Let's go

The bridge to possible

Enabling the right Cloud Calling Platform with Webex

Amy Ryan, Principal Solutions Engineer

Session ID: BRKCOL-2691

Cisco Webex App

Questions?

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

How

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2. Click “Join the Discussion”
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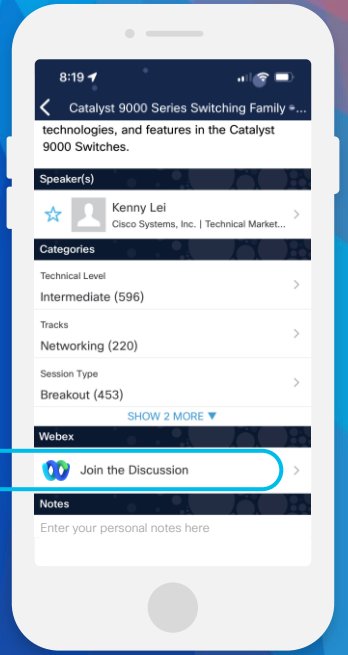
Webex spaces will be moderated by the speaker until December 22, 2023.



https://ciscolive.ciscoevents.com/ciscolivebot/#BRKCOL-2691

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Agenda

- Current State
- Connect to the Cloud
- Review Cloud Options
- Feature Updates
- Customer Experience
- Migration Considerations

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Collaboration Applications for Premise Deployments

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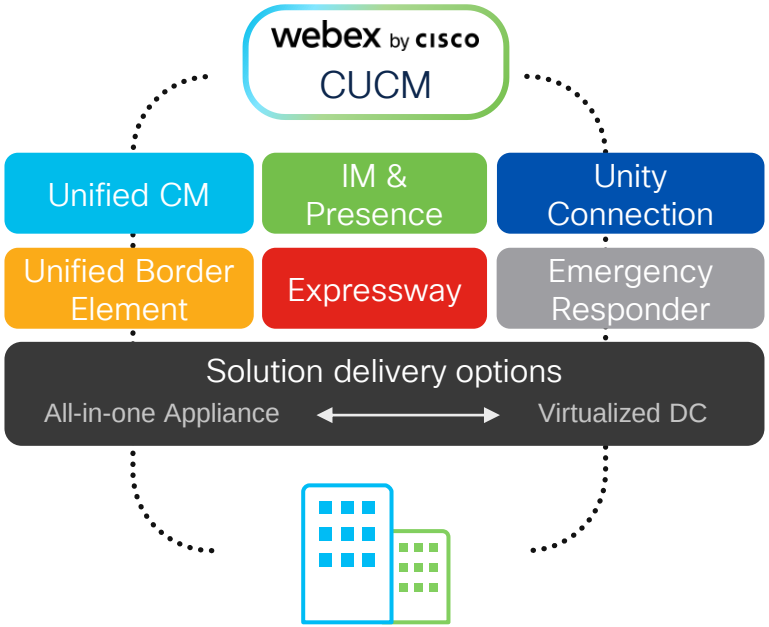
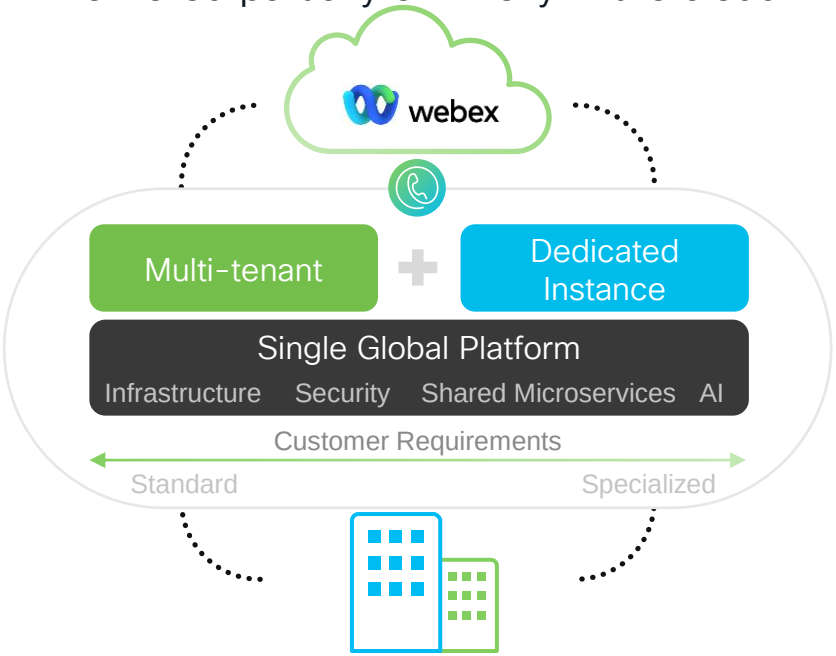
Cisco Unified Communications Manager (CUCM)

The most complete and flexible enterprise-grade calling experience is now part of the Webex Suite

Delivered on-premises



Delivered partially or wholly in the cloud



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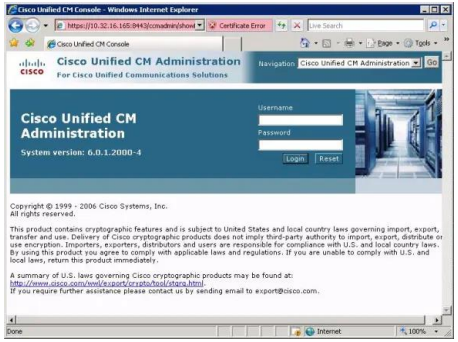
We have been there before……



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Continued investment in CUCM

Unified Communications Manager Development Themes

Simplifying UC administration

Enhancing security and compliance

Delivering the best user experiences

Connections to Cloud

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Available releases for Unified Communications Manager (including IM&P) and Cisco® Emergency Responder

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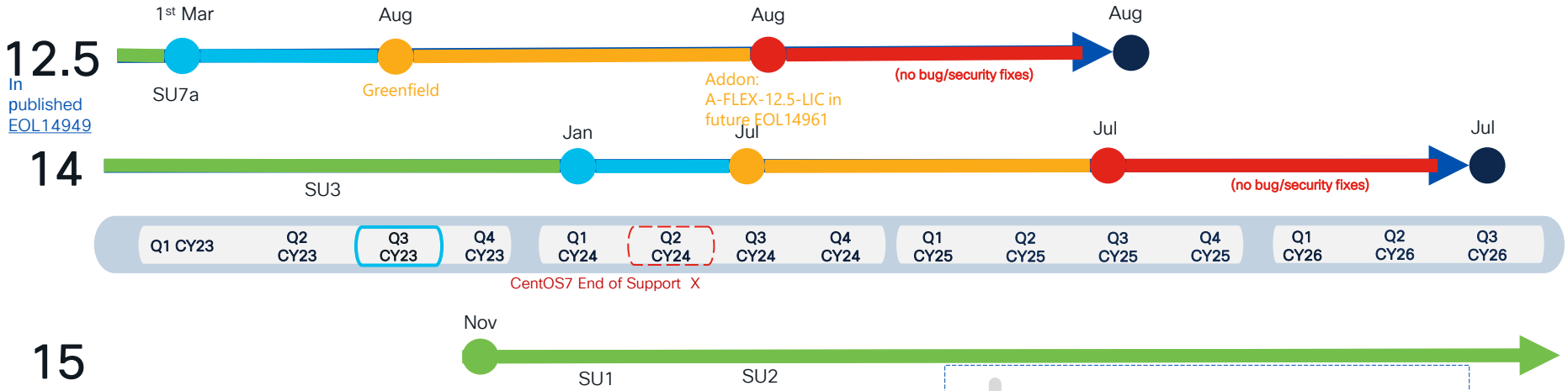
Release FCS/EOL – CUCM 15, 14, 12.5 (Cisco dates subject to change)

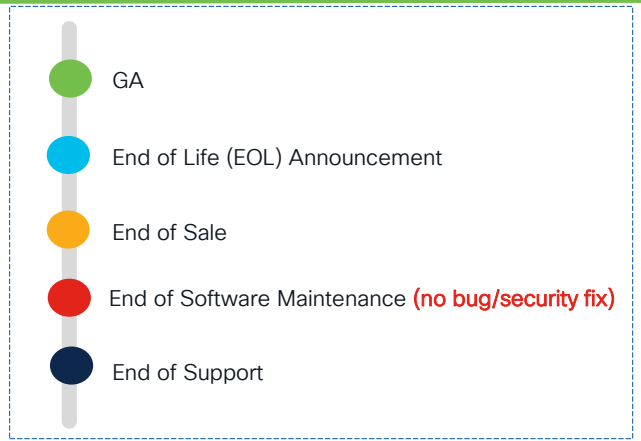


Products that this timing applies to:

- UCM – Unified Communications Manager
- SME – Session Management Edition
- IM&P – Instant Messaging & Presence service
- CUC – Unity Connection
- CER – Cisco® Emergency Responder
- PCD – Prime Collaboration Deployment

Products also affected, but timelines slightly different

- Elements of CCX – Contact Center Express
- Elements of CCE – Contact Center Enterprise
- Elements of Webex Calling dedicated instances, UCMC-G, Webex Contact Center Enterprise



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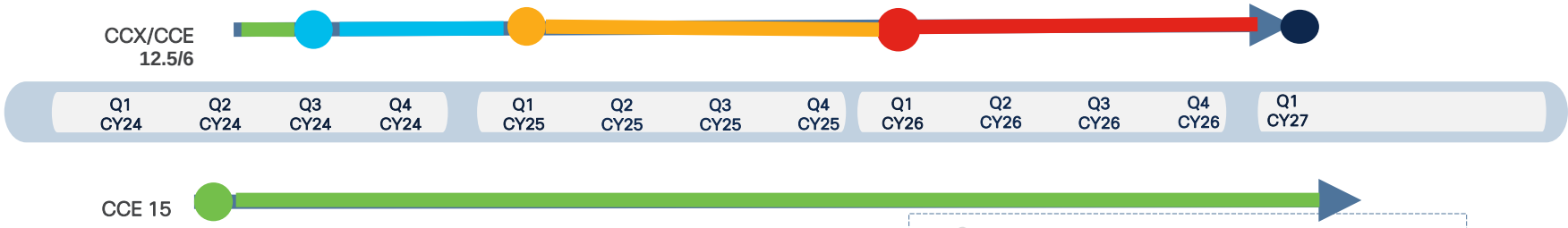
Contact Center Lifecycle – Both Express and Enterprise(subject to change)



From girishv deck, pulled 13-Jun-CY23

Notes:

- CCX 12.5SUx will be compatible with CUCM 15

- This EOL cycle applies to the entire CCE 12.6 solution (Windows and VOS components)
- CCE 12.6 will be compatible with CUCM 15

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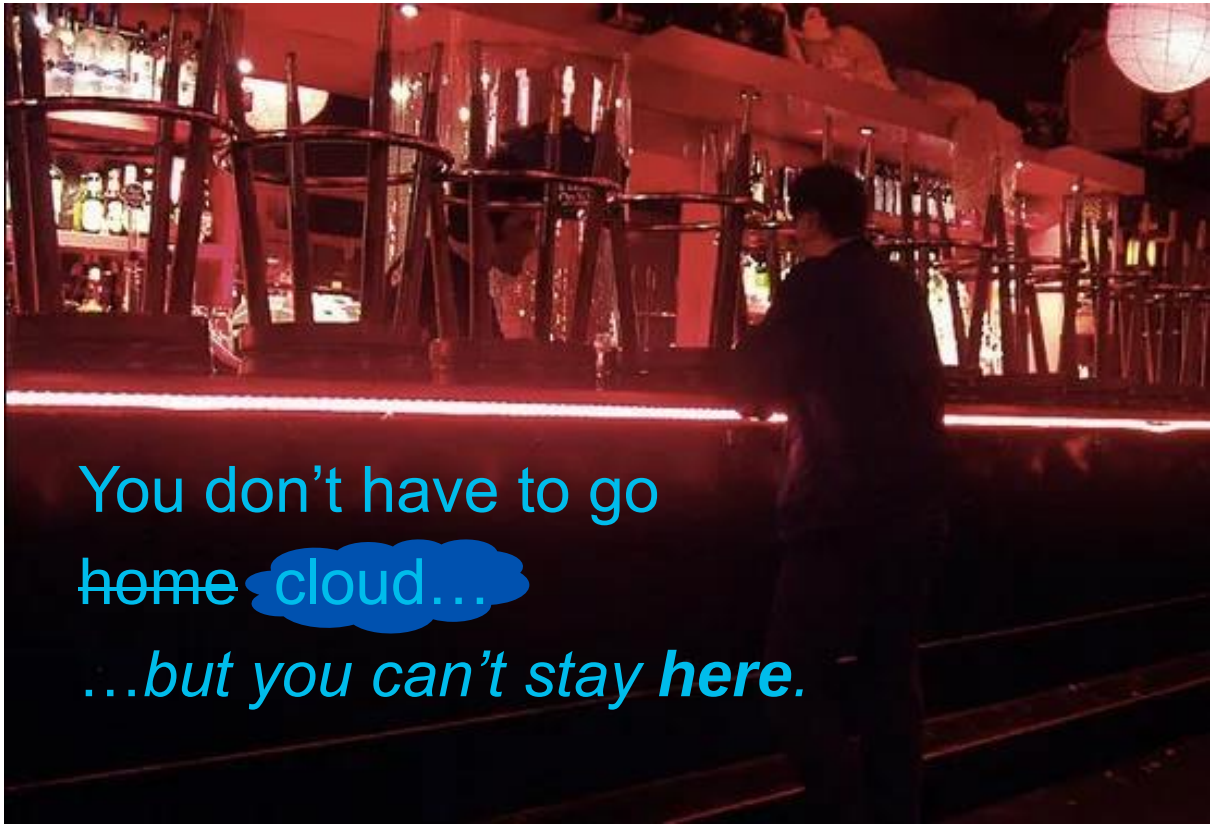
What does this mean for YOU?



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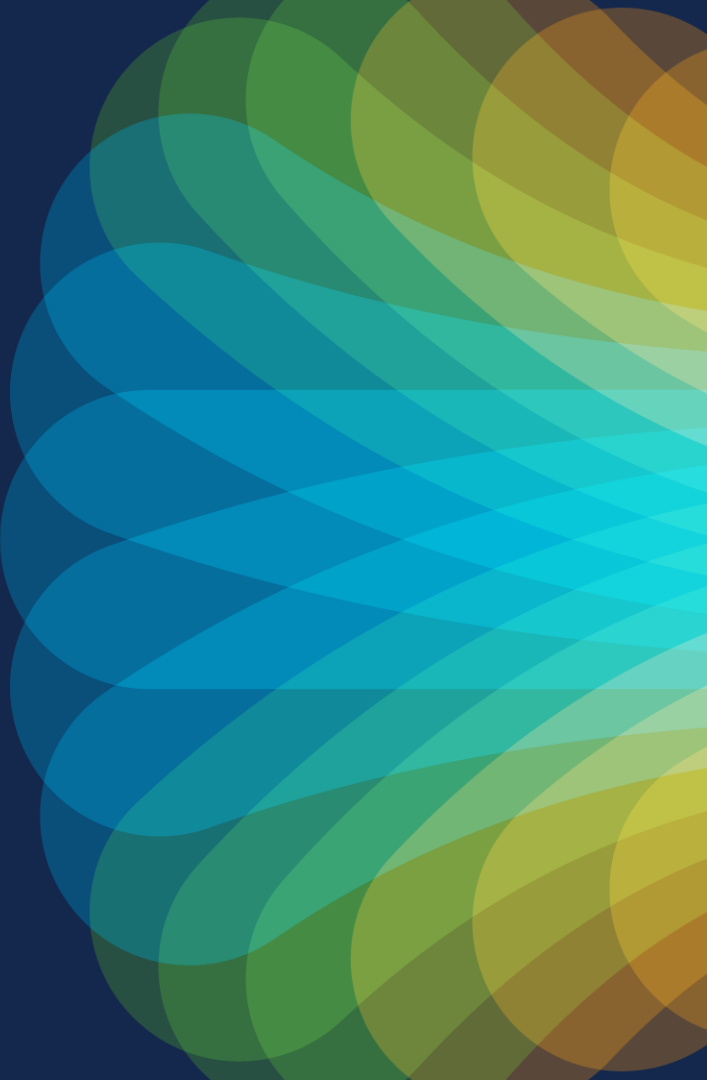
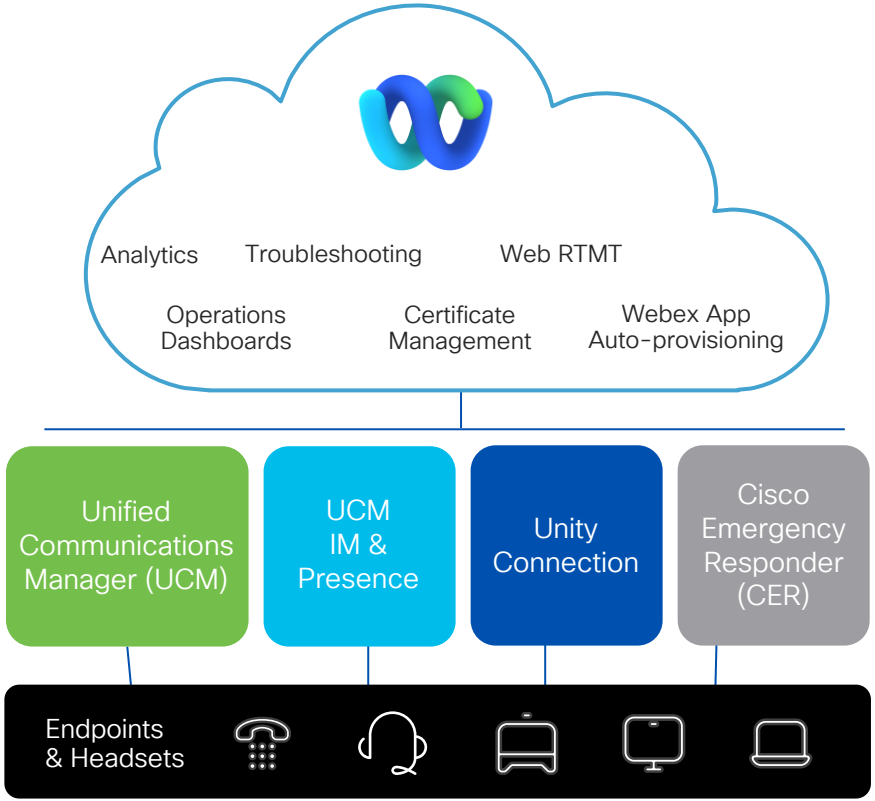
Connections to the Cloud

Step 1 to a successful migration



cisco Live!

Webex Cloud-Connected UC



A suite of Webex® cloud services that provide enhanced business and operational insights to improve administrative productivity

For customers who:

- Want the centralized administrative workflow experience of the cloud, while keeping their UC services on-premises
- Need a single global view to manage on-premises UC, along with any Webex cloud, or hybrid services
- Desire efficient, cloud-based admin services (delivered by partner) for an on-premises CUCM deployment
- Ease my journey on-prem➔"hybrid"➔cloud
  - CCUC-powered "migrate to Webex" features.

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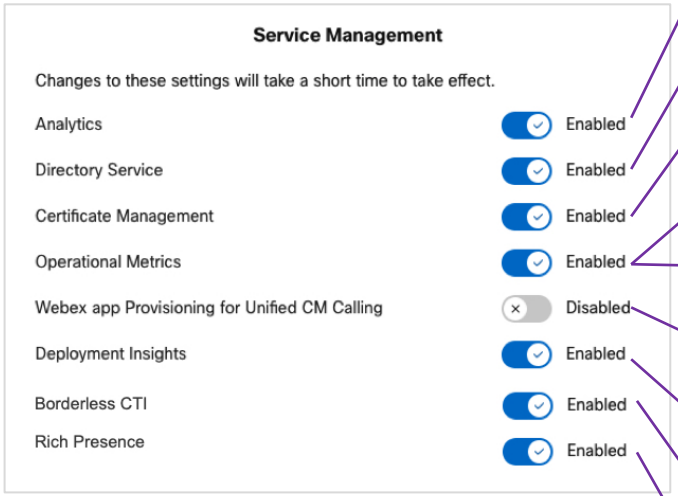
Webex Cloud-Connected UC (cont'd) – Key Features



Analytics
(call quality, traffic analysis, trunk usage, device usage)

Directory Service
(UCM to WxIdentity for AzureAD etc.)

Certificate Management
(central view/distribute across apps/clusters)

Ops Dashboard with WebRTMT
(near-real-time view in CH not thick-client of last hour's call status & audio quality for top 5 UCM clusters)

Troubleshooting
(CX CSA integration for SDL logs in CH)

Also requires Webex Serviceability Connector

Touchless WxApp (auto-)provisioning
(enduser self-provision via just login to WxApp with UCM calling)

"Migration" to Webex
(understand Jabber usage, enable wizards under CH->Migration)

Borderless CTI
(enduser controls IP phone via WxApp CTI over MRA not VPN)

Rich Presence
(UCM-registered in-call phone status synced to WxApp presence)

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CCUC analytics – service experience
Call volume status

KPI's for calls: attempted, successful, failed, and dropped

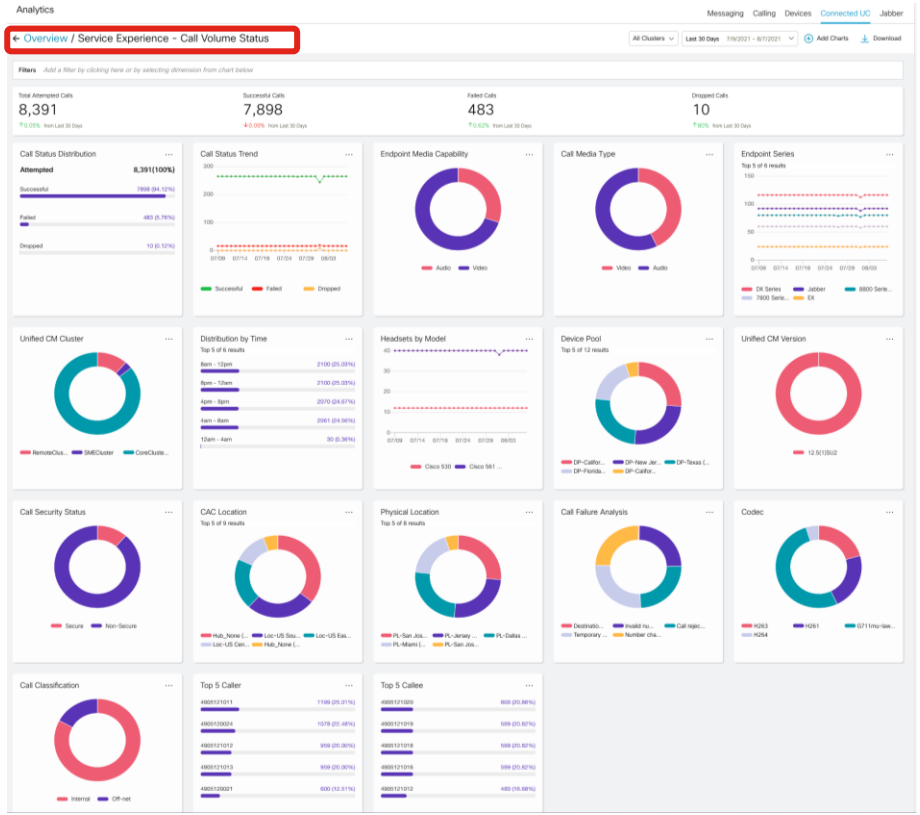
- Dropped call: any call > 0 min in duration and then failed

Interactive charts and graphs

- Call trends, endpoint media, type of endpoints and headsets, Cisco® UCM cluster, distribution of calls over time, device pools, CAC location bandwidth, etc.

"Filters" to guide admin on a particular aspect – all charts and graphs update accordingly

Ability to download CSV: snapshot of the entire data set, or of the filtered data view



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CCUC analytics – service experience
Call audio quality

KPI's for total calls, then calls that were good/poor/acceptable

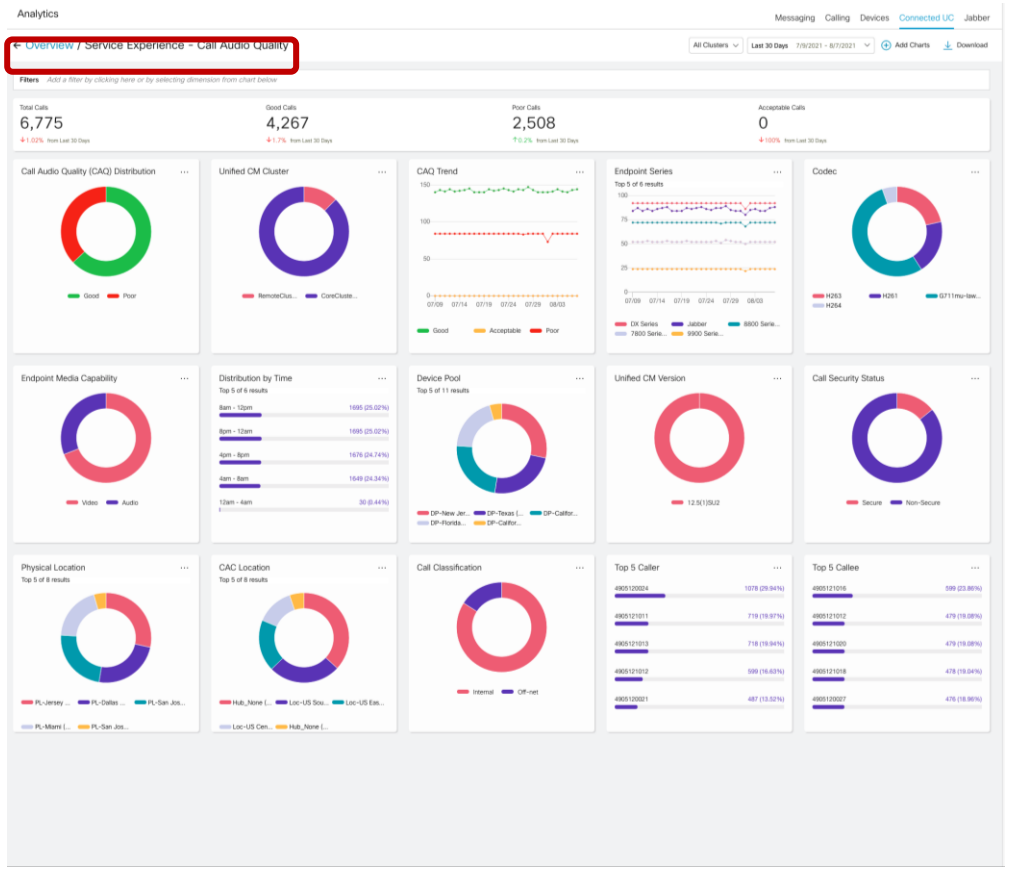
- Call Audio Grading is based on:
  1) Severely Concealed Seconds Ratio (SCS / Duration of Call)
  2) SCS information is available from CMR
  3) Thereby, only those calls which have a CMR will be graded for Call Audio Quality

Interactive charts and graphs

- Call audio quality trends, endpoint media, type of endpoints and headsets, Cisco® UCM cluster, distribution of calls over time, device pools, physical location, etc.

"Filters" to guide admin on a particular aspect – all charts and graphs update accordingly

Ability to download CSV: snapshot of the entire data set, or of the filtered data view



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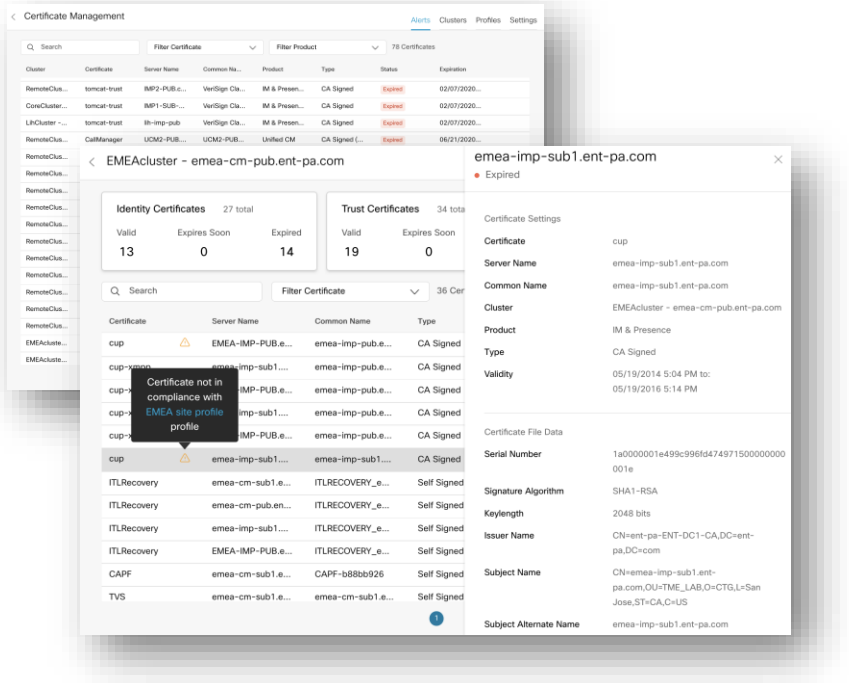
Overview
Certificate Management



- Single place to view, manage and distribute certificates of CUCM, IM&P, Unity and CER across multiple clusters and trust stores
- Quick dashboard to view expired or expiring soon certificates
- Multi-cluster listing with certificate summary for each cluster and detailed view of identity certificates and trust stores.
- Define certificate profile with various settings and assign certificate profile to cluster
- Centralized certificate actions – CSR generation, upload, renew, download, copy, replace, remove, etc.
- Certificate insights - out of compliance warnings with profiles
- Notification settