

CISCO *Live!*

GO BEYOND

#CiscoLiveAPJC



Cisco Collaboration Devices as an Open Platform

Michael Isatchenko – Collaboration Solutions Engineer
BRKCOL-2525

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/BRKCOL2525>

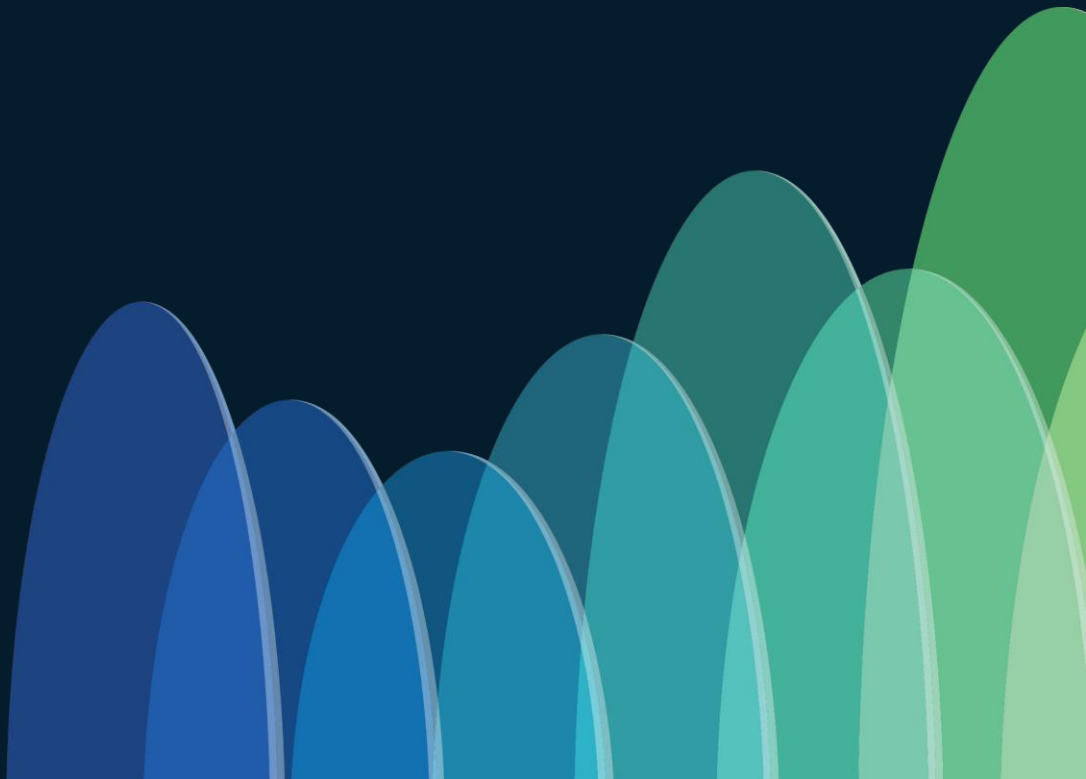




Agenda

- Introduction
- Overview of Cisco Video Devices
- Cisco Devices Features
- Hybrid Calendar
- Joining a Zoom Meeting
- Joining a Google Meeting
- What else can we join?
- Summary

Introduction



Choose the experience for your needs

Powered by RoomOS



Cisco Rooms Experience

Native Webex and advanced interop with Microsoft Teams, Google and Zoom



Session: Enabling Cisco
Microsoft Teams Rooms
BRKCOL-2524
Tim Bowden

Microsoft Teams Rooms Experience

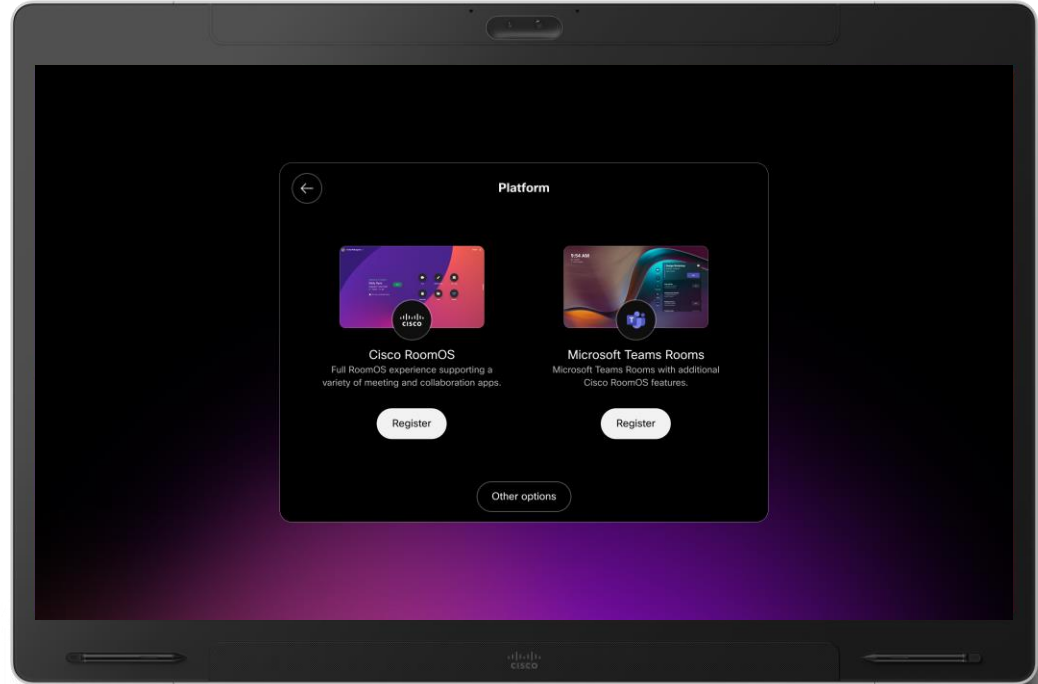
Native Microsoft Teams with the option for full featured Webex Meetings and Events

Choose your experience

Cisco Rooms Experience

Available with RoomOS 11 through

- Initial Setup for new out of box devices
- Factory reset devices



Easily join **any** meeting with **one-button-to-push**

RoomOS: open & extensible to support how you work



Webex Video
Integration for
Microsoft Teams
or via direct
guest join

Google Meet
video interop

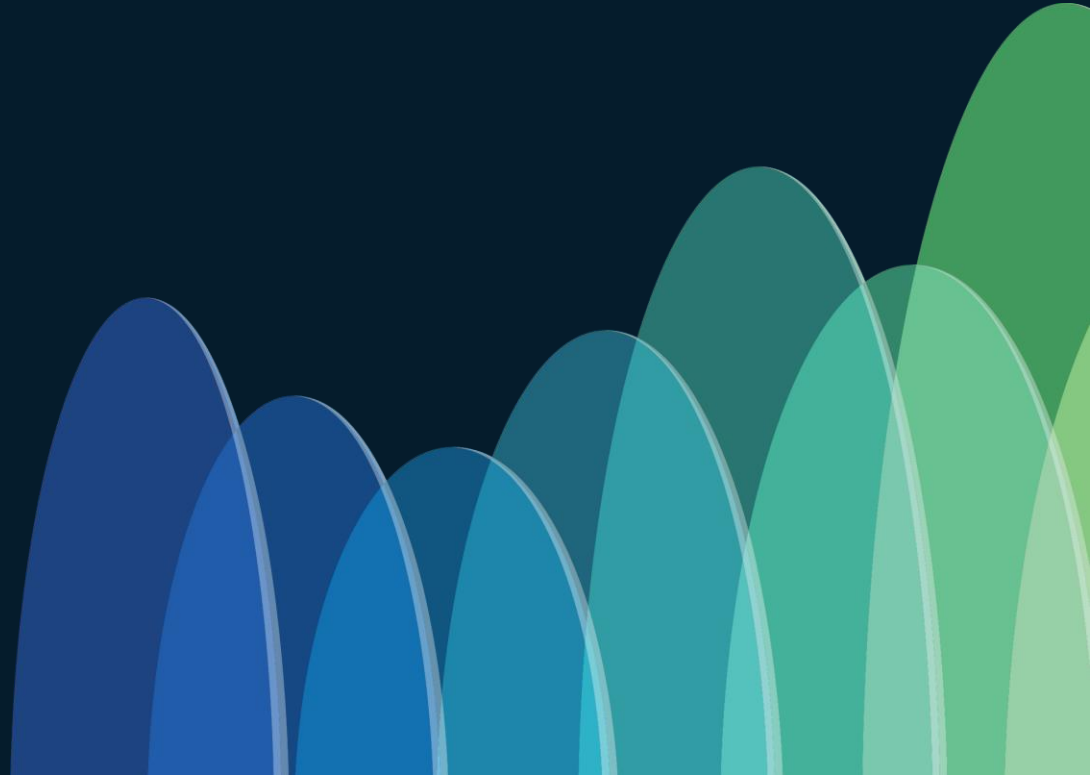
Zoom interop
with rich
meetings
experience

BYOD support
with USB
passthrough

Run native 3rd
party web apps
- Miro, Mural,
Appspace and
many more

UI extensions
for smart
buildings
integrations

Overview of Cisco Collaboration Devices



Cisco Collaboration Devices

Cisco has the largest portfolio of desk, room & peripheral devices in the industry

Room Devices



Phones



Room Peripherals



Desk Devices



Headsets and Cameras



Cisco Desk Series Devices

All-in-one desk devices suitable for office or home office



Desk Mini

Small workspaces and portability

15-inch touch screen

1080p Resolution



Desk

Home office or office desks

24-inch touch screen

1080p Resolution



Desk Pro

Executive office or small huddle spaces

27-inch touch screen

4K Resolution

USB-C Passthrough, Built-in Sensors, On-Prem/Cloud, Sharing via HDMI, USB-C, Webex, Miracast and AirPlay

Cisco Board Pro G2

All-in-one meeting and collaboration board for AI meetings



Board Pro 55 G2



Board Pro 75 G2

Purpose built all-in-one solution combining video conferencing, visual collaboration, ideation and co-creation

Dual, 96MP camera system with the ability to add external cameras

14-element beamforming microphone array with the ability to add external microphones

Upgraded compute with NVIDIA AI chipset allowing features such as AI virtual lens and Cinematic Meetings

Connectivity with external camera, microphones, speaker, control panel and screens, WiFi 6E connectivity

USB-C Passthrough with touch redirect, Built-in Sensors, On-Prem/Cloud, Sharing via HDMI, USB-C, Webex, Miracast and AirPlay



Cisco Room Series Devices

Room devices from the huddle space to an Auditorium



Room Bar

Small Meeting Room/Huddle Spaces
for 3-7 People

Dual Screen Support

Single-lens, 12MP, 120 degree
HFOV

Spatial sound; internal mics + mic
extension



Room Bar Pro

Medium Meeting Room for 7-11
People

Triple Screen Support

Dual-lens, 96MP, 112 & 70 degree
HFOV

Spatial sound; built-in mics;
audio over IP, USB & analog



Room Kit EQ/Pro

Large Meeting Rooms with over 11 people
and custom rooms (Auditorium/Teaching)

Triple Screen Support

Quad-lens, 80MP 83 degree HFOV & 3 x 50
degree HFOV

Mono speakers; audio over IP, USB & analog

USB-C Passthrough*, Built-in Sensors, On-Prem/Cloud, Sharing via HDMI, USB-C, Webex, Miracast and AirPlay

Cisco Room Kit EQX

Flagship meeting room device for any medium or large room

Cisco Room Kit EQX

Integrated room kit appliance with camera system, audio system, room codec, mounting options, and frame design

Quad-lens, 80MP 83 degree HFOV & 3 x 50 degree HFOV

Dual external displays (65", 75" and 85") in the main frame module and option for a third screen

Spatial audio via advanced, multi-channel audio system with 6 x built-in loudspeakers, subwoofer, and amplifier. 1 x audio line out and USB-A for external speakers in Codec EQ

Microphone connectivity over IP (AES67), USB and analog ports.

Ability to add more cameras for Cinematic Meetings features

USB-C Passthrough*, Built-in Sensors, On-Prem/Cloud, Sharing via HDMI, USB-C, Webex, Miracast and AirPlay



Ceiling Microphone Pro

Crisp Clear Audio in any space

- 64 omnidirectional microphones
- 8 AI Adaptive Audio Beams
- 12ft Audio Pickup Radius (~3.5m)
- 3 Ultrasonic Speakers
- POE (8watts)
- Audio over IP
- 2 colour options
 - Arctic white
 - Carbon black
- 3 mounting options
 - Wire suspension
 - Hard ceiling
 - Drop ceiling



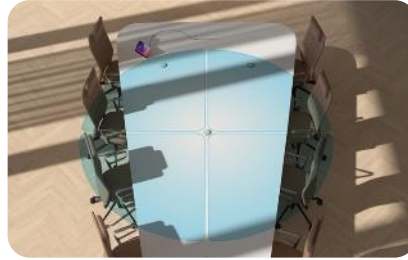
Cisco Devices Features



Device Intelligence Built-in



Head detection and always-on people counting



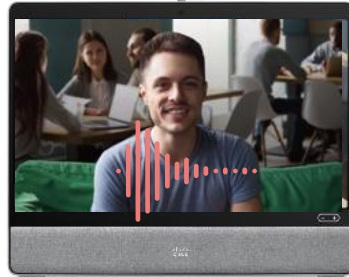
Adaptive, beam forming, microphones



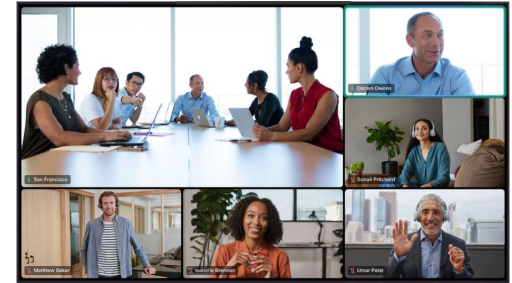
Meeting Zones for open spaces and glass walls



