Hybrid Work

Jaroslav Martan
jmartan@cisco.com

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Agenda

- Hybrid Work – not only Collaboration
  - Security – Duo & AnyConnect
  - Connectivity & Visibility – Thousand Eyes
  - Smart Buildings – Cisco Spaces
- Cisco Video Devices
- Microsoft Teams Room (MTR) – native MS Teams client in Cisco device
- Join any meeting – SIP, Zoom, MS Teams, Google,…

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Where Cisco is innovating?

Smart buildings

Sustainability

Collaboration

Security

Visibility & Mgmt

Connectivity

Hybrid Work In Practice

Work from Home

Work from Office

Work anywhere else

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Hybrid Work In Practice

Work from Home

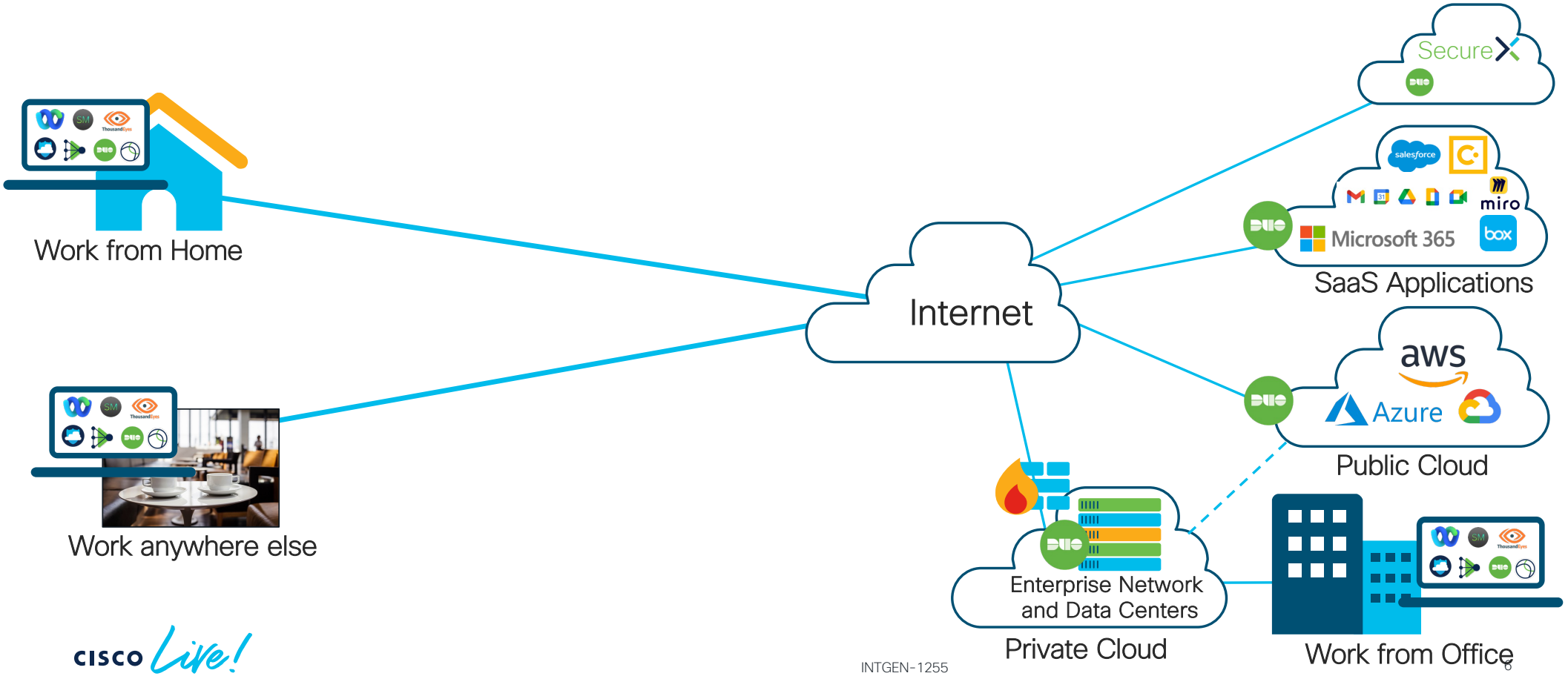
Work anywhere else

SaaS Applications

Public Cloud

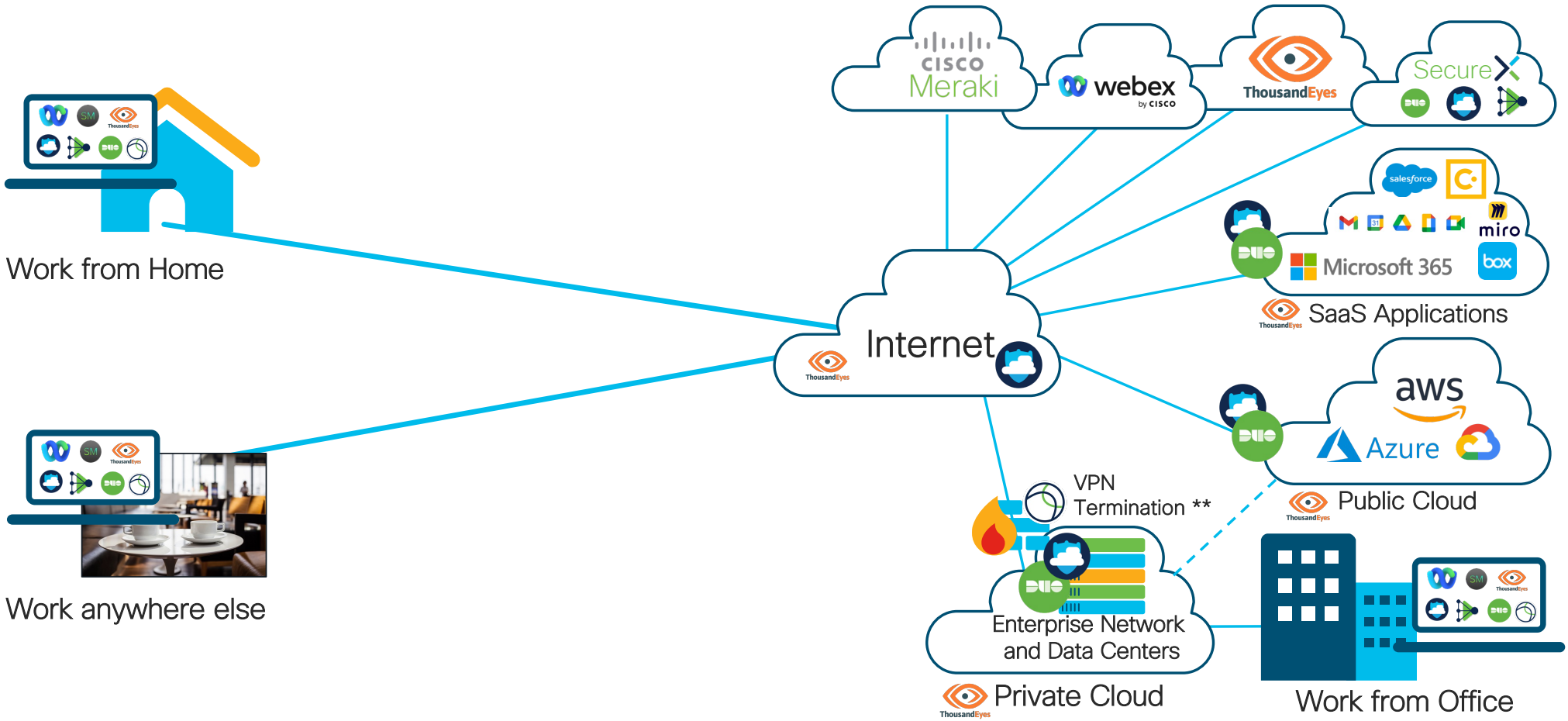
Work from Office

Hybrid Work In Practice



Hybrid Work in practice

Collaboration, security, visibility, and management delivered from the cloud



Cisco Secure Client (a.k.a. AnyConnect) Much more than VPN

Basic VPN

Advanced VPN

Endpoint Compliance

Enterprise Access

Cloud Edge

Threat Protection

Network Visibility

Cisco AnyConnect

Integration with other Cisco solutions

ISR

ASR / CSR

Secure Firewall

Cisco Identity Services Engine

Cisco Umbrella

Switches and Wireless Controllers

Secure Endpoint

NetFlow Collectors

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Digitizing our real estate

Cisco Smart Workspaces

Smart buildings cloud platform that ingests & consolidates the “data exhaust” from these various sensors

Meraki Cameras

Floor occupancy
(macro floor plate loading)

Cisco Wi-Fi Access Points

People count, people’s physical location to track their journey through the office

Air Quality

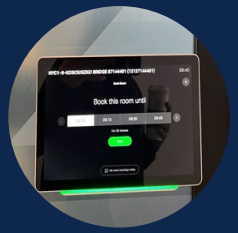
Molex sensors for true air quality / CO2, temperature, humidity, VOC

Occupancy

Molex sensors for people count

Cisco Devices

People count,
Ambient Noise



Cisco Navigator

Temperature, Humidity, VOC (volatile organic compounds)

Shading

Mecho shading sensors for Lux level to help maximize daylight and manage visual comfort & heat load

Lighting

Low voltage lighting powered by PoE can be is both more efficient and can easily be powered via solar.

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The Cisco Spaces Platform

Native & Partner Apps, Meta API & Data Out

Use cases that make your spaces safe, smart, sustainable and seamless
Multi-sensor & location API designed for high volume data streaming

Indoor Location Services

Onboard people & things seamlessly. Understand their presence and identity across all your locations

Sensor Framework & IoT Services

Purchase, onboard, monitor and manage pre-validated & integrated multi-vendor sensors on top of your existing Cisco network

Rich 3D Indoor Maps & Location Metadata

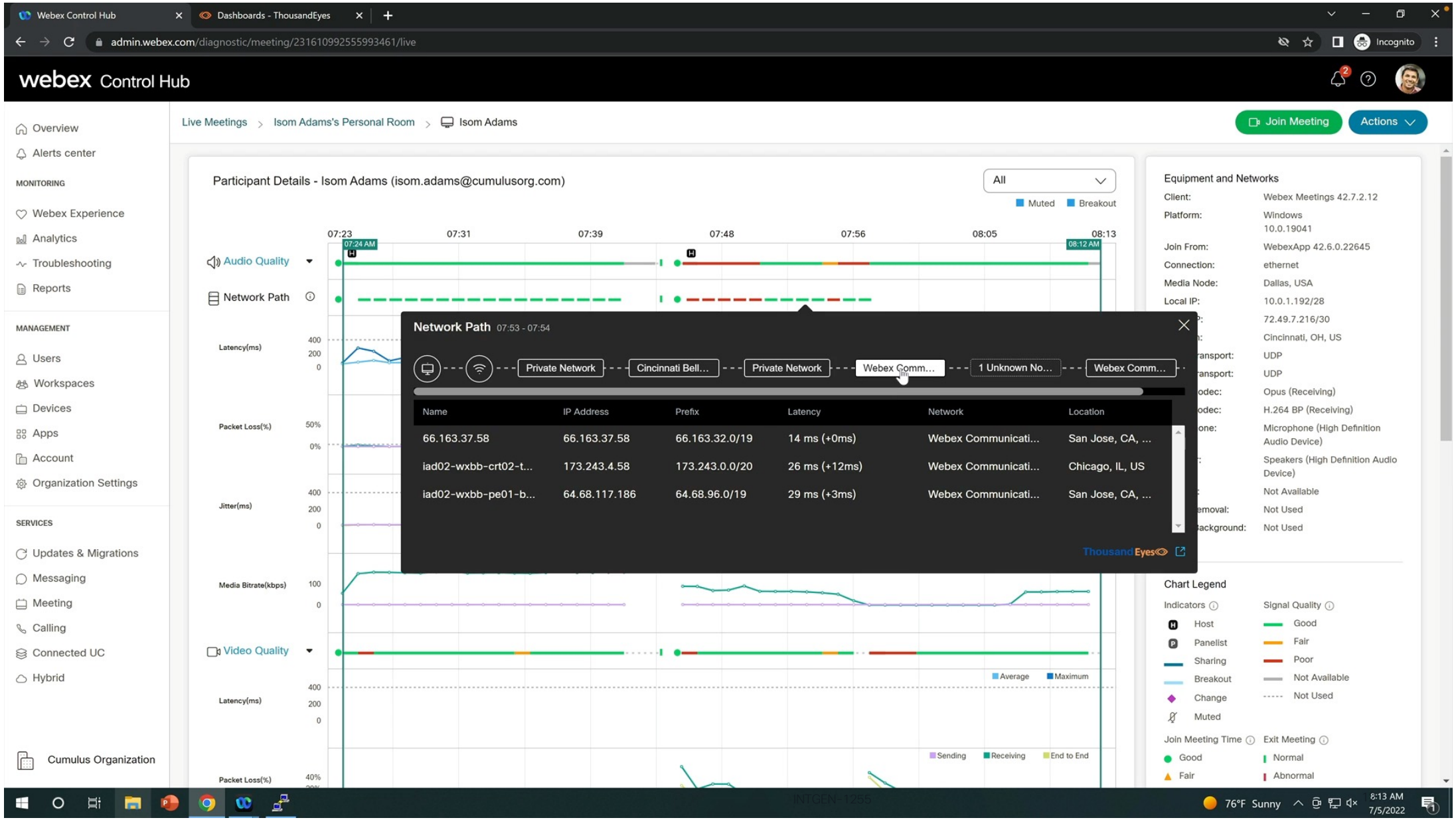
Transform your static floor plans into interactive 3D maps with uniform metadata & location context

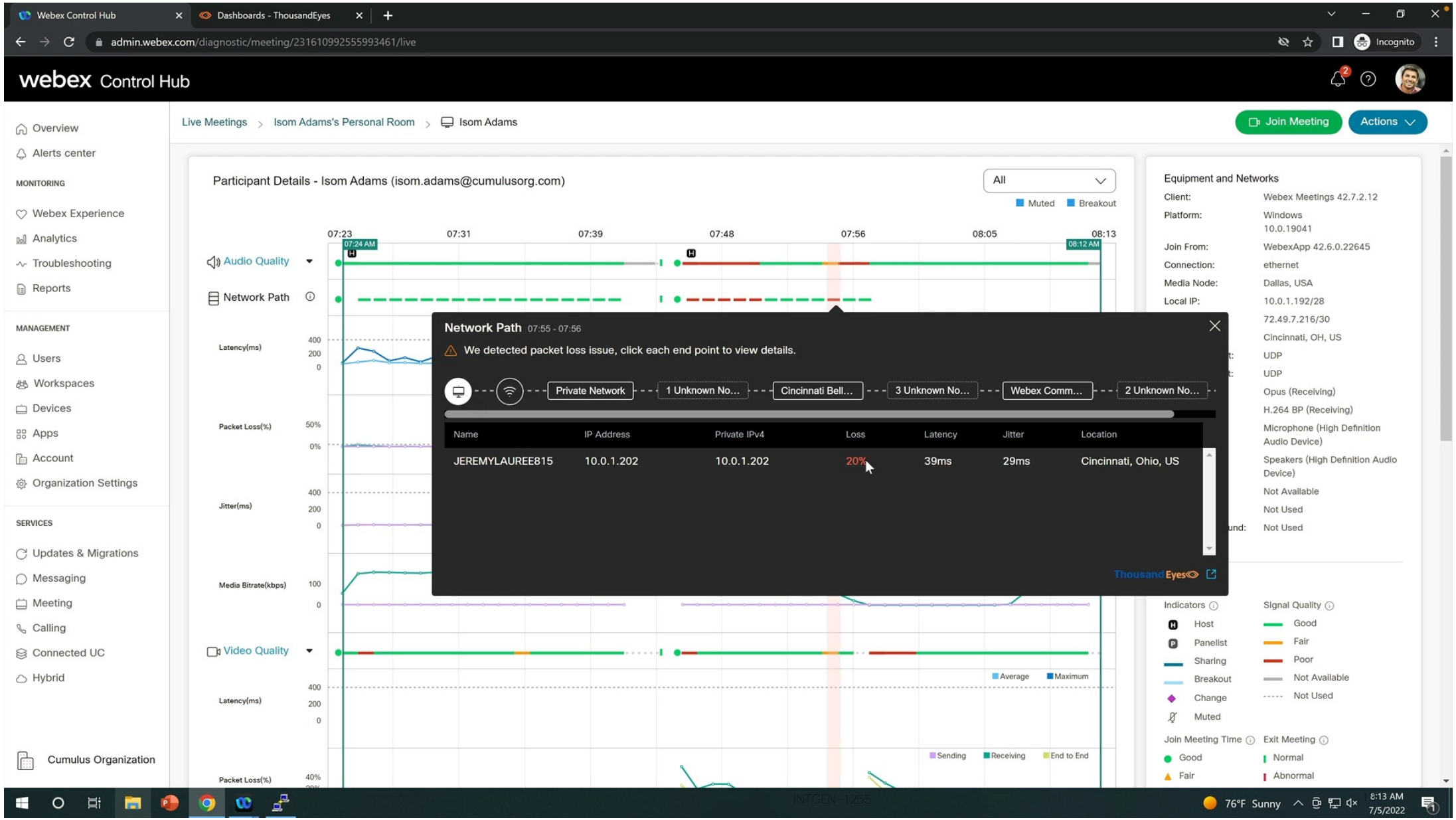
Cisco Network & Sensors

Connect your robust Cisco networking & collaboration products to a seamless smart building cloud

cisco Catalyst cisco Meraki

webex


Webex Control Hub
Dashboards - ThousandEyes
admin.webex.com/diagnostic/meeting/231610992555993461/live
Incognito
webex Control Hub
Overview
Alerts center
MONITORING
Webex Experience
Analytics
Troubleshooting
Reports
MANAGEMENT
Users
Workspaces
Devices
Apps
Account
Organization Settings
SERVICES
Updates & Migrations
Messaging
Meeting
Calling
Connected UC
Hybrid
Cumulus Organization
Live Meetings
Isom Adams's Personal Room
Isom Adams
Join Meeting
Actions
Participant Details - Isom Adams (isom.adams@cumulusorg.com)
All
Muted
Breakout
07:23
07:31
07:39
07:48
07:56
08:05
08:13
07:24 AM
08:12 AM
Audio Quality
Network Path
Latency(ms)
Packet Loss(%)
Jitter(ms)
Media Bitrate(kbps)
Video Quality
Average
Maximum
Sending
Receiving
End to End
Network Path 07:53 - 07:54
Private Network
Cincinnati Bell...
Private Network
Webex Comm...
1 Unknown No...
Webex Comm...
Name
IP Address
Prefix
Latency
Network
Location
66.163.37.58
66.163.37.58
66.163.32.0/19
14 ms (+0ms)
Webex Communicati...
San Jose, CA, ...
iad02-wxbb-crt02-t...
173.243.4.58
173.243.0.0/20
26 ms (+12ms)
Webex Communicati...
Chicago, IL, US
iad02-wxbb-pe01-b...
64.68.117.186
64.68.96.0/19
29 ms (+3ms)
Webex Communicati...
San Jose, CA, ...
ThousandEyes
Equipment and Networks
Client: Webex Meetings 42.7.2.12
Platform: Windows 10.0.19041
Join From: WebexApp 42.6.0.22645
Connection: ethernet
Media Node: Dallas, USA
Local IP: 10.0.1.192/28
72.49.7.216/30
Cincinnati, OH, US
UDP
UDP
Opus (Receiving)
H.264 BP (Receiving)
Microphone (High Definition Audio Device)
Speakers (High Definition Audio Device)
Not Available
Not Used
Not Used
Chart Legend
Indicators
Host
Panelist
Sharing
Breakout
Change
Muted
Signal Quality
Good
Fair
Poor
Not Available
Not Used
Join Meeting Time
Good
Fair
Exit Meeting
Normal
Abnormal
76°F Sunny
8:13 AM
7/5/2022


Webex Control Hub
Dashboards - ThousandEyes
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webex Control Hub
Overview
Alerts center
MONITORING
Webex Experience
Analytics
Troubleshooting
Reports
MANAGEMENT
Users
Workspaces
Devices
Apps
Account
Organization Settings
SERVICES
Updates & Migrations
Messaging
Meeting
Calling
Connected UC
Hybrid
Cumulus Organization
Live Meetings
Isom Adams's Personal Room
Isom Adams
Join Meeting
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Participant Details - Isom Adams (isom.adams@cumulusorg.com)
All
Muted
Breakout
07:23
07:31
07:39
07:48
07:56
08:05
08:13
07:24 AM
08:12 AM
Audio Quality
Network Path
Latency(ms)
Packet Loss(%)
Jitter(ms)
Media Bitrate(kbps)
Video Quality
Average
Maximum
Sending
Receiving
End to End
Network Path 07:55 - 07:56
We detected packet loss issue, click each end point to view details.
Private Network
1 Unknown No...
Cincinnati Bell...
3 Unknown No...
Webex Comm...
2 Unknown No...
Name
IP Address
Private IPv4
Loss
Latency
Jitter
Location
JEREMYLAUREE815
10.0.1.202
10.0.1.202
20%
39ms
29ms
Cincinnati, Ohio, US
ThousandEyes
Equipment and Networks
Client:
Webex Meetings 42.7.2.12
Platform:
Windows 10.0.19041
Join From:
WebexApp 42.6.0.22645
Connection:
ethernet
Media Node:
Dallas, USA
Local IP:
10.0.1.192/28
72.49.7.216/30
Cincinnati, OH, US
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Signal Quality
Good
Fair
Poor
Not Available
Not Used
Join Meeting Time
Good
Fair
Exit Meeting
Normal
Abnormal
76°F Sunny
8:13 AM
7/5/2022

VIEWS

Add a filter

Save and Share

Automated Session Tests

Scheduled Tests

Browser Sessions

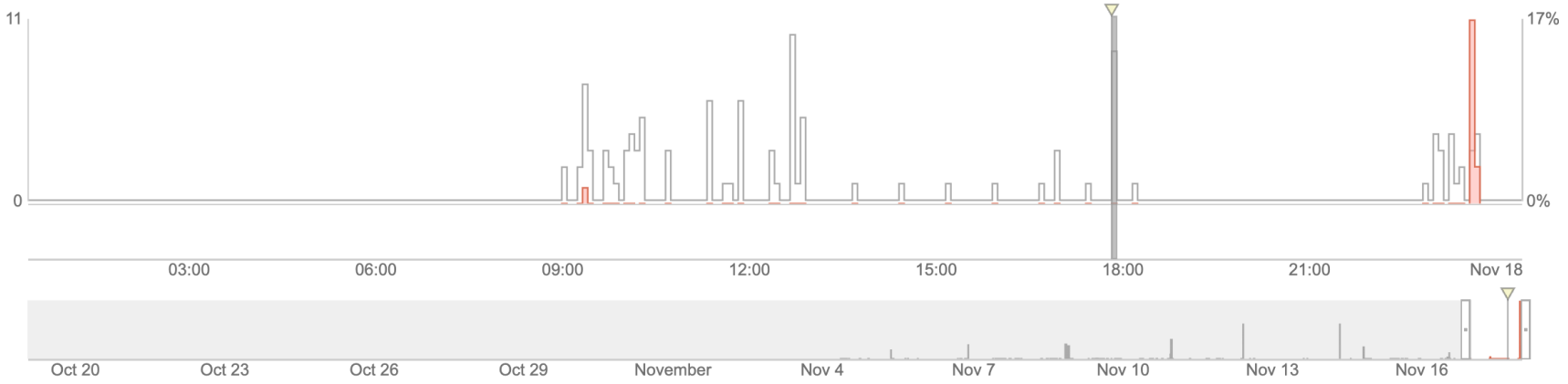
Visited Pages

Network

Local Networks

24h 7d 14d Metric **Loss**

Average Loss Pages



Overview Pages Sessions

Showing data from **Thu, Nov 17 17:50 - 17:55 EST** (6 hours ago)

Latest

9 pages

Experience Score

51%

Page Speed

Average

Total Errors

4

Browser Session Alerts

0

Experience Score by Visited Site

www.google.com	0%
www.webex.com	91%

Page Speed

www.google.com	Average
www.webex.com	Fast

Errors by Category

Other	4

Active Alerts

No data

Experience Score by Agent

pgiralt-m-70mv	51%

Cisco hybrid work offers

Starting at ~ EUR 919

Work from Home offer

Entry	Standard	Professional	Premium
Meraki Z3C, Cisco Camera, Cisco Headset + Dock	Meraki Z3C, Cisco Desk Mini, Cisco Headset + Dock	Meraki MX68CW, Cisco Desk, Cisco Headset + Dock	Meraki MR46, MX75, MG21, Cisco Desk Pro, Cisco Headset + Dock

Work from Office offer

Cisco Validated Framework

Catalyst (DNA Center) | Meraki (Cisco Meraki Dashboard)

Hot Desks	Quiet Rooms (1/2 person)	Huddle Spaces (4/8 person)
Cisco Desk Camera	Cisco Desk or Desk Pro	Cisco Room Bar or Board + Cisco Room Navigator

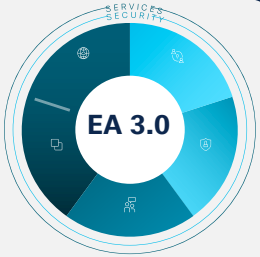
Conference Rooms
(5, 6/7, 9/10, or 15 person)
Webex Room Kit Plus, table mics + Webex Room Navigator

Cisco SPACES Smart Workspaces

Hybrid Work Software Offer

- Webex Suite
- Duo Access
- Umbrella DNS Advantage
- Secure Endpoint Advantage
- Secure Client Premier
- Thousand-Eyes Endpoint Agent
- Meraki Systems Manager

GBP 11.75 / EUR 13.34‡
CSRP PUPM



Support and Services
Embedded, Add-on, and/or Consulting Services

‡ Cisco Suggested Resell Price (CSRP) shown in local currency of $14.50 USD at a discount that requires Webex Suite or Hybrid Work Software Suite

Cisco Video Devices

cisco Live!

Purpose-built devices for every space

OFFICE HOME ANYWHERE

Headphones

Desk Series

Room Kit Series

Board series

Room Panorama

Meraki

Desk Phone

webex

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Purpose-built devices for every space

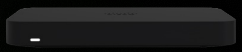
OFFICE HOME ANYWHERE

Headphones

Cameras

Desk Mini

Desk Series



Meraki

webex

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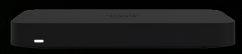
Purpose-built devices for every space

OFFICE HOME ANYWHERE

Headphones

Mobile

Cameras



Meraki

webex

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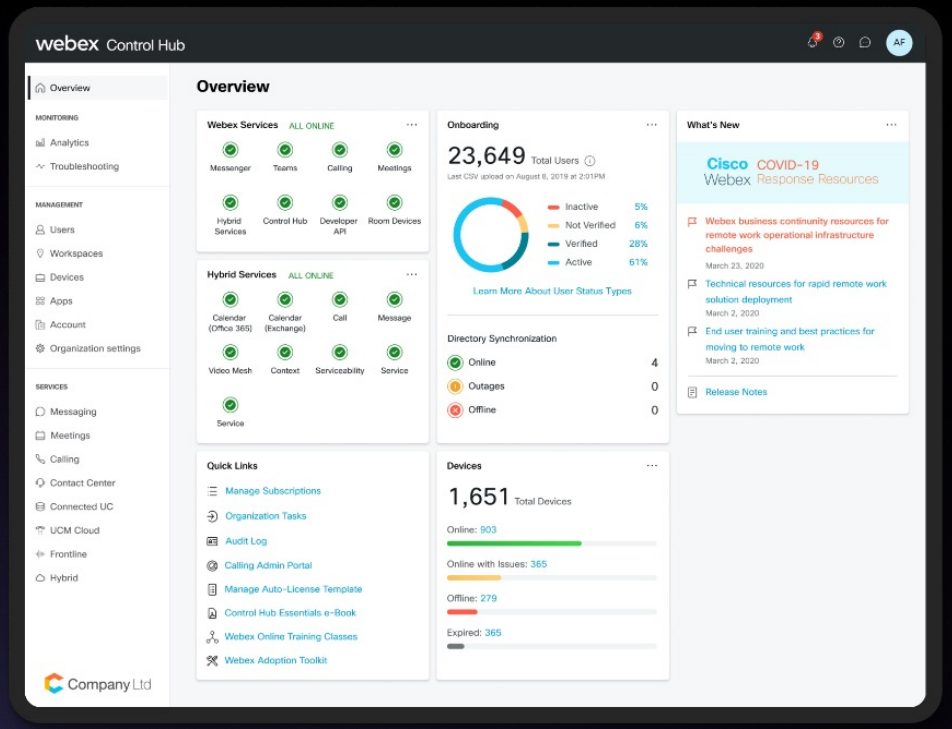
→ Managed

Manage every device, user and workspace

Single-pane-of-glass management, provisioning, diagnostics, analytics and workspace insights in Control Hub.



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Introducing Cisco Room Kit EQ

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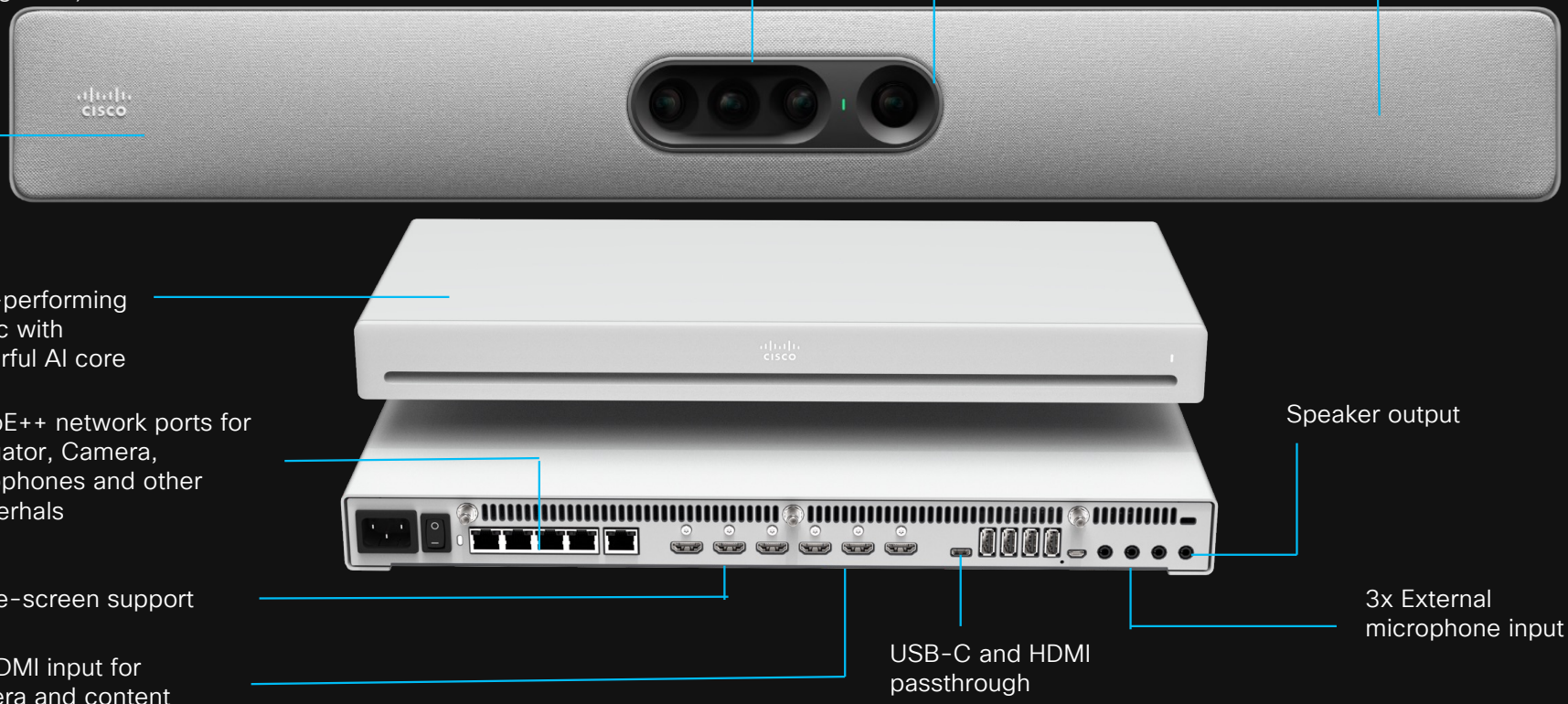
Engineered for collaboration



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Codec EQ bundles

Room Kit EQ PTZ 4K

Featuring PTZ 4K Camera

Room Kit EQ

Featuring the Quad Camera

Codec EQ

Standalone

Optional Room Navigator touch controller

Codec Plus vs Codec EQ

Codec Plus

2x HDMI out

3x HDMI in

3x Eth (2xPoE)

3x Mic

1x Line-out

2x USB-A

Codec EQ

3x HDMI out

3x HDMI in + 1xUSB-C

5x Eth (1xPoE + 4xPoE++ (Total 90W))

3x Mic (MiniJack) + 8x AoIP (Table Mic Array over LAN)

1x Line-out

4x USB-A

Introducing Webex Room Bar

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Taking room collaboration to the next level

Webex Room Kit Mini

Integrated, codec-powered video bar for small meeting rooms

Webex Room Bar

All of this, and better quality, more flexibility, more integrations, more intelligence and more supported workspaces

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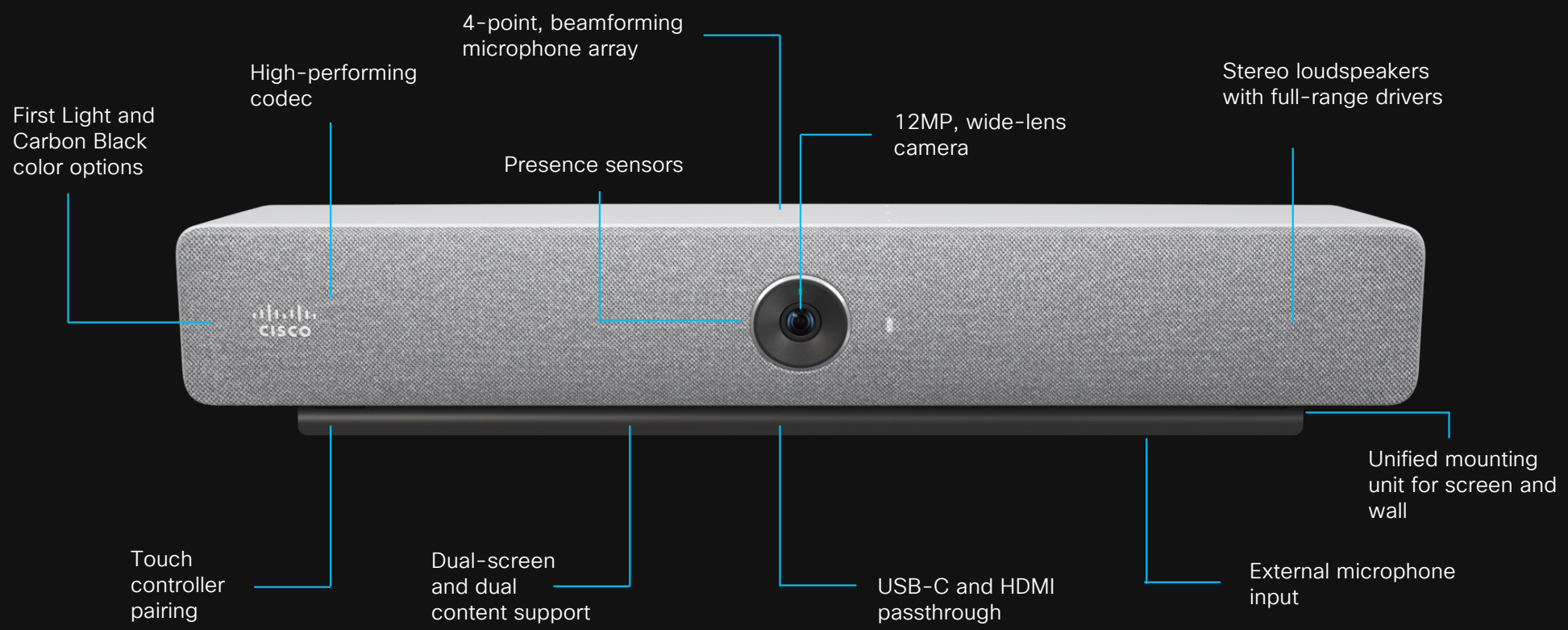
Purpose-built for collaboration



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→ Flexible

Dual-screen support

Augmented experience with the option to display live video or video and content on two screens

webex

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→ Flexible

USB-C passthrough & content sharing

Connect Room Bar with your laptop for an immersive video, audio and content sharing experience, using any meeting platform

webex

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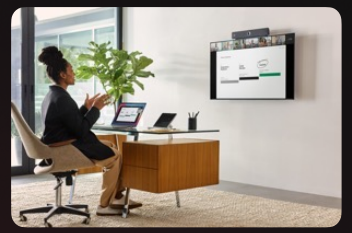
→ Inclusive

Audio intelligence to enable immersive meetings

Noise-cancelling microphone array

Directional, stereo sound

Automatic gain control



ML-powered noise removal

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People Focus
ensuring everyone is represented

Before

After

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Best Overview with smart cropping

Remove space between individuals in the view sent from meeting rooms

Before

After

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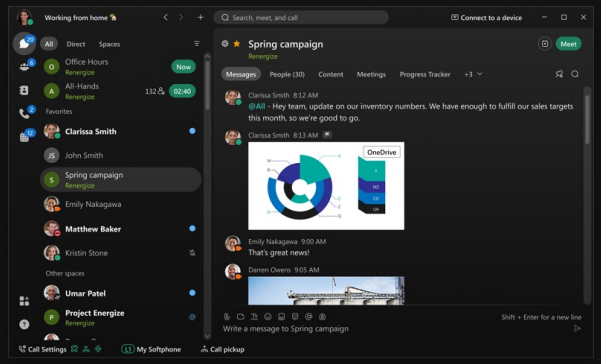
MTR
MS Teams Room

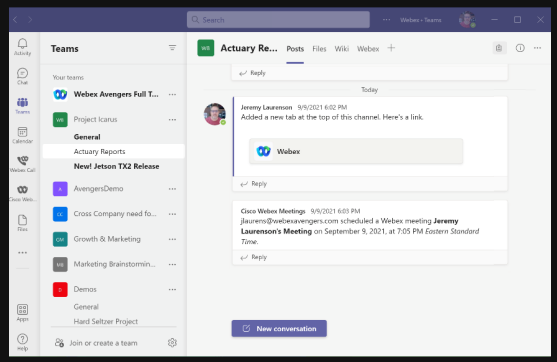
cisco Live!

Webex and Microsoft: Better Together

Join Microsoft meetings
on Cisco Devices



Integrate Webex
with Microsoft Ecosystem



Embed Webex into
Microsoft Teams

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Collaboration devices for any workspace

For any worker, any workstyle, anywhere

Desk
Cameras &
Headsets

Teams Certified Accessories

Teams Panels

Desk Pro

Teams Display

Room Bar

Room EQ

Kit Pro

Board Pro
55” & 75”

Microsoft Teams Rooms
Small
Medium
Large
Ideation

webex

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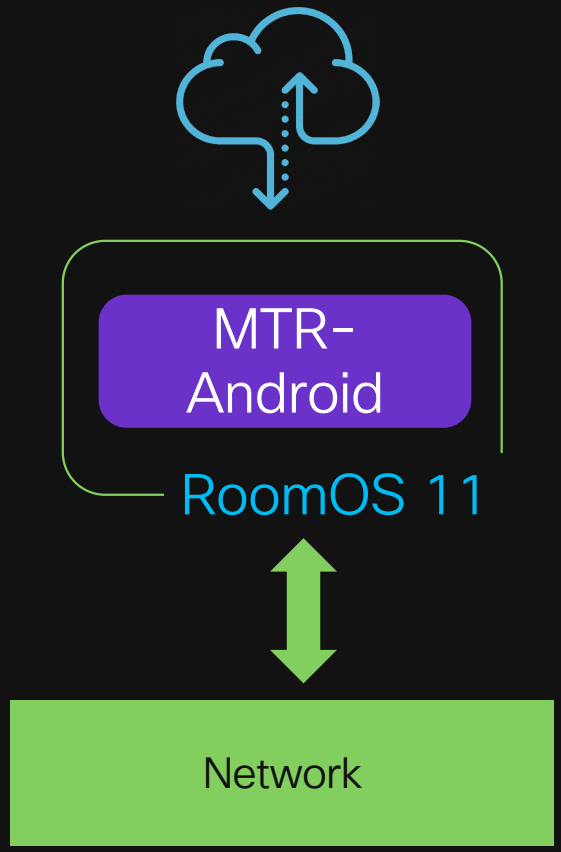
Cisco Webex Board Pro is a touch device offering native Microsoft Whiteboard and Teams meetings.

Board Pro 55/75

Android as a container

- Network traffic is handled by RoomOS, which has Cisco Security built-in.
- Android is containerized/sandboxed and not visible to the network
- Device updates become uncritical from a security perspective and can be managed via Control Hub
- SW updates will be tested to the same security standard as per all our devices



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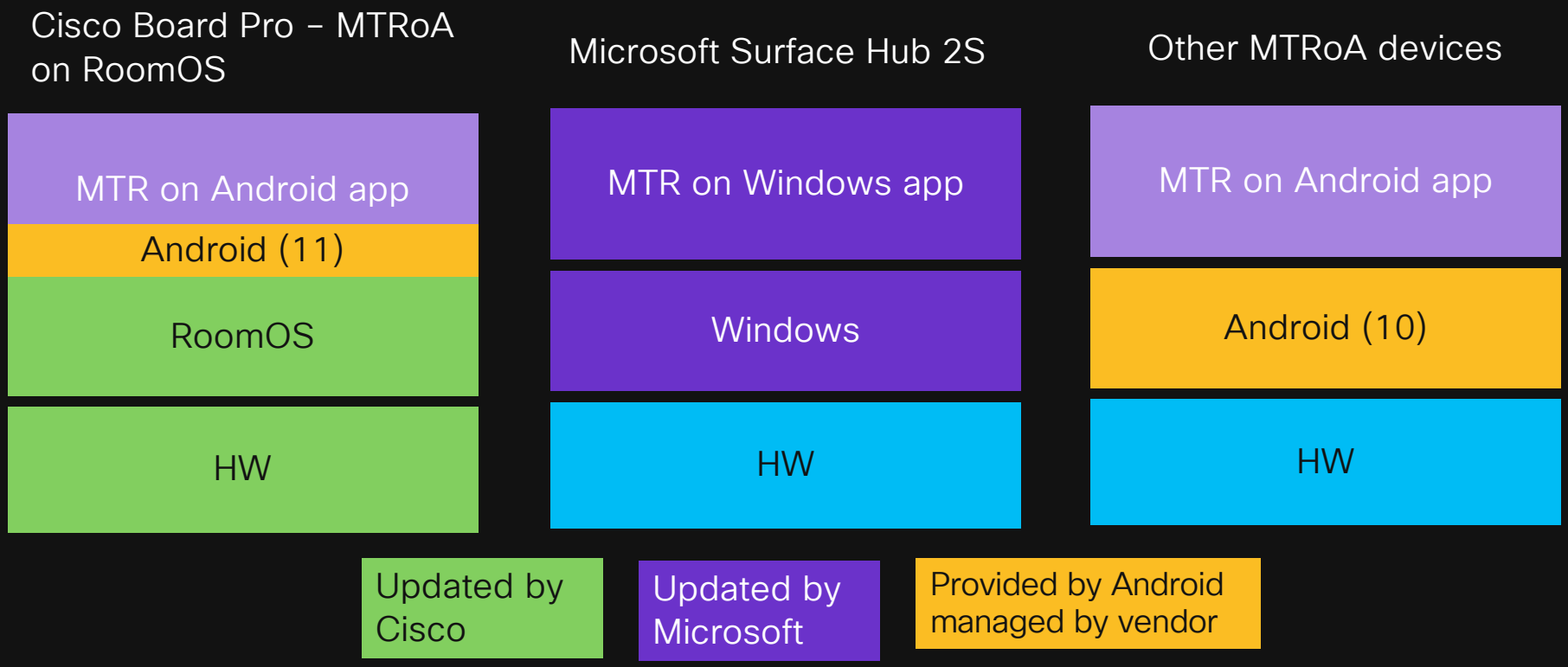
Cisco MTR runs as a contained, secure Android-based application on RoomOS



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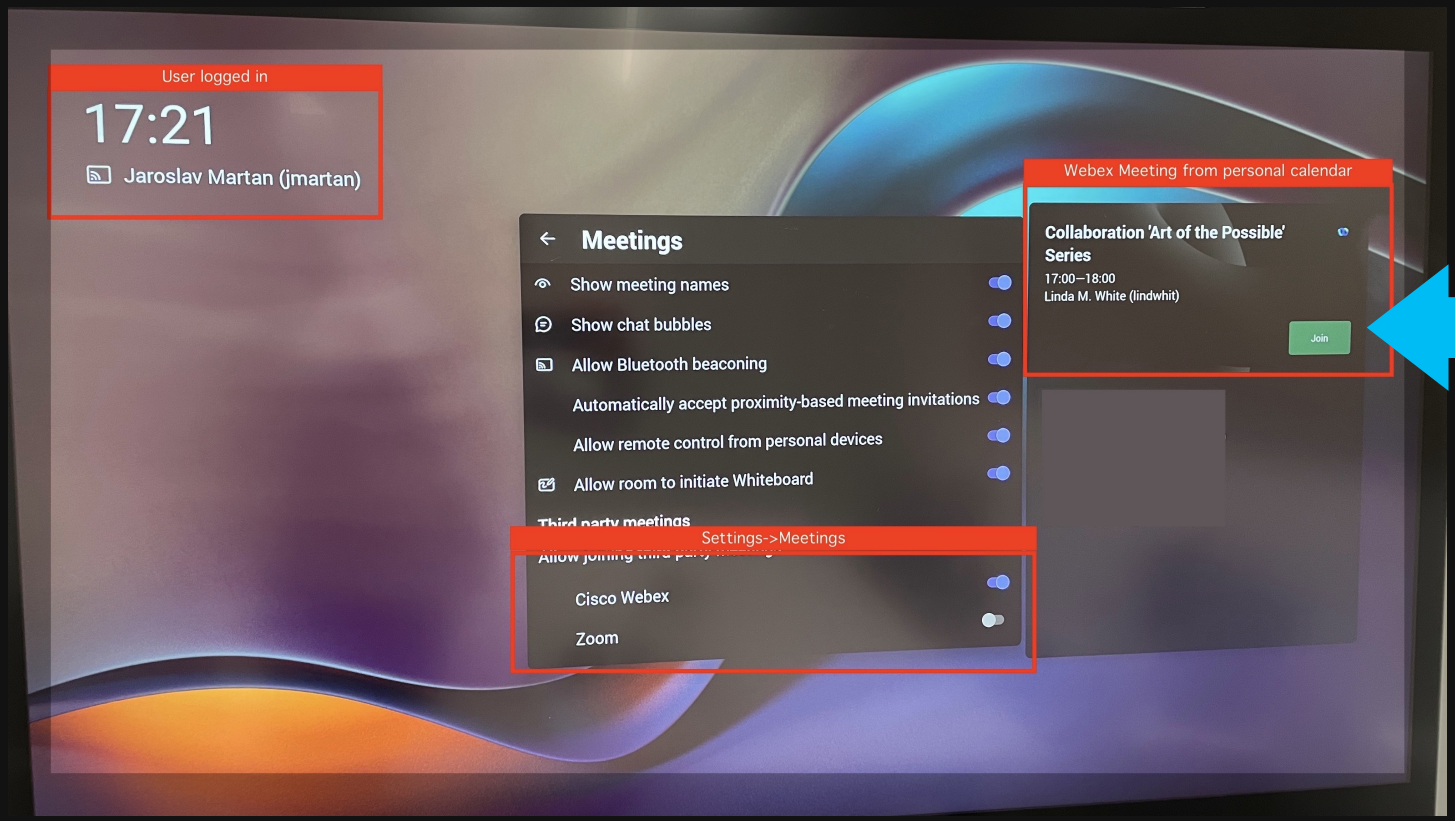
Join Meeting from Calendar



- Click **Join**

Join Any Meeting

cisco Live!

Open & extensible to support how you work

BYOD support with USB passthrough

Webex Google Meet video interop

Webex Zoom interop with rich meetings experience

Webex Video Interop for Microsoft Teams or via direct guest join

Run native 3rd party web apps

Control Hub management and analytics with APIs

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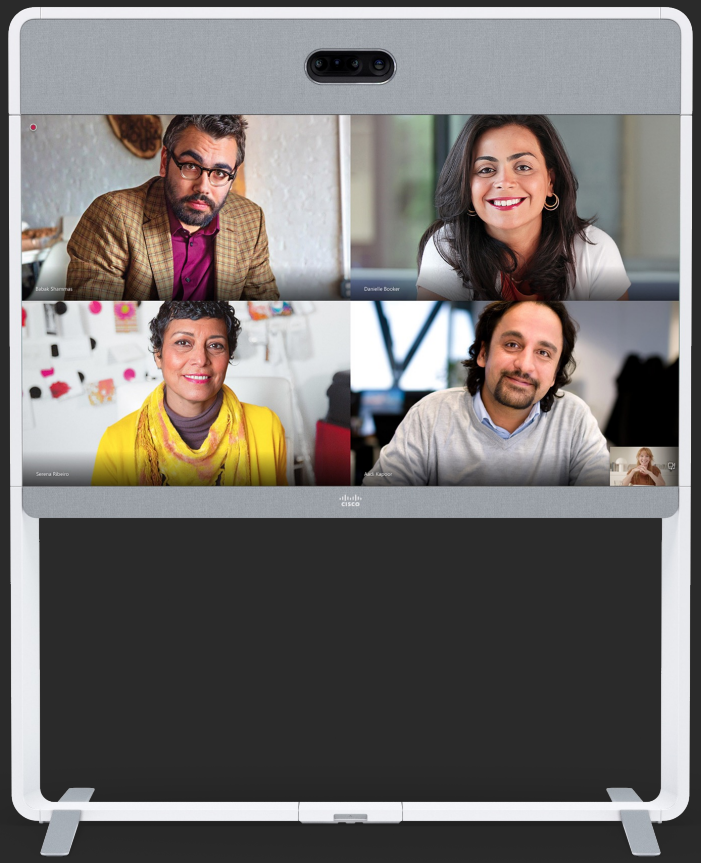
Webex Video Integration for Microsoft Teams

- Easy to join with One Button to Push or direct dial into meeting
  using Meeting ID
- Multi-screen experience with HD video
- Richer meeting controls with layout and roster
- VIMT license required

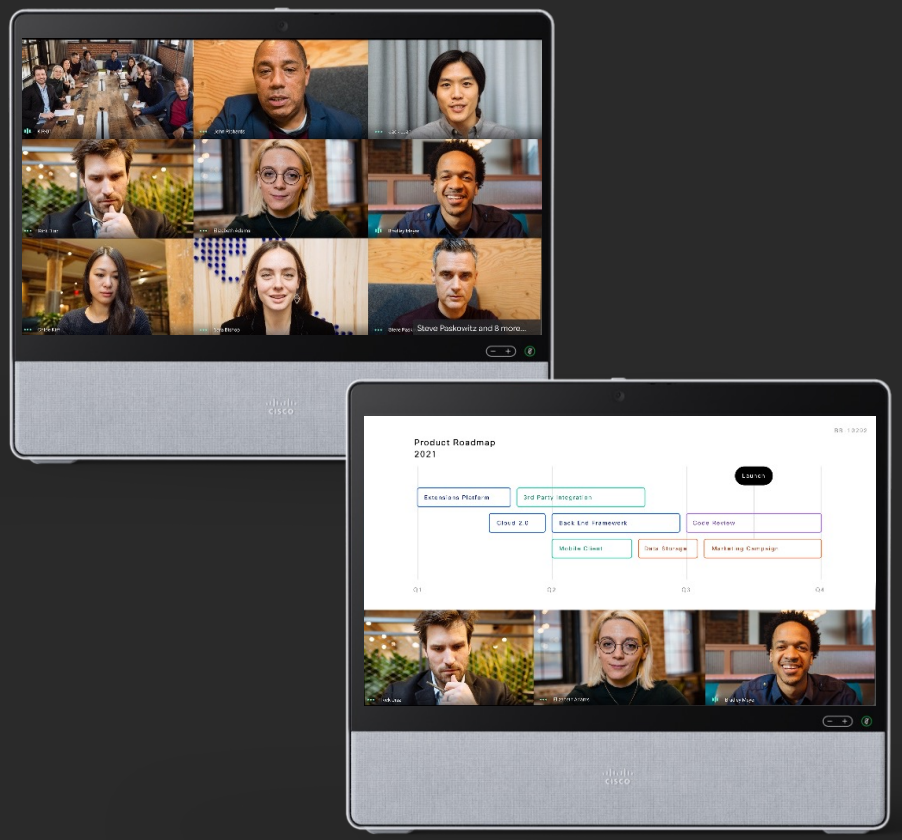
Webex Microsoft Teams Direct Guest Join

- Device WebRTC providing MSFT Teams hosted meetings
- No license required
- Easy to join with One Button to Push
- Single screen support



Webex Google Meet Video Interop

- Device WebRTC providing Google Meet hosted meetings
- Easy to join with One Button to Push or direct dial into meeting using Meeting ID
- Preserves layout, name labels, and content sharing from Google
- Device controls are available and actions like volume control, mute and hang-up are part of Webex UI



Webex & Zoom Video Interop

- Easy to join with One Button to Push or direct dial into meeting using Meeting ID
- Supports DTMF commands in-call such as managing layouts and host controls
- Dual-screen experience
- Zoom Conference Room Connector is required
- Our target is to develop a UI that allows you to connect into a Zoom meeting from a Webex Device

MS Teams – Join Options

	MTR	WebRTC	VIMT (CVI)
description	Native MS Teams client	Web client	SIP client
features	search directory MS teams whiteboard ad-hoc meeting	*coming soon:* dual-screen display, HDMI share	dual-screen, content share, whiteboard share
license	Webex + MTR	Webex	Webex + VIMT
target users	mainly MS Teams meetings	all meeting types, a lot of external invites	all meeting types, MS Teams mainly internal

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cisco
The bridge to possible
Thank you
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