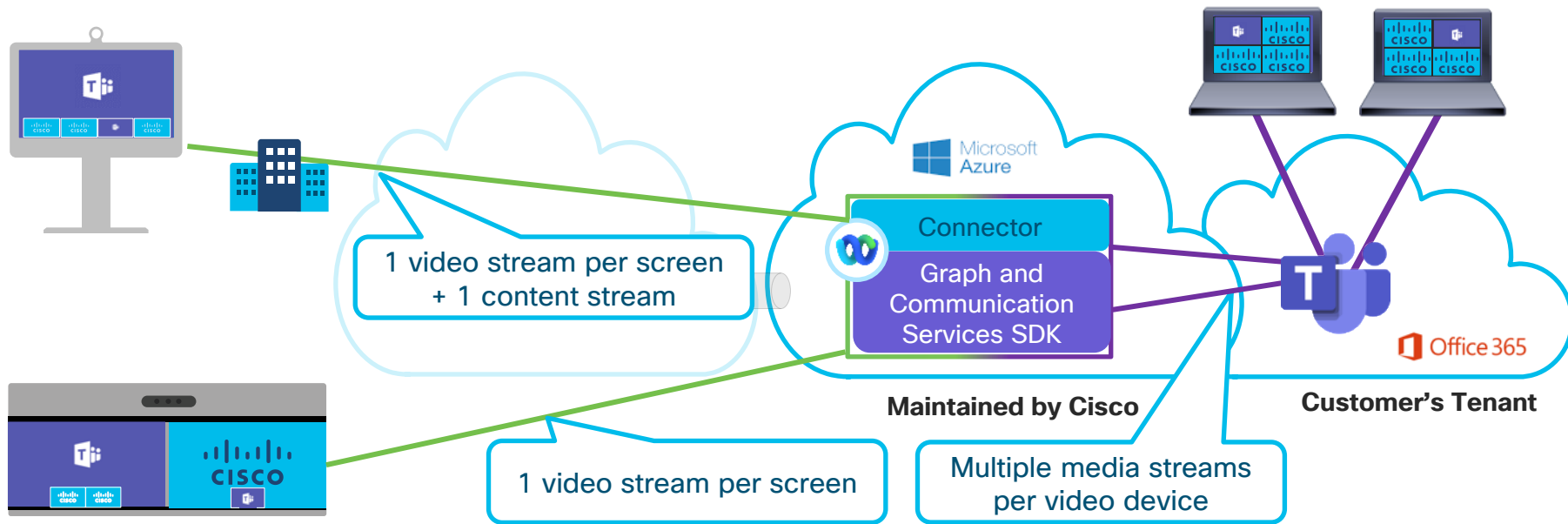
- On-prem video devices must be able to call the Webex domain for VIMT over SIP
  - Interworking to H.323 can be provided by **local on-prem infra** (i.e. VCS/Expressway)
- Example: Endpoint<->CUCM<->Expressway-C<->Expressway-E<-internet->Webex Cloud

--- Webex signaling  
--- Microsoft signaling

**CISCO** *Live!*

# Video Integration for Microsoft Teams Gateway Media path

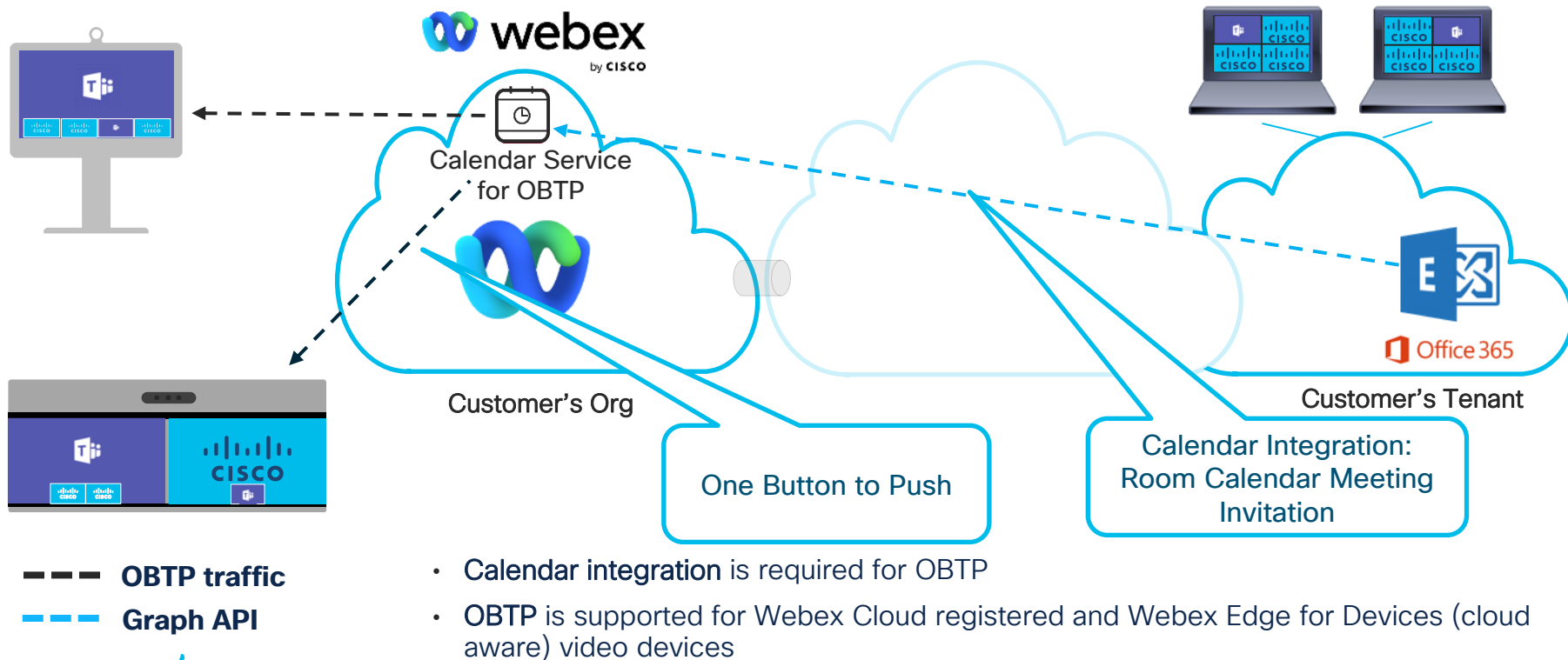
For your reference



- Single stream media
- Microsoft Teams Multistream media

- Media of Webex cloud registered video devices flows directly to the Azure DC maintained by Cisco
- Media of on-premises-registered video devices flows to the Azure cloud maintained by Cisco via the local SIP infrastructure:  
Example: Endpoint<->Expressway-C<->Expressway-E<-Internet->Cisco-maintained Azure Tenant
- No Video Mesh support

# Video Integration for Microsoft Teams Gateway Calendar service and OBTP





# Devices connect to closest Azure Datacenter



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

# VIMT Functionality

# Webex VIMT (CVI) Features – Summary

## Supported video devices

- Webex Cloud registered
- Webex on-prem registered
- Webex Edge for Devices
- SIP standard based  
(H.323 via on-prem interworking)

## Features available to any device

- Family of layouts for Video devices
- Layout control via DTMF
- 2-way content sharing
- Server-side Mute/Unmute management via DTMF
- Recording Indicator
- Configurable lobby management policy  
(guest access / lobby bypass)

Support for Live Events

New!

## Unique features for Webex Rooms (\*)

- OBTP Join (One Button To Push)
- Multi-screen support
- Integrated Participants List
- Active Layout Control (via Touch 10)
- Server/Local Mute status sync
- Webex Assistant
- People Focus
- Unidirectional Whiteboarding from Webex Board and DeskPro
- Call Troubleshooting in Control Hub

(\*) Some features require cloud registration or Webex Edge for Devices.  
**Local** in-call device features are supported for any deployment model  
(i.e. best overview, speaker track, noise canceling, etc)



# Webex App notification

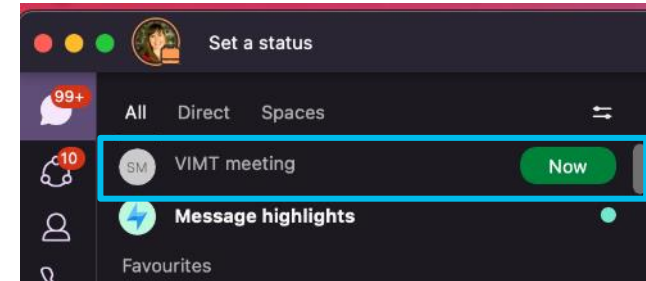
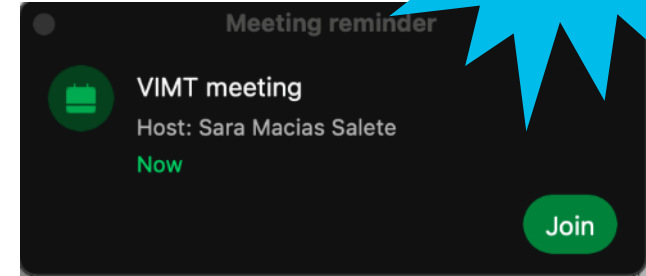
CVI is specifically designed for HW devices

Webex clients cannot join VIMT-enabled meetings

When users are invited to a Microsoft Teams meeting and have the Webex App installed, they get notifications in the Webex App:

- When paired to a device, the Webex app will join the meeting from it
- When not paired, the Webex app will cross launch the MS Teams client (or browser)

New!



# Live Events



Cisco Webex VIMT allows video devices to join a Microsoft Teams live event as **presenter**

Organizers schedule a live event with the Microsoft Teams client (not with Outlook). The VIMT service does not require additional configuration. A live event invite includes join details for video devices.

Microsoft Teams

[Join live event](#)

Join as producer or presenter when it's time for the live event.

Do not forward this invite to the attendees.

[+44 20 3321 5238](#) United Kingdom, London (Toll)

Conference ID: 448 414 152#

[Local numbers](#) | [Reset PIN](#)

[Producer help](#) | [Presenter help](#) | [Learn more](#)

[Manage live event resources](#)

Join with a video conferencing device

[uberespresso@m.webex.com](mailto:uberespresso@m.webex.com) VTC Conference ID: 1252118847

[Alternate VTC instructions](#)

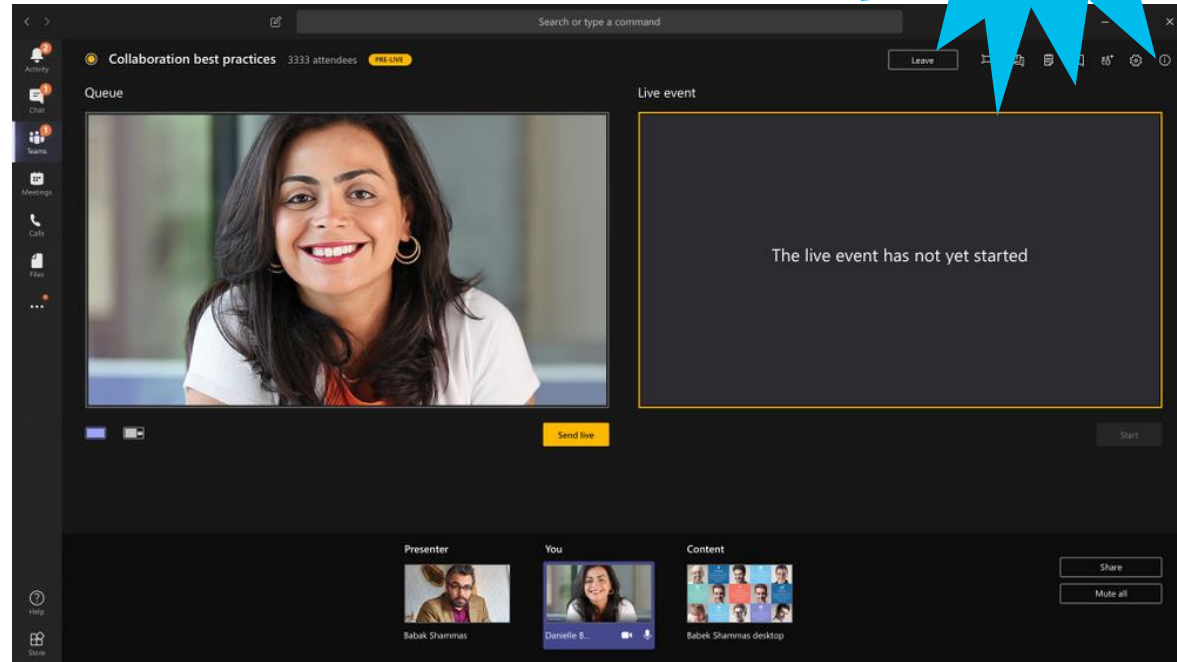
# Live Events – roles

New!

**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 ID used to trust a customers' devices



Webex configuration documents for on-prem infrastructure:  
<https://help.webex.com/article/ebbjqz>

Trusted devices will always bypass the lobby, regardless of the Microsoft Teams meeting-specific settings and org-wide policies

# Lobby Bypass for untrusted Video Devices

Untrusted 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

The screenshot shows the 'Participants & guests' settings in the Microsoft Teams admin center. The settings are as follows:

- Let anonymous people start a meeting: Off
- Automatically admit people: **Everyone** (highlighted with a blue box)
- Allow dial-in users to bypass the lobby: **Everyone** (highlighted with a blue box)
- Allow Meet now in private meetings: Everyone in your organization
- Enable live captions: Everyone in your organization
- Allow chat in meetings: Everyone in your organization and federated organizations
- Enable chat in meetings: Enabled

## Meeting Options (meeting invite)

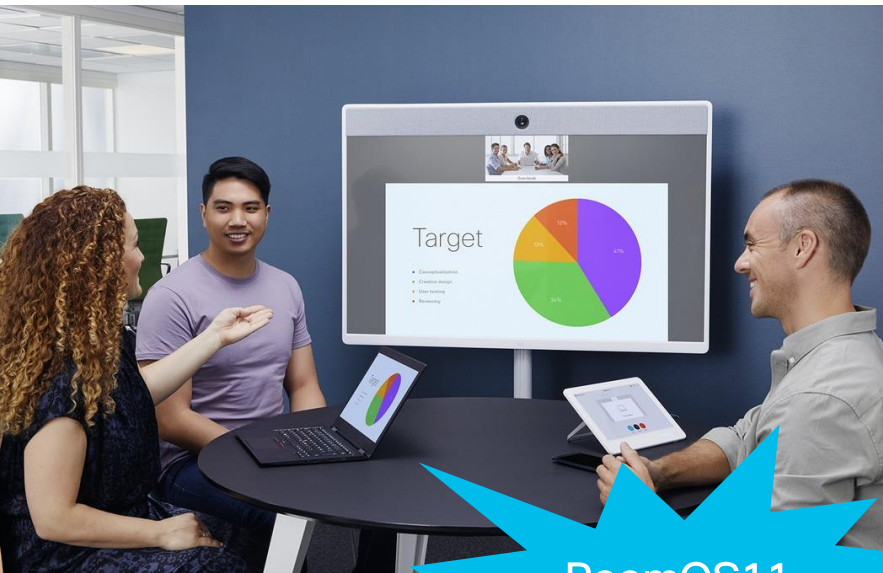
The screenshot shows the 'Meeting options' settings in the Microsoft Teams admin center. The settings are as follows:

- Who can bypass the lobby? **People in my organization** (highlighted with a blue box)
- 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** (highlighted with a blue box)



# Wireless Display Content Sharing (Miracast)

New!



RoomOS11  
feature!

A solution for wireless content sharing, without the need for a client (as it is natively built into Windows). Usually gives very low latency and high media quality, including audio.

Using Wi-Fi Direct, a direct network connection is established from laptop to the Webex Device; no need to connect to guest network or enterprise Wi-Fi.

Allows for sharing “extended” desktop, so you can see “presenter view” while presenting.

Available on Room, Desk and Board series.  
Requires the Webex Device to be on cabled network.

# Apple AirPlay is now part of the Webex experience

Simple sharing experiences you know, on the devices you love.



Works with

**Apple AirPlay**

**CISCO** *Live!*

**RoomOS11  
feature!**

**New!**



# VIMT Licensing and reports

## – Overview

# VIMT licensing offers

## VIMT Active Devices

### Active device

Any device using service twice or more in 30-day period needs a license

### Annual True Forward

Average over last 3 months, can be used to compute True Forward annually

### Devices owned or guests

### Minimum purchase

Minimum purchase is 5 licenses

 10% overage allowed

### Reporting

License report showing unique devices on Webex Control Hub

## VIMT All Devices

### All devices

Covers all devices customers owns/operational

### Annual True Forward

Annual True Forward review of devices in use

### No cost for guests

Guest devices can join without additional licensing costs

### Customer to update subs with new devices

Customer to keep current subscription as they deploy new devices, and to update subscription as they buy new devices within 60 days of deployment

### Minimum purchase

Minimum purchase is 25 licenses

# VIMT License report

For your reference

Used to calculate True Forward on **Active Devices** licensing model

Data shown:

Unique devices per day

Unique devices per 30-days window

Average of unique devices on 90 days window

Data used for True Forward\*

Webex Org ID	Date	Unique Devices 24 hours	Unique Devices last 30 days	Unique Devices rolling 90 day average
ec3a0815-yyyy-zzzzz-b945-xxxxxxxxxx	6/10/21	2	6	6
ec3a0815-yyyy-zzzzz-b945-xxxxxxxxxx	7/10/21	1	6	6
ec3a0815-yyyy-zzzzz-b945-xxxxxxxxxx	8/10/21	1	6	6
ec3a0815-yyyy-zzzzz-b945-xxxxxxxxxx	9/10/21	1	5	5
ec3a0815-yyyy-zzzzz-b945-xxxxxxxxxx	13/10/21	1	5	5
ec3a0815-yyyy-zzzzz-b945-xxxxxxxxxx	15/10/21	1	5	5
ec3a0815-yyyy-zzzzz-b945-xxxxxxxxxx	19/10/21	1	5	5
ec3a0815-yyyy-zzzzz-b945-xxxxxxxxxx	20/10/21	1	5	5
ec3a0815-yyyy-zzzzz-b945-xxxxxxxxxx	21/10/21	3	6	6
ec3a0815-yyyy-zzzzz-b945-xxxxxxxxxx	25/10/21	1	6	6
ec3a0815-yyyy-zzzzz-b945-xxxxxxxxxx	26/10/21	1	7	7
ec3a0815-yyyy-zzzzz-b945-xxxxxxxxxx	27/10/21	2	8	8
ec3a0815-yyyy-zzzzz-b945-xxxxxxxxxx	28/10/21	3	8	8
ec3a0815-yyyy-zzzzz-b945-xxxxxxxxxx	1/11/21	2	8	8
ec3a0815-yyyy-zzzzz-b945-xxxxxxxxxx	3/11/21	4	9	9

\*True Forward is currently a manual process. Plans are to automate this process in the future

Used to get information about devices using VIMT

Device data shown:

Device name

Device URL

## Device Join time

## Device disconnect time

Device SIP URI

Date device joined call

Ms Teams data shown:

Microsoft Teams conference ID

## Microsoft Teams tenant ID

Webcam ID	Teams Conference	Device Name	Device URL (local registered)	Device Join Time	Device Disconnect time	Device URL	Teams Tenant ID	Date device joined call
11111111-1111-1111-1111-1111000111		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/11073411	2021-12-15T01:58:53.393Z	2021-12-15T02:49:17.292Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000112		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/52771641	2021-12-15T01:55:10.402Z	2021-12-15T04:50:30.060Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000113		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/46565141	2021-12-15T11:29:51.082Z	2021-12-15T12:14:51.902Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000114		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/57429861	2021-12-15T05:14:26.379Z	2021-12-15T05:32:20.872Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000115		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/10581637	2021-12-15T02:29:51.568Z	2021-12-15T02:54:15.810Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000116		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/21136931	2021-12-15T01:00:31.187Z	2021-12-15T01:55:18.810Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000117		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/5511441	2021-12-15T11:12:11.717Z	2021-12-15T11:47:11.060Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000118		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/4061914	2021-12-15T04:29:53.622Z	2021-12-15T05:10:08.432Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000119		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/40183301	2021-12-15T02:29:19.832Z	2021-12-15T21:32:18.878Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000120		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/61901151	2021-12-15T08:02:27.896Z	2021-12-15T08:02:27.896Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000121		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/11073411	2021-12-15T01:02:01.896Z	2021-12-15T01:55:36.814Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000122		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/40183301	2021-12-15T01:01:26.590Z	2021-12-15T01:50:30.362Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000123		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/44850167	2021-12-15T11:31:16.171Z	2021-12-15T15:50:43.943Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000124		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/46565141	2021-12-15T01:48:03.616Z	2021-12-15T01:48:03.616Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000125		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/21892421	2021-12-15T08:59:32.783Z	2021-12-15T08:59:32.783Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000126		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/50855122	2021-12-15T09:45:07.506Z	2021-12-15T09:45:07.506Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000127		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/10760421	2021-12-15T11:33:16.411Z	2021-12-15T18:49:01.582Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000128		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/48185031	2021-12-15T14:40:09.012Z	2021-12-15T15:25:49.241Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000129		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/61901151	2021-12-15T01:21:08.082Z	2021-12-15T01:50:07.582Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000130		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/11484226	2021-12-15T15:35:46.393Z	2021-12-15T16:38:58.686Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000131		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/78188611	2021-12-15T01:20:50.280Z	2021-12-15T01:20:50.280Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000132		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/21939151	2021-12-15T05:35:34.592Z	2021-12-15T06:28:55.210Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000133		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/9636761	2021-12-15T12:00:27.741Z	2021-12-15T21:43:15.762Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000134		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/51748484	2021-12-15T10:31:18.158Z	2021-12-15T01:53:51.866Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000135		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/46783531	2021-12-15T01:16:55.802Z	2021-12-15T01:01:01.091Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000136		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/26167548	2021-12-15T11:56:28.788Z	2021-12-15T11:01:24.401Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000137		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/68437061	2021-12-15T09:55:44.906Z	2021-12-15T11:21:01.402Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000138		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/64626131	2021-12-15T11:27:41.912Z	2021-12-15T12:12:19.822Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000139		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/65380113	2021-12-15T11:31:12.117Z	2021-12-15T14:09:29.322Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000140		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/41984829	2021-12-15T11:57:29.002Z	2021-12-15T11:30:40.471Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000141		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/11073411	2021-12-15T08:01:45.484Z	2021-12-15T10:15:10.686Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000142		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/41614161	2021-12-15T01:48:43.160Z	2021-12-15T01:48:43.160Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000143		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/52771641	2021-12-15T09:58:47.711Z	2021-12-15T01:43:48.804Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000144		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/61901151	2021-12-15T01:31:13.213Z	2021-12-15T08:01:34.069Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000145		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/19800841	2021-12-15T01:02:16.424Z	2021-12-15T01:02:16.424Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000146		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/6466441	2021-12-15T01:05:12.047Z	2021-12-15T09:58:47.941Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000147		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/40183301	2021-12-15T01:08:17.823Z	2021-12-15T01:42:14.692Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000148		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/40741411	2021-12-15T01:50:46.286Z	2021-12-15T01:18:07.752Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000149		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/41614161	2021-12-15T01:48:43.160Z	2021-12-15T01:48:43.160Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000150		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/8754511	2021-12-15T11:03:16.752Z	2021-12-15T15:36:10.672Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000151		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/11484226	2021-12-15T11:55:44.221Z	2021-12-15T16:38:58.642Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000152		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/11073411	2021-12-15T09:01:13.414Z	2021-12-15T09:01:13.414Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000153		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/36739111	2021-12-15T08:41:30.032Z	2021-12-15T09:44:01.912Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000154		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/50855122	2021-12-15T09:17:03.900Z	2021-12-15T09:17:27.782Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000155		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/19800841	2021-12-15T11:04:15.419Z	2021-12-15T14:46:36.205Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000156		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/78261211	2021-12-15T11:01:29.241Z	2021-12-15T11:01:29.241Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000157		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/8754511	2021-12-15T11:29:45.002Z	2021-12-15T14:41:58.362Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000158		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/64638864	2021-12-15T01:30:14.196Z	2021-12-15T01:32:22.592Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000159		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/48185031	2021-12-15T11:47:11.118Z	2021-12-15T11:47:11.118Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021
11111111-1111-1111-1111-1111000160		1234567890	https://vdm-a-wb2.com/vdmlapi/v1/devices/40183301	2021-12-15T01:04:16.566Z	2021-12-15T01:07:58.512Z		z9y2u2-z222-z222-z222-z2y2z9y2z2	15/12/2021



# Device Troubleshooting for VIMT



## By device name

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



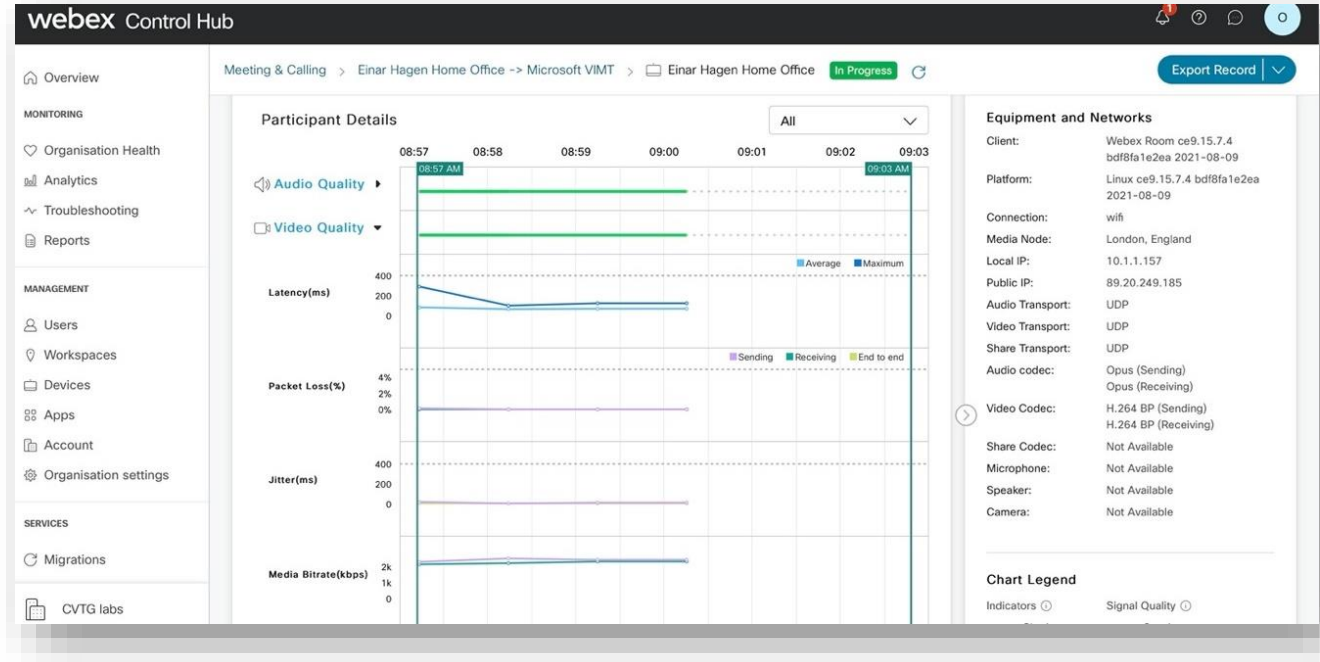
## Stats

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)





# Agenda

## Introduction

### Microsoft Teams meetings & Webex video devices interoperability

- VIMT (CVI) Gateway
- Direct Guest Join (WebRTC)

### Microsoft Teams & Webex client-side integrations

- Webex Meetings integration
- Webex calling integration



# Microsoft Teams meetings & Webex video devices interop – Direct Guest Join (WebRTC)



# Pre-meeting and in- meeting experience

# Example Teams invite (generated by Microsoft)

## Microsoft Teams meeting

Join Link for App &  
Web App

**Join on your computer or mobile app**

[Click here to join the meeting](#)

MSFT Teams  
Join Info

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

# Joining Microsoft Teams meetings – WebRTC

## One Button to Push experience



# WebRTC layouts

Single and dual screen

## Video Participants only



Basic, single screen layout controlled by Microsoft Teams

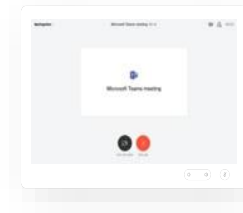
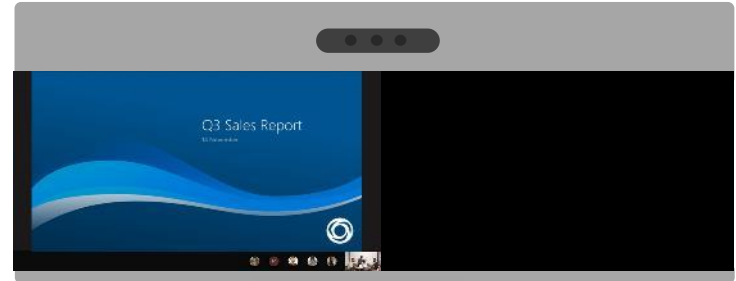
Up to 4 Active Speakers are shown on video

Ability to view content share (including PowerPoint Live)  
+ live video streams (bottom bar)

Additional local device specific features such as Speaker  
Tracking are fully supported

**CISCO** *Live!*

## With content being shared



Touchpad  
view

**Note:** Sharing content from Webex Device is not supported

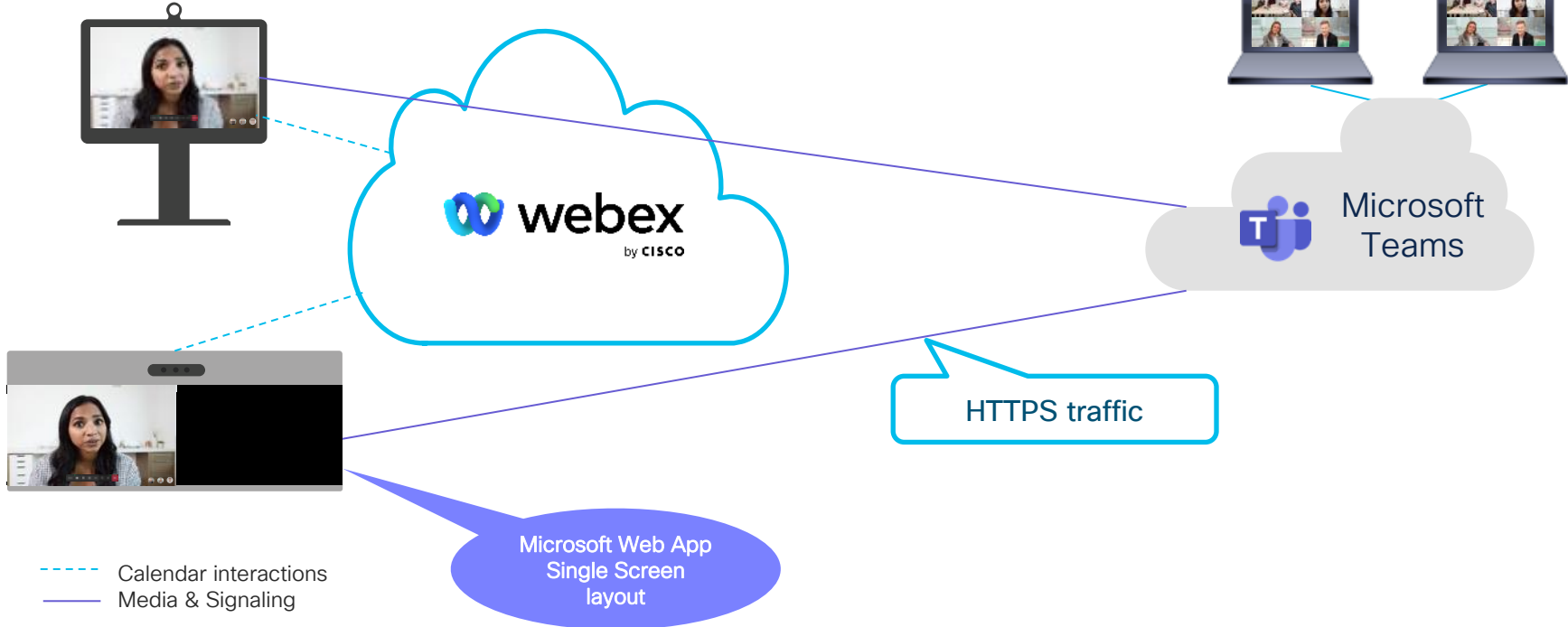
- Requires use of separate Microsoft Teams client

# WebRTC Architecture



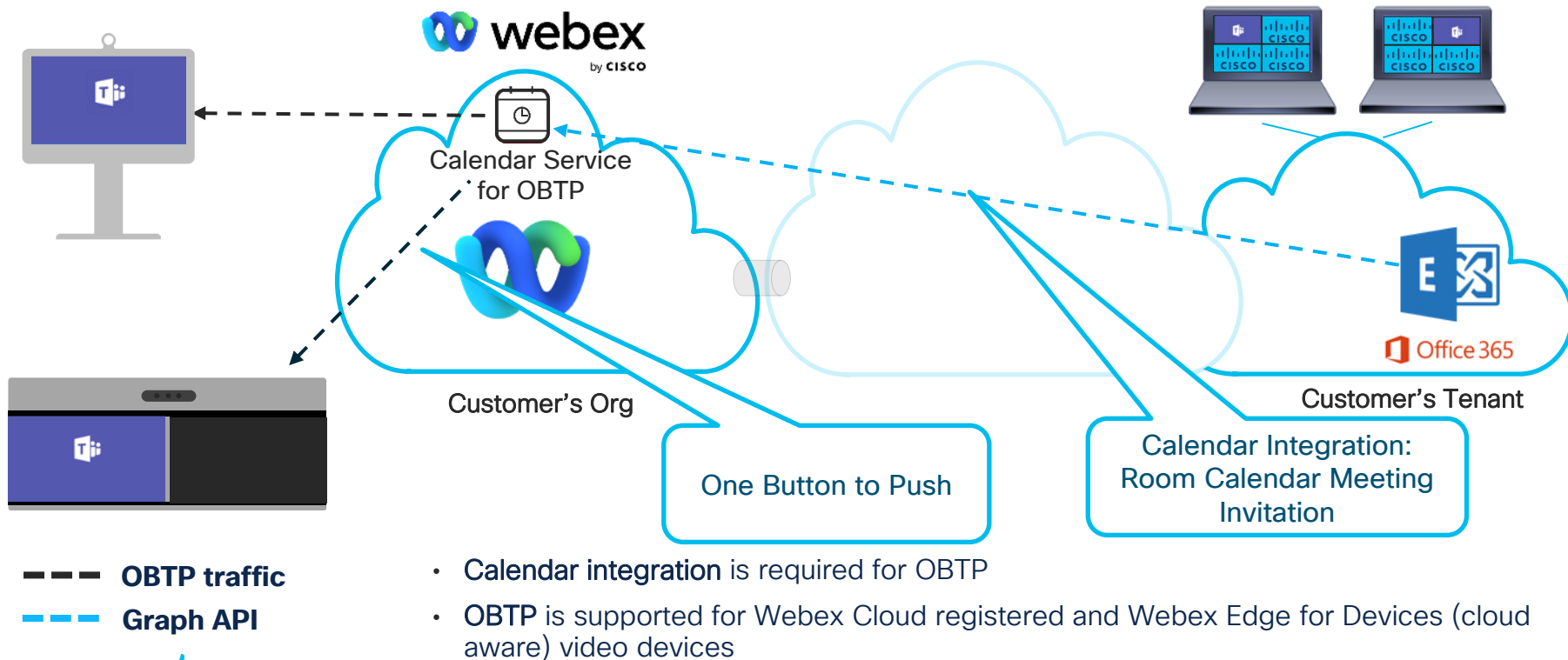
# Webex Rooms for Microsoft Teams meeting

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



# Joining Microsoft Teams meetings- WebRTC Calendar Service and OBTP

For your reference

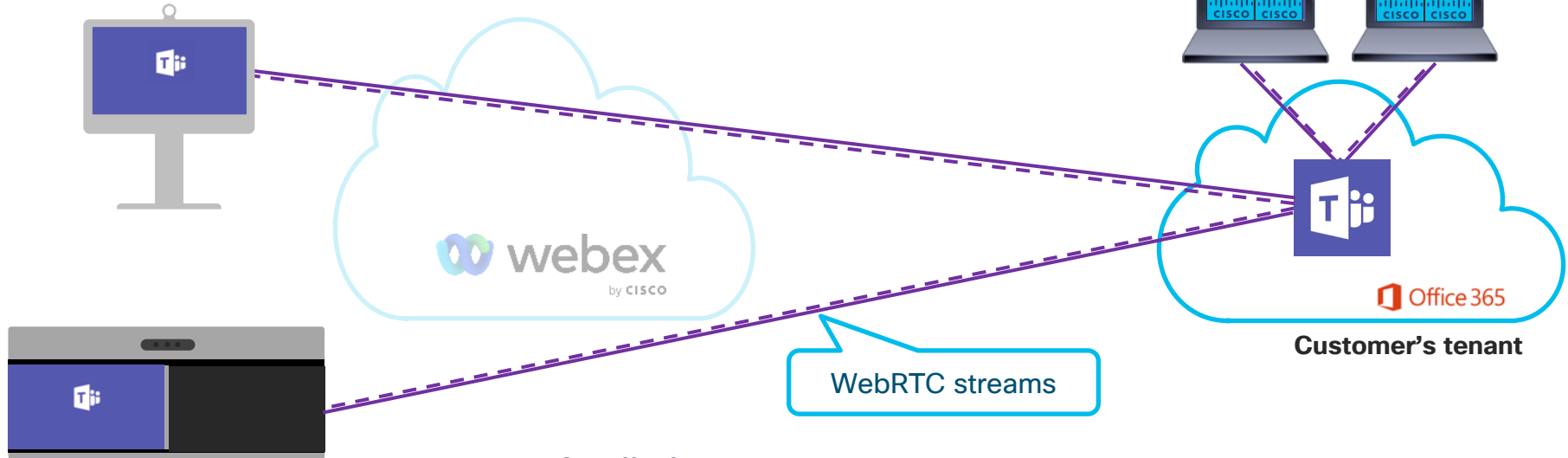


CISCO *Live!*



# Modern web technology – WebRTC

## In-meeting signaling and media



--- Microsoft signaling  
— Microsoft media

- WebRTC traffic for both cloud registered and cloud aware video devices
  - direct flow from the customer's premises to the Microsoft Teams' bridge
  - does not traverse through Expressway
- Ports 80, 443, 3478-3481

# Direct Guest Join - Licensing

Direct Guest Join is supported on modern Webex Devices registered to Cloud or enabled with Webex Edge for Devices

**License:**

Included with Cloud Device Registration  
(via Flex or standalone \$29.50/month list price)

NOTE:

Microsoft Direct Guest Join (WebRTC) is unsupported but works with GCC, it doesn't work with GCC+  
We are waiting for a fix and official support from Microsoft



# Agenda

## Introduction

- Microsoft Teams meetings & Webex video devices interoperability

- VIMT (CVI) Gateway
- Direct Guest Join (WebRTC)

## Microsoft Teams & Webex client-side integrations

- Webex Meetings integration
- Webex calling integration

# Why a client-side approach

Interop is never a miraculous approach:

- It rarely is a win-win solution
- It is always based on compromises
- it creates constraints and bottle-necks
- It sacrifices a lot of good proprietary features

**That is why you should consider a dual clients approach**

- Your users will use Microsoft Teams as common interface and “entry point” to the collaboration tools
- You will split different workloads to different back ends, keeping messaging, ECM and all asynchronous capabilities on Microsoft Teams, while real-time workloads like calling and meetings will be based on your Webex solution. Natively compatible with your Webex devices and Cisco phones  
(which means to embrace the Open Platform approach)

# Microsoft Teams & Webex client-side integrations - **Webex Meetings** integration

# Webex Meetings for Microsoft Teams

## Posting meetings

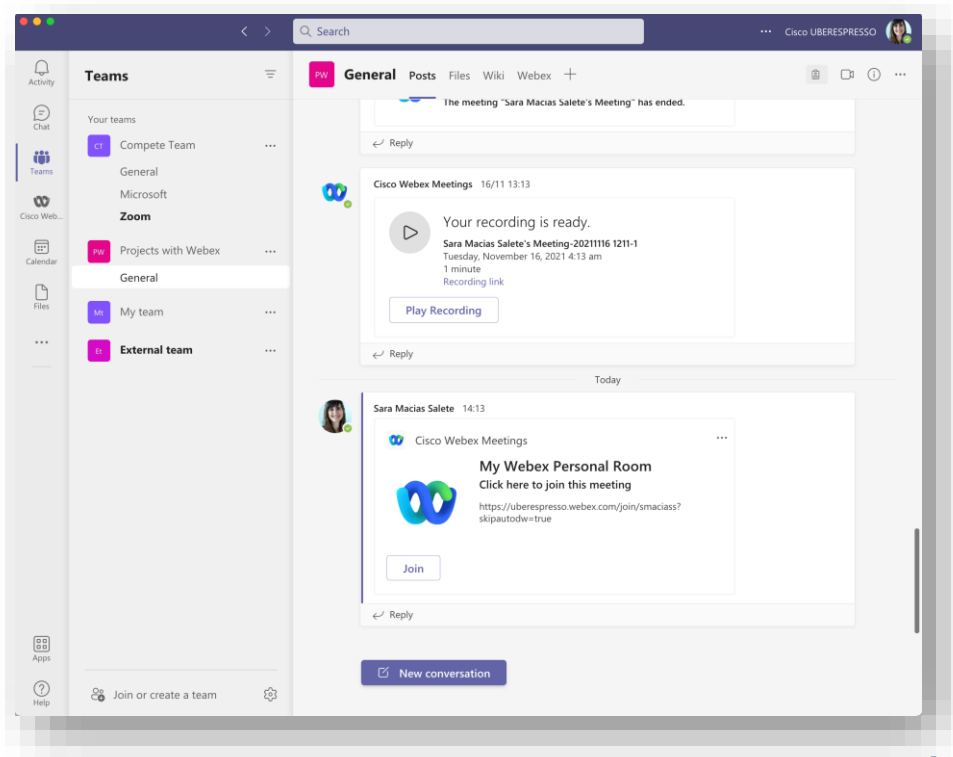
Send a message in a channel or chat to share Personal Room meeting link

## Scheduling

Schedule Personal Room or regular meetings

## Joining

Start or Join Personal Room or scheduled meetings from MS Teams



## Meetings list

View upcoming list of meetings and edit/update from there

## Recordings

View meeting recordings list and play recordings from there.

## Notifications

Get real-time meeting notifications with meeting info and Join button

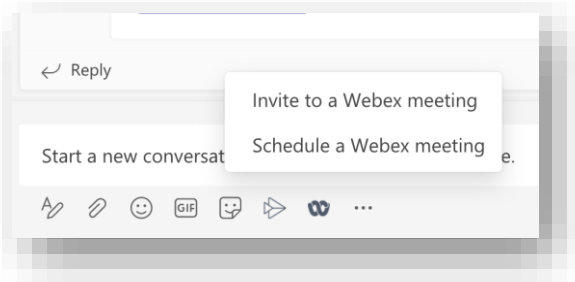
Get recording notifications with Play button

Webex for Government [FedRAMP] is supported

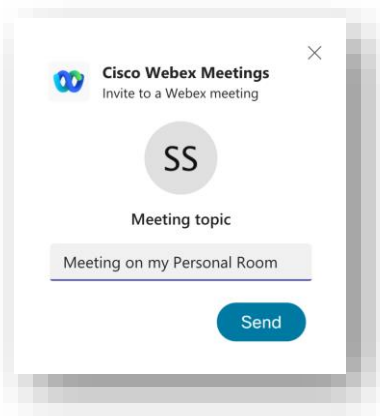
# Starting/scheduling meetings from Messaging extension

## Access from chat area

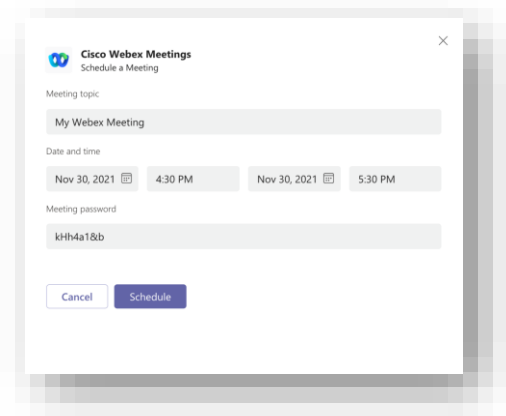
Users can start an instant meeting or schedule a meeting



## Invite to a Webex meeting



## Schedule a Webex meeting



# Webex Meetings Bot in Microsoft Teams – Channel experience

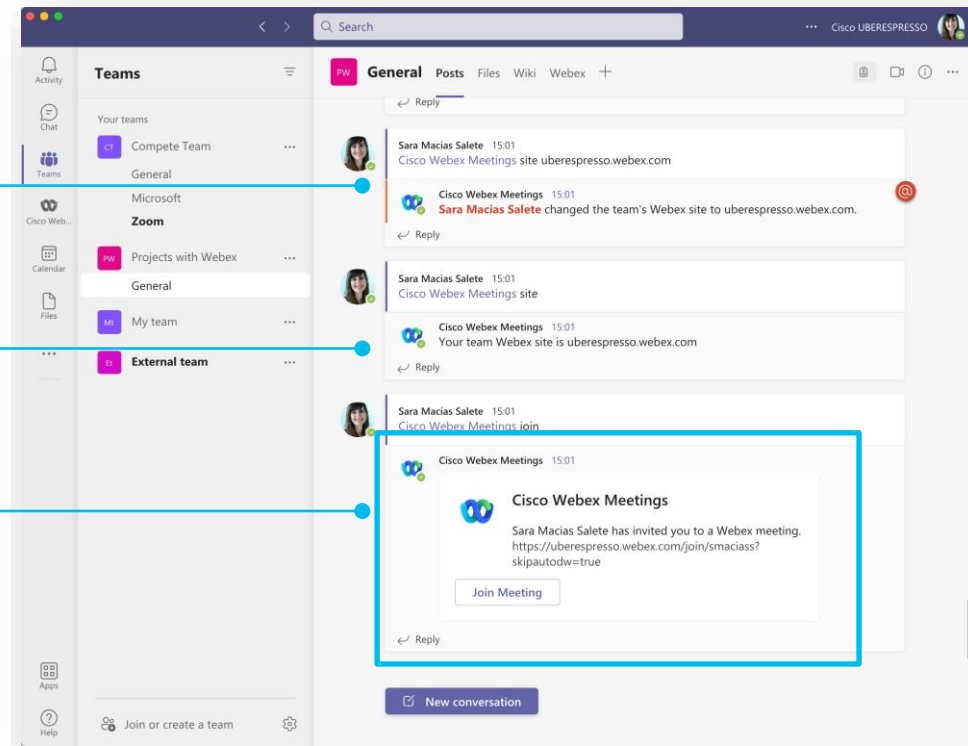
For your reference

Setup a site to use with the channel

Check the current meetings site

Post a Personal Room meeting join URL

Also available: get meetings notifications





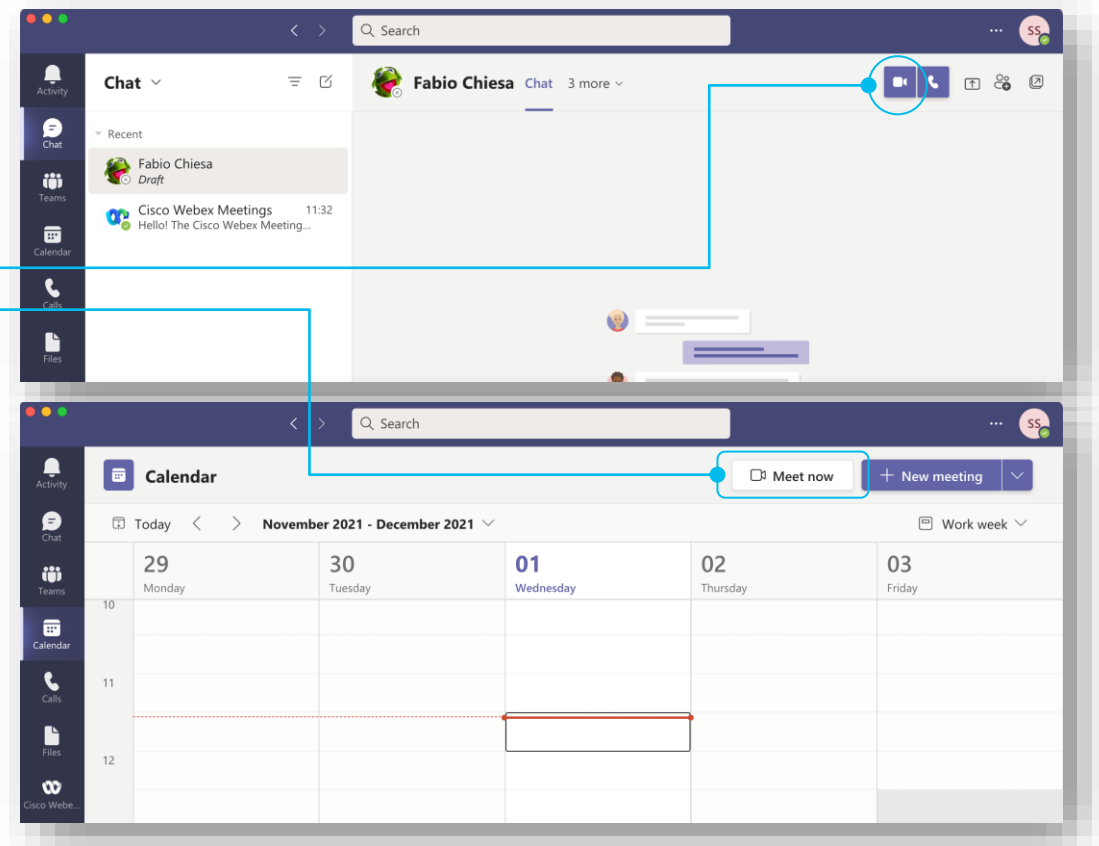
# Deployment and Recommendations for Webex Meetings integration



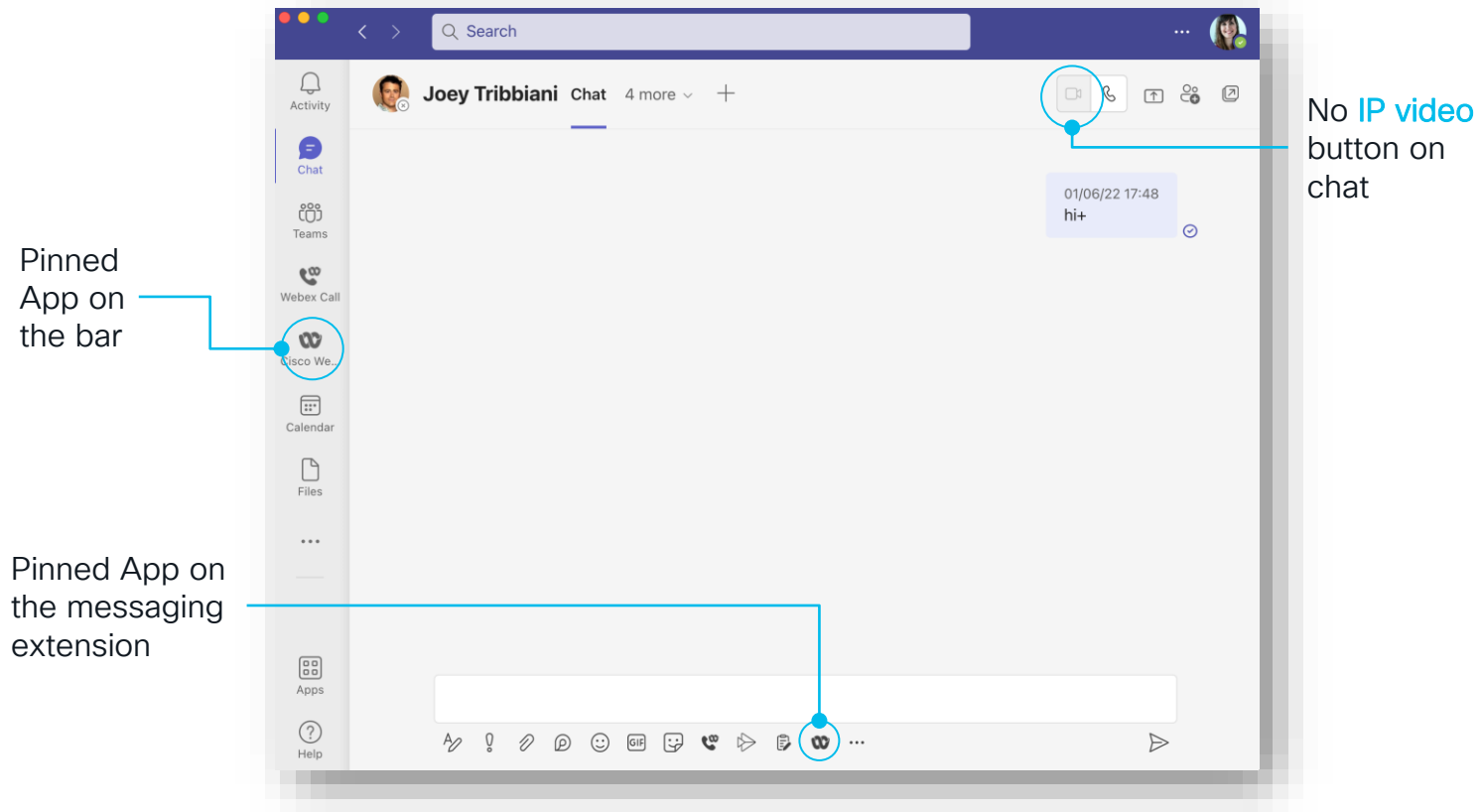
# Why disabling Ms Teams Meetings

Users can find the Ms Teams meeting buttons in the **chat** and in the **calendar**

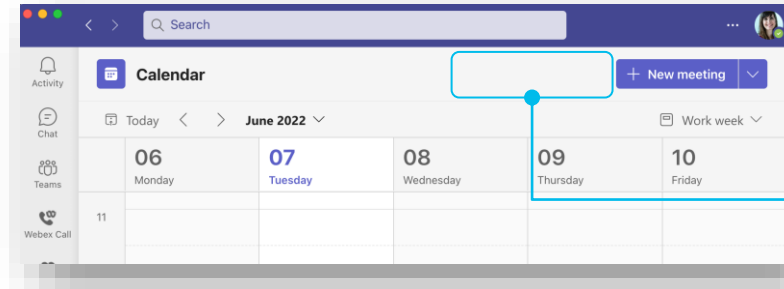
This could be confusing if we want to leverage the Webex Meetings integration for Microsoft Teams



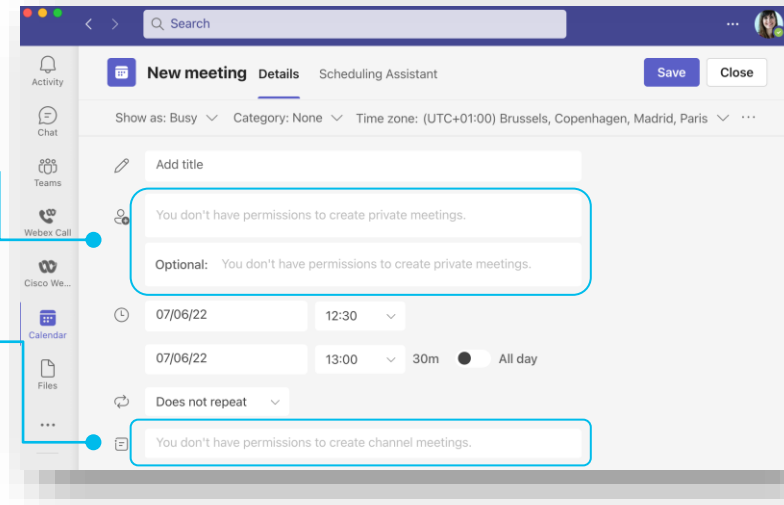
# Ms Teams view after all changes – Chat view



# Ms Teams view after all changes – Calendar view



No **Meet Now** option

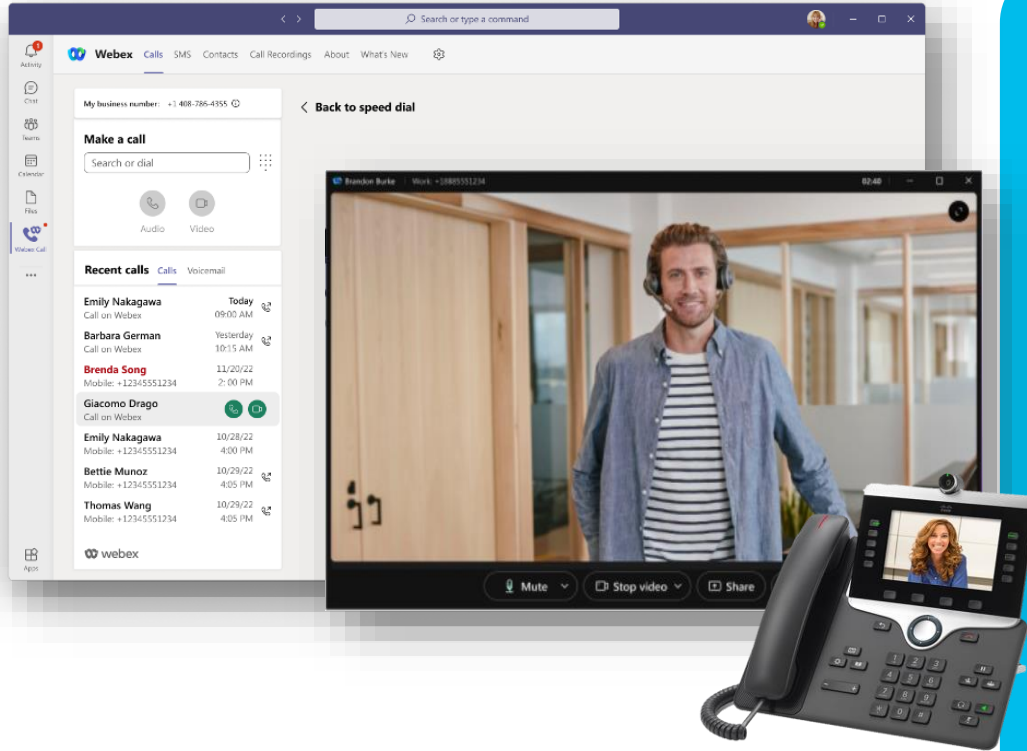


No permissions to create private meetings

No permissions to create channel meetings

# Microsoft Teams & Webex client-side integrations - Webex Calling integration

# Cisco Webex Calling for Microsoft Teams



The simple way to integrate Microsoft Teams Messaging and Cisco Calling

- Use existing Cisco calling infrastructure: Webex Calling, Webex for BroadWorks, CUCM, UCM Cloud or HCS
- 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

# Webex Calling integration for Ms Teams

Calling for Enterprise grade, resiliency, mobility and complex business

For your reference

## Call Tab

Access dial pad, contact search and speed dials

## Dialpad

Access to dialpad to key in numbers

## Call/Search Input

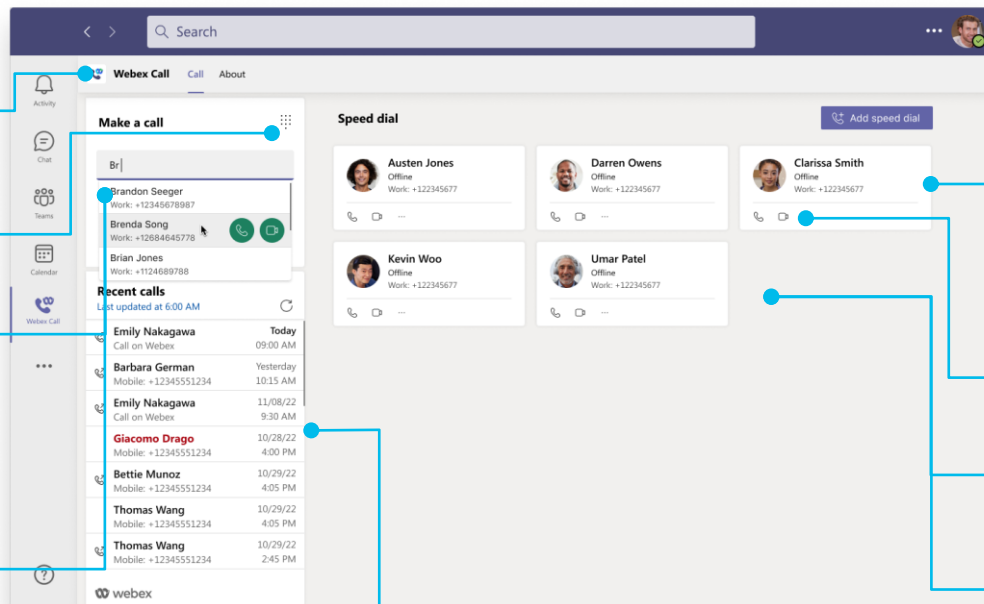
Enter a number, SIP address or type a name to search for a Azure AD/Outlook contact

## Contact Search

Search for personal and corporate contacts

Azure AD  
Contacts

Outlook 365  
Contacts



## Calling History

Easily call back by hovering or clicking and selecting audio only or video call

## Add Speed dial

Click to add up to 25 speed dial cards

## Speed dial

Pin frequent contacts as speed dials for easy access

## Call

Select number and call contact

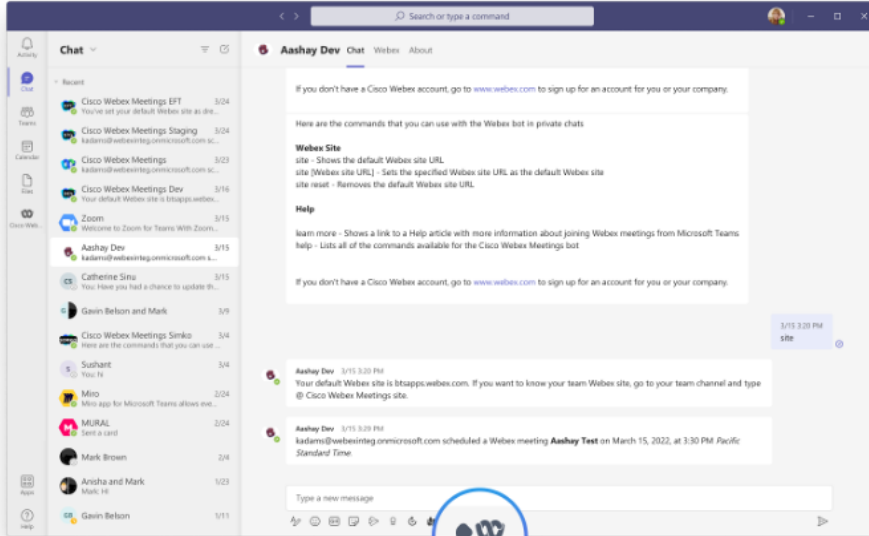
## Reorder

Drag and drop cards to organize them

## Delete

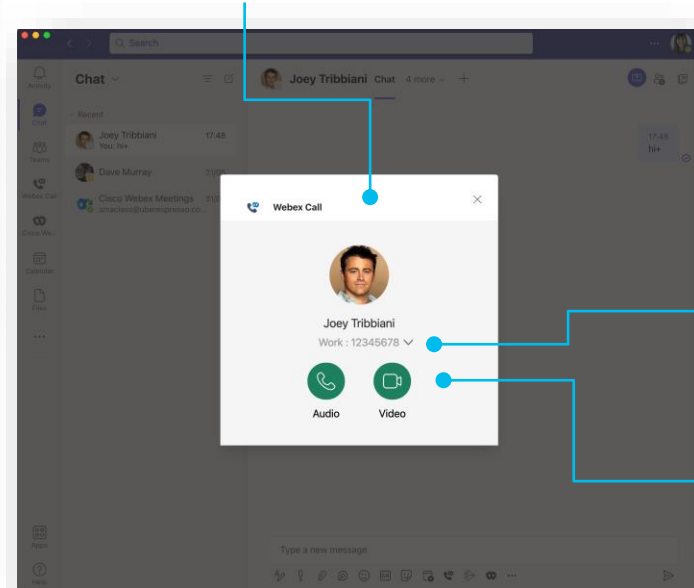
hover over the card and click delete icon to remove speed dial

# Webex Calling from a MS Teams conversation



Call Button  
Escalate this  
conversation  
to a Cisco voice/video  
conversation

Contact Card  
Displayed when the  
Cisco  
call icon is clicked

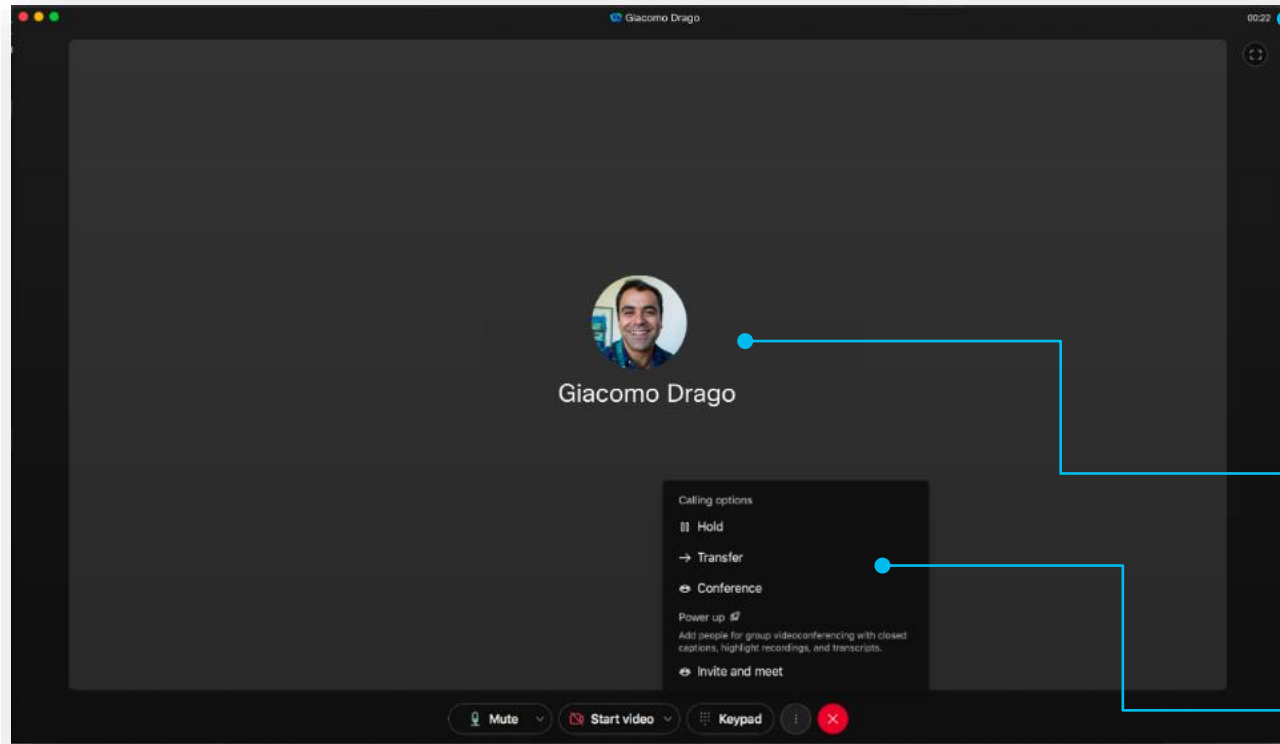


Call Addresses  
Dropdown to select  
work,  
mobile or SIP address  
from  
Azure AD.

Launch Call  
Dial selected number



# Webex Calling in-call window



**In-Call Window**  
Provides complete Webex Calling capability set available in Webex App

**Audio and Video Calling**  
Provides both audio and video calling, including background noise cancellation

**Mid-Call Controls**  
User has mid-call telephony options

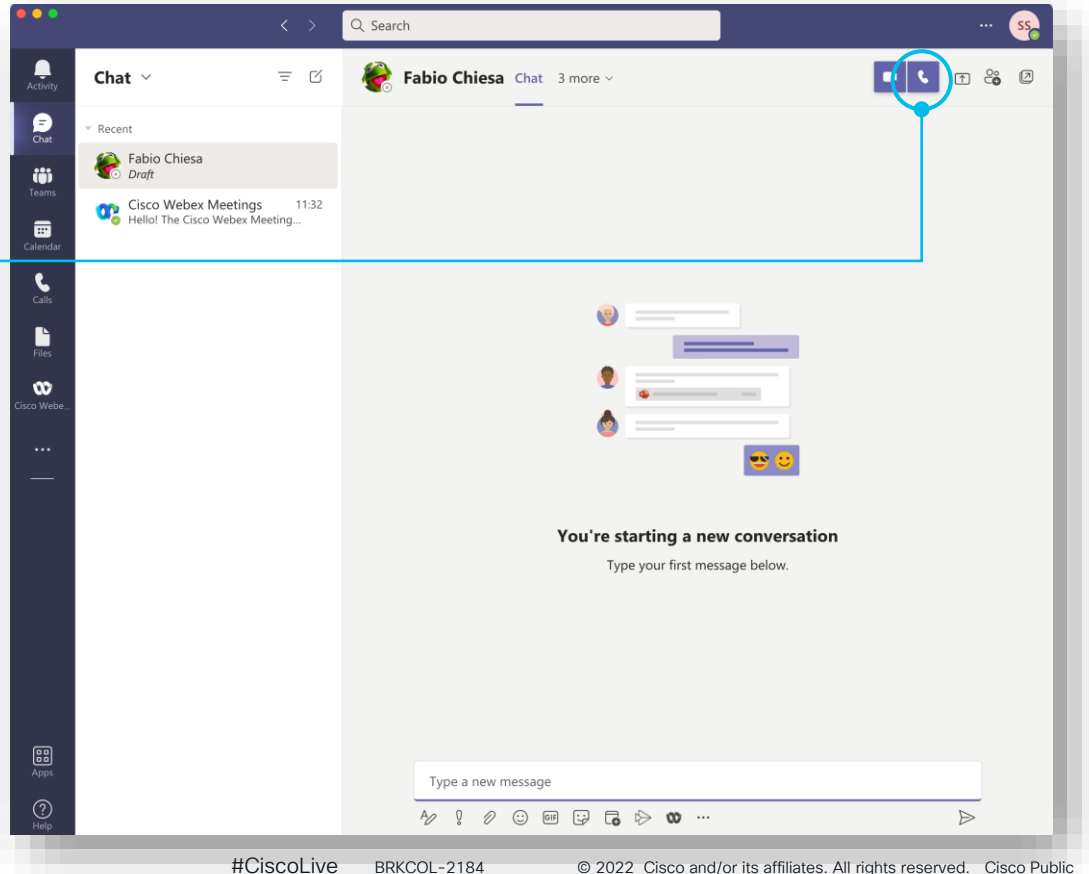
# Deployment and recommendations for Webex Calling integration



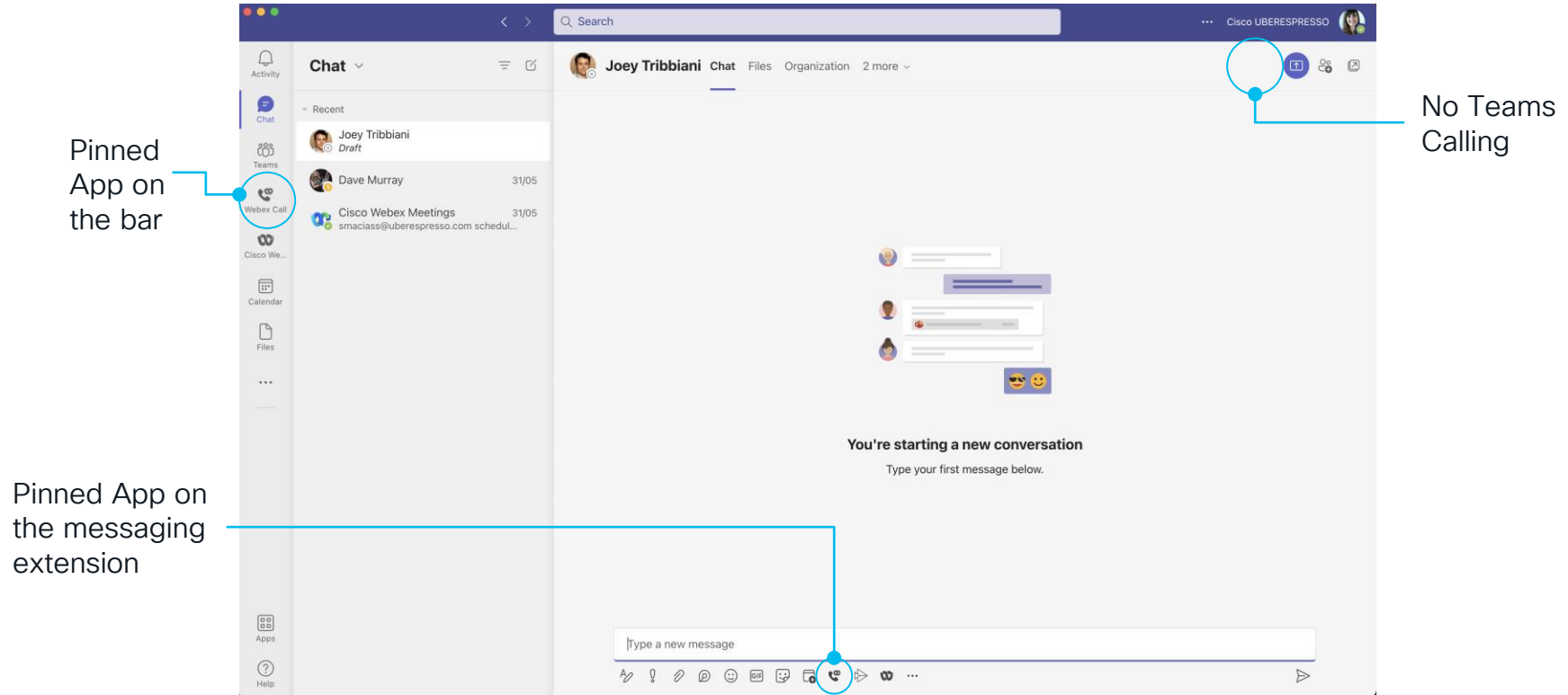
# Why disabling Ms Teams Calling

Users can find the Ms Teams Calling icon in the **chat**

This could be confusing if we want to leverage the Webex Calling integration for Microsoft Teams



# Ms Teams view after all changes



# Summary

# Webex Video Interoperability with Microsoft Teams

## Key takeaways

- We have a long interop history with Microsoft
- VIMT (CVI) connects your high-quality Webex Devices to **your** Microsoft Teams meetings
- Direct Guest Join provides an easy way to join **remotely hosted** Microsoft Teams meetings not enabled with CVI
- Microsoft Teams & Webex app client-side integrations are the best solution to **avoid interop constraints** and enrich your Microsoft Teams clients with all the Webex Meetings and Calling features

# Technical Session Surveys

- Attendees who fill out a minimum of four session surveys and the overall event survey will get Cisco Live branded socks!
- Attendees will also earn 100 points in the Cisco Live Game for every survey completed.
- These points help you get on the leaderboard and increase your chances of winning daily and grand prizes.



# Cisco Learning and Certifications

From technology training and team development to Cisco certifications and learning plans, let us help you empower your business and career. [www.cisco.com/go/certs](https://www.cisco.com/go/certs)

## Pay for Learning with Cisco Learning Credits

(CLCs) are prepaid training vouchers redeemed directly with Cisco.



## Learn

### Cisco U.

IT learning hub that guides teams and learners toward their goals

### Cisco Digital Learning

Subscription-based product, technology, and certification training

### Cisco Modeling Labs

Network simulation platform for design, testing, and troubleshooting

### Cisco Learning Network

Resource community portal for certifications and learning



## Train

### Cisco Training Bootcamps

Intensive team & individual automation and technology training programs

### Cisco Learning Partner Program

Authorized training partners supporting Cisco technology and career certifications

### Cisco Instructor-led and Virtual Instructor-led training

Accelerated curriculum of product, technology, and certification courses



## Certify

### Cisco Certifications and Specialist Certifications

Award-winning certification program empowers students and IT Professionals to advance their technical careers

### Cisco Guided Study Groups

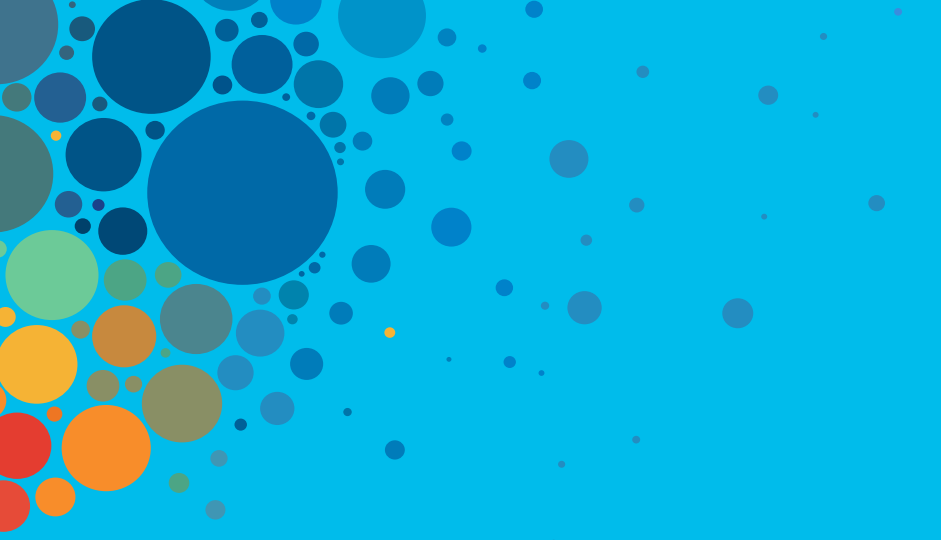
180-day certification prep program with learning and support

### Cisco Continuing Education Program

Recertification training options for Cisco certified individuals

Here at the event? Visit us at **The Learning and Certifications lounge at the World of Solutions**





# Continue your education

- Visit the Cisco Showcase for related demos
- Book your one-on-one Meet the Engineer meeting
- Visit the On-Demand Library for more sessions at [www.CiscoLive.com/on-demand](http://www.CiscoLive.com/on-demand)

For VIMT Troubleshooting please join  
BRKCOL-2058 Wed 6/15 1pm

For Hybrid Calendar Troubleshooting  
please join TSCCOL-2027



The bridge to possible

# Thank you

CISCO *Live!*



#CiscoLive