Frames camera intelligence



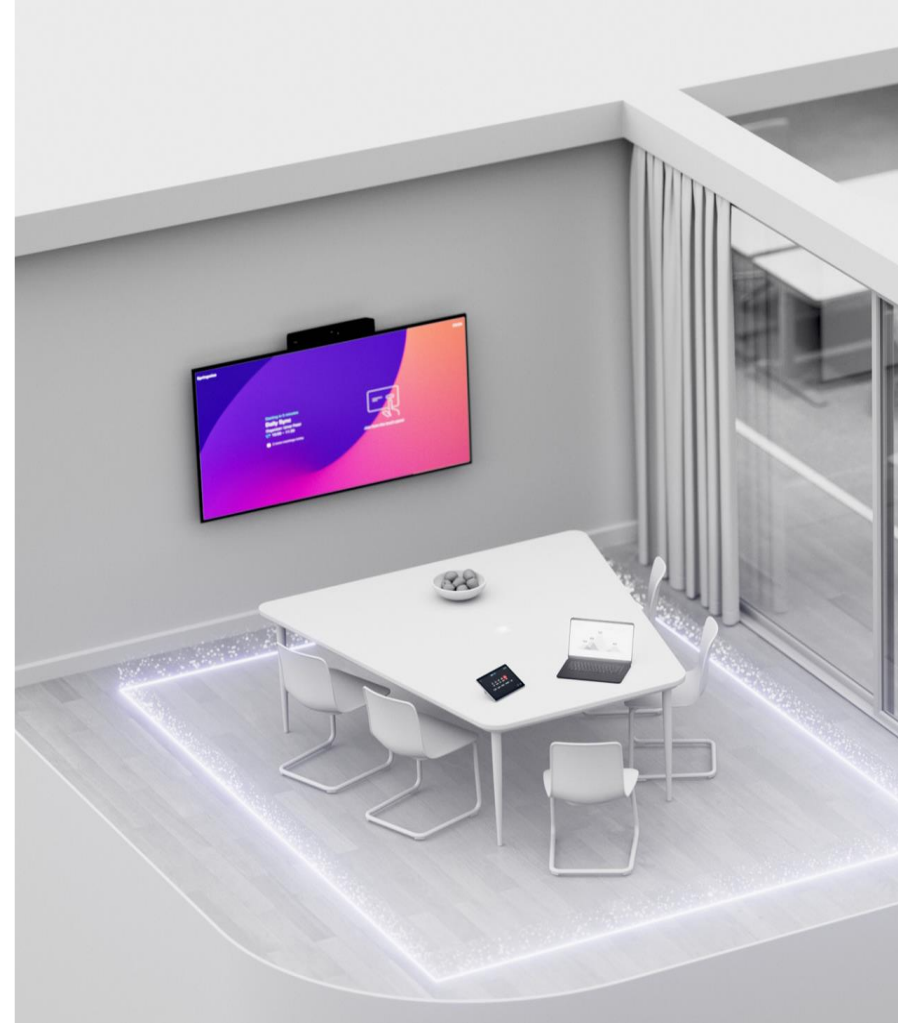
Background noise removal and optimise for my voice



Speaker and Group

Meeting Zones

- Ensuring that only people within a defined area are included in the camera's automatic framing minimizing distractions
- Useful for open offices or glass-walled meeting rooms
- People count will only include participants within the meeting zone
- Supported on Board, Desk and Room Devices

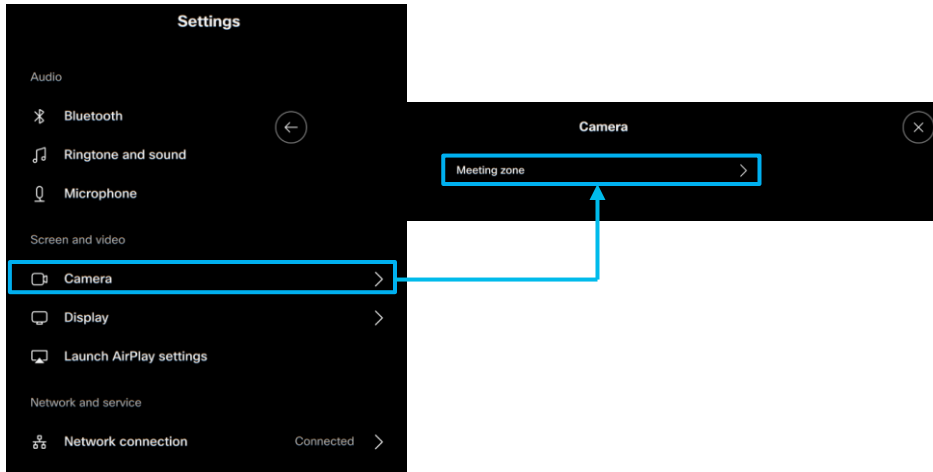
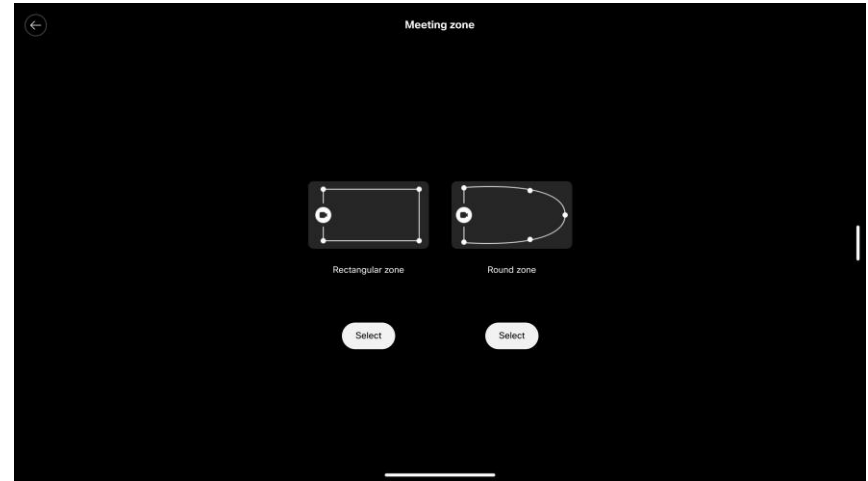


Configuration

Easily configured using the Cisco Navigator or through the device's API.

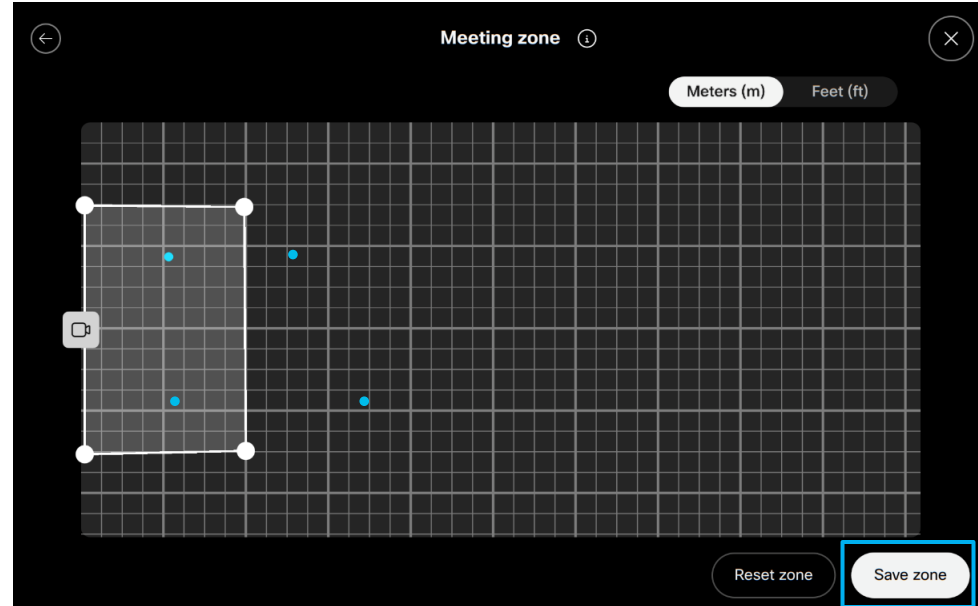
- In the settings menu, select “Camera” then “Meeting Zone”

- Choose between the two standard meeting zones layout:
 - Rectangular zone
 - Round Zone



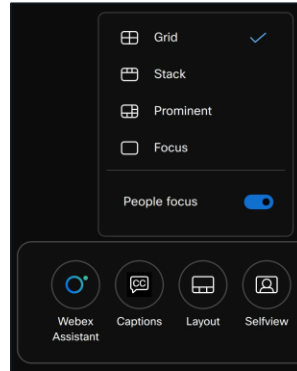
Configuration

- Changes made by dragging the anchor points to a desired position
- Long Press to delete an anchor point or Long Press to add a new point
- Blue dots represents people seen by the camera and will move when people move.
- Remember to tap "Save Zone"
- Layouts can be reset and re-drawn at any time



People Focus

- Webex Meeting feature to focus on the person and not the space behind them
- Dynamically optimises the layout to use all available screen space



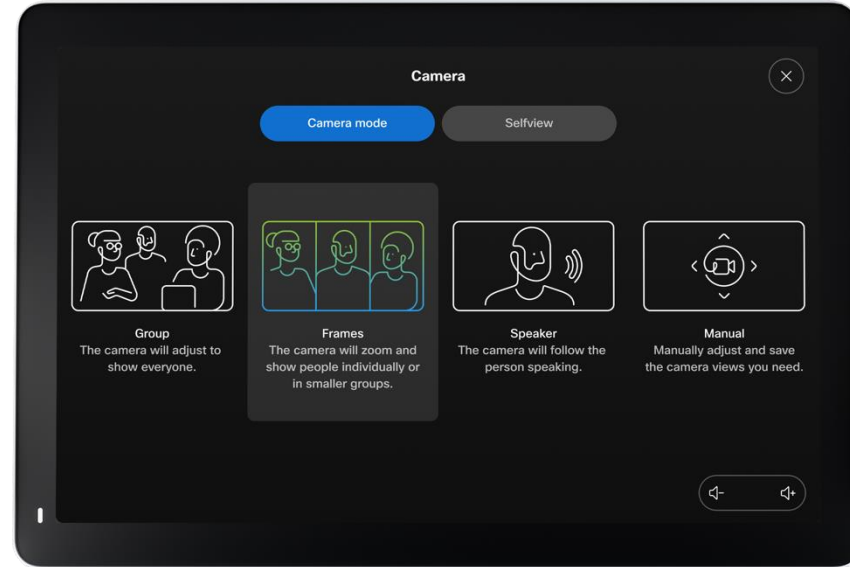
Frames

- Frames will capture everyone in the room in up to 4 frames
- People sitting close to each other will be captured in groups to preserve the in-room context
- Frames dynamically adapts to the where people are sitting and moving
- For a scenario with little empty space, the camera will fall back to a group overview of the room
- Support on Board and Room series with RoomOS11



Frames - continued

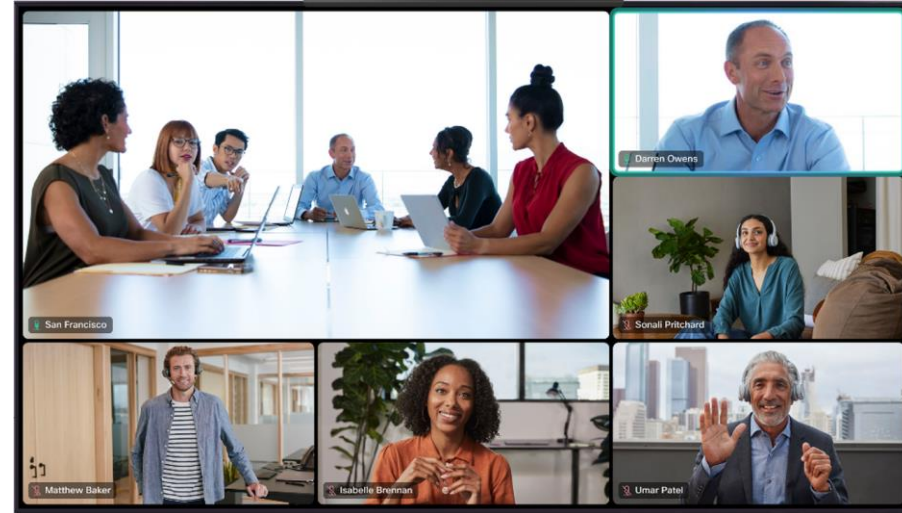
Camera -> Frames



Speaker and Group

Multi-stream for Webex

- Ensure remote participants get the best overview of the room, and the active speaker at the same time!



Group

The camera will adjust to show everyone.



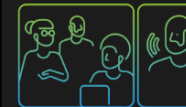
Frames

The camera will zoom and show people individually or in smaller groups.



Speaker

The camera will follow the person speaking.



Group & speaker

The camera will show both an overview and a close-up of the person speaking

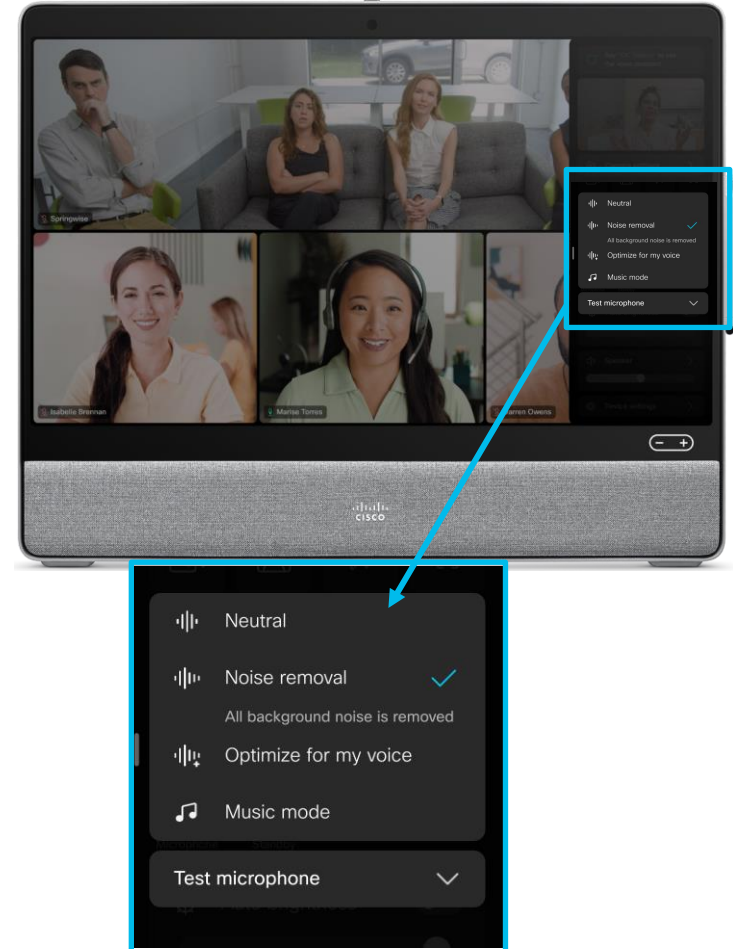


Manual

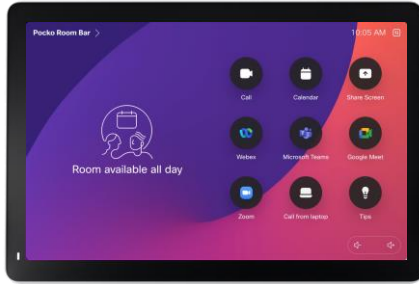
Manually adjust and save the camera views you need.

