# Cisco Collaboration Devices

Charlie Thorpe – Technical Marketing Engineer
@CiscoCollabTME
BRKCOL-2390

# 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

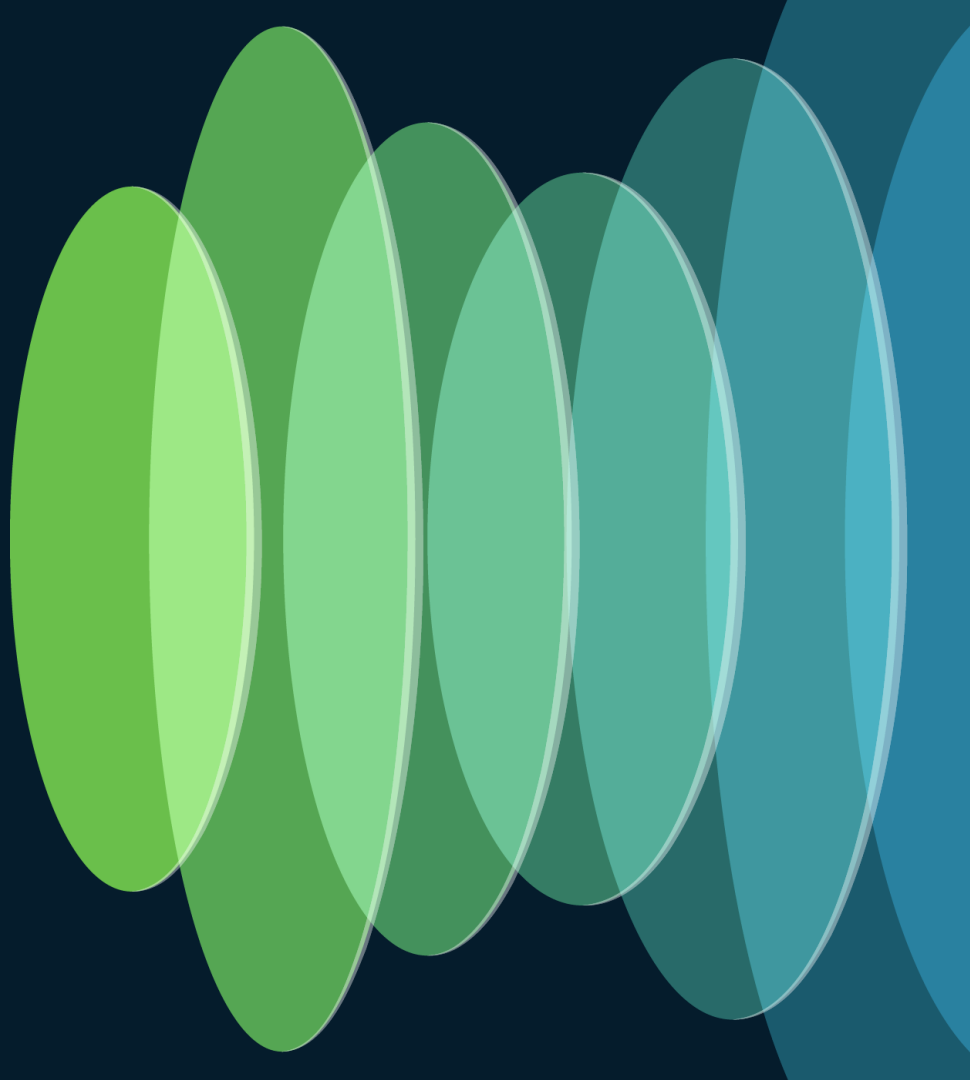Webex spaces will be moderated
by the speaker until June 7, 2024.

# Agenda

- Introduction
- RoomOS
- Devices
- Cinematic Views

# RoomOS
# Updates

# RoomOS May

RoomOS May updates

- Animated reactions in Webex meetings

- Cisco Room scheduler check-in/check-out

- Device PIN lock for Board and Room devices in Personal mode

- Microsoft Teams Rooms
  - Call App available in control panel (side panel)

- Airplay – ability to allow AirPlay share of copyright protected content in local share only
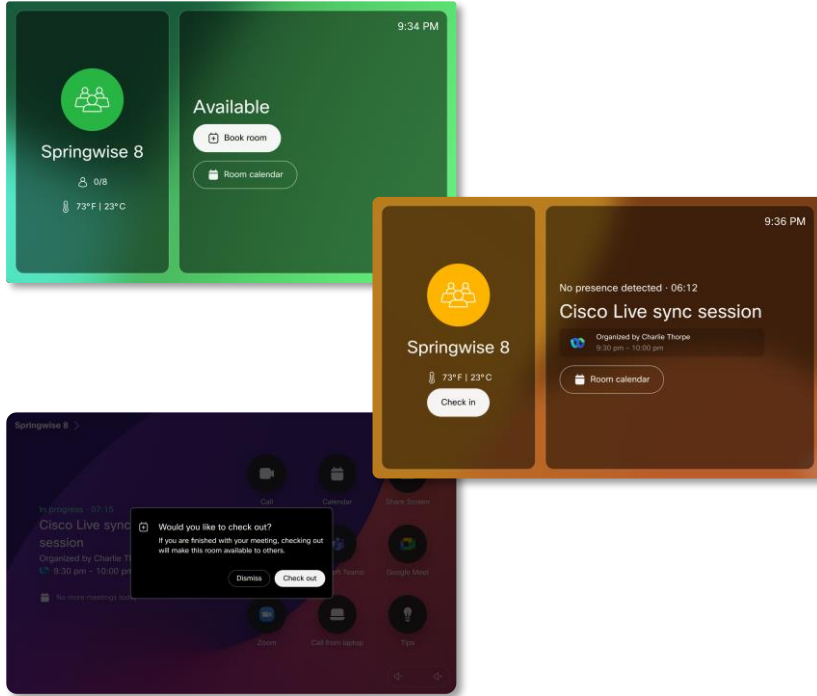
# Animated reactions

## RoomOS May

- When a user reacts in a Webex meeting and their video is in view on your screen, their reaction will now appear and animate in their video frame.

  - If someone raises a hand, this will also appear in their video frame and will remain until lowered.

  - Only supported in Webex meeting



    6

# Cisco Room scheduler check-in/check-out
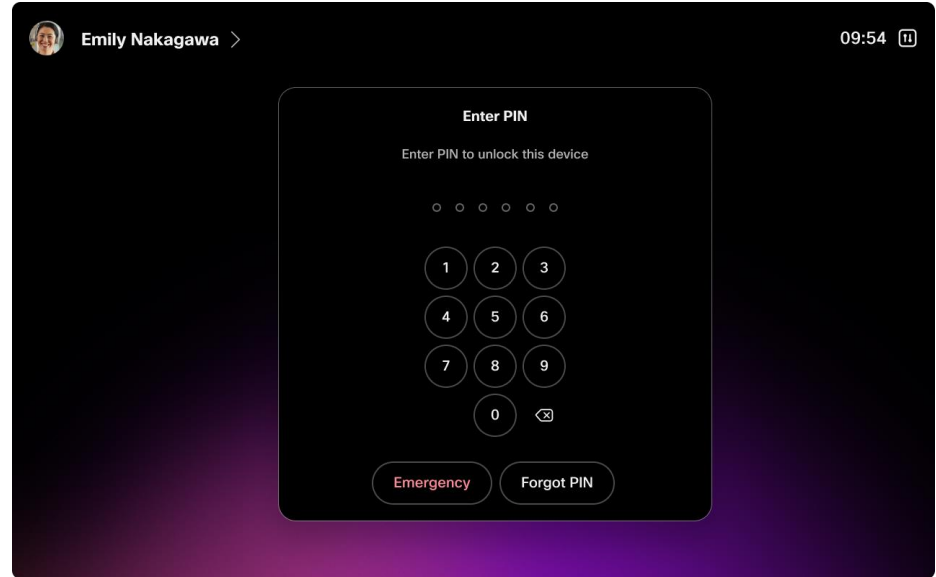## RoomOS May



- Check-in/check-out is designed to optimize room utilization by:
  - Requiring physical presence confirmation in the workspace for the booking to persist
  - Auto-release (time is configurable) if physical presence is not confirmed.
  - Check in can be performed manually through the press of a button or automatically by using peoplecount, sharing or simply joining a call.
    - Settling in period of around 4-5 mins to ensure no false confirmations of presence.
  - Option to check out when finished to release resource before end of booking

# PIN lock for Board and Room Personal mode
## RoomOS May

- PIN lock brings Board series and Room series inline with Desk series when configured in Personal Mode

# Microsoft Teams Rooms – call app

## RoomOS May

- Webex and SIP calling from Cisco device configured for Microsoft Teams Rooms

  - New 'Call' button in Control Panel to allow the dialing of:

    - SIP URIs

    - Webex addresses

    - Access to Control Hub directory

  - Requires dual registration (Teams Admin Center and Control Hub)
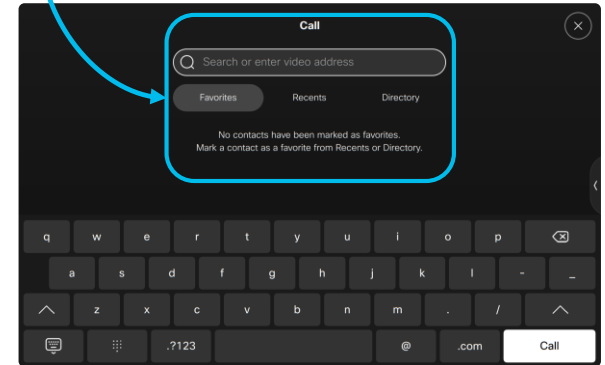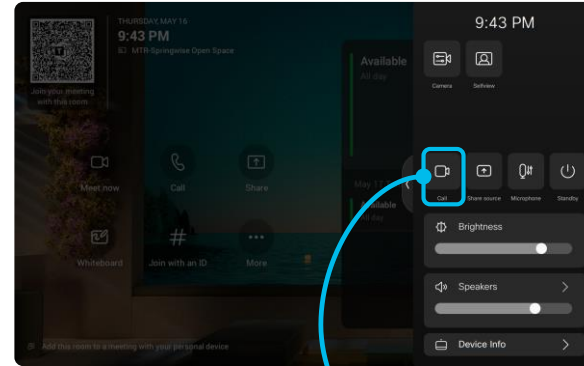
# RoomOS June

- Hotdesking for Board series devices (Beta)

- FedRAMP <-> Commercial cross join

- Devices – Step Away phase 1

- RoomOS settings menu updates

- MTR
  - 4k local share out of call through RoomOS (Beta)

# Hotdesking for Cisco Board series
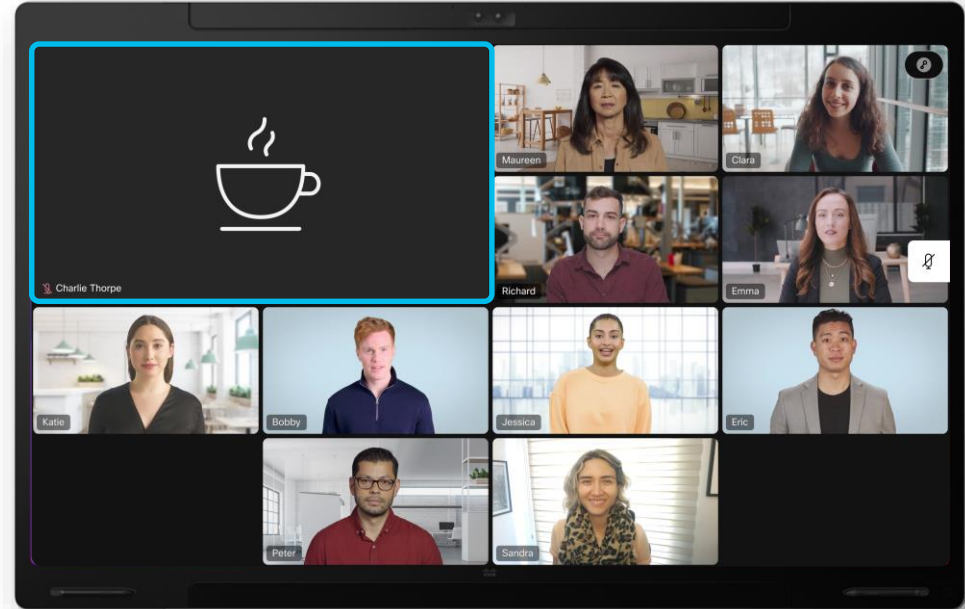
## RoomOS June (beta)

- Hotdesking released to Board series devices.
  - Allows Board series device to be configured with hotdesking in workspace
  - QR code shown on screen to allow sign-in from Webex app
    - Optional setting to enforce sign-in before being able to use Whiteboard
  - Available on Board Pro/Board Pro G2 as well as Board series
  - Full cloud or Webex Edge for Devices with optimized join.
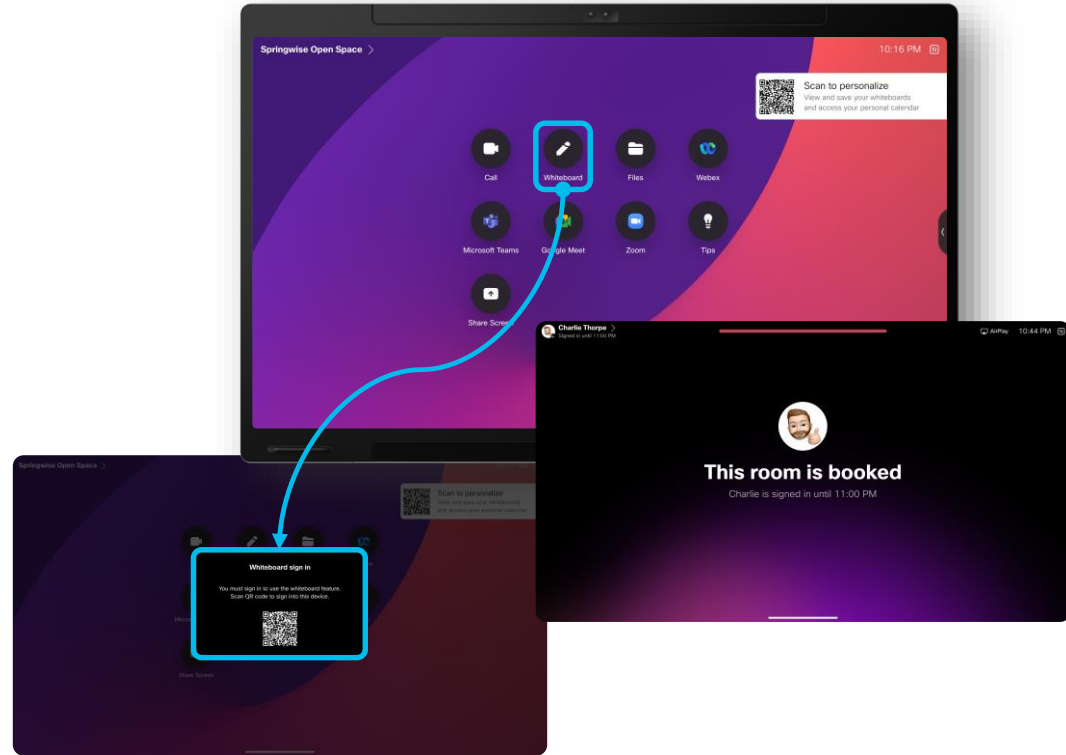
# Devices Phase 1 Step Away

## RoomOS June

- When someone in the Webex app decides to step away from their PC, there will be the ability to enable the 'step away' status. This release will allow Cisco devices to consume the status of that user.

  - When 'Step Away' is triggered, the video pip of the user will change to the coffee cup. Audio is also seen as muted.

  - When 'Step Away' is triggered, the participant list on the device will also show muted audio and video as well as the wording of 'stepped away'.