Noise Removal

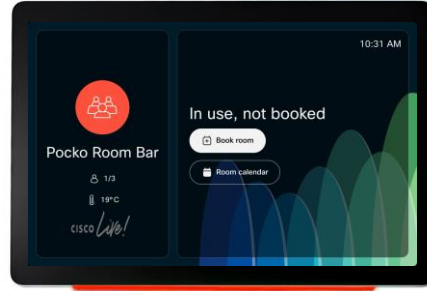
- Use noise removal to filter out distracting noises from your environment in a call.
- Remove keyboard noise, papers rustling etc
- Especially useful in a shared space or home office



Cisco Room Navigator



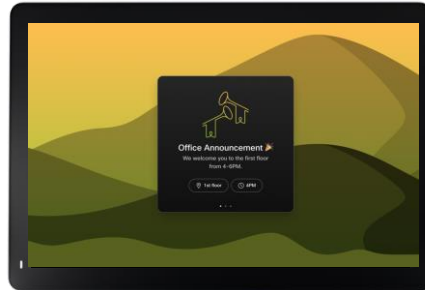
Conference Control



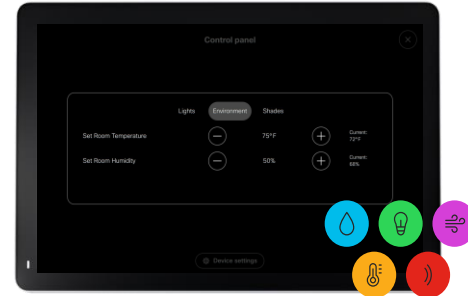
Room Booking



Room Control



Kiosk/Signage/Web



Sensors

Cisco Control Hub for IT Admins

- Easy Automated User Onboarding
- Business Insights on Device Adoption and Resources
- Device Management & Workspace Optimization
- Diagnostics and Proactive Alert Capabilities
- Enterprise Health and Readiness Assessment
- Security and Compliance Controls for Office and Home



Sensors

- Cisco Devices together with the Room Navigator controller support the following:
- People presence detection
 - Detects space occupancy through Ultrasound
- People Count
 - AI supported head detection
- Ambient noise and sound levels
 - Ambient noise estimation
- Temperature Control Hub analytics reporting
- People presence detection, People count and Ambient noise estimation are disabled by default. They can be enabled through Control Hub, Device WebUI or xAPI commands

Real-Time Utilisation Metrics

Devices ⓘ	● Idle	🗒 Booked ⓘ	No
Occupied ⓘ	Yes	📱 Paired apps ⓘ	0
Occupants ⓘ	2		

[View Details](#)

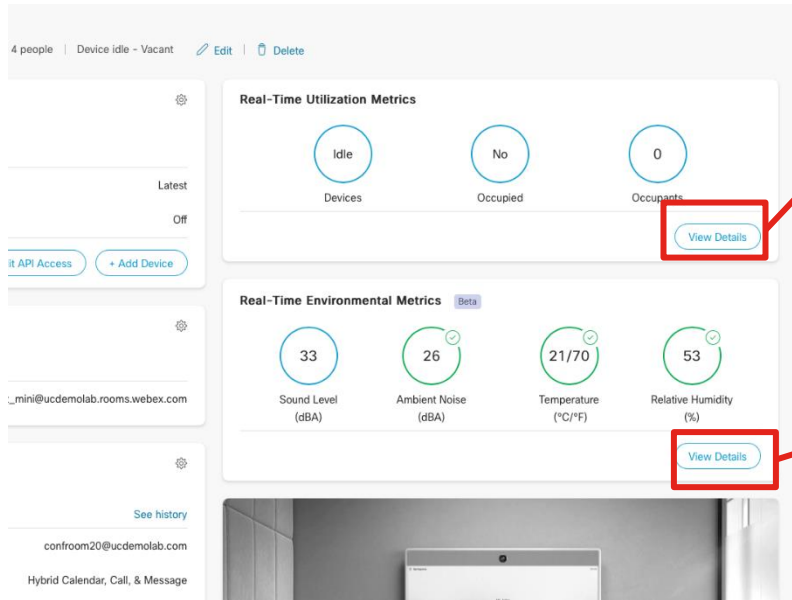
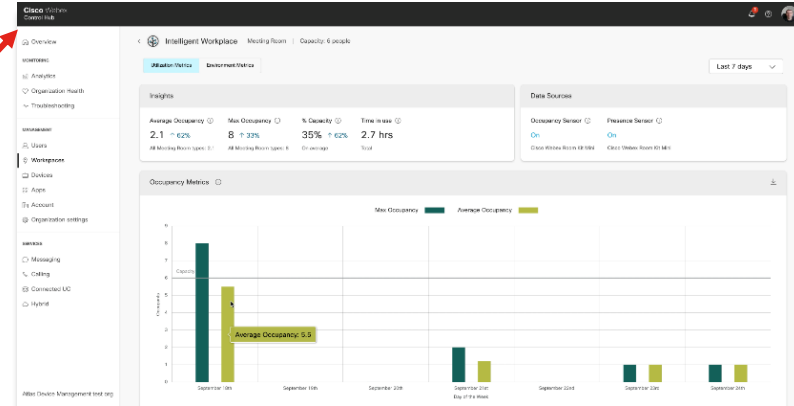
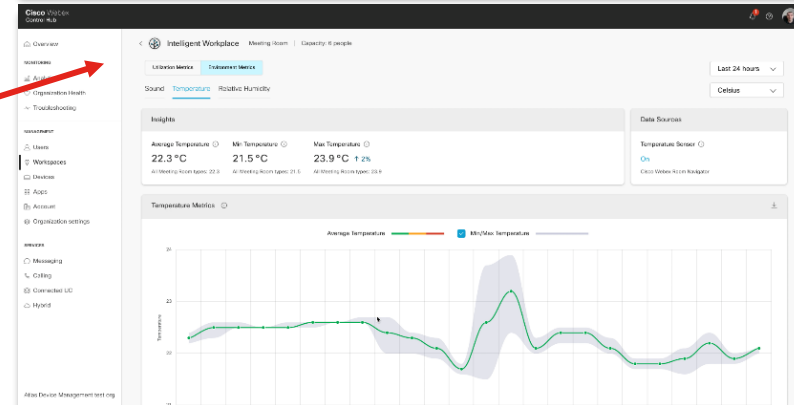
Real-Time Environmental Metrics

Sound Level ⓘ	31 dBA	:	Temperature ⓘ	22/71 °C/°F	:
Ambient Noise ⓘ	30 dBA	:	Relative Humidity ⓘ	37%	:
			Air quality (TVOC) ⓘ	1.0	:

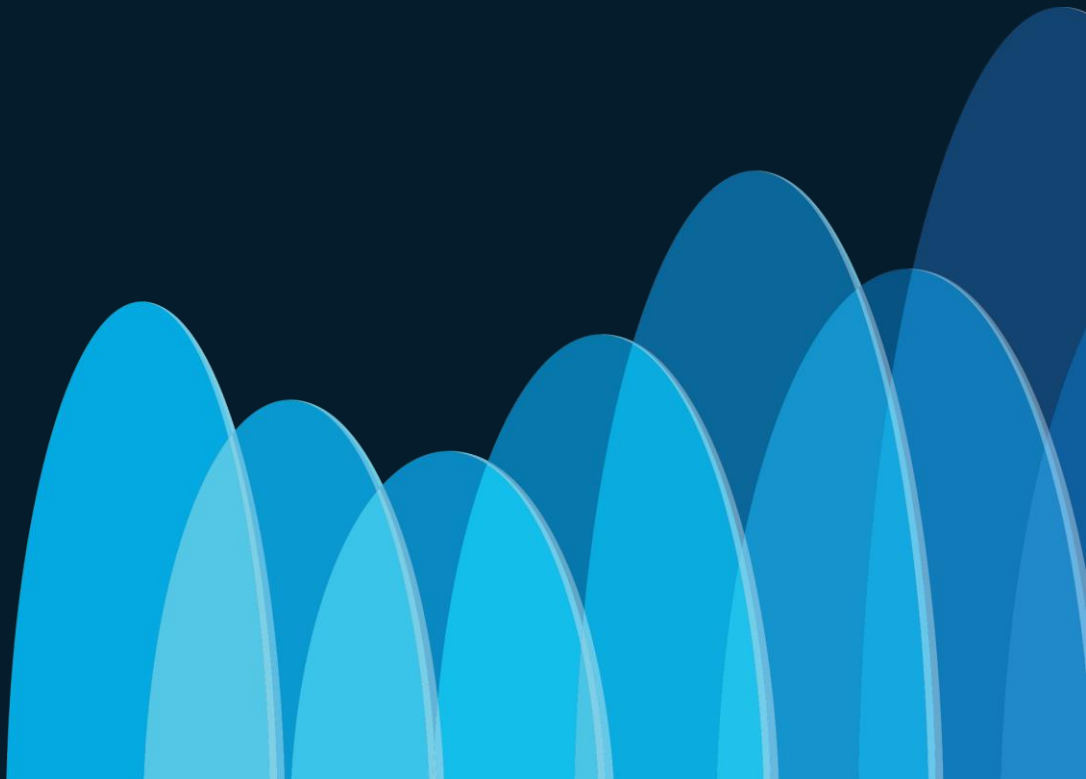
[View Details](#)

Workspace Utilisation in Control Hub

- Utilisation metrics and
- Environment Metrics



Hybrid Calendar



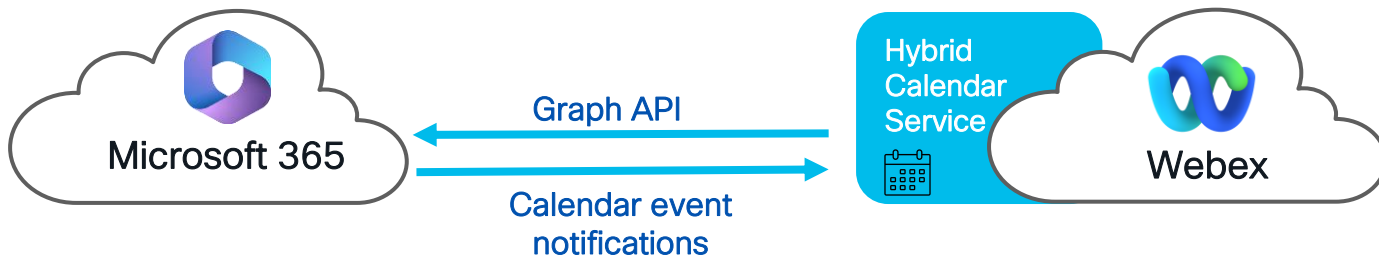
Make it easier for Cisco Device to join meetings with One Button to Push

- Join any Webex, Microsoft Teams, Google Meet, or Zoom meeting with the touch of a button.
- Integrate into Microsoft 365 and Google Calendars
- Users book a room resource with their meeting type and the device handles the OBTP

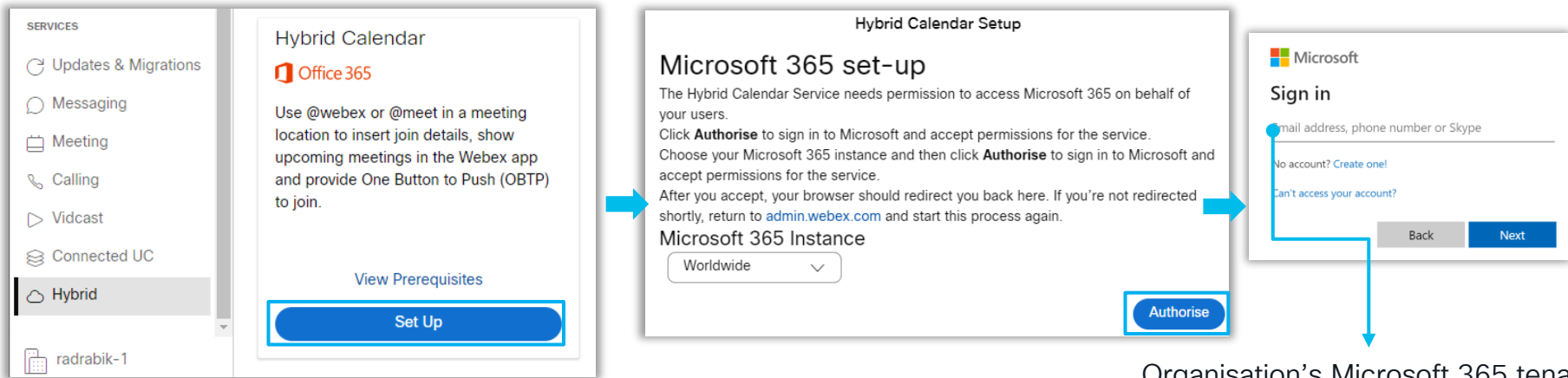


Session: Microsoft Interop for
Calling, Meetings and
RoomOS BRKCOL-2523
Robert McAffery

Configure – Cloud Calendar service with MS 365 Setup



Webex Control hub > under Services > **Hybrid** > Hybrid Calendar (Office 365) > click Set Up



Organisation's Microsoft 365 tenant
Global administrator account login

Configure – Cloud Calendar service with MS 365

Setup – Continued



misatche@pockolab.wbx.ai

Permissions requested



Webex Calendar Service

[App info](#)

This application is not published by Microsoft or your organisation.

This app would like to:

- ✓ Sign in and read user profile
- ✓ Read directory RBAC settings
- ✓ Maintain access to data you have given it access to
- ☒ Consent on behalf of your organisation

If you accept, this app will get access to the specified resources for all users in your organisation. No one else will be prompted to review these permissions.

Accepting these permissions means that you allow this app to use your data as specified in their [Terms of Service](#) and [Privacy Statement](#). You can change these permissions at <https://myapps.microsoft.com>. [Show details](#)

Does this app look suspicious? [Report it here](#)

Cancel

Accept

- Read directory RBAC (Role-Based Access Control) to determine if this user is a Global Administrator in the requested tenant

Configure – Cloud Calendar service with MS 365

Setup – Continued



misatche@pockolab.wbx.ai

Permissions requested

Review for your organisation



This application is not published by Microsoft or your organisation.

This app would like to:

- ✓ Read and write all user mailbox settings
- ✓ Read and write calendars in all mailboxes
- ✓ Read domains
- ✓ Sign in and read user profile

If you accept, this app will get access to the specified resources for all users in your organisation. No one else will be prompted to review these permissions.

Accepting these permissions means that you allow this app to use your data as specified in their [Terms of Service](#) and [Privacy Statement](#). You can change these permissions at <https://myapps.microsoft.com>. [Show details](#)

Does this app look suspicious? [Report it here](#)

Cancel

Accept

- Determine the user's language for localisation purposes
- Read out-of-office status
- Set out-of-office status (feature is not available yet)
- Update the meeting text with the join details
- Read domain properties
- Required for the other permissions listed. The Hybrid Calendar Service does not use it directly.

Configure – Cloud Calendar service with MS 365

Setup – Continued

Hybrid Calendar Setup

Test Account

Enter the Office 365 account email that you want to use to test the connection with Office 365 Calendar. The email entered must have an Office 365 licence. Cisco Webex will add a test event to the calendar associated with the email, with the subject line 'Test Event from Cisco Webex'.

Workspaces

My organisation needs to be able to schedule meetings from workspaces

Enter the Microsoft 365 account email to use as the organiser for meetings scheduled from Workspaces.

Scheduling account

Hybrid Calendar Setup

✓ Office 365 Calendar connected successfully.

People Insights

People Insights produce trends based on information about the use of products and services. When this feature is on, calendar activity helps calculate content recommendations to you and the people you work with.

Send Calendar user data to Cisco People Insights



Hybrid Calendar Setup

Setup Complete

You're ready to enable the Hybrid Calendar Service for your Microsoft 365 users:

- Enable them individually from the [users page](#).
 - Enable them in bulk using the [CSV template](#).
- For more information, go to [Collaboration Help](#).

- Test button will be disabled if no Test Account provided
- Click the test button to test the integration

Configure – Cloud Calendar service with MS 365

Enable Hybrid Calendar for Devices/Workspaces

Under Management > **Workspaces** > Select Workspace

The screenshot illustrates the configuration process for a calendar service in a workspace. On the left, the 'MANAGEMENT' sidebar shows 'Workspaces' selected. The main panel displays the 'Apollo Room' workspace configuration. Under the 'Scheduling' section, there is a 'Choose scheduling' button. An arrow points from this button to a configuration form. The form has two radio button options: 'None' (No scheduling service) and 'Calendar' (Calendar service enables One Button To Push for this Workspace). The 'Calendar' option is selected. Below this, the 'Calendar provider' is set to 'Microsoft Exchange/Office 365'. The 'Email address' field contains 'PockoRoomBar@pockolab.wbx.ai', and a 'Validate' button is next to it. Another arrow points from the 'Validate' button to the final configuration state. On the right, the 'Scheduling' section shows 'Office 365' as the active provider, with a status of 'Activated - since today at 6:20 PM' and a 'See history' link. Below this, the 'Email Address' is listed as 'PockoRoomBar@pockolab.wbx.ai'.

- Webex Rooms in “**shared mode**” requires a **resource mailbox*** (Type: Room)
- Webex Rooms in “**personal mode**” will sync with the device owner’s mailbox

* For Shared mode, make sure that you disable comment deletion for OBTP to work consistently:
Set-CalendarProcessing -identity "room" -DeleteComments \$false

Configure – Cloud Calendar service with MS 365

Enable Hybrid Calendar for Devices/Workspaces – Continued

99 Webex Update



 29/10/2024  from 2:30 pm  (UTC+10:00) Canberra, Melbourne, Sydney  All day 

29/10/2024  to 3:00 pm  (UTC+10:00) Canberra, Melbourne, Sydney 

Event time in your time zone: 2:30 – 3:00 pm

 Does not repeat 



 15 minutes before 

DeskPro; @webex

In progress · 15:04

Webex Update

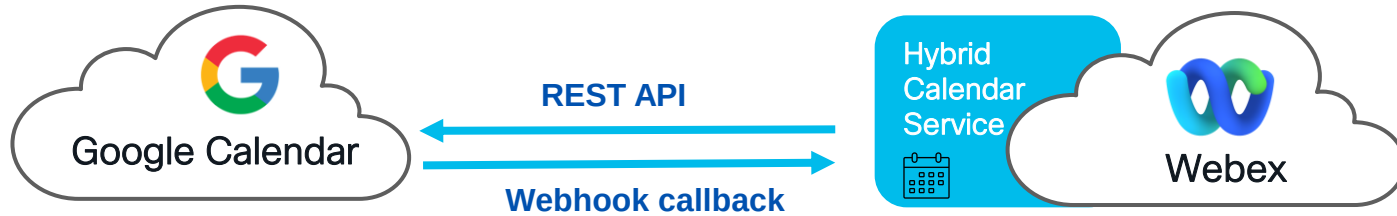
Organizer: Michael Isatchenko

 2:30 pm – 3:00 pm

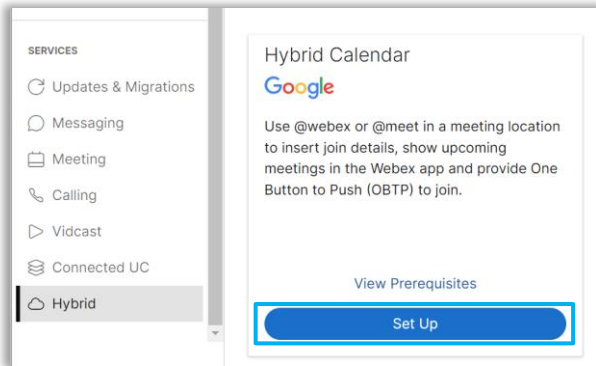
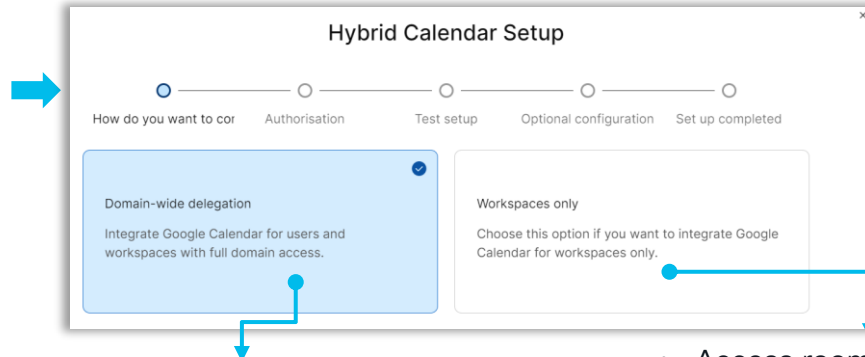
Join



Configure – Cloud Calendar service with Google



Webex Control hub > under Services > Hybrid



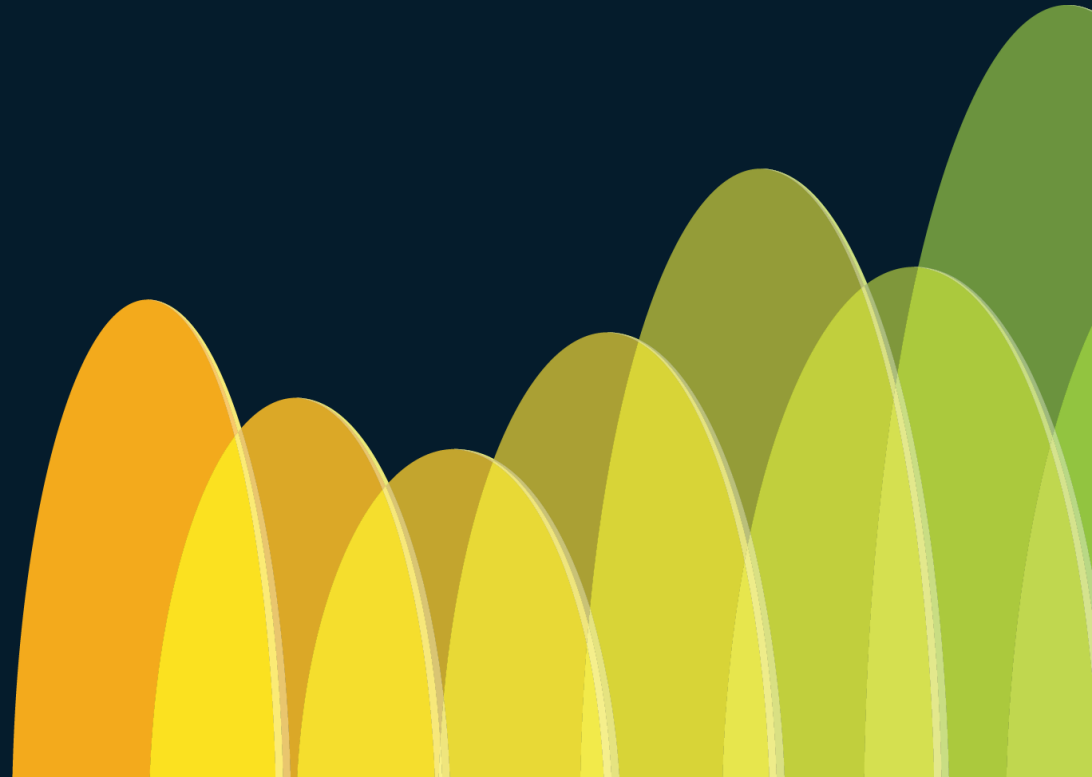
- Access to all rooms and user calendars
- Registers Webex as **app** with Google – admin must copy **client ID** and **scopes** from Control Hub to Google Admin console
- Access room calendars only
- Uses **Admin** account
- Reauthorisation needed every 180 days per Google's policy

Configure – Cloud Calendar service with Google

Things to consider

- **Webex room devices** must have email address that matches Google room resource format
 - Older format ([company.com](#) must be verified in Control hub)
[company.com__3130313639353739333032@resource.calendar.google.com](#)
 - New format (no domain verification needed)
[c_0803348627605091471198@resource.calendar.google.com](#)
- Remove **Google Hangouts** information in meeting events

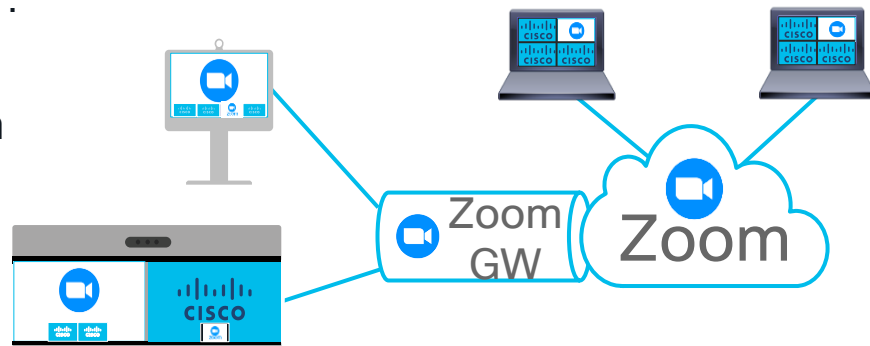
Joining a Zoom Meeting



Cisco video devices joining Zoom Meetings

High Level Architecture

- Cisco Devices join Zoom Meetings through **Zoom Conference Room Connector (CRC)** or **Video Interop for Meetings** using SIP.
- Join via OBTP and direct dial-in using meeting ID.
- In-meeting controls such as managing layouts and host controls through DTMF. Native UI available for RoomOS 11
- Dual-Screen experience requires Zoom CRC License



Licensing for Zoom Interoperability

Zoom Video Interop for Meetings vs Zoom CRC

- Basic SIP interoperability is now included at no extra cost with paid Zoom subscriptions
- Currently requires manual interaction to enable
- For enhanced features, Zoom CRC licenses are required

Feature	Video Interop for Meetings	CRC
Protocols Supported	SIP	SIP and H.323
Max resolution	720p	1080p
Max Displays	1	2
Supported webinar roles	Attendee only	Attendee and Panelist roles

RoomOS features available in Zoom Meetings

Video and Audio Intelligence

- SpeakerTrack, Group View and Frames
- Meeting Zones
- Cinematic Meetings*
- Noise removal and Optimise for my voice

Content Sharing

- HDMI and USB-C sharing
- Miracast and AirPlay
- One-way whiteboarding and webapp sharing

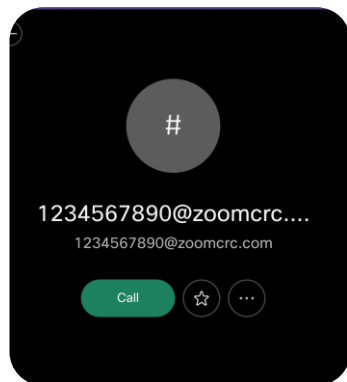
AI and customisation

- Macros
- UI Extensions
- Webex Assistant for Devices

Join methods for Zoom interoperability

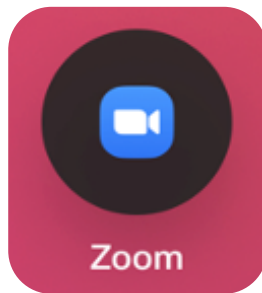
From Cisco video devices

Direct dial-in



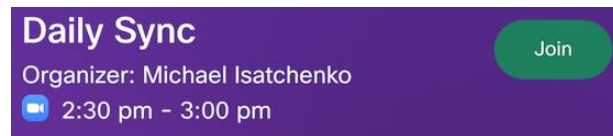
Only native Zoom DTMF experience (No Zoom UI experience)

Zoom joining button



Requires RoomOS 11

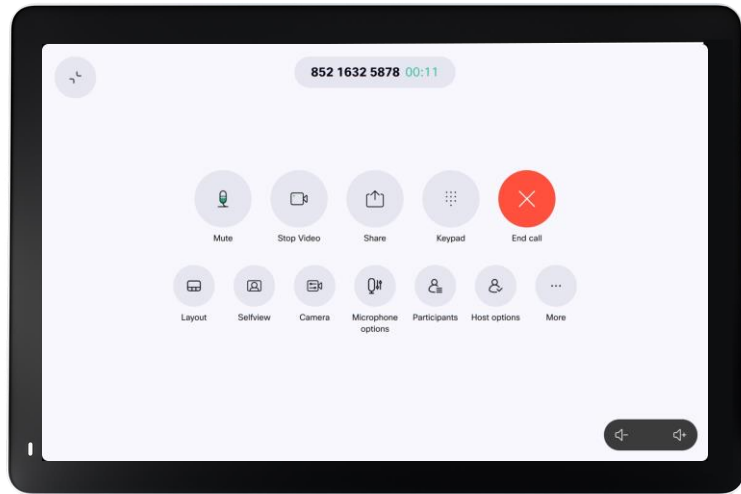
Enable Zoom in Webex Control Hub for Cloud registered devices or with an xAPI for on-prem



Requires Cloud registration and Hybrid Calendar

Zoom in-meeting controls

UI for Room Navigator and Desk/Board series



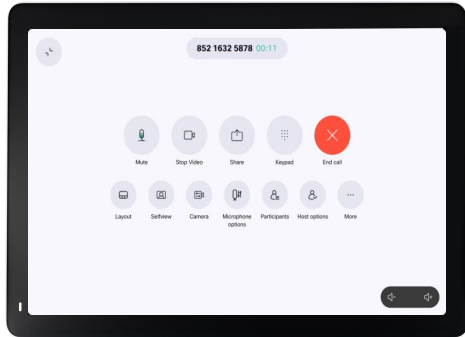
Room Navigator UI



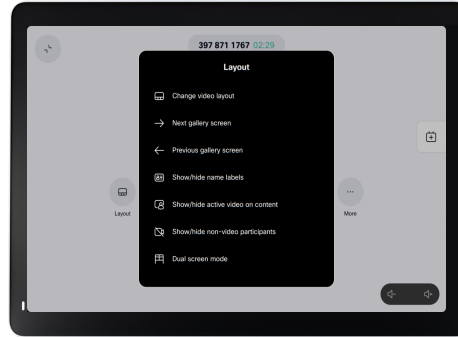
Board Pro UI

Zoom in-meeting controls

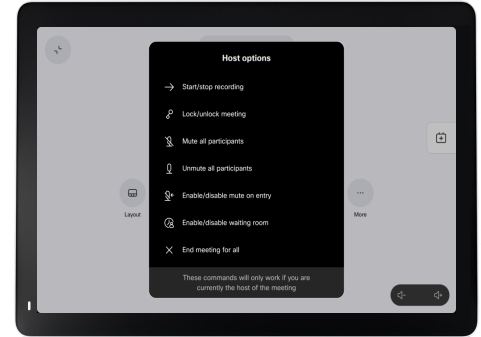
UI for Room Navigator



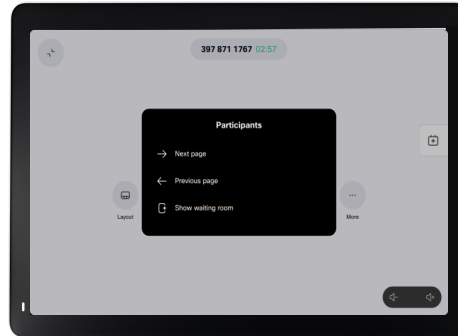
Layout Controls



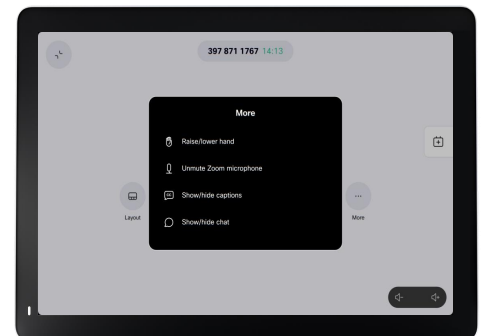
Host Controls



Participant Controls



More Controls

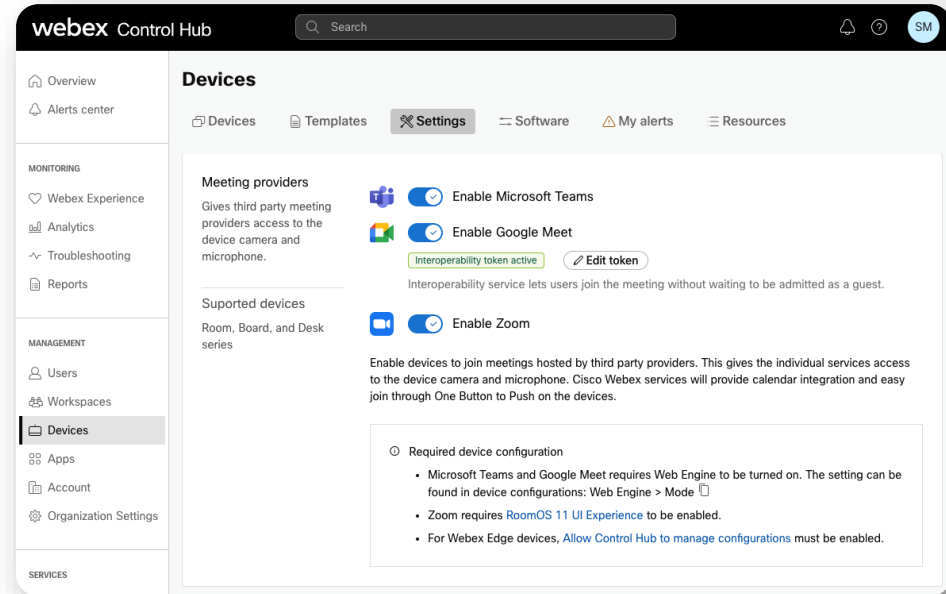


Enable Zoom interoperability

Zoom interoperability can be turned on under the device settings in Webex Control Hub for Cloud registered devices.

This will enable the Zoom **joining button** on the devices (RoomOS 11 required) and OBTP for Zoom meetings.

For on-prem devices the joining button can also be enabled using an xAPI config.



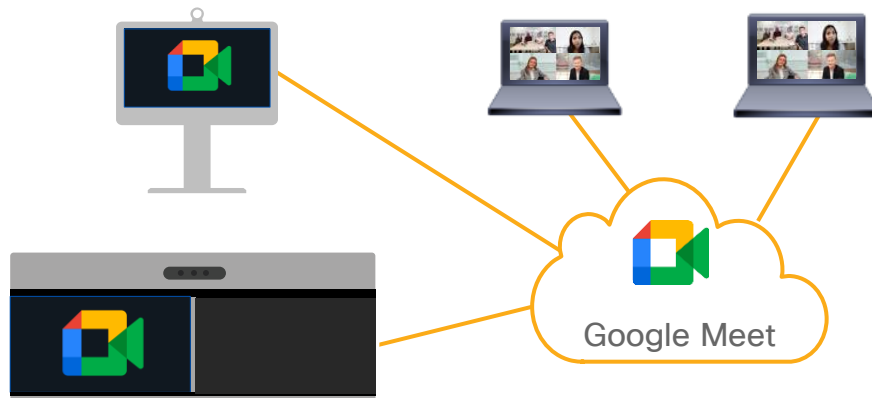
Joining a Google Meeting



Cisco video devices joining Google Meet Meetings

High Level Architecture

- Cisco Devices join Google Meet Meetings using **WebRTC**
- **OBTP** and an embedded Joining button to join by meeting ID supported
- Bidirectional Content Sharing is a work in progress



Join methods for Google Meet interoperability

From Cisco video devices

Google Meet button



One Button to Push

Customer Workshop

Organizer: Michael Isatchenko

 2:30 pm - 3:00 pm

Join

Layout

3x3 grid view

- Google layout is 3x3 grid view per default

Fixed layout

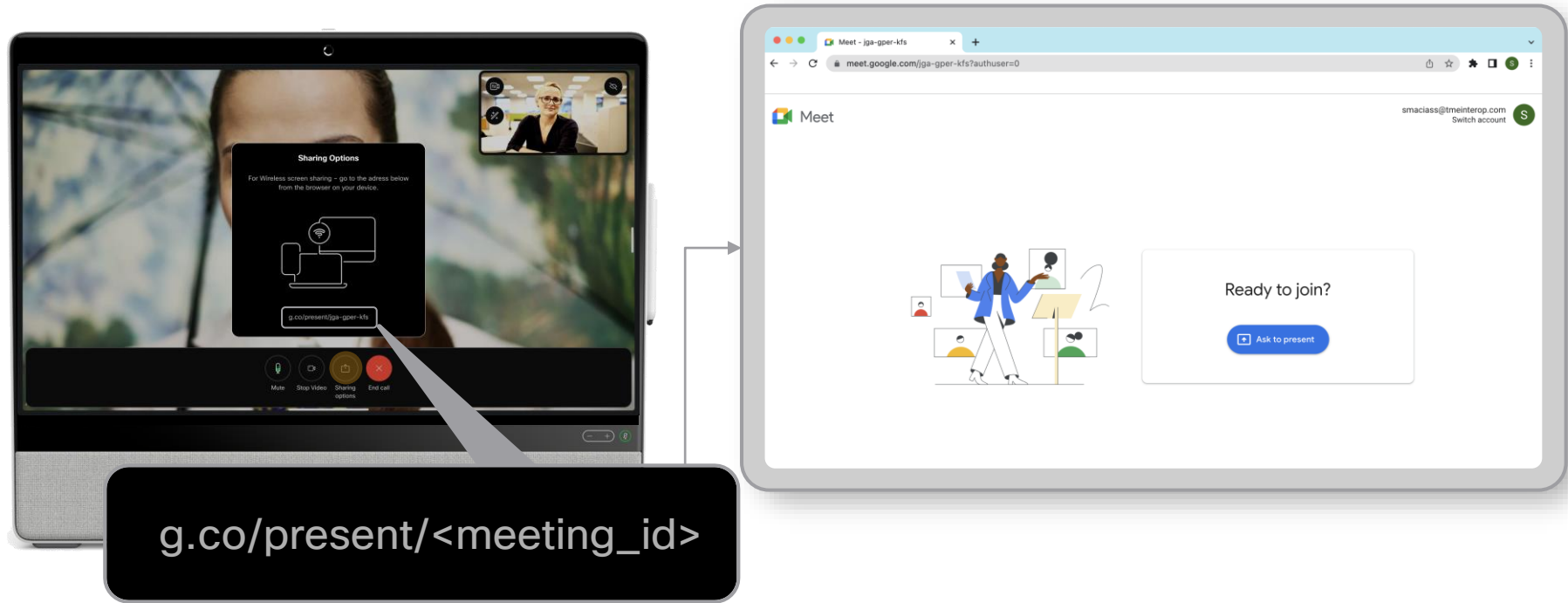
- Layouts cannot be changed on Google Meet meetings

Single Screen

Dual screen is not supported today.
Plans are to support it in the future



Content sharing - current



Bidirectional Content Sharing on Google Meet meetings

Cisco and Google are working together on bidirectional content sharing.

It is currently available on the Beta channel for selected customers (decided by Google) via a toggle.

Today this includes support for USB-C/HDMI sharing.

It will support Miracast and Airplay on a later release.



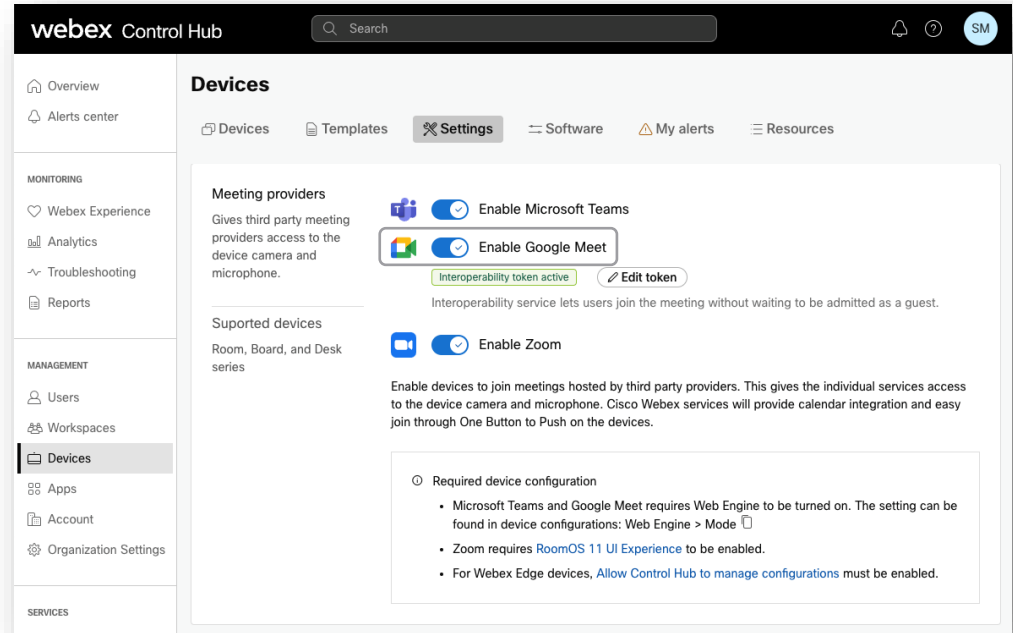
Now in Beta

For selected customers only

Enable Google Meet interoperability

Google Meet interoperability can be turned on under the device settings in Webex Control Hub.

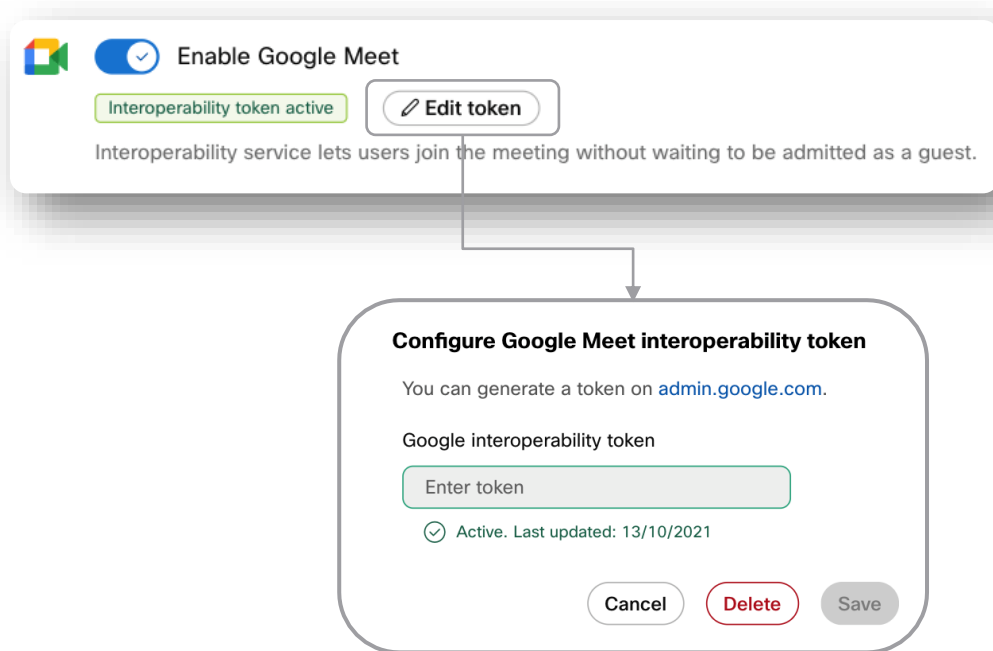
This will enable WebRTC for Google Meet and the Google Meet joining button on the devices



Lobby Bypass for Google Meet

Lobby bypass can be configured in Webex Control Hub by adding a token generated from Google.

When enabled, trusted participants are automatically admitted on Google Meet meetings



Get the token for Google Meet interoperability

The required token must be added on the Google Admin site, and it will be listed in the Interoperability tokens list

Interoperability tokens

An interoperability token lets third-party devices that support Meet interoperability connect to Meet calls without waiting to be admitted by the host. [Learn more about Meet interoperability](#)

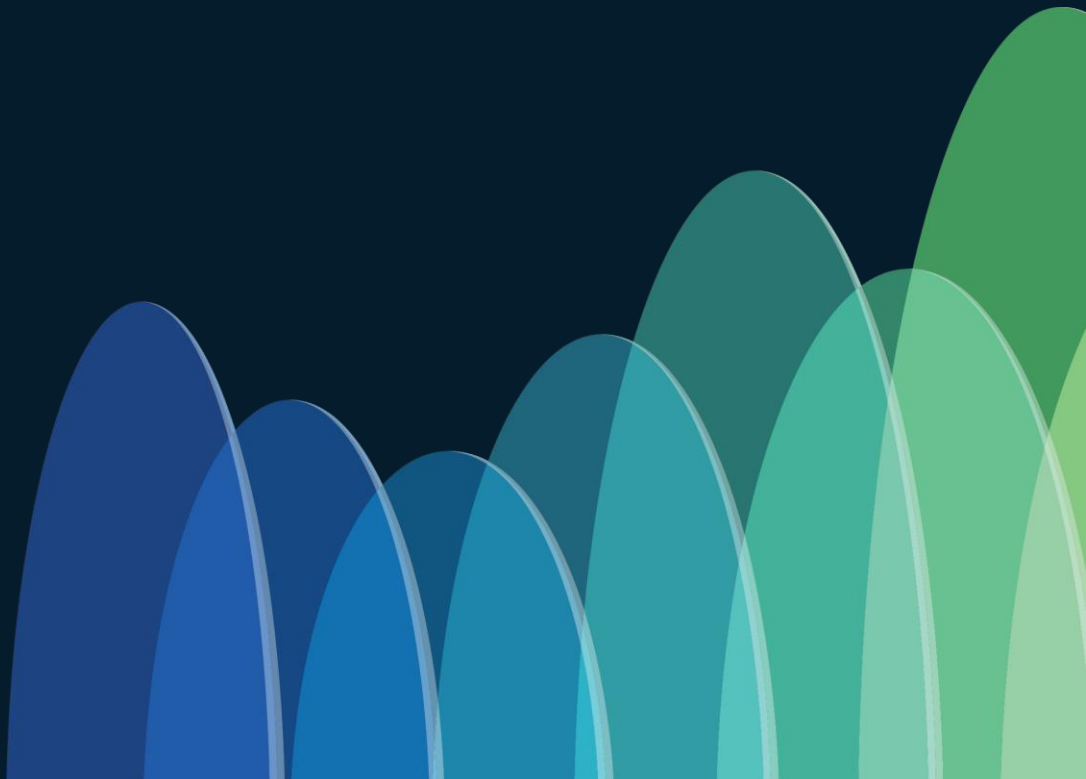
In addition, a token is required to authenticate interoperability gateways, including the Pexip Infinity gateway, for your Google Workspace domain. Inbound gateway interoperability is managed in [Gateway interoperability](#). [Learn more](#)

[ADD A TOKEN](#)

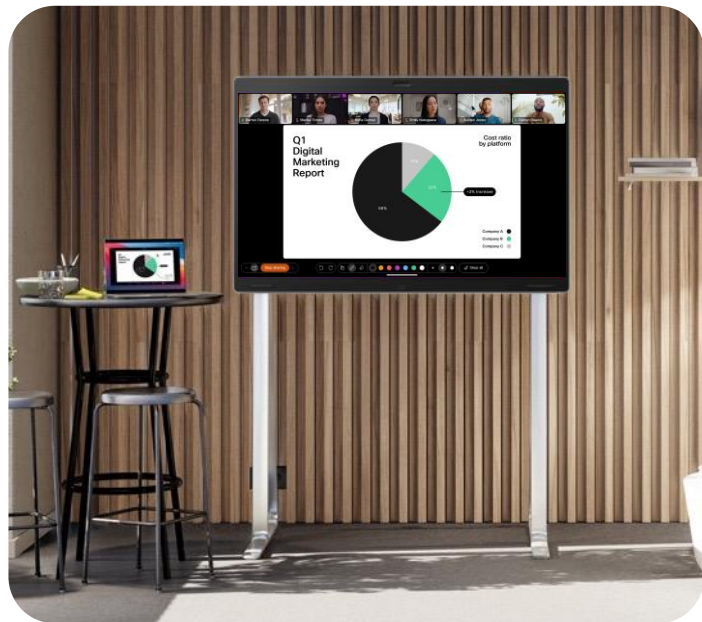
Type	Name	Generated on	Trusted devices ?	
Cisco	WebRTC	Nov 29, 2022	On	 
Cisco	NewToken	Mar 20, 2022	On	 
Pexip	CiscoWebexInterop	Oct 13, 2021	On	 
Cisco	GuestAdmit	Mar 11, 2022	On	 

Type	Name	Generated on	Trusted devices ?
Cisco	WebRTC	Nov 29, 2022	On

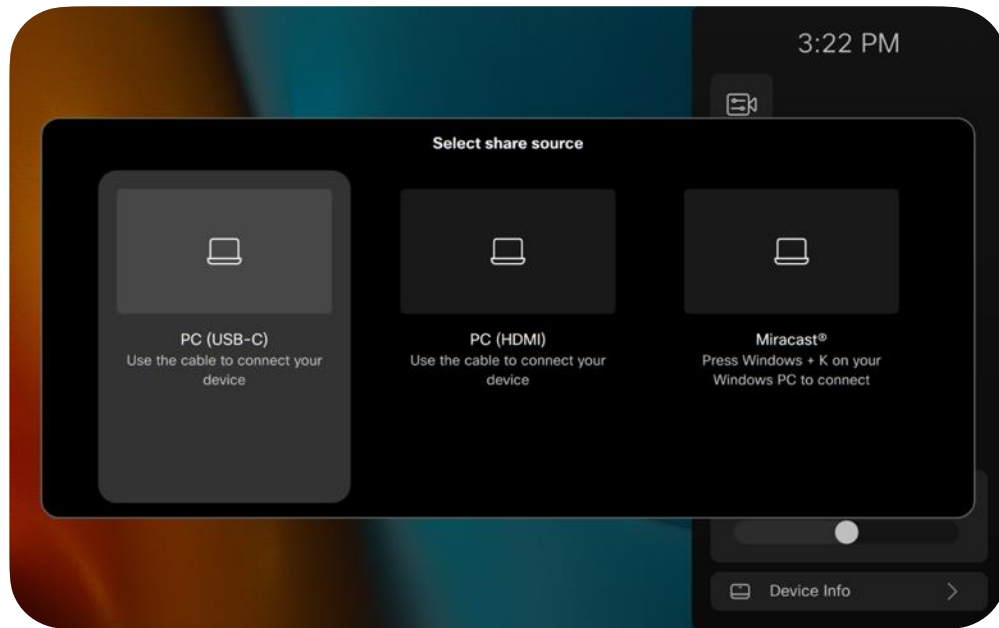
Sharing



Make content sharing simple and intuitive



Wired content sharing.
HDMI & USB-C

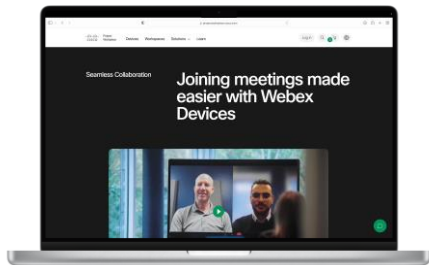


Wireless content sharing
Miracast, Apple Airplay*, Webex*

AirPlay Content Sharing

On Cisco Devices

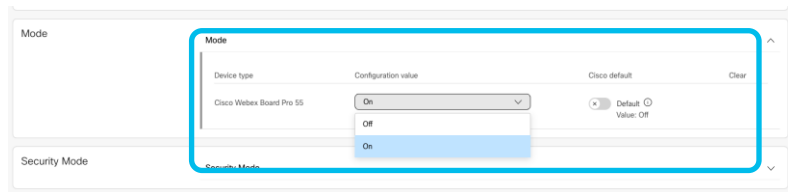
- AirPlay allows the sharing of content from an AirPlay device to a Cisco device with quality and integrity.
- AirPlay devices would include:
 - iPhone
 - iPad
 - Mac
- Latest iOS/iPadOS/macOS is always recommended.



AirPlay deployment options – Control Hub

Shared Mode systems

- To enable AirPlay on a Shared Mode system, an Administrator will need to enable the service through Control Hub.
- Devices> [device name]>All Configurations>Video>Input>AirPlay Mode
- The Default Value is Off. Switching to On will automatically enable the service on the given Cisco device.
- Please note to aid device discovery that Bluetooth® should also be enabled. This applies to **both** Shared and Personal mode systems.



Personal Mode systems

- To enable AirPlay on a Personal Mode system, an Administrator will need to enable the service through Control Hub.
- Devices> [device name]>All Configurations>Video>Input>AirPlay Mode
- The Default Value is Off. Switching to On will automatically enable the service on the given Cisco device.
- The end user has the ability from the Cisco device settings menu to then further disable and re-enable the service.
- From the home screen of the Cisco device open Device settings>Open AirPlay settings.
- This option can only be seen once the Administrator has enabled the service through Control Hub.

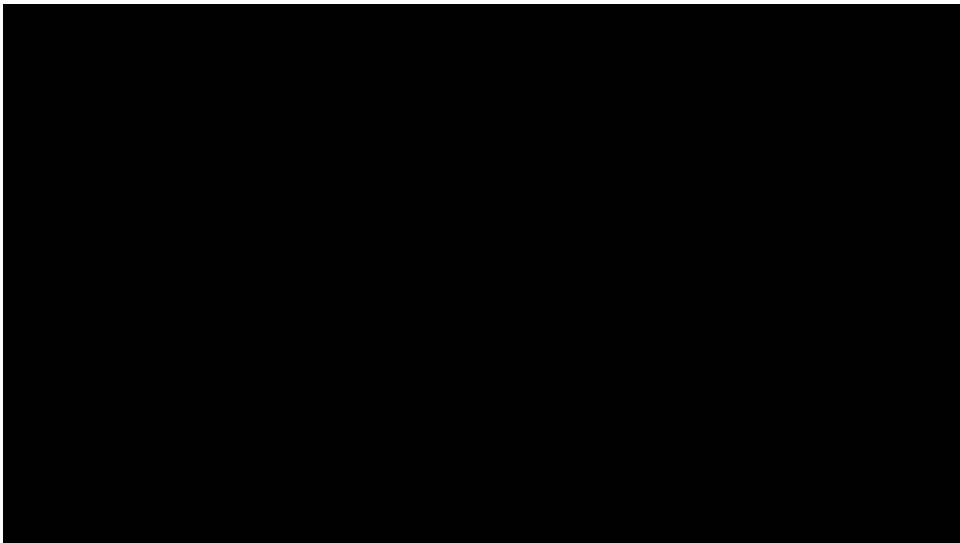
AirPlay hardware and software support

AirPlay will be supported on the following devices

- Cisco Desk Series
 - Desk Mini, Desk, Desk Pro
- Cisco Board Series
 - Board 55S, 70S and 85S
 - Board Pro / Pro G2
- Cisco Room Series
 - Room Bar, Room Bar Pro, Room Kit EQ/EQX, Room Kit Pro
 - Room 55/70 Series and Kit Series

AirPlay will be available with the following minimum software

- RoomOS11 Experience
- Control Hub registered Devices including Webex Edge Devices



Miracast Content Sharing

On Cisco Devices

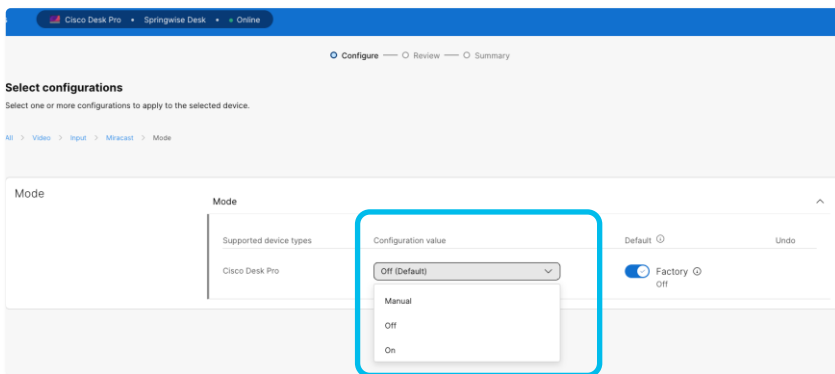
- Miracast provides a content sharing solution without the need for a client as it is integrated into Windows 8.1 and above.
- Miracast can use either the local infrastructure or Wi-Fi Direct to establish a connection to transfer a video stream from the Miracast device, such as a Windows PC/Android based device to the Cisco video device.