# FedRAMP <-> Commercial cross join
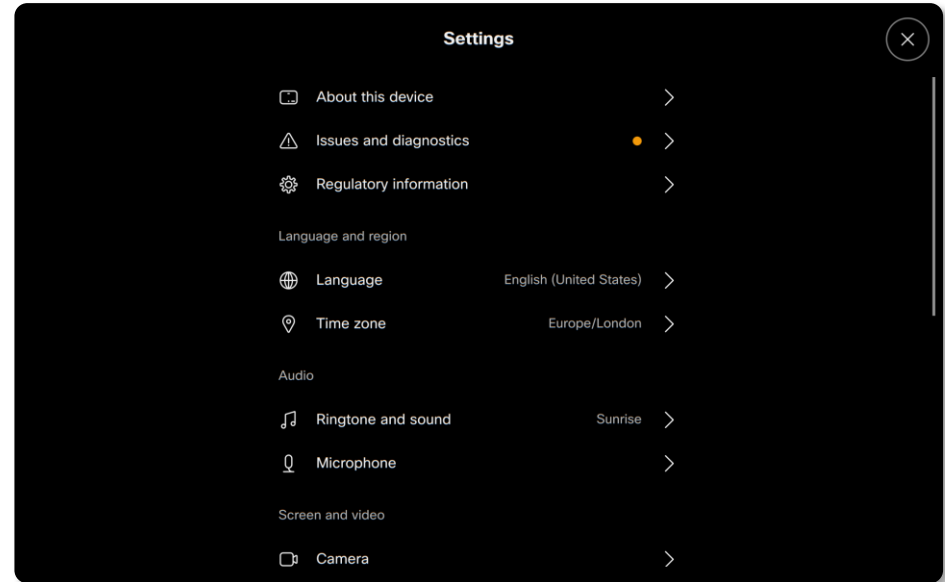## RoomOS June

- FedRAMP customers when calling into a Webex meeting hosted in the commercial platform will join as a standard SIP device, losing many of the Webex features.

- With the FedRAMP <-> Commercial cross-join, Cisco devices on a FedRAMP org calling into a commercial platform Webex meeting will now enjoy the same Webex features as commercial customers.

# RoomOS Settings Menu Update

## RoomOS June

- Redesign of the settings menu on devices.
  - Brings the settings menu inline with the other menu screens seen on the device.

# 4k previews in MTR on Cisco Devices

## RoomOS June (beta)

- 4k local share/preview handled by RoomOS layer of MTR device
  - Board Pro and Desk Pro
    - 4k content share to screen (out of call)
    - Touch redirect supported when used with Windows PC
  - Bar, Bar Pro, EQ, EQX and Codec Pro
    - 4k content to one, two or three screens (out of call)
    - Multisource – view up to 3 different sources across screens

Microsoft Teams Share in MTR mode
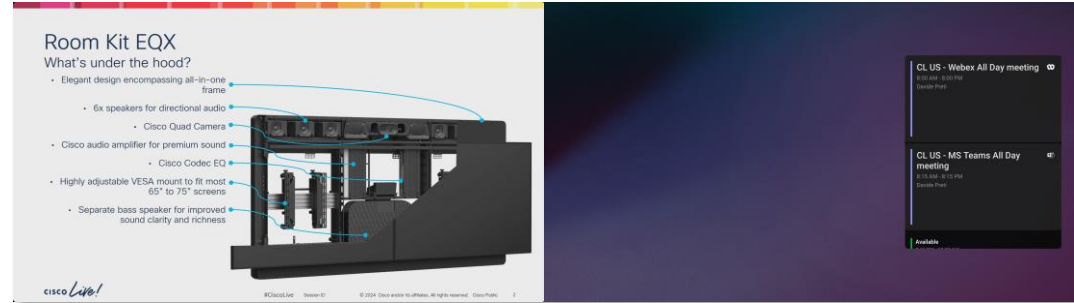


RoomOS Share in MTR mode
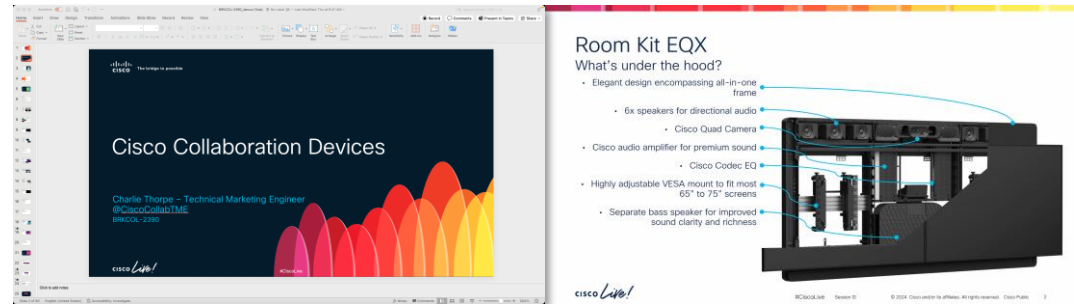
# RoomOS July

- Hotdesking on Board series

- Multi-camera Group and Speaker View (beta)

- Multi-camera Speaker View

- AirPlay pairing pin in pip (beta)

# Multi-camera Group and Speaker View

## RoomOS July (beta)

- Designed to provide a 'group' view of the space plus an additional stream with the active speaker.

- Supported initially on Cisco Bar Pro and Board Pro G2

- Support only within Webex meeting on devices
  - Cloud registered
  - Webex Edge for Devices with Optimized Join
  - Webex app support expected later this calendar year



Sending side activation
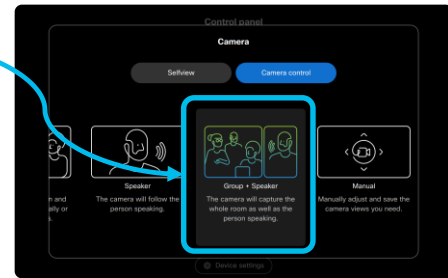
Receiving side:
Group view
Active speaker
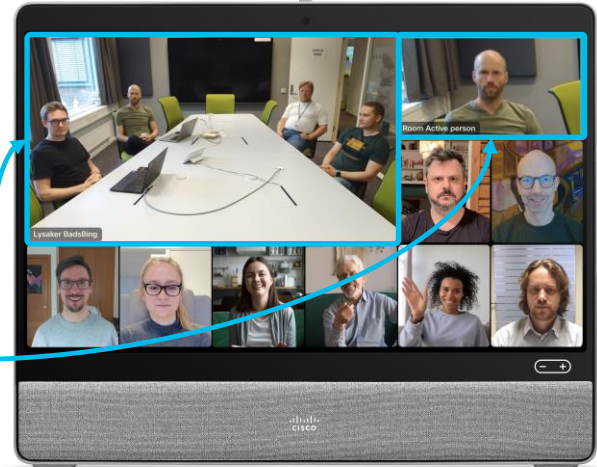
# AirPlay pairing pin in pip
## RoomOS July (beta)

- AirPlay PIN challenge
  - Appears as smaller PIP when trying to share.
  - Prior to this enhancement, the PIN challenge would display full screen.

# Coming to Beta channel

- Multi-camera Speaker View (expected beta June)

- Group and Speaker (expected beta July)

- Microsoft Teams Panel on Wall Navigator

- Microsoft Teams Display on Desk Pro

# Cisco Collaboration devices
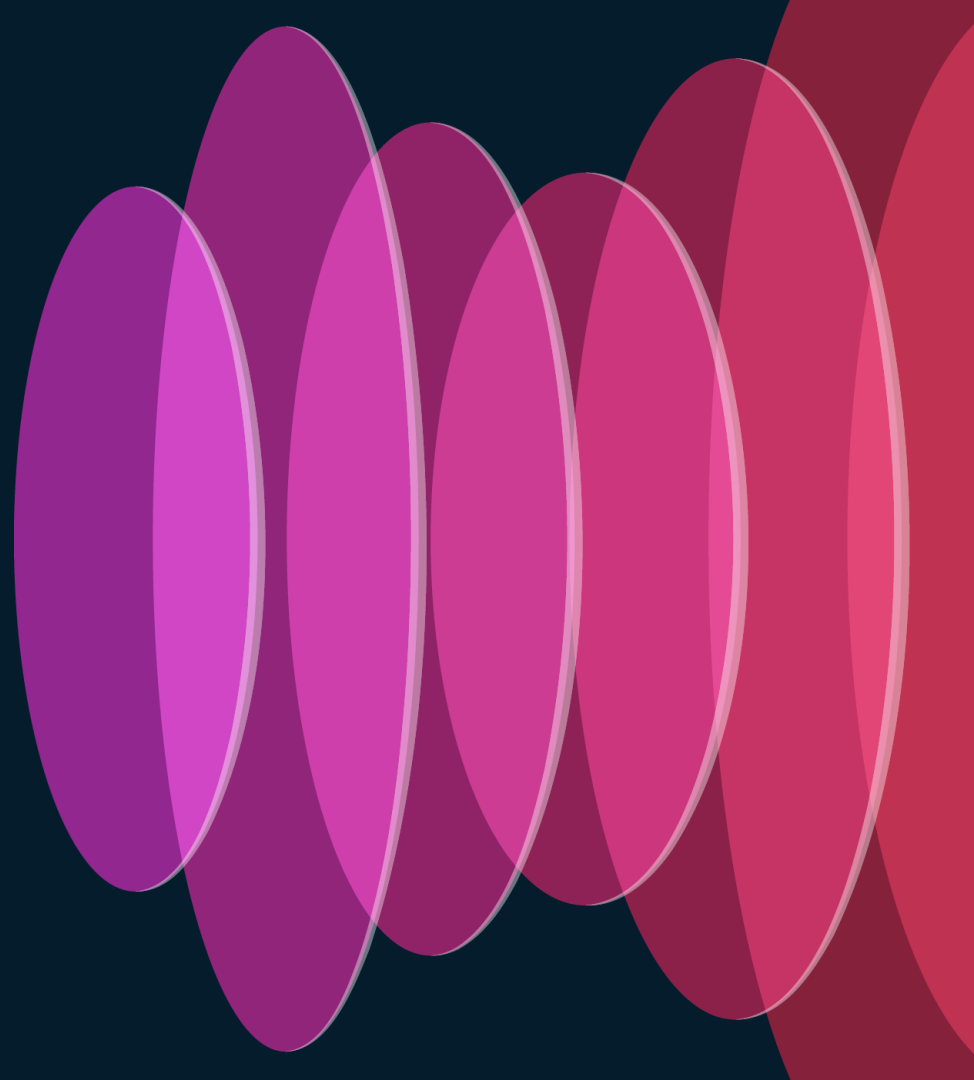
# Cisco Desk Series

### Desk Mini

Entry-level, portable all-in-one for the home

### Desk

Premium experience built to scale

### Desk Pro

Our flagship device for the high-end experience

# Cisco Board Pro Series



Board Pro 55 G2 and Boar Pro 75 G2

Wall mount, floor stand or floor stand with wheels

# Cisco Room Kit Series

PTZ4K

Quad Camera

Room Kit

Room Bar

Codec Pro

Codec EQ

Codec Plus

## Room Kit Series

A portfolio of purpose-built video bars and collaboration kits powering modern workspaces
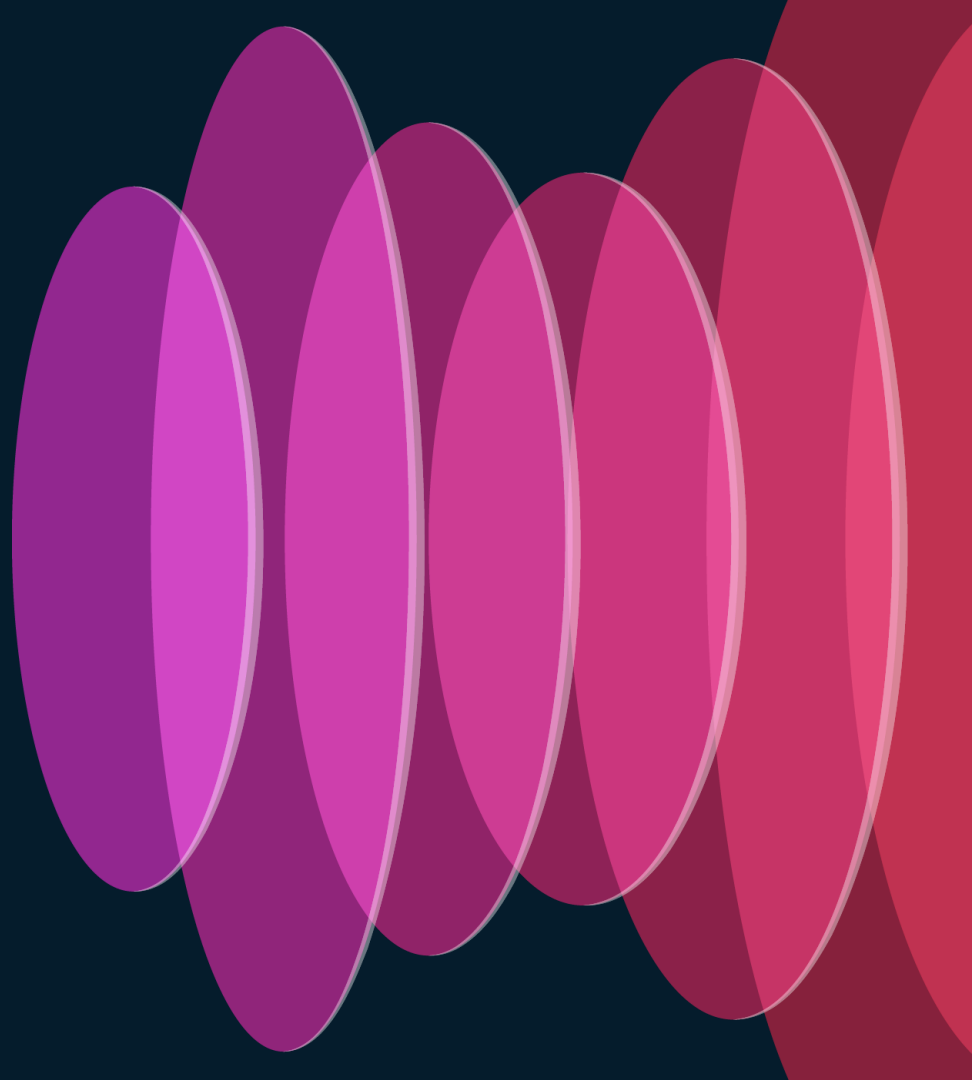
# Cisco Room Kit EQX

Cinematic Views

# Cinematic Meetings Experience

## Meeting zones

Enable distraction-free meetings in glass-walled meeting rooms by only framing and tracking people within predefined perimeters
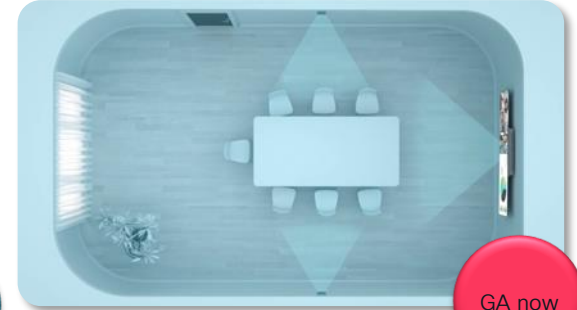


## Multi-camera speaker view

Dynamic switching between the built-in camera system and the PTZ 4K Camera for extended reach and high-quality framing



In beta soon

## Multi-camera cross-view

Show the best view of in-room participants across the table through adaptive, AI-directed framing for true-to-life meetings.



GA now

# Cinematic Meetings Experience

## Presenter & audience view

Run engaging local, remote and hybrid sessions with AI presenter tracking, camera switching and multi-stream video intelligence



GA now

## Frames & people focus

Ensure everyone is equally seen in the meeting with AI people cropping and augment the experience with intelligent video layouts on Webex
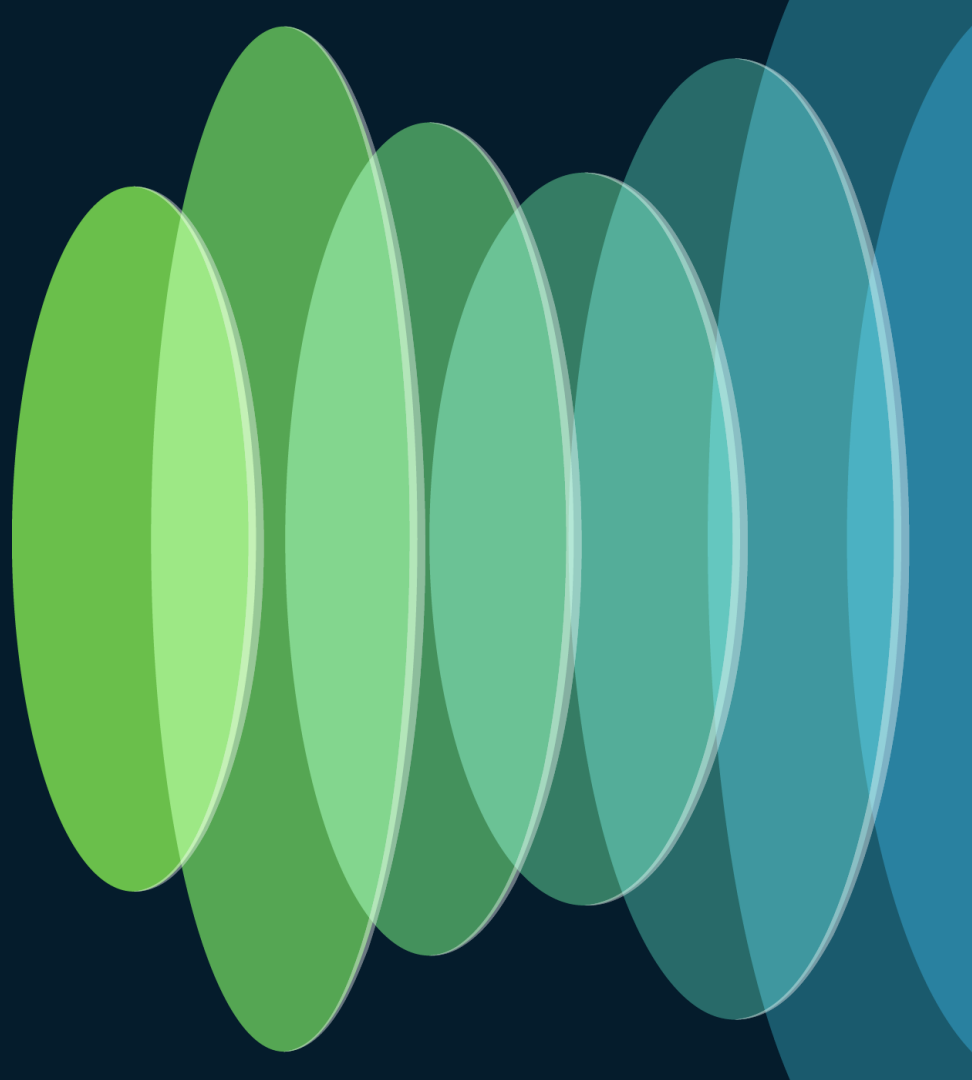


GA now

## Campfire

Bring an inclusive experience to executive meetings with a purpose-designed setup with multiple codecs, cameras and screens.