Miracast deployment options – Control Hub

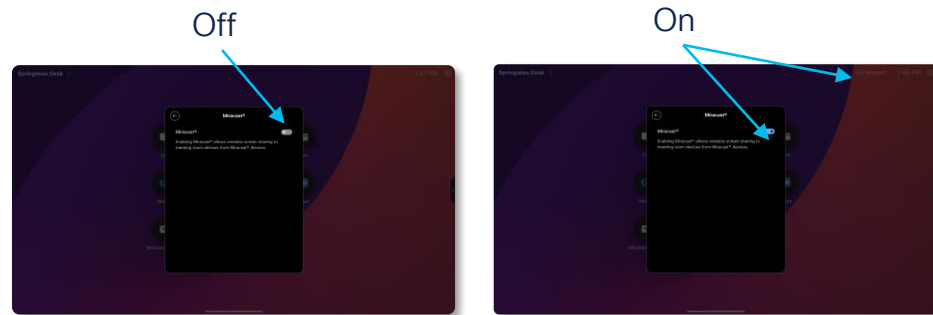
Admin Controlled

- If the administrator wants to control Miracast availability, setting the Miracast Mode to On from the device configuration in Control Hub will ensure that it will always be visible to the end user.
- The Default Value is Off.



User Controlled

- If the administrator wants the end user to control Miracast availability, set the Miracast Mode to Manual from the device configuration in Control Hub.
- The Default Value is Off.
- With Miracast Mode turned to Manual, the end user will be able to turn it on or off from the UI. With it turned off, the home page of the device will not show Miracast icon.



Miracast hardware and software support

Miracast will be supported on the following devices

- Cisco Desk Series
 - Desk Mini, Desk, Desk Pro
- Cisco Board Series
- Cisco Room Series
 - Room Bar, Room Bar Pro, Room Kit EQ/EQX, Room Kit Pro
 - Room 55/70 Series and Kit Series

Miracast will be available with the following minimum software

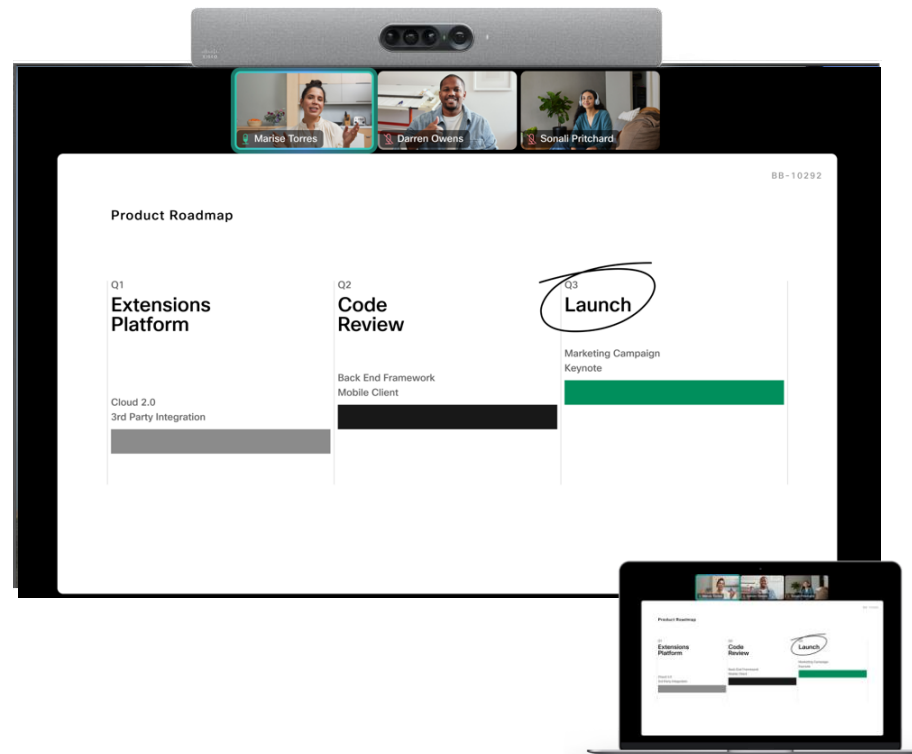
- RoomOS11 Experience
- Control Hub registered Devices including Webex Edge Devices
- On-premises registration (minimum of RoomOS 10.19.2.2 with RoomOS 11 UI enabled).

USB Passthrough

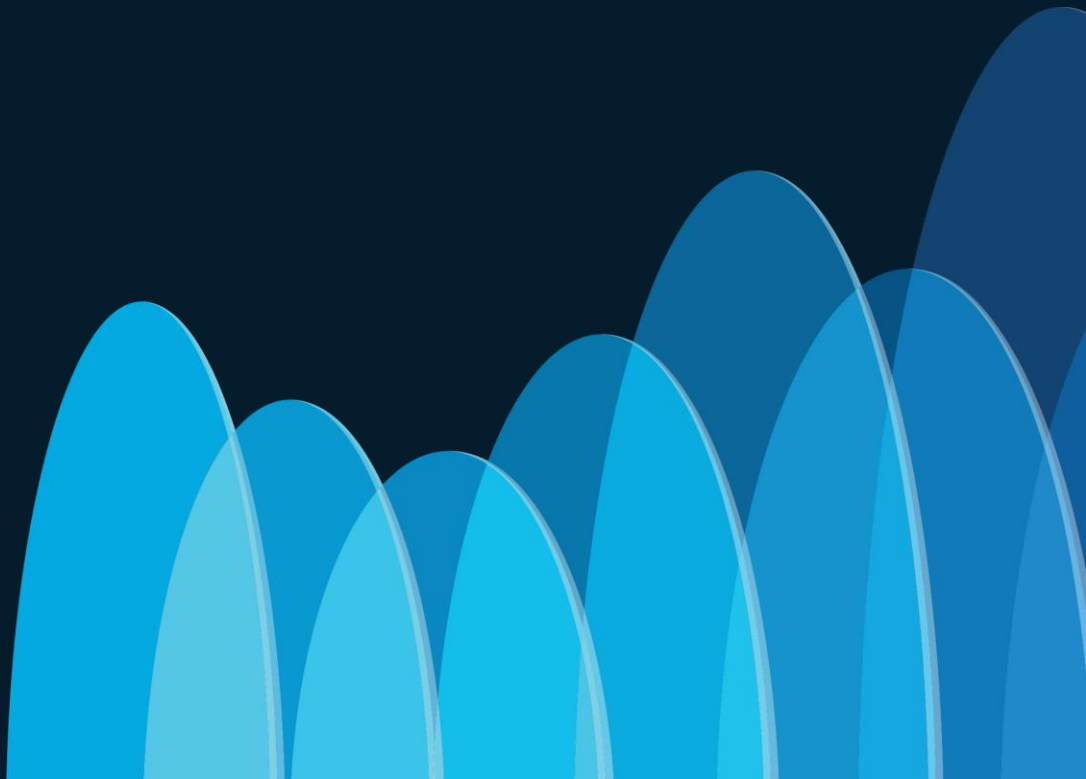


USB Passthrough

- Native USB Passthrough mode allows you to take advantage the device's rich microphone(s), intelligent camera(s) and powerful speaker(s) as a sophisticated web camera for various 3rd party software clients.
- Supports intelligent video with best overview, frames and Cinematic Meetings features
- Available natively on Cisco Desk Series, Cisco Board Pro, Room Bar , Room Bar Pro and Room EQ/EQX
- Other devices support with 3rd party hardware



Summary



Summary

- Devices for Any Space
 - Desk, Meeting Room and Complex
- Consistent User Experience
 - RoomOS, Device Intelligence (Cameras, Microphones etc)
- Hybrid Calendar is a Must!
 - Give your customers One Button to Push
- Join Any Meeting
 - Google, Zoom, Webex, Teams and USB Passthrough
- Multiple Sharing Capabilities
 - Wireless, AirPlay, Miracast, Cable



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

Contact me on Webex or Misatche@cisco.com



Thank you



#CiscoLiveAPJC

CISCO *Live!*

GO BEYOND

#CiscoLiveAPJC

Appendix



Device Comparisons



Comparing Board Pro vs Board Pro G2



Board Pro

Features NVIDIA chipset and powerful computing module



Board Pro G2

Features the **latest NVIDIA AI chipset** and **upgraded computing module** for better performance

24 MP dual camera system

96 MP dual camera system for improved quality and reach. AI virtual lens enhancement for extended zoom.

Supporting connectivity with an external PTZ camera for AI presenter tracking. Requires Ethernet switch.

Extra Ethernet port to connect with an external PTZ camera for AI presenter tracking.

Integrated room device with multiple mounting options for wall and floor.

Integrated room device with multiple mounting options for wall and floor.

Connects with up to 1x additional screen for mirroring, content or live video.

Connects with up to 2x additional screens over HDMI out for mirroring, content or live video.

Built-in mic array. Audio extension over IP, USB & analog. Connects with Cisco or third-party IP microphones.

Built-in mic array. Audio extension over IP, USB & analog. Connects with Cisco or third-party IP microphones.

Native support for Cisco Rooms (Webex Meetings and advanced third-party video interop) and Microsoft Teams Rooms

Native support for Cisco Rooms (Webex Meetings and advanced third-party video interop) and Microsoft Teams Rooms

Supports WiFi 2.4 GHz and 5GHz

Supports WiFi 6E for improved bandwidth and wireless sharing experience. WiFi 2.4 GHz and 5GHz.

Small and medium meeting rooms, huddle spaces and training rooms. Optimal framing experience at 1080p up to 6 meters from the device.

Optimal framing experience at 1080p up to 7 meters from the device. Small and medium meeting rooms, huddle spaces and training rooms.

COMPUTE

MAIN CAMERA

MULTI-CAMERA

MOUNTING &
FORM FACTOR

SCREEN
EXTENSION

MICROPHONE

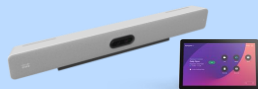
INTEROP

WIFI
CONNECTION

ROOM COVERAGE

Room Bar Pro vs Room Kit

NEW



Room Bar Pro

Dual-lens system, 96MP, 112° & 70° HFOV with motorised tilt. Up to 6m camera reach for optimal framing and tracking at 1080p. To be extended with virtual lens upgrade*



Room Kit

15MP single-lens camera with 83° HFOV. Up to 5m camera reach for optimal framing and tracking at 1080p.

CAMERA	Dual-lens system, 96MP, 112° & 70° HFOV with motorised tilt. Up to 6m camera reach for optimal framing and tracking at 1080p. To be extended with virtual lens upgrade*	15MP single-lens camera with 83° HFOV. Up to 5m camera reach for optimal framing and tracking at 1080p.
MULTI-CAMERA SCENARIOS	Connection with Cisco PTZ 4K Camera for presenter tracking. Multi-camera cinematic cross-view*	No
SCREEN	Triple-screen support. Integration with a touch display	Dual-screen support
I/O	Extended with 3x analogue, 2x USB-A, 1x USB-C, 3x HDMI out, 1x HDMI in, 3x PoE	Standard with 3x analogue, 1x USB-A, 2x HDMI out, 1x HDMI in, 2x Ethernet
INTEROP	Native RoomOS and native Microsoft Teams Rooms with rich third-party interop. Single-cable BYOD via USB-C	Native RoomOS with rich third-party video interop
MICROPHONE	Advanced built-in mic array with 4m pickup range. Audio over analog, USB or IP (up to 3x Table Microphone Pros)	Built-in mic array only for speaker tracking. Mic extension over 1x USB or 2x analog.
FORM FACTOR & COMPUTE	AI-powered NVIDIA chipset. Color options; Built-in power supply for all-in-one design. Circular design	Standard NVIDIA chipset. Only light gray color model. Separate power supply.
SPEAKER	3-channel stereo loudspeaker system. 1x audio line out or 2x USB-A for external speakers	5-point speaker system. 1x audio line out or 1x USB-A for external speaker
MOUNTING	Single mounting unit for wall & screen. Can be mounted over and under (image & speaker front flip).	Separate wall and screen mount; mounting upside-down not supported

Room Kit EQ vs Room Kit EQX



Room Kit EQ

Features NVIDIA intelligence engine for advanced camera, audio, speech & meeting zone AI use cases

Intelligent, AI-enhanced framing and speaker tracking with 80MP, quad-lens camera system; 83° & 3x 50° HFOV

Multi-camera ready, cinematic cross-view*, presenter & audience view, extended speaker view*

Modular room kit with separate mounting for camera and codec. First light or carbon black color options (Quad Camera)

Connects with up to three external displays or one interactive touch screen

Audio extension over IP, USB & analog. Connect with up to 8x Table Microphone Pro units over IP. Audio APIs

Advanced video interop with third-party meeting platforms on RoomOS; native Microsoft Teams Rooms

5-point mono loudspeakers. Audio line out or USB-A for external speakers

Medium-to-large conference rooms, auditoriums and training rooms

NEW



Room Kit EQX

Features NVIDIA intelligence engine for advanced camera, audio, speech & meeting zone AI use cases

Intelligent, AI-enhanced framing and speaker tracking with 80MP, quad-lens camera system; 83° & 3x 50° HFOV

Multi-camera ready, cinematic cross-view*, presenter & audience view, extended speaker view*

Fully integrated system with floor stand, wall stand or wall mount option, and premium frame design. Carbon black color.

Connects with dual external displays (65-75") and an additional screen

Audio extension over IP, USB & analog. Connect with up to 8x Table Microphone Pro units over IP. Audio APIs

Advanced video interop with third-party meeting platforms on RoomOS; native Microsoft Teams Rooms

Multi-channel speaker system with amplifier and bass module supporting spatial audio.
Audio line out or USB-A for external speakers

Flagship workspaces, any medium-to-large conference rooms and training rooms

COLLABORATION AI

CAMERA

MULTI-CAMERA

MOUNTING &
FORM FACTOR

SCREEN
INTEGRATION

MICROPHONE

INTEROP

SPEAKER

ROOM COVERAGE

cisco *Live!*

Cisco Microphone Comparisons

Intelligent IP microphones

Analog microphones

New



Cisco Ceiling Microphone Pro

- Multi-directional, digital ceiling mic for meeting, learning & flex spaces
- AI adaptive beamforming to follow room dynamics and design changes
- Zero-touch, automatic positioning and embedded digital signal processing
- Support for camera tracking



Cisco Table Microphone Pro

- Multi-directional, digital table mic
- 4x adjustable microphone lobes
- Flexible mounting and color options & intuitive mute controls
- Advanced noise cancellation & embedded digital signal processing
- Support for camera tracking



Cisco Ceiling Microphone

- 180-degree, omni-directional pickup
- Entry-level analog ceiling mic for any workspace
- Suspended ceiling mount



Cisco Table Microphone

- 360-degree, omni-directional pickup
- Entry-level analog table mic with flexible mounting options
- Smart mute controls

AUDIO OVER IP
UNIFIED
MANAGEMENT

SCALABLE VIA SWITCH

FEATURE UPGRADES

INTEGRATED DEVICE
INTELLIGENCE

SECURE ENCRYPTION

CISCO *Live!*

Miracast Transport Modes



Miracast Transport Modes

Direct

- Direct mode will only use Wi-Fi Direct for transportation:
 - Peer-to-Peer network is established between the Sender and the Cisco video device.
 - IPv4 only.
 - All IP packets with destination of source address outside of Wi-Fi Direct subnet are dropped by the firewall.
 - UDP packets on port 67 are allowed (BOOTP/DHCP).
 - ICMP packets are allowed with a limit of 10/second.
 - Average bit rate for video with motion is typically ~10 Mbps.
- Direct Mode is the default setting.

Miracast Transport Modes

Infrastructure

- Miracast over infrastructure (MS-MICE) will utilise the corporate network for media transmission.
- Miracast availability beacon is emitted directly from the Wi-Fi interface on the Cisco video device. Wi-Fi must also be enabled on the Windows PC for discovery of the Miracast beacon.
- Once discovered, the Windows PC can leverage the corporate network to send the media for the share. The Windows PC can be wired or wireless.
 - In addition to ports 7236 and 7492 (as mentioned earlier within the TDM), TCP port 7250 must be open to support MS-MICE.
- Infrastructure Mode is ONLY supported with Windows PC's.
 - IPv4 and IPv6 supported.
 - Android mobile devices do not support MS-MICE and therefore will not connect if Infrastructure only mode is configured.
- The sending Windows PC and Cisco video device must be on the same network when Infrastructure Mode is selected.
 - Windows PC's on a guest network and Android mobile devices will be unable to share to the Cisco video device.

Miracast Transport Modes

Auto

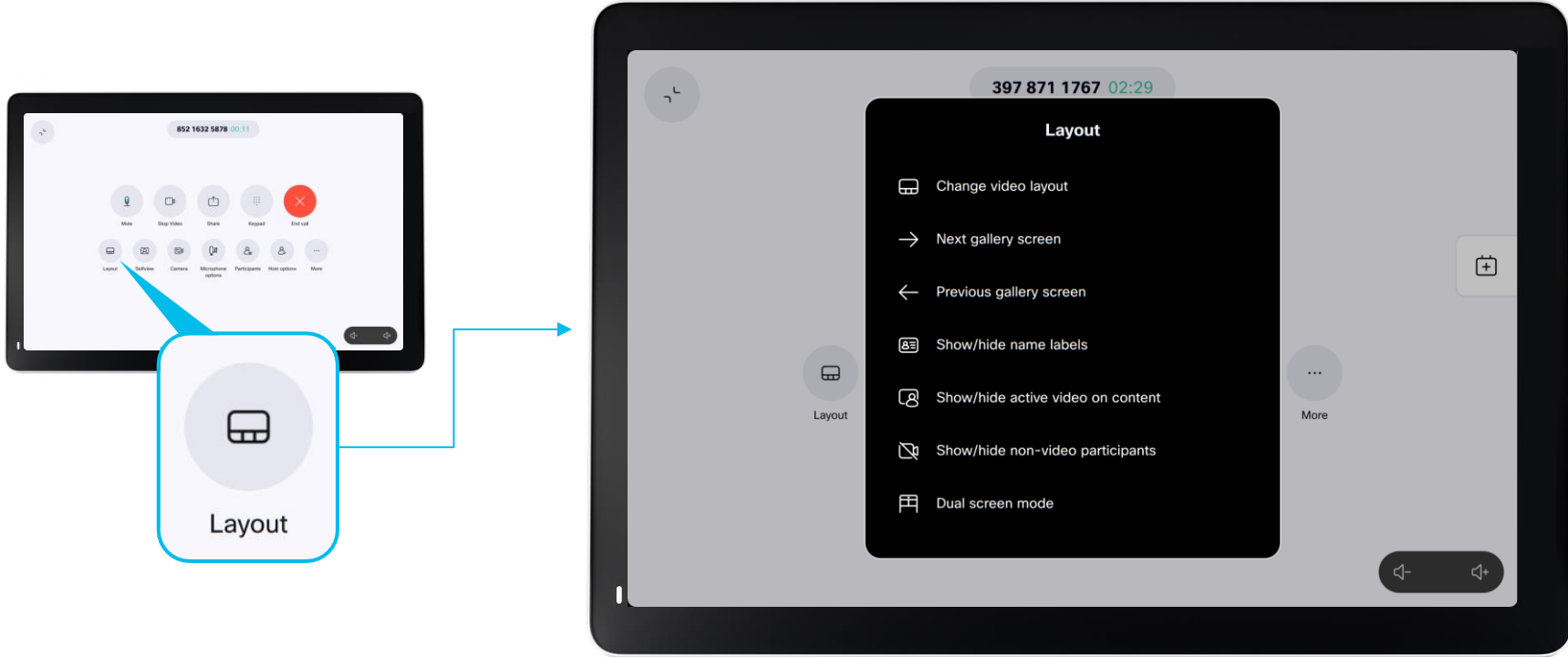
- Miracast Auto mode automatically selects between Wi-Fi Direct® and Infrastructure mode to enable a Miracast share.
- Infrastructure – Windows PC will use this mode and automatically fallback to Wi-Fi direct if infrastructure mode fails.
- Wi-Fi direct – Windows PC will use this mode if:
 - Infrastructure mode fails between Windows PC and Cisco video device on the same LAN.
 - Windows PC's not on the same LAN as the Cisco video device (guest network).
 - Windows PC's that are connected to an unencrypted Wi-Fi network.
 - Windows PC using Windows versions prior to Windows 10 v1809.
- Android devices do not support Infrastructure mode, so therefore when Miracast mode is set to Auto, Android devices will always connect via Wi-Fi Direct.

Zoom In- meeting controls



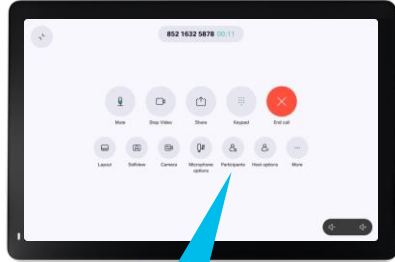
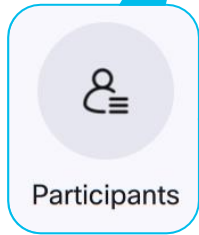
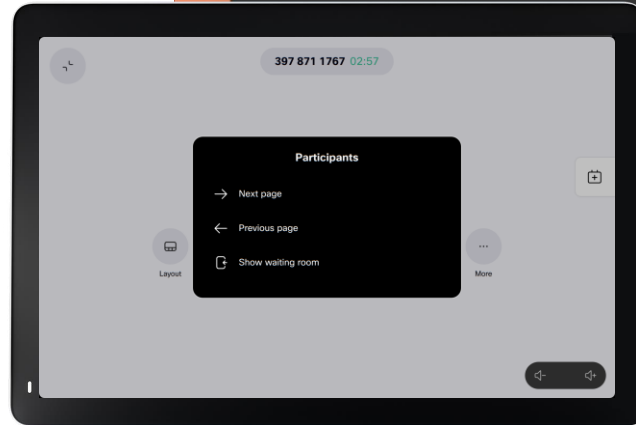
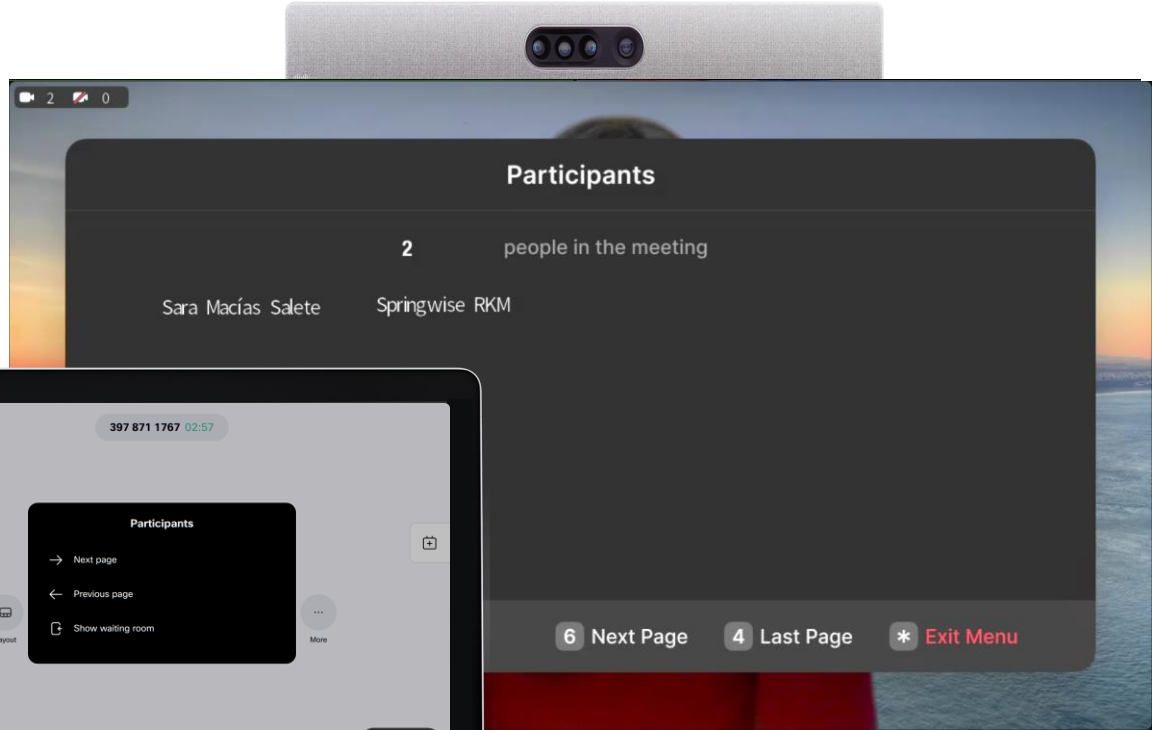
Zoom in-meeting controls

Layout controls



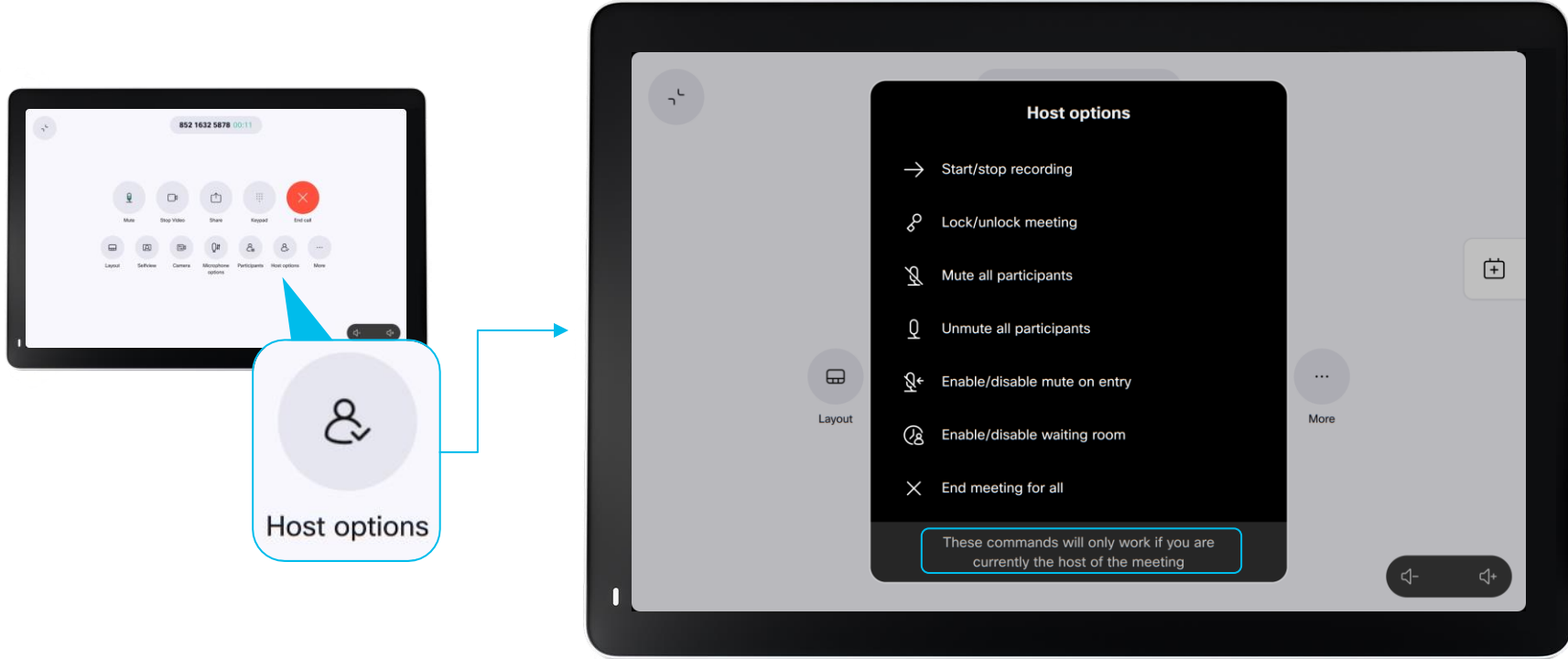
Zoom in-meeting controls

Participants



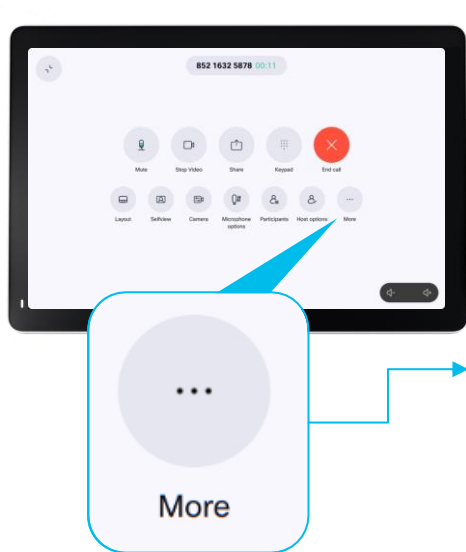
Zoom in-meeting controls

Host controls



Zoom in-meeting controls

More options



This unmutes Zoom microphone when the device is muted by the host