GA now

# Cross-View

# Cinematic Meetings
## Multi-camera Cross-view

- Quad Camera and PTZ4K camera setup

- Switching between main and sides

- Codec EQ based systems

- Table Microphone Pro required


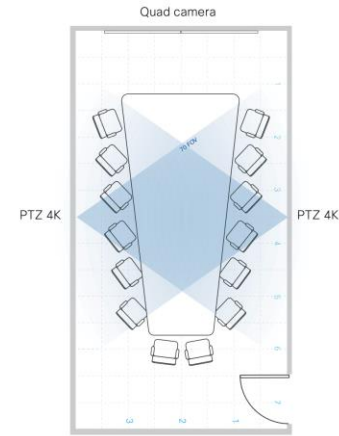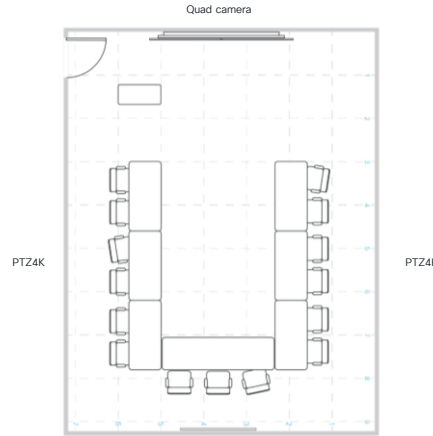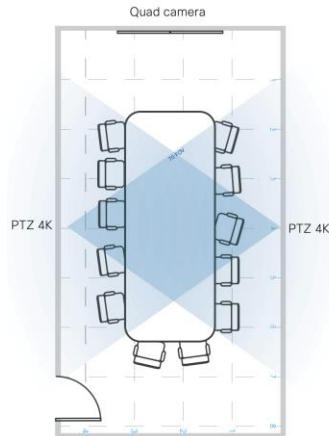
GA now

# Cinematic Meetings

## Cross-view

- "Main" quad camera at the front of the room

- Two PTZ 4K "side-cameras" covering the long edges of the meeting room table

- "Array" of Table Microphone Pros

- Automatically select a crop that captures the active speaker and other in-room participants in the best way based on the available camera views and in-room audio

- RoomOS and MTR mode

Additional note: It will soon be possible to nominate one of the Cross-View cameras to also support Presenter (PresenterTrack)

# Recommended room layout

- Long and narrow conference rooms

- Designed for inclusive hybrid meetings

- Capture discussions happening across the table

- PTZ4K will use digital PTZ to frame speakers
  - **No** physical movement
  - Side cameras



Quad camera

PTZ 4K          PTZ 4K



Quad camera

PTZ4K          PTZ4K



Quad camera

PTZ 4K          PTZ 4K

# Recommended room layout

- Recommend 3 to 6 Table Microphone Pro's depending on the table width

- For tables wider than 1.8m/5.9', consideration should be given to adding two 'lanes' of microphones
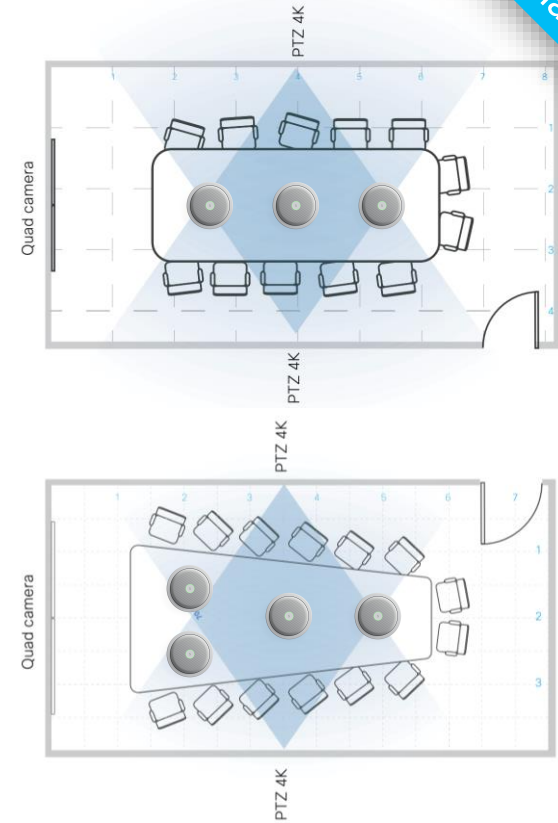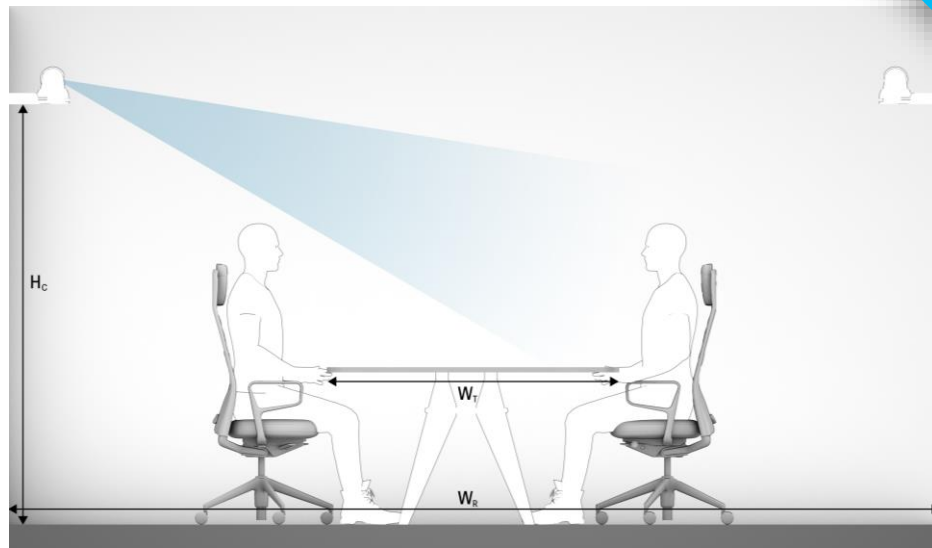
# Camera placement

- PTZ4K should be centered on the length of the table

  - Center line perpendicular to the 'long' edge of the table

- In-room participants must be positioned within the FoV of the Quad Camera and one of the two PTZ4K side cameras

Quad camera

Avoid

Recommended

Avoid
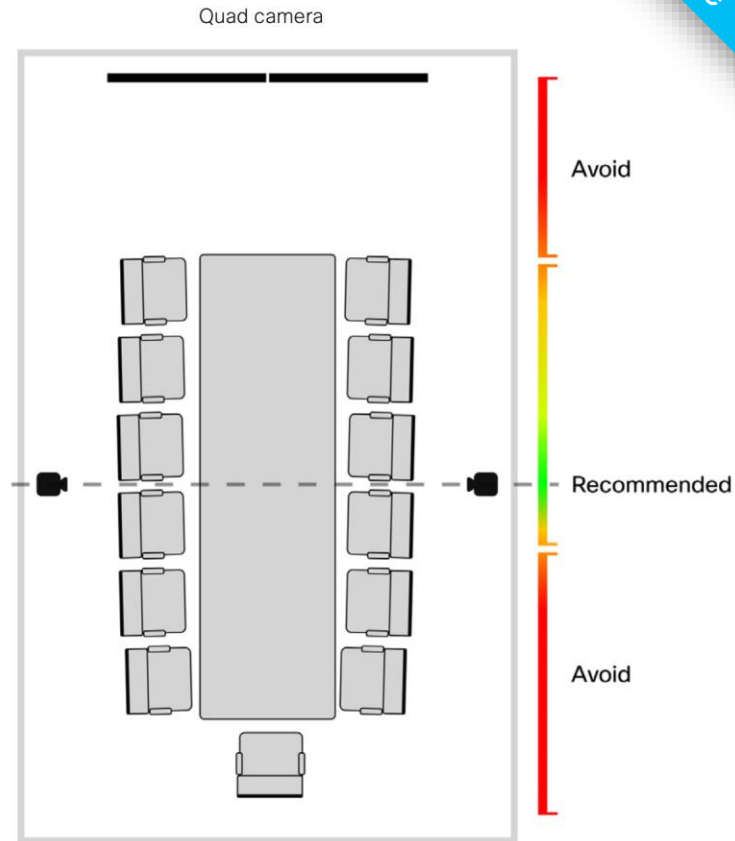
# Camera placement

- Four parameters that must be considered:
  - FoV of the side cameras
    - PTZ4K: 70° HFOV, 43° VFOV
  - Width of meeting room ($W_R$)
  - Width of table ($W_T$)
  - Mounting height of the side cameras*

\* For ADA-compliance, side camera must be mounted higher than 8' ($H_C$)



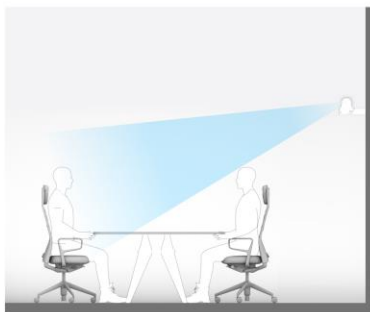| Room width ($W_R$) | Table width ($W_T$) | Camera height ($H_C$) |
|---|---|---|
| 4.5 m / 14.5' | 1.8 m / 5.9' | 2.03 m / 79.92'' |
| 4.5 m / 14.5' | 1.5 m / 4.9' | 2.1 m / 82.68'' |
| 6.0 m / 19.7' | 1.8 m / 5.9' | 2.2 m / 86.61'' |

# Camera placement
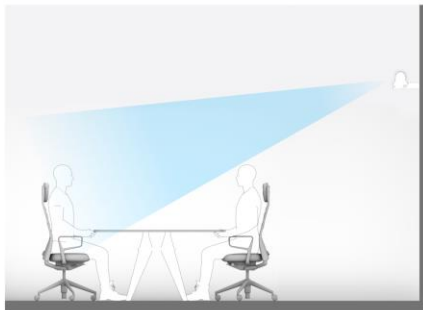
Wide room
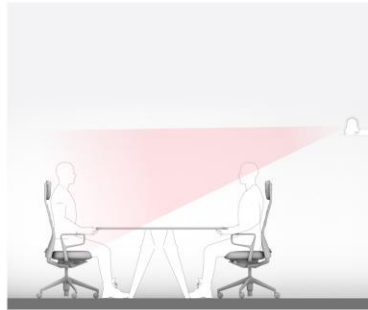
Too low

Narrow room
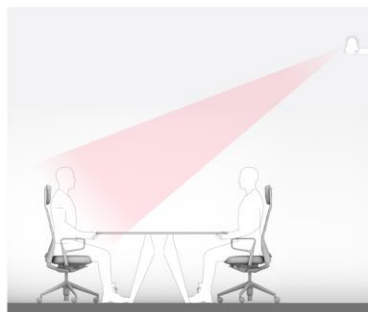
Too high

# Required equipment

## Cisco equipment:

1 x Codec EQ (or EQX) system

1 x Quad Camera (main camera)

2 x PTZ4K (side cameras) with mounting brackets

3-6 Table Microphone Pro for voice pickup and audio triangulation

AV Integrator License key (if more than 3 Table Microphone Pros are needed)

## Additional equipment

1 x PoE+ enabled switch (expansion of EQ's link-local network)

2 x 4K HDMI cables to connect PTZ4K cameras to EQ/EQX

# Connections

- Only USB-C available for wired sharing as all HDMI inputs are used for camera inputs

- Need external PoE/PoE+ switch to extend number of link-local ports for Navigators, Table Microphone Pro...
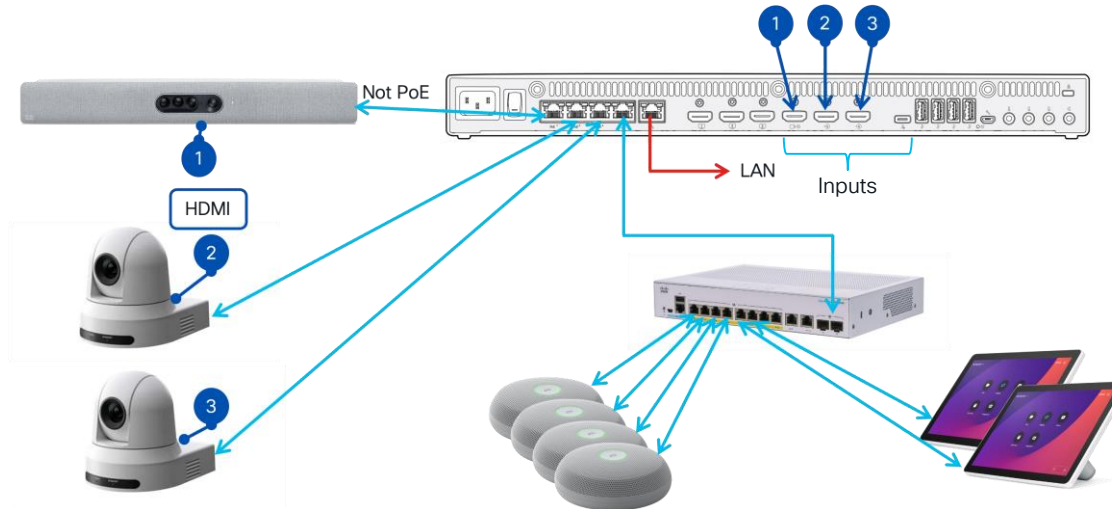
# Software setup
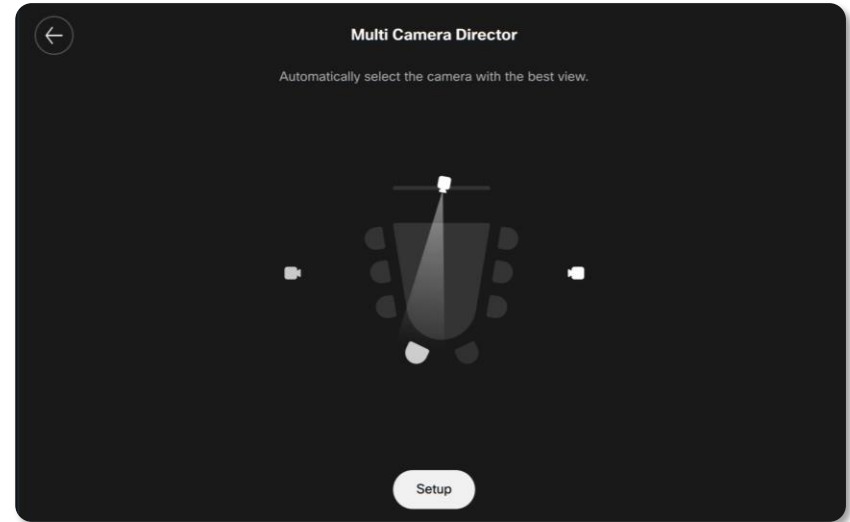
- Software setup is completed through a wizard on the Room Navigator

- Cross-view features will have the option of being enabled/disabled from the camera settings options on the Room Navigator

# Cross-View

## Feature enablement

- Cross-View will automatically be enabled when 'Speaker' mode is enabled
  - Camera feed will automatically switch between Quad Camera and PTZ4K's depending on where the active speaker is facing.
    - If Presenter (PresenterTrack) is also configured, Presenter button will move nominated PTZ4K to Presenter preset position.
    - Selecting Speaker will return camera to Cross-View preset position
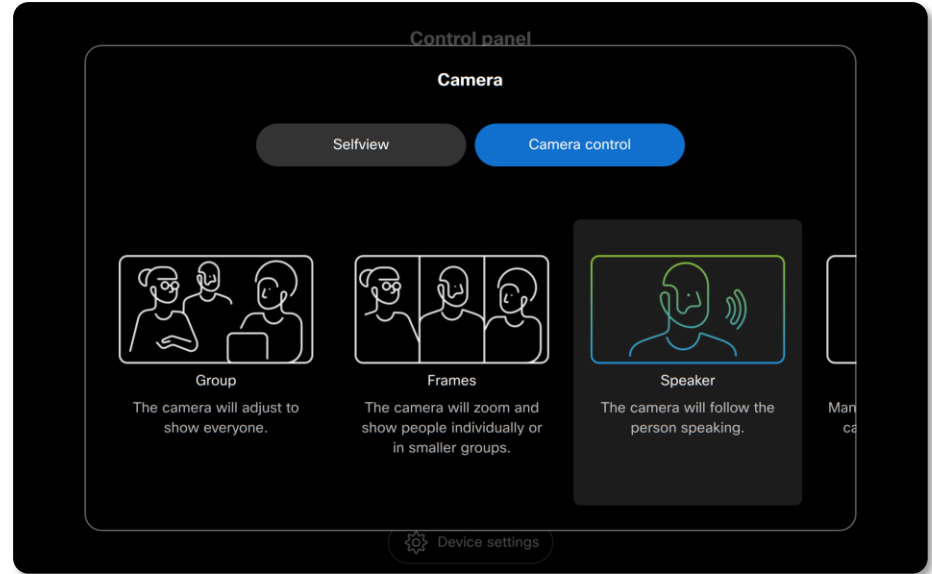
But wait...
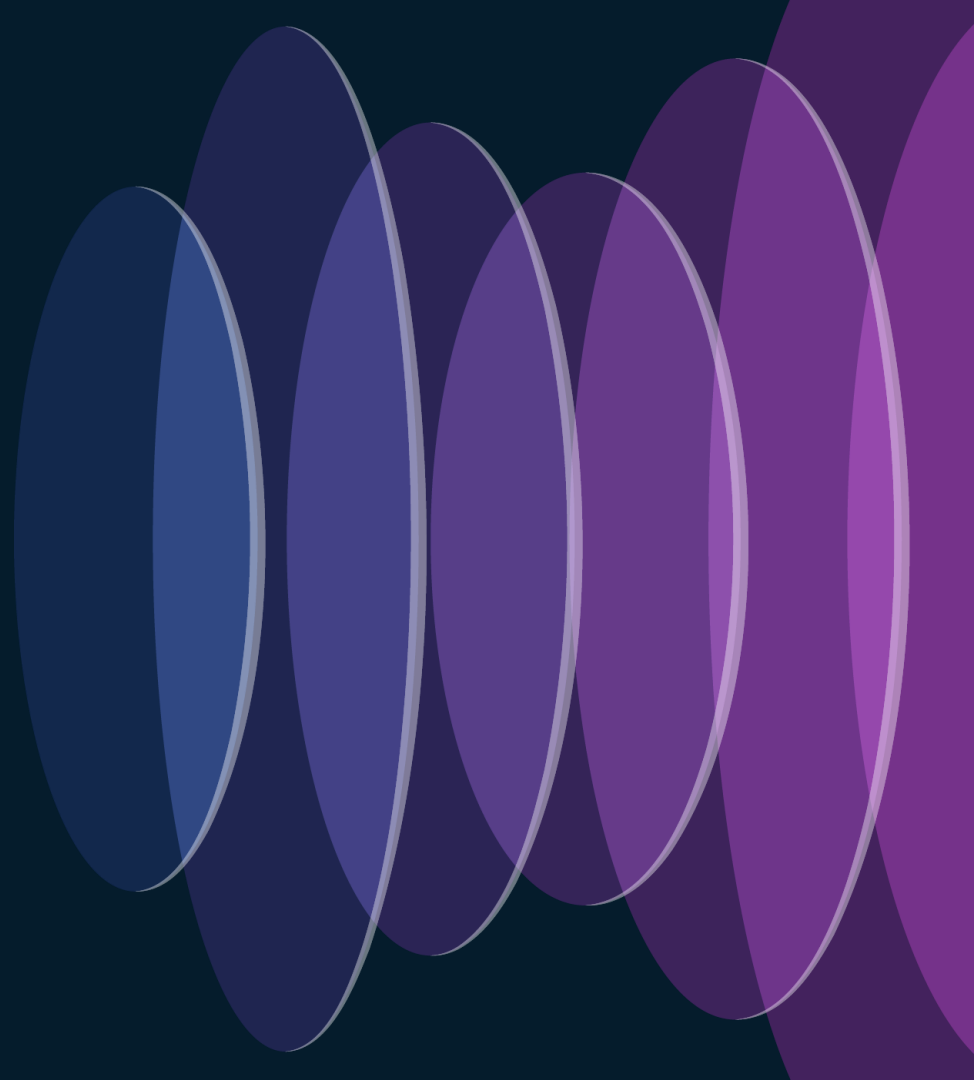
...there is more...

CISCO *Live!*
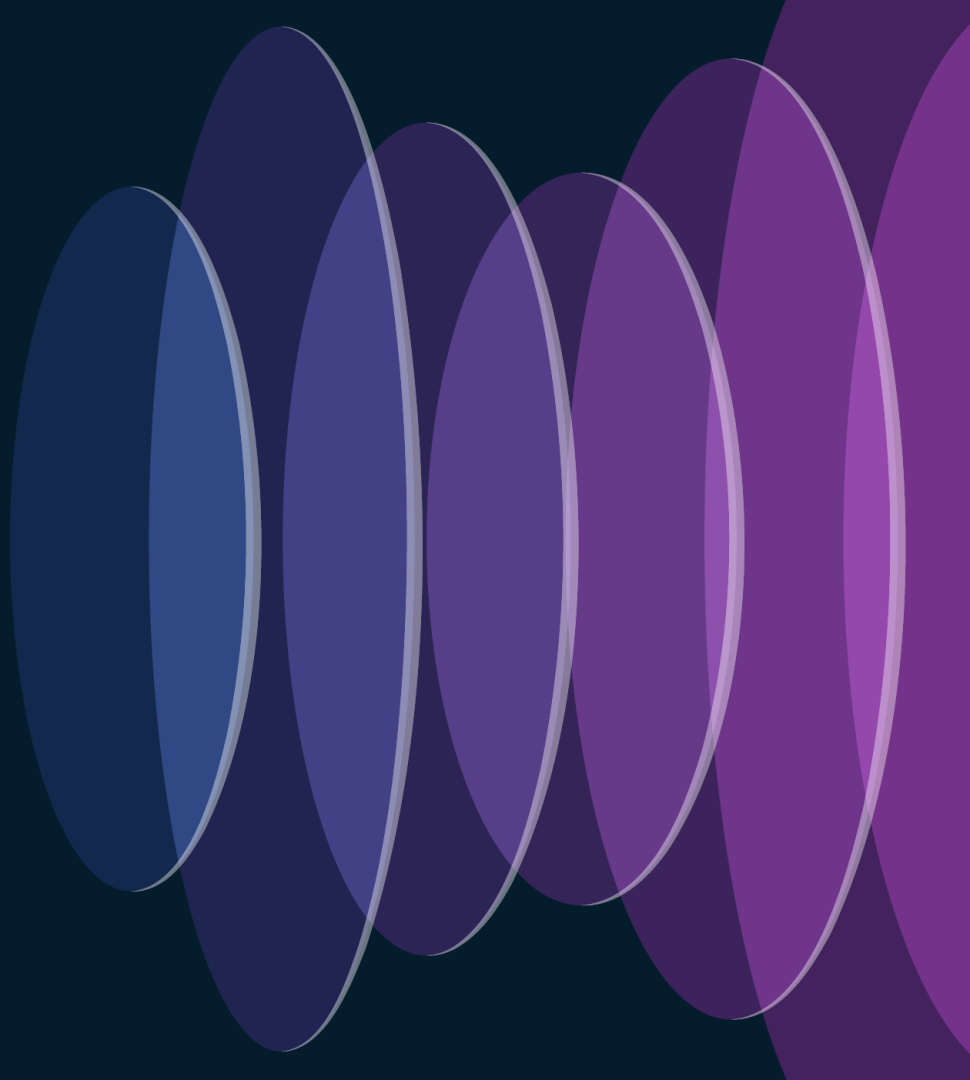
...coming to a
beta system
near you soon...

CISCO Live!
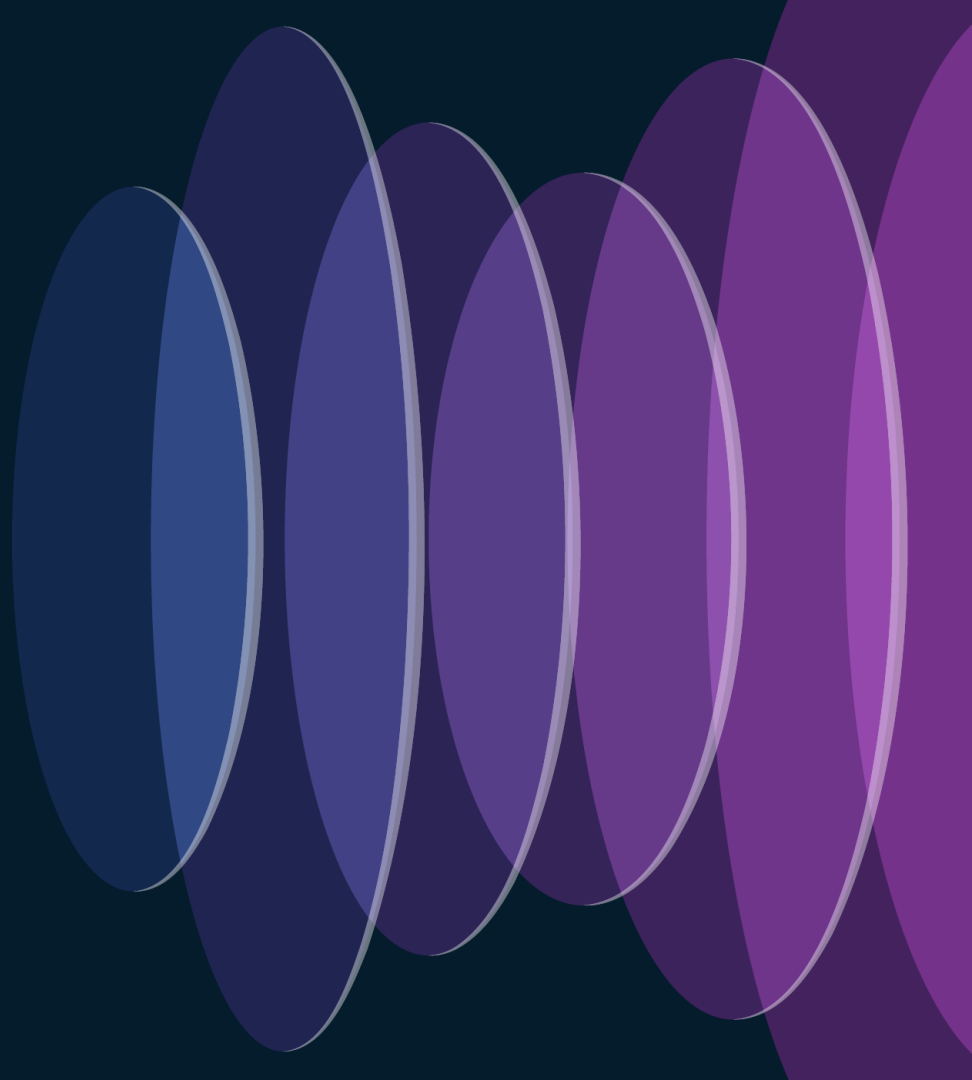
# Cross-view hot off the press

- Support to be added to the Codec Pro for Cross-View

- Support to be added for side mounted Quad Cameras (instead of the PTZ4K) – No audio from side Quad Cameras
  - Supported with Codec EQ/EQX and Codec Pro

- Codec Pro to also support Cross-View with side Quad Cameras combined with Extended view with PTZ4K
  - Not supported with Codec EQ/EQX

- Expected to be:
  - Beta in June/July 2024
  - GA in August 2024

# Cross-view

- Cisco Equipment:
  - 1 x Cisco Codec EQ or Codec Pro
    - Codec Pro is required when cross-view and Multi-camera Speaker view is combined.
  - 3 x Quad Camera
    - Front camera only one to provide audio
  - 1 x PTZ4K
    - Codec Pro is required when fours cameras are needed.
  - 3-8 Table Microphone Pro
    - AV Integrator Key will be needed on Codec EQ systems to allow between 4-8 Table Microphone Pros to be connected
  - Additional switch(s) will be needed to extend Link Local Network and provide PoE support
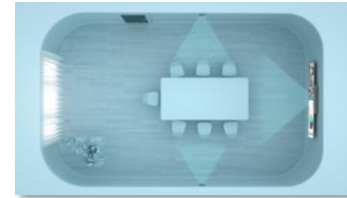
Cross-view    +    Speaker view
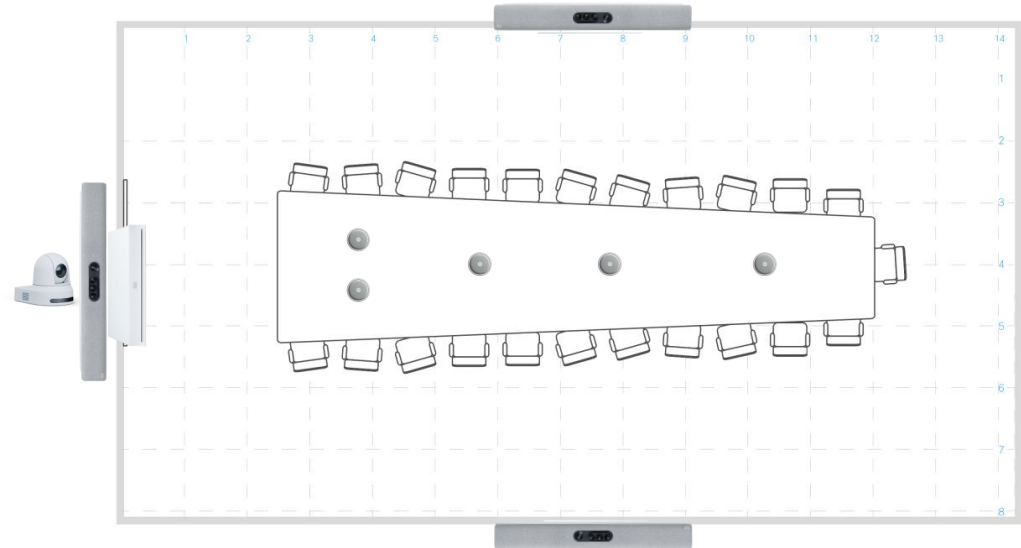
# Multi-camera
# Speaker View
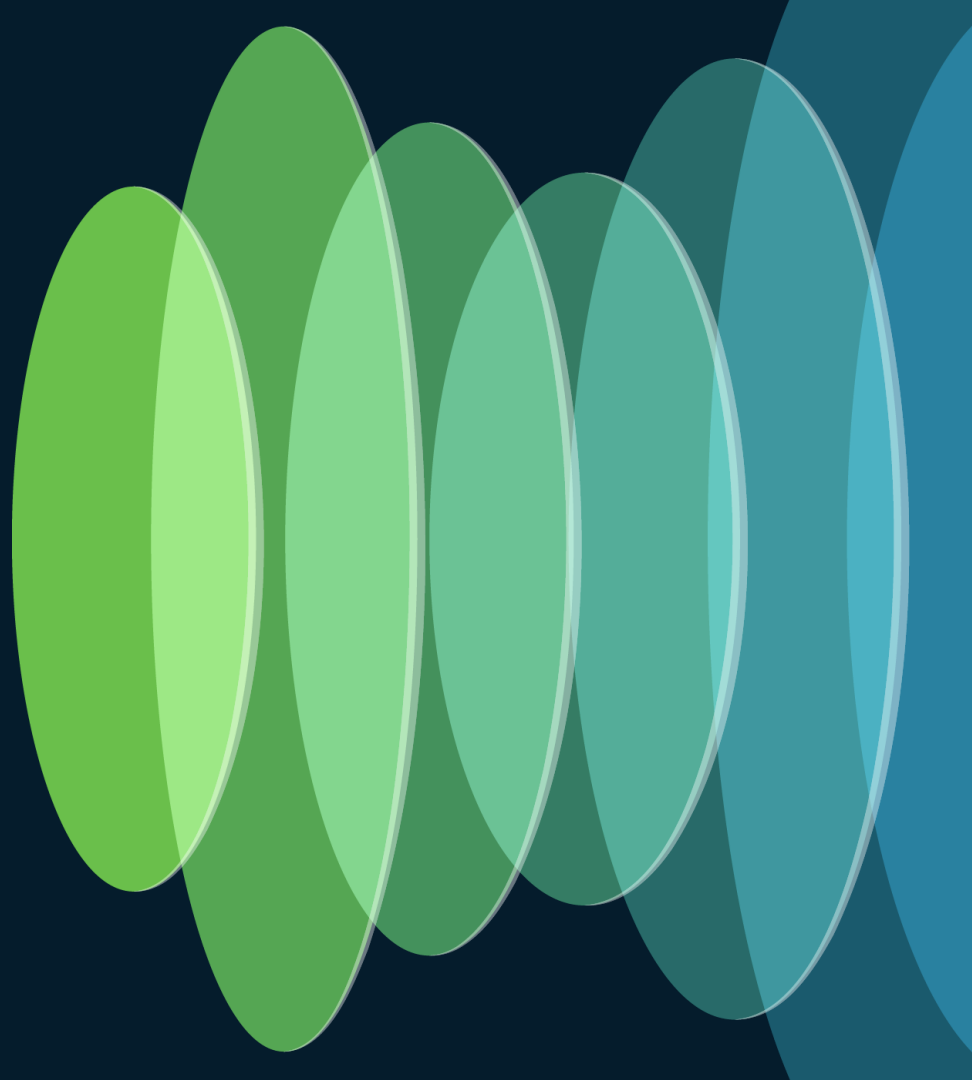
# Cinematic Meetings

## Multi-camera Speaker View

- Also known as Extended Speaker

- Quad Camera and PTZ4K will work together to switch between each other.

- Codec Pro and EQ based systems only.

- Table Mic Pro to extend Speaker Track pickup area



Beta
June
2024
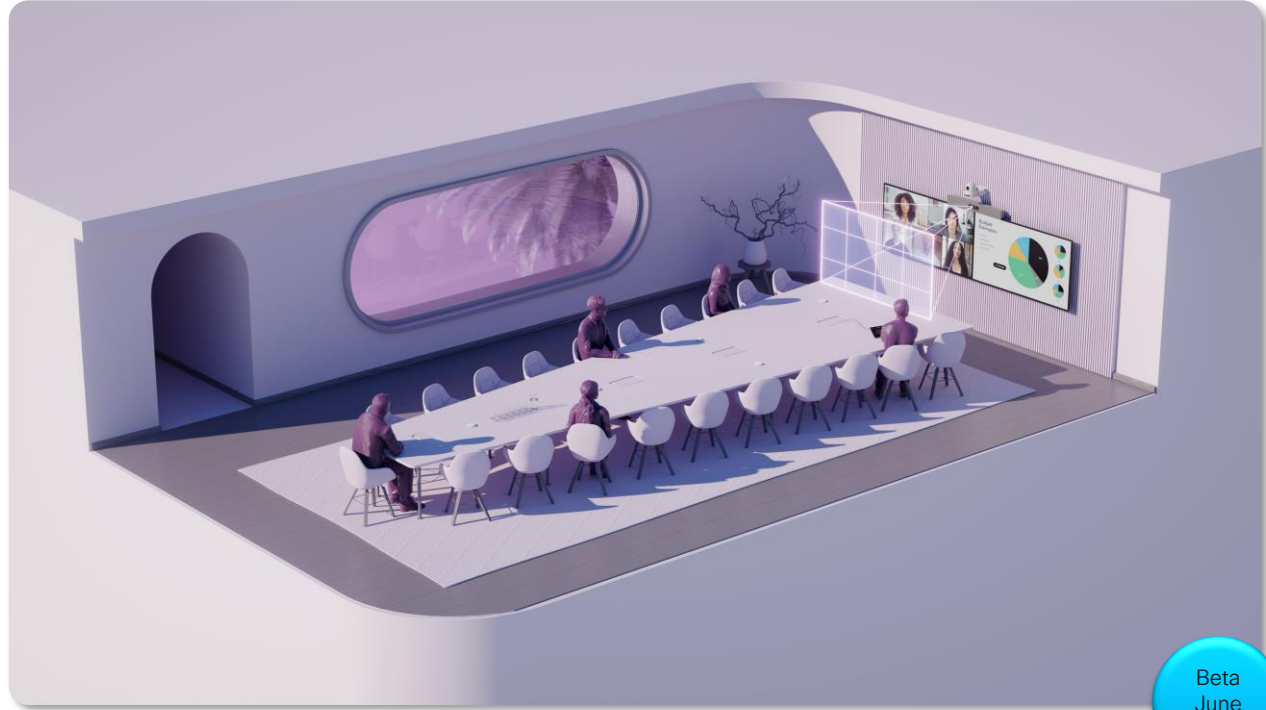
# Reach/Performance

- Reach of extended speaker tracking depends on room acoustics and also light conditions.
  - Illustration (right) visualizes the horizontal field of when:
    - Quad Camera is digitally zoomed in, standard mode ~ 20°
    - Quad Camera is digital zoomed in, extended zoom range is enabled ~13°
    - PTZ4K is 11x optically zoomed in ~7°
      - Max optical zoom is 20x



20 FOV – Quad Regular Zoom
13 FOV – Quad Extended Zoom
7 FOV – Close Up Framing from 4K PTZ
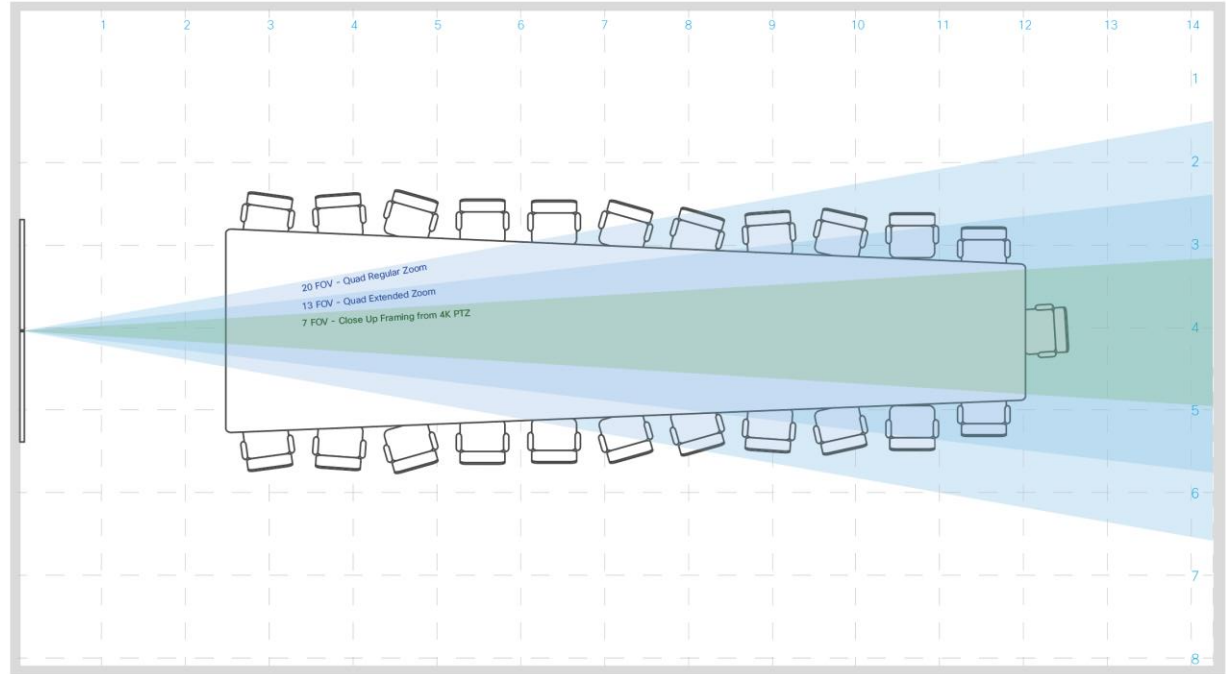
`xConfiguration Cameras SpeakerTrack ZoomRange: Extended`
Quad Camera with extended zoom enabled will increase max. digital zoom with 1.5x from 2.7x (1080p) to 4x (720p)

# Setup

Equipment

- 1 x supported codec
  - EQ/EQX
  - Codec Pro

- 1 x Quad Camera

- 1 x PTZ4K

- 3-6 Table Microphone Pro (for voice pickup and audio triangulation). Final number subject to change

- AV Integrator license key (EQ/EQX only) – required for more than 3 Table Mic Pro's to be connected to the EQ/EQX
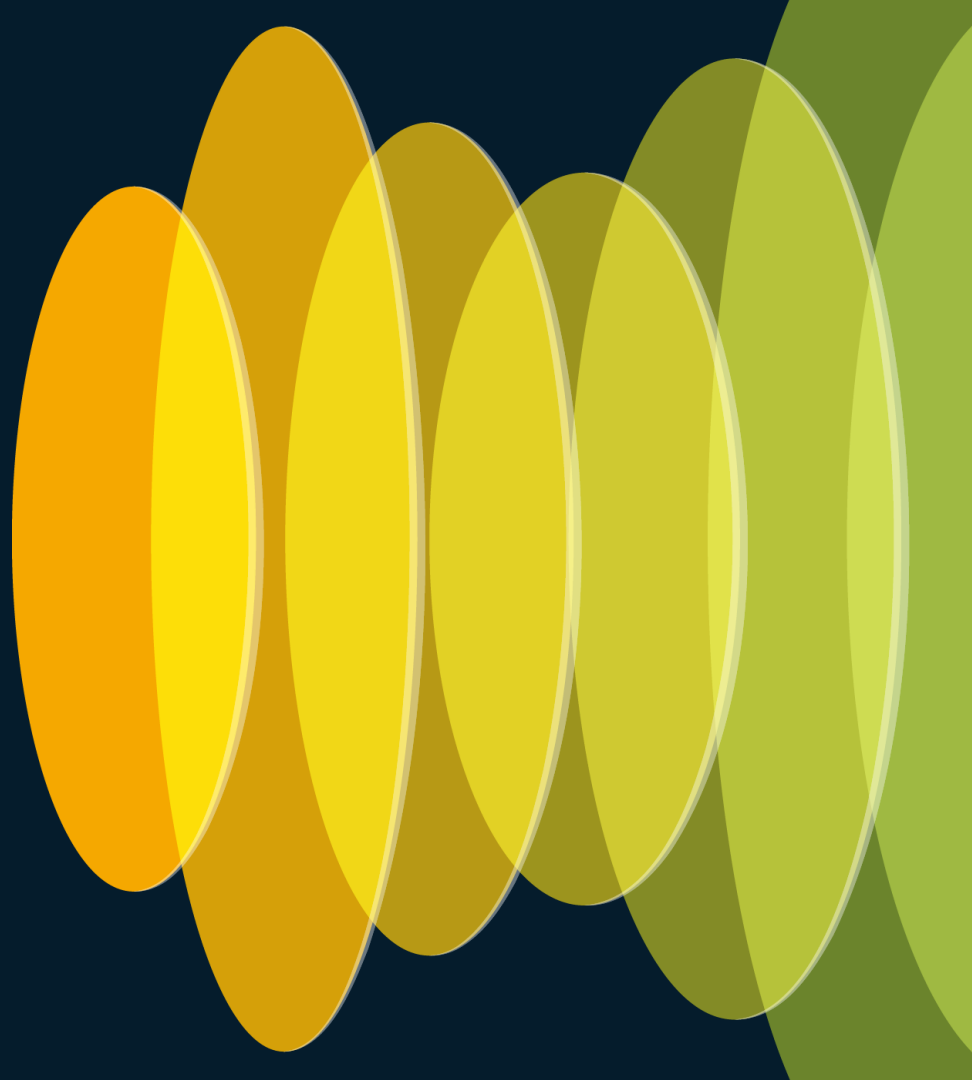
Example Room Configuration
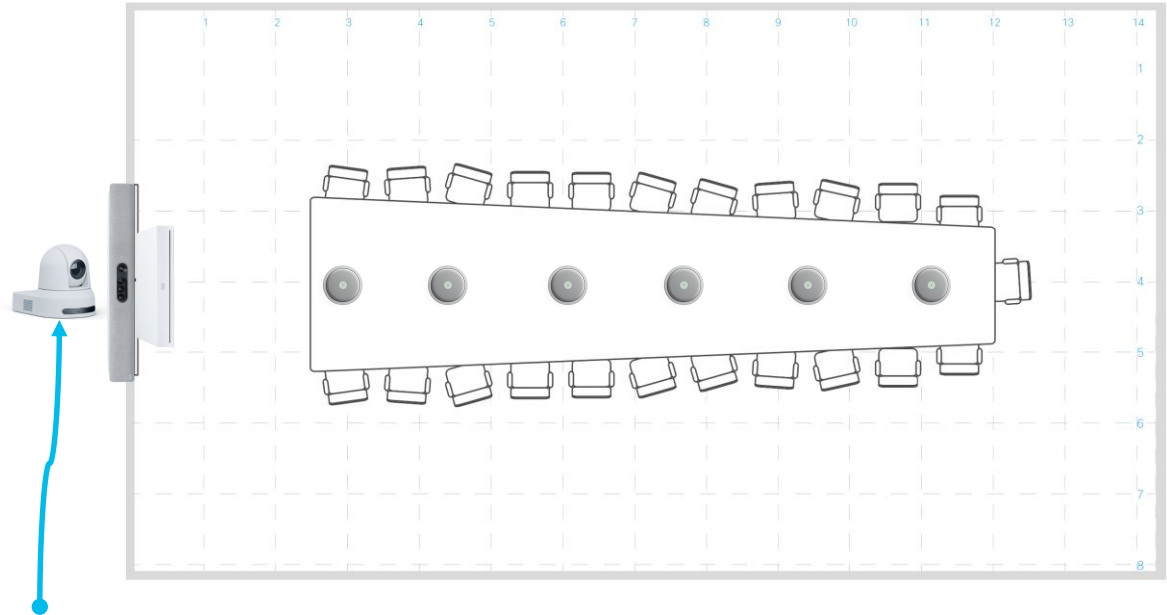
Quad Camera with PTZ4K centrally mounted above

Exact placement of PTZ4K and Table Microphone Pro's TBC

# Multi-camera Speaker View setup

# Multi-camera Speaker View setup wizard
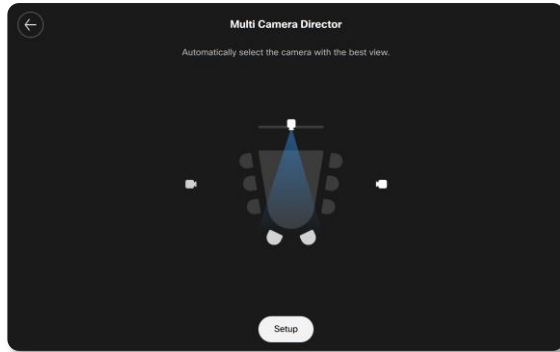


Wizard to guide through setup process
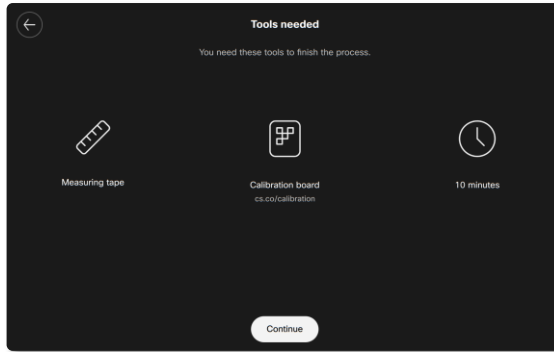
Provide information relating to tools required
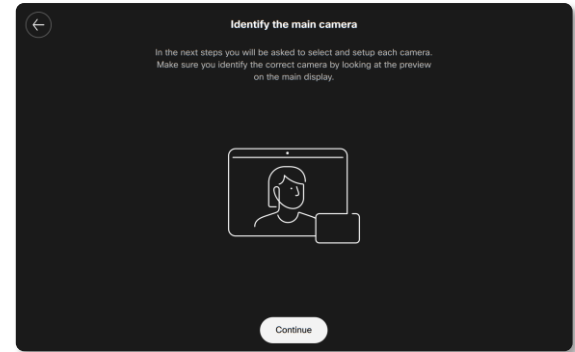
Begin the setup

# Multi-camera Speaker View setup wizard
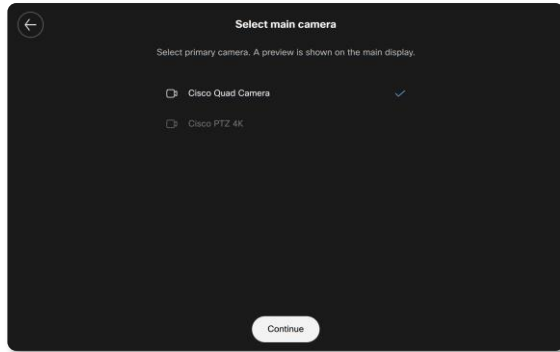


Identify main camera source (Quad Camera)
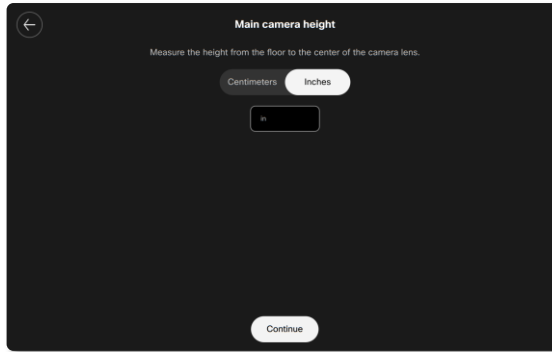
Configure height from finished floor level to center of lens. Repeat for second camera.
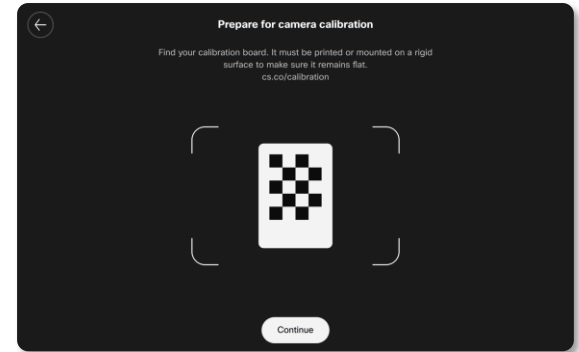
Calibration card needed for setup

# Multi-camera Speaker View & Cross View

## Calibration board

- Required for Multi-camera Speaker View and Cross-View

  - All cameras need to see board to be able to accurately calibrate

  - cs.co/calibration

  - Calibration Board

# Cameral Calibration Board

## Best Practices

- Both cameras need to be able to see the board. Check what is seen on screen.
  - When taking calibration images, calibration card must be at least 30cm/12in away from the position it had in any previous calibration photo to be valid.
- Cameras will not calibrate correctly/not at all if board is not printed correctly.
- Measurements for height of calibration card need to be correct to ensure correct calibration.
- Calibration board should be affixed to a solid backer – holding the piece of paper can lead to failure!
- Two people are better than one!

# Multi-camera Speaker View setup wizard

- Five images in total are needed with the calibration board in different place each time.

- Live camera feed seen from both cameras to aid calibration board positioning

- Images accepted will start to turn the segments blue.

# Multi-camera Speaker View setup wizard

- Once five successful images captured, Navigator will update.

- Multi-Camera extended speaker view is now ready
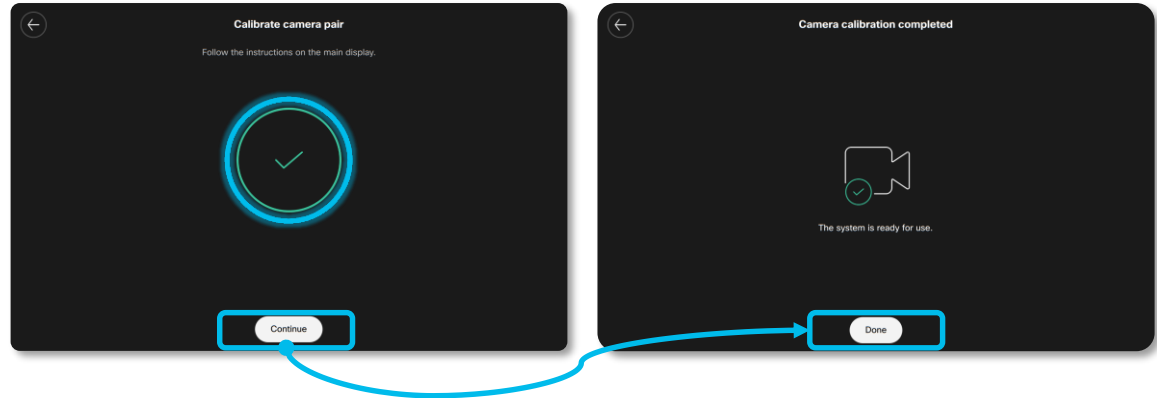
# Multi-camera Speaker View

## Feature enablement

- Multi-camera extended speaker will automatically be enabled when 'Speaker' mode is enabled
  - Camera feed will automatically switch between Speaker view from Quad Camera and Extended Speaker view from the PTZ4K
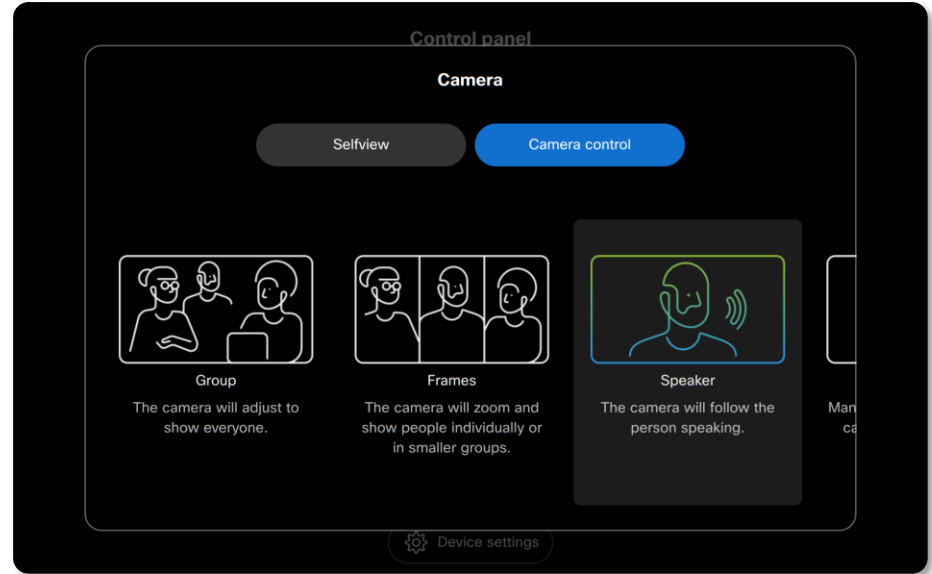
# SpeakerTrack using external microphones

# Multi-camera Speaker View

## SpeakerTrack with external microphones

With the introduction of Multi-camera Speaker View, there is now the option to increase the room length by combining the use of the Cisco Quad Camera and the Cisco PTZ4K.

There is still a limitation or around 9 meters/29 ft for integrated SpeakerTrack microphone array.

To solve for the potential issue where distance exceeds the range of the integrated mic array, Cisco Table Microphone Pros can also be leveraged to assist with SpeakerTrack detection in excess of the above limit.

# SpeakerTrack setup wizard
## Initial setup

- Available only from new Settings menu UI

  - SpeakerTrack using external microphones will indicate either:

  - Off – needs to be configured or turned off

  - On – configured and running

- Please note, Multi-camera Extended Speaker view needs to be configured first before attempting SpeakerTrack setup!
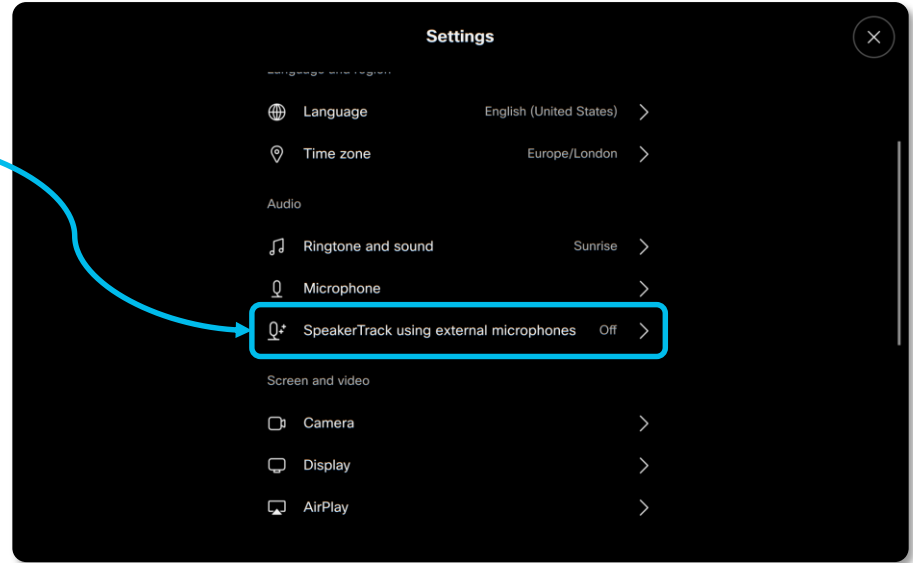
# SpeakerTrack setup wizard
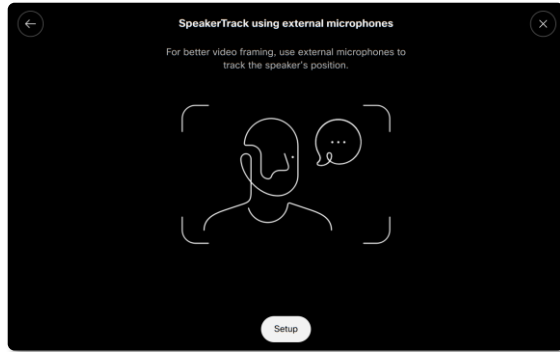






Wizard to guide through setup process
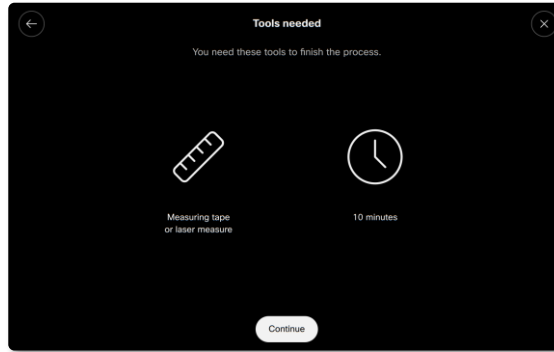
Provide information relating to tools required
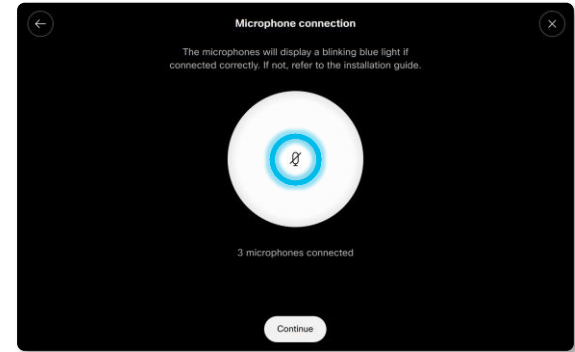
Information relating to how many Table Mic Pros detected (all detected will flash blue ring)

# Table Mic Pro best practices

- Table Mic Pro is directional

- Make sure to use the the adhesive magnetic mounts or recessed into the table
  - 18mm or 23/32" hole for cable exit
  - 105mm or 4 1/8" hole for recessed mount

# Cisco Table Microphone Pro

Zone 4

Zone 1

Zone 3

Zone 2
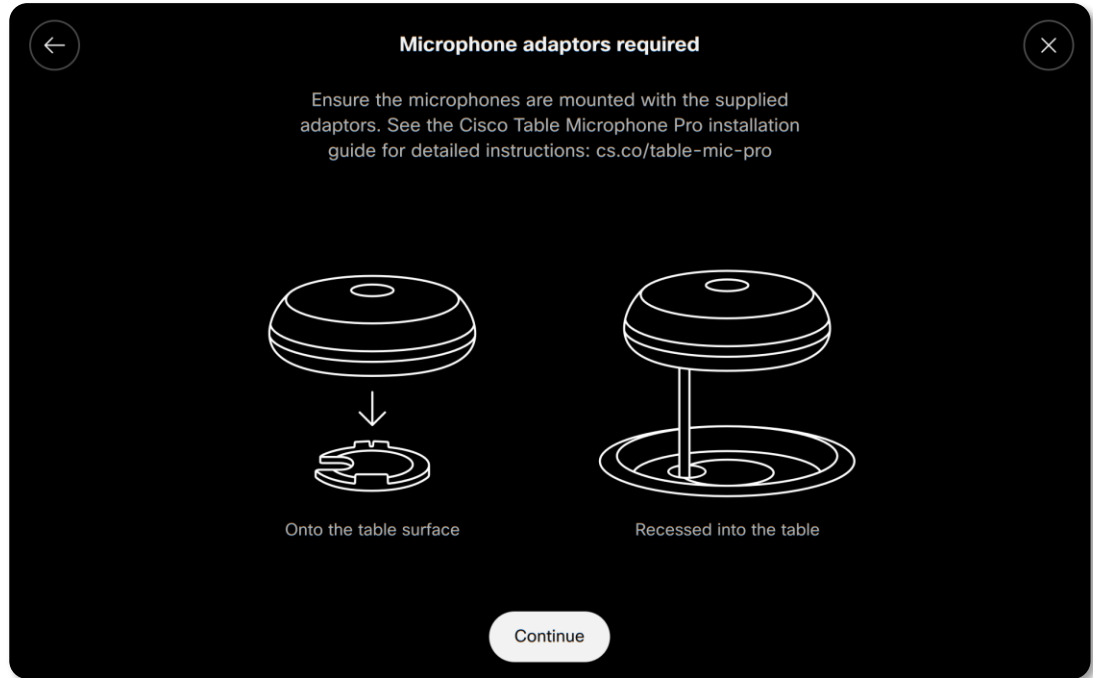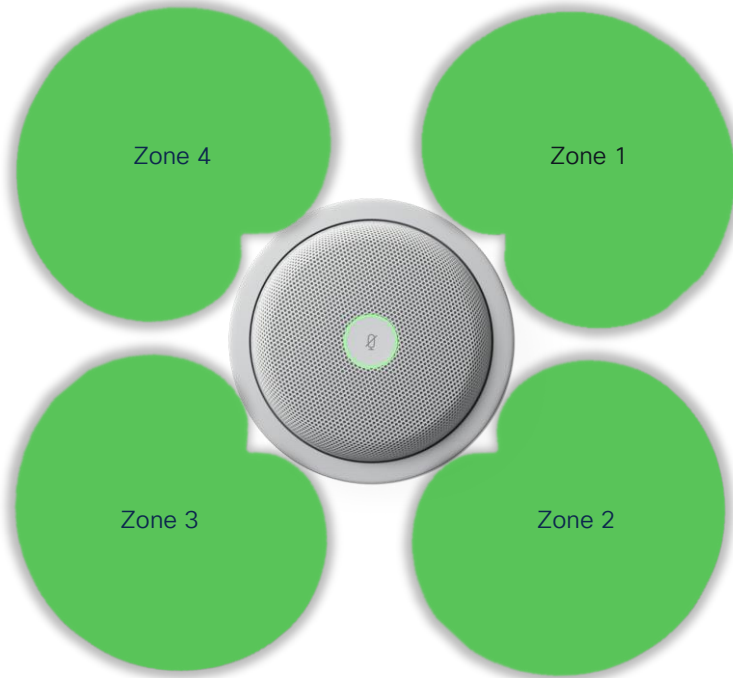
Some important details:

- The four pickup zones are orientated in a clock-wise fashion from where the cable connects to the microphone with the mute button correctly orientated.

- Each zone can be configured independently (for example you might want to disable zones 3&4)

- The Table Mic Pro send back one (1) AES67 stream with four (4) channels to the codec.

# SpeakerTrack setup wizard



- Height from finished floor to tabletop is required to co-ordinate with Mic Array in Quad Camera

- The following steps will repeat for each connected Table Mic Pro. Individual LED ring will flash to ID
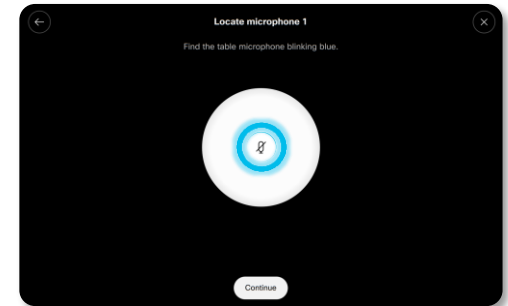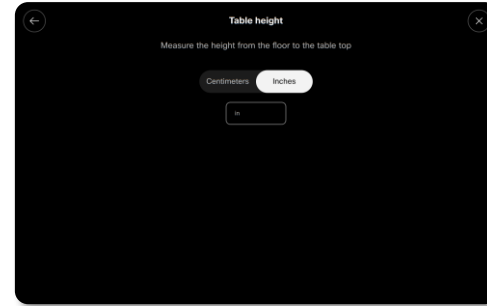
# SpeakerTrack setup wizard

This step will repeat for each connected Table Microphone Pro

1. Identify microphone (flashing LED ring).
2. Use directional pad on Navigator to place Mic ID on Microphone.
3. Feedback given on screen as to location flag (view provided by Quad Camera).
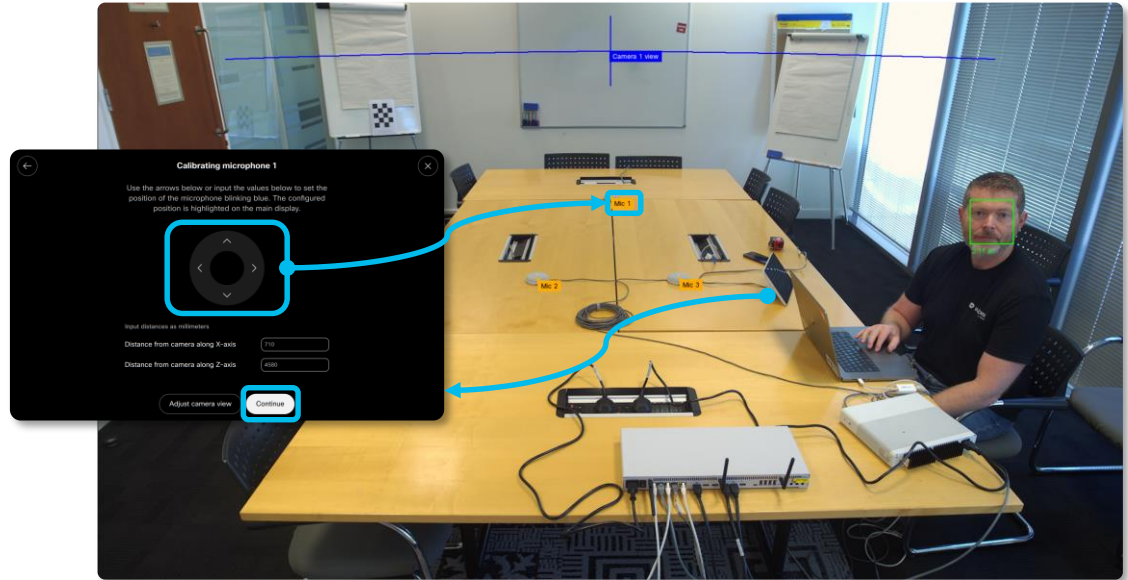
# Speaker Track setup wizard

- Directional orientation needs to be configured.

- Orientation can be changed through use of rotate left and rotate right buttons.

- Repeat steps on previous slide and this slide until all Table Microphones Pros are configured and you reach the Completed screen.
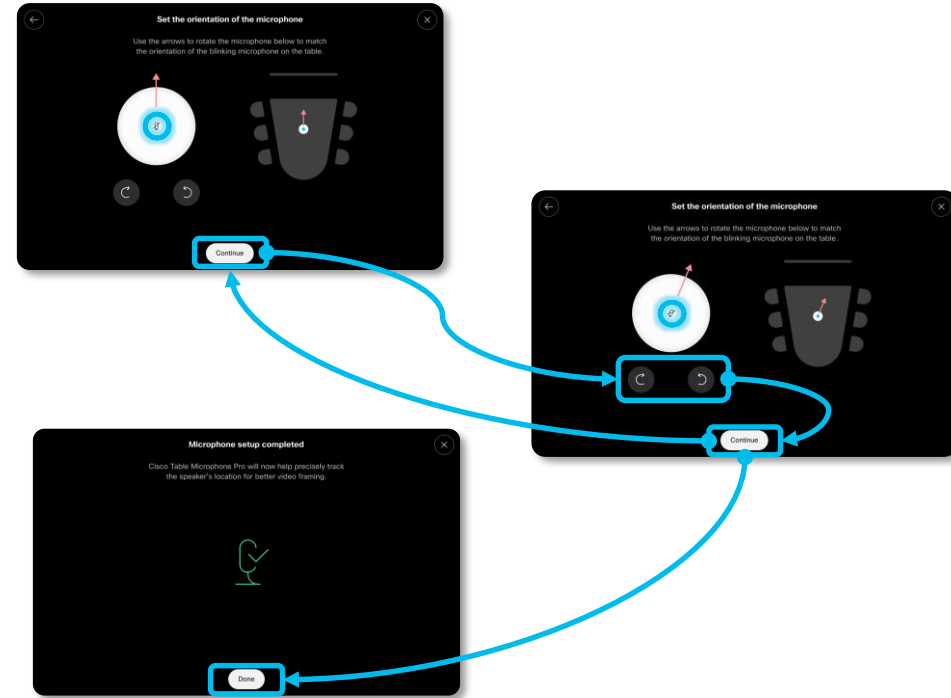
# Complete Your Session Evaluations

Complete a minimum of 4 session surveys and the Overall Event Survey to be entered in a drawing to **win 1 of 5 full conference passes** to Cisco Live 2025.

**Earn 100 points** per survey completed and compete on the Cisco Live Challenge leaderboard.

Level up and earn **exclusive prizes!**

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

# Continue your education

- Visit the Cisco Showcase for related demos

- Book your one-on-one Meet the Engineer 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 at: chthorpe@cisco.com

# Thank you

CISCO

The bridge to possible

CISCO Live!

#CiscoLive

# Additional reference information
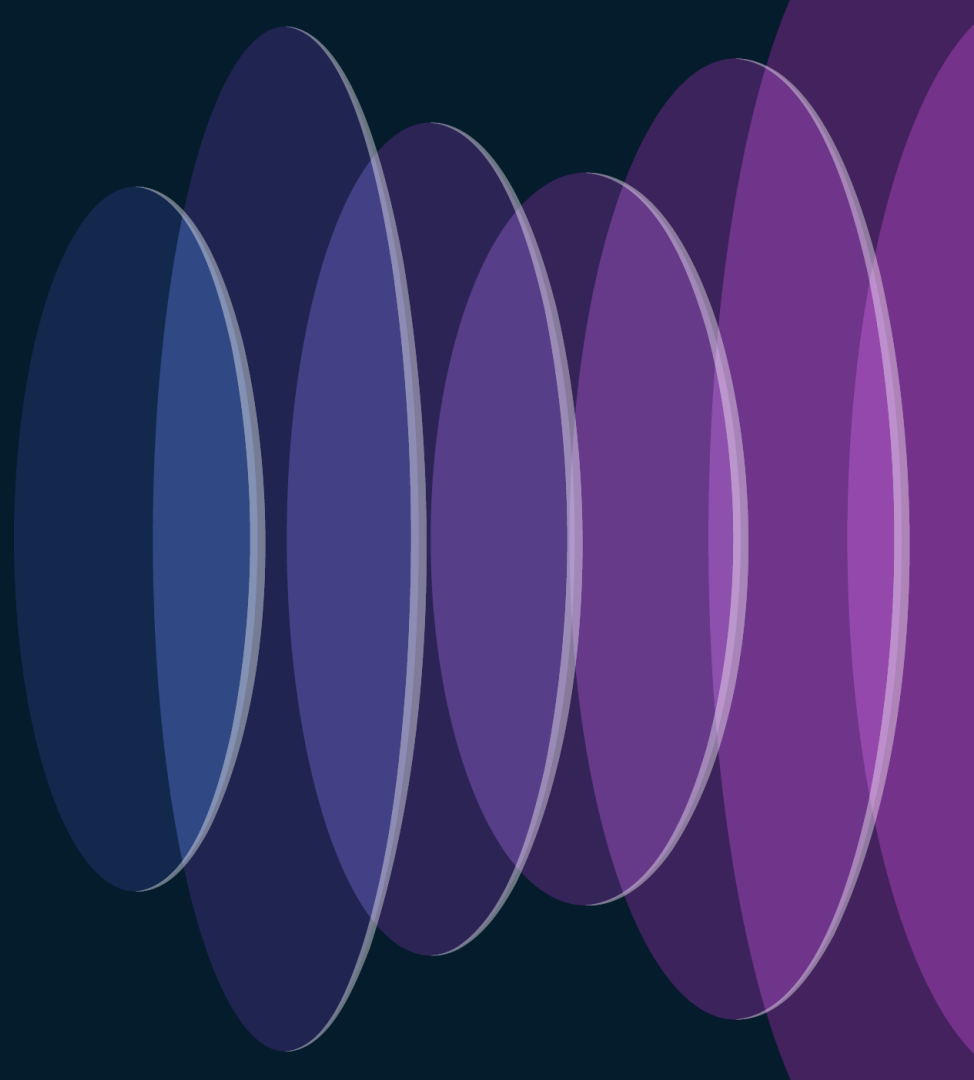
# History Lesson

CISCO Live!
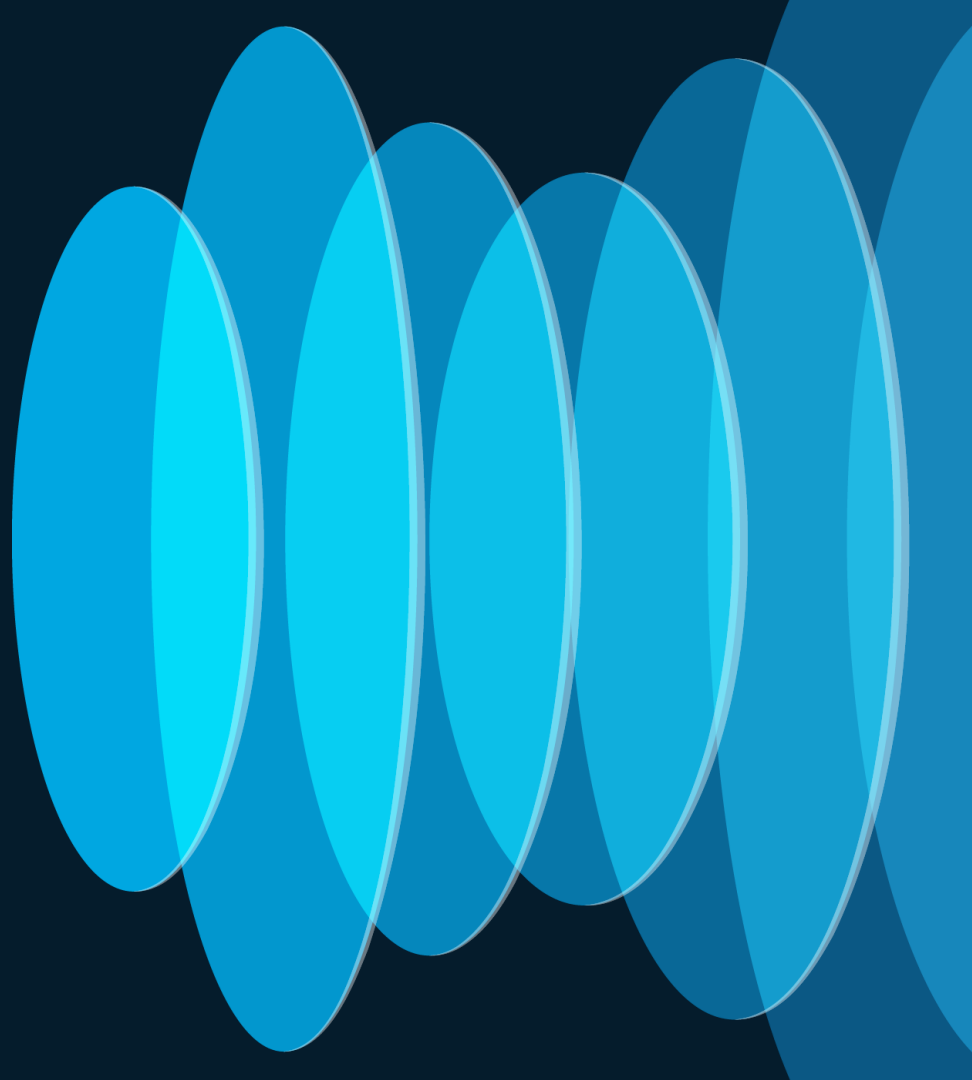
# Cisco Collaboration devices
## Collaboration Endpoint through to RoomOS

Time

Branch

CE 8
11/15

EoL CE8.x.x.x
05/21

Branch

CE 9
04/17

CE9.15.x.x
02/21

CE9.15.3.17
04/21

EoL CE9.15.x.x
01/26

Branch

RoomOS 10.3
04/21

EOL
RoomOS 10.19
06/23

RoomOS
11.9.2.x
11/23

RoomOS
11.14.2.3
03/24

RoomOS
11.17.2.x
ETA 06/24
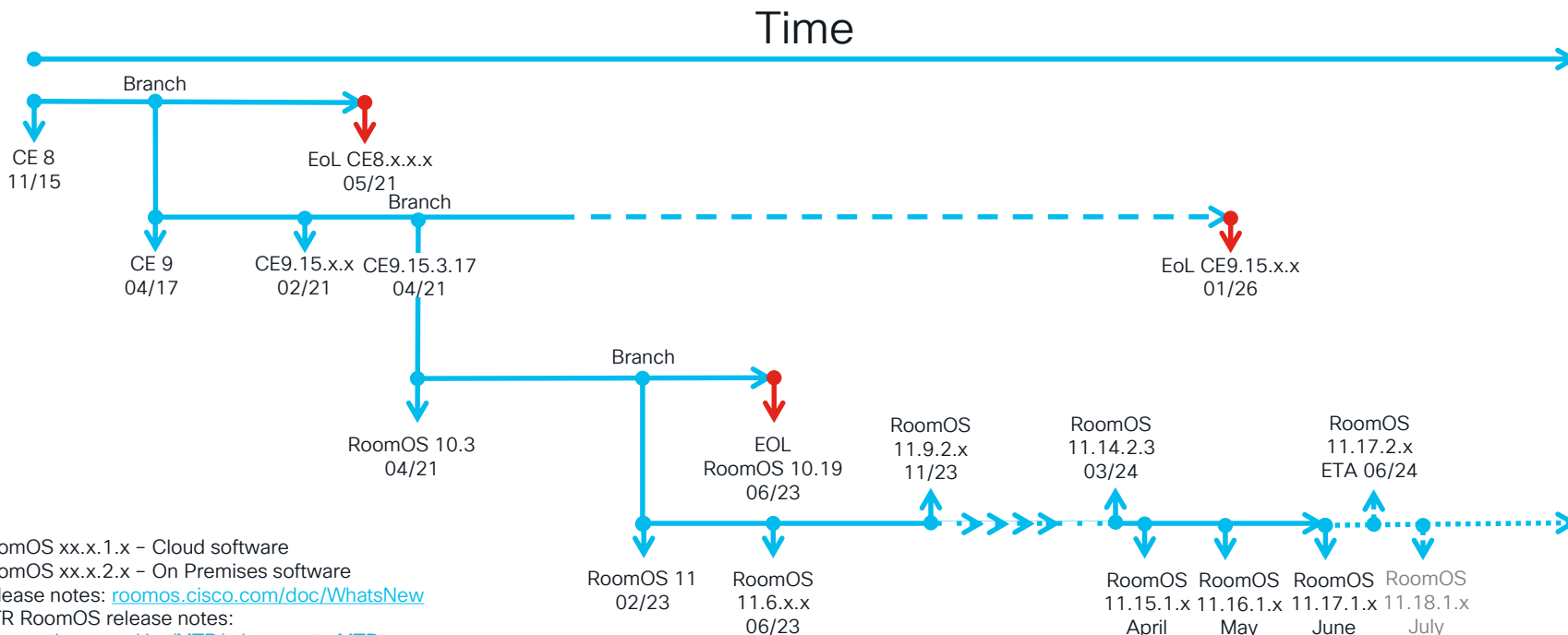
RoomOS xx.x.1.x – Cloud software
RoomOS xx.x.2.x – On Premises software
Release notes: roomos.cisco.com/doc/WhatsNew
MTR RoomOS release notes:
roomos.cisco.com/doc/MTR/releasenotesMTR

RoomOS 11
02/23

RoomOS
11.6.x.x
06/23

RoomOS
11.15.1.x
April

RoomOS
11.16.1.x
May

RoomOS
11.17.1.x
June

RoomOS
11.18.1.x
July

# Collaboration Software Support

## CE

- CE8.x
  - DX Series
  - MX Series (not G1)
  - SX Series
- CE9.x/RoomOS 9
  - All of the above
  - Cisco Desk Pro
  - RoomUSB, Room Kit Mini, Room Kit Plus, Room Kit Pro, Room 55 Series, Room 70 Series.
  - Board/Board S series

## RoomOS 10

- Cisco Desk Series
  - Desk Mini*, Desk LE, Desk Pro, Desk Hub*
- Cisco Board Series
  - Board/Board S Series
  - Board Pro Series*
- Cisco Room Series
  - Room USB, Room Kit Series
  - Room 55 Series and Room 70 Series
  - Room Panorama Series

* When configured with the RoomOS 11 UI

## RoomOS 11

- Cisco Desk Series
  - Desk Mini, Desk, Desk Pro
- Cisco Board Series
  - Board/Board S Series
  - Board Pro Series
- Cisco Room Series
  - RoomUSB/Room Kit Series
  - Room Bar, Room Bar Pro
  - Room 55 Series and Room 70 Series
  - Room Panorama Series

# Cisco Collaboration devices
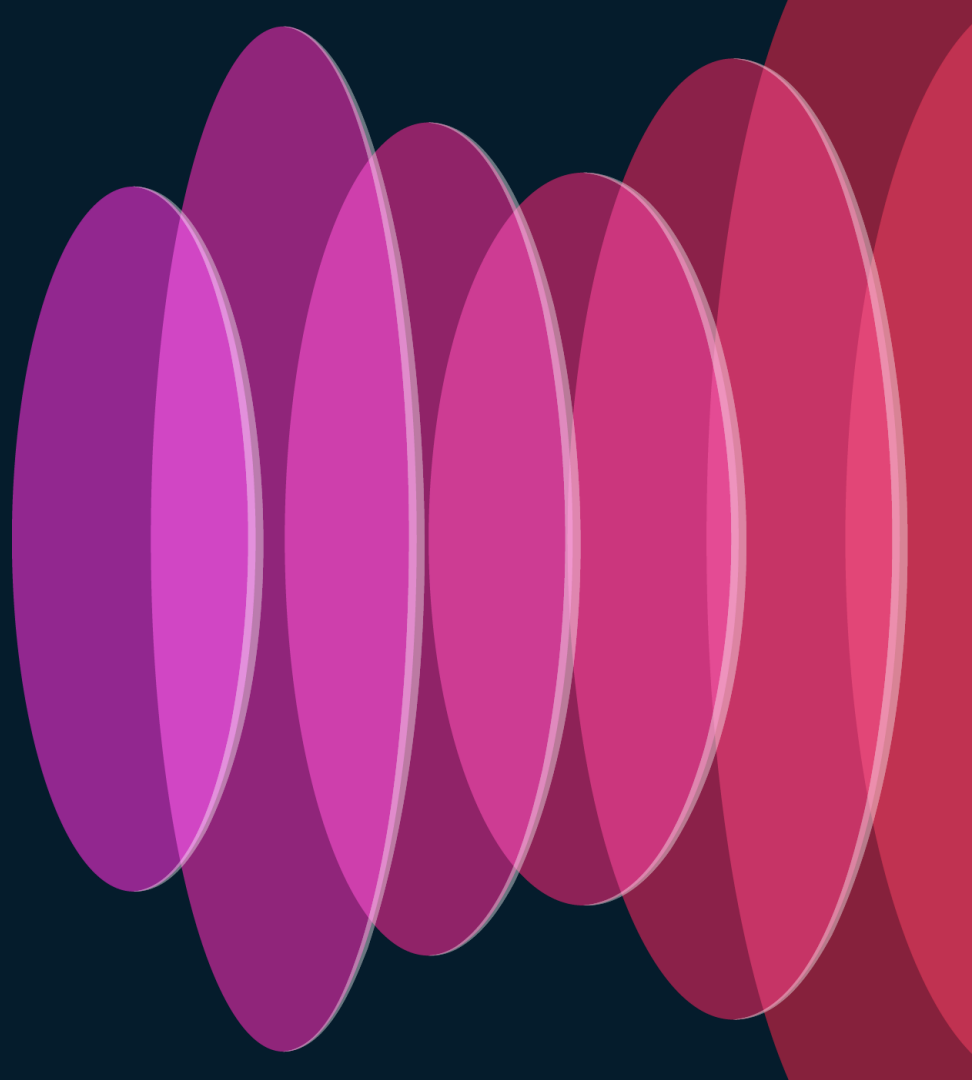
# Device Lifecycle Milestones

## DX Series

- DX70
  - ~~EoS August 2018~~
  - ~~EoL August 2023~~
- DX80
  - ~~EoS January 2021~~
  - EoL January 2026

## MX Series

- MX200G2/MX300G2
  - ~~EoS May 2018~~
  - ~~EoL May 2023~~
- MX700
  - ~~EoS April 2019~~
  - ~~EoL March 2024~~
- MX800
  - ~~EoS April 2019~~
  - ~~EoL March 2024~~

## SX Series

- SX10/10N
  - ~~EoS January 2020~~
  - EoL January 2025
- SX20/20N
  - ~~EoS October 2019~~
  - EoL October 2024
- SX80
  - ~~EoS October 2019~~
  - EoL October 2024

# Device Lifecycle Milestones

## Desk Series

- Desk Limited Edition (Desk LE)
  - Converts with software upgrade to Desk Pro
- Desk Hub
  - ~~EoS December 2022~~
  - ~~EoL March 2023~~

## Board Series

- Board 55
  - ~~EoS March 2019~~, EoL March 2027
- Board 55S
  - ~~EoS May 2022~~, EoL May 2027
- Board 70
  - ~~EoS February 2019~~, EoL May 2027
- Board 70S
  - ~~EoS May 2022~~, EoL May 2027
- Board 85S
  - ~~EoS May 2022~~, EoL May 2027

# Device Lifecycle Milestones

## Room 55 Series

- Room 55
  - ~~EoS November 2023~~, EoL November 2028
- Room 55 Dual
  - ~~EoS June 2023~~, EoL June 2028

## Room 70 Series

- Room 70 Single
  - ~~EoS August 2019~~ (replaced by G2 version)
- Room 70 Dual
  - ~~EoS August 2019~~ (replaced by G2 version)
- Room 70 Single G2
  - ~~EoS February 2022~~, EoL February 2027
- Room 70 Dual G2
  - ~~EoS July 2023~~, EoL July 2028

# Device Lifecycle Milestones

- Cisco Room USB
  - EoS October 2024, EoL October 2029
- Cisco Room Kit Mini
  - EoS October 2024, EoL October 2029
- Cisco Room Kit Mini, Room Kit and Kit Plus NON-RADIO versions
  - ~~EoS November 2023~~, EoL May 2029

- Cisco Board Pro 55 and Cisco Board Pro 75
  - EoS Nov 2024, EoL Nov 2029

# Useful links

- End-of-life and End-of-Sale notices
  - [Cisco Room Series](#)
  - [Cisco Board Series](#)
  - [Cisco Desk Series (includes DX series)](#)
  - [Cisco MX Series](#)
  - [Cisco SX Series](#)

# Comparisons
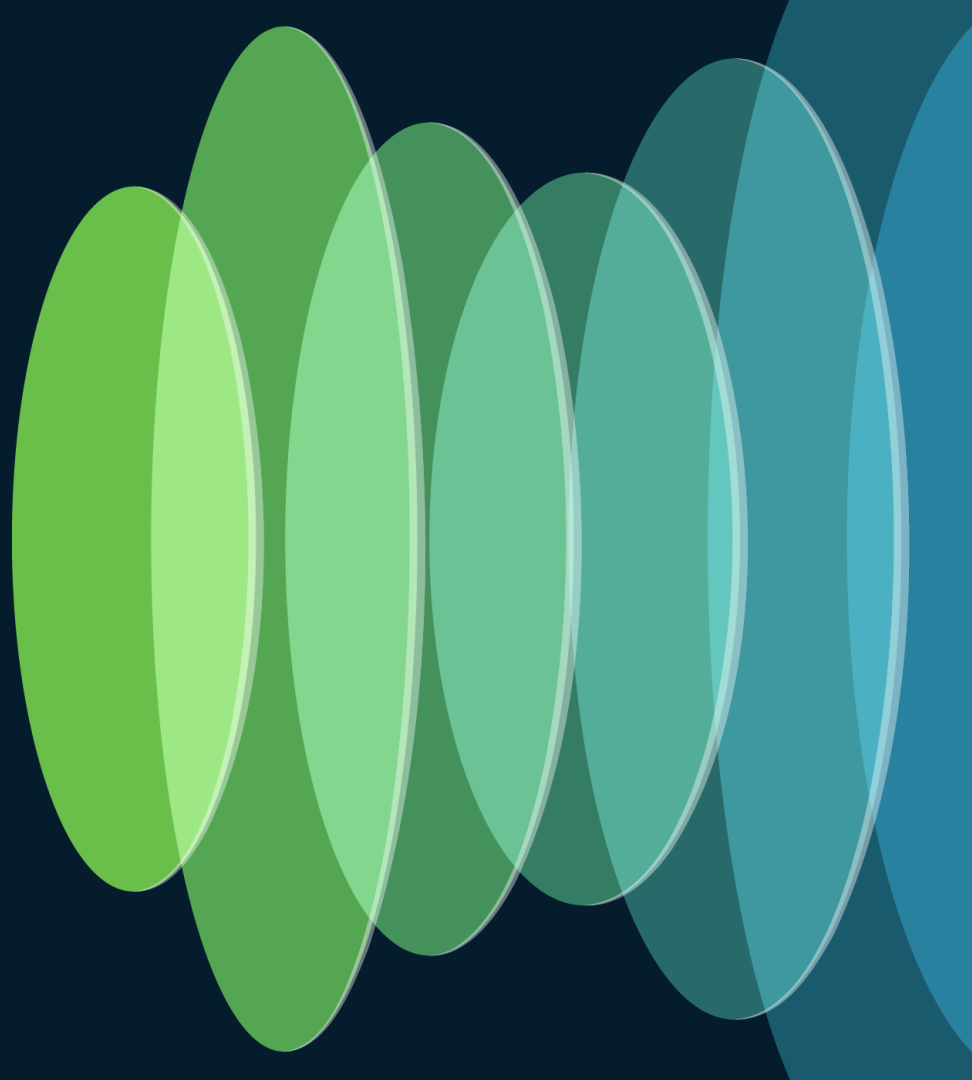
# Raising the bar for hybrid workspaces

| | Room Bars | |
|---|---|---|
| | **Room Bar** | **Room Bar Pro** |
| Camera | Single-lens, 12MP, 120º HFOV | Dual-lens, 96MP, 112º & 70º HFOV |
| Audio | Spatial sound; internal mics + mic extension | Spatial sound; built-in mics; audio over IP, USB & analog |
| Screen | Dual screen (4Kp60) | Triple screen (4Kp60) |
| Controls | Touch controls with Room Navigator | Touch controls with Room Navigator |
| I/O | Extended with analogue, USB-A/C, HDMI, PoE | Extended with analogue, USB-A/C, HDMI, PoE |
| Room | Huddle, small meeting room | Medium |
| Interop | Native RoomOS and Microsoft Teams | Native RoomOS and Microsoft Teams |
| Form Factor | Integrated video bar appliance | Integrated video bar appliance |

# Raising the bar for hybrid workspaces

| | Room Kits | | |
|---|---|---|---|
| | **Room Kit EQ** | **Room Kit EQX** | **Room Kit Pro** |
| **Camera** | Quad-lens, 80MP, 83° HFOV, 3x50° HFOV | Quad-lens, 80MP, 83° HFOV, 3x50° HFOV | Quad-lens, 80MP, 83° HFOV, 3x50° HFOV |
| **Audio** | Mono speakers; Audio over IP, USB & analog. Audio API's | Immersive audio system. Audio over IP, USB & analogue. Audio API's | Mono speakers; Audio over IP, USB & analog. Audio API's |
| **Screen** | Triple screen (4Kp60) | Dual 65-75" (not supplied) + 1 additional screen | Triple screen (2x4Kp60, 1x4Kp30) |
| **Controls** | Touch controls with Room Navigator | Touch controls with Room Navigator | Touch controls with Room Navigator |
| **I/O** | Advanced with analogue, USB-A/C, HDMI, PoE | Advanced with analogue, USB-A/C, HDMI, PoE | Advanced with analogue, USB-A, HDMI, SDI, PoE |
| **Room** | Medium to Large | Medium to Large, Flagship workspaces | Extra large, specialist AV integration |
| **Interop** | Native RoomOS and Microsoft Teams | Native RoomOS (Microsoft Teams in beta) | Native RoomOS and Microsoft Teams |
| **Form Factor** | Modular Room Kit appliance | Integrated room kit appliance with mounting and frame design | Modular Room Kit appliance |

# Room Bar Pro vs Room Kit

| | Room Bars | Room Kit |
|---|---|---|
| | **Room Bar Pro** | **Room Kit** |
| **Camera** | Dual-lens system, 96MP, 112° & 70° HFOV. Up to 6m camera reach for optimal framing at 1080p | 15MP single-lens camera with 83° HFOV. Up to 5m camera reach for optimal framing and tracking at 1080p |
| **Mounting** | Single mount unit for wall and screen. Can be mounted above or below screen (image and speaker front flip) | Separate wall and screen mounts. Mounting upside-down not supported |
| **Screen** | Triple Screen support | Dual Screen support |
| **Speaker** | 3-channel stereo loudspeaker system. 1 x audio line out or 2 x USB-A for external speakers | 5-point speaker system. 1 x audio line out or 1 x USB-A external speaker |
| **I/O** | Extended with 3 x analogue, 2 x USB-A, 1 x USB-C, 3 x HDMI out, 1 x HDMI in, 4 x Ethernet (3 x PoE) | Standard with 3 x analogue, 1 x USB-A, 2 x HDMI out, 1 x HDMI in, 2 x Ethernet |
| **Microphone** | Advanced built-in mic array with 4m pickup range. Audio over analogue, USB or IP (Table Mic Pro | Built-in mic array only for speaker tracking. Separate mic for audio pick-up. Mic extension over 2 x analogue or 1 x USB-A |
| **Interop** | Native RoomOS with rich third-party interop and native Microsoft Teams Rooms. Single-cable BYOD via USB-C | Native RoomOS with rich third-party interop |
| **Form Factor & compute** | AI powered NVIDIA chipset. Color options; built-in power supply. | Standard NVIDIA chipset. Single color. External power supply |

# Board Pro vs Board Pro G2

| | Board Pro | Board Pro G2 |
|---|---|---|
| |  |  |
| Compute | Featured NVIDIA chipset and powerful compute module | Features latest NVIDIA AI chipset and upgraded compute module for better performance |
| Main Camera | 24MP dual camera system with 120° wide-angle lens and 85° tele-lens | 96MP dual camera system with 112° wide-angle lens and 70° tele-lens |
| Multi Camera | Supports connectivity with external PTZ camera for AI presenter tracking. May require ethernet switch. | Supports connectivity with external PTZ camera for AI presenter tracking. Additional ethernet port included |
| Mounting | Integrated room device with options for wall and floor | Integrated room device with options for wall and floor |
| Screen Extension | Supports up to 1 x additional screen for mirroring content or live video | Supports up to 2 x additional screens for mirroring content or live video |
| Microphone | Built-in mic array. Audio extension over IP, USB & analog. Connects with up to 3x Cisco IP microphones. | Built-in mic array. Audio extension over IP, USB & analog. Connects with up to 3x Cisco IP microphones. |
| Interop | Native support for Cisco Rooms (Webex meetings and advanced third-party video interop) and Microsoft Teams | Native support for Cisco Rooms (Webex meetings and advanced third-party video interop) and Microsoft Teams |
| Wi-Fi Connection | Supports Wi-Fi 2.4 GHz and 5 GHz | Supports Wi-Fi 2.4 GHz, 5 GHz and 6 GHz (6E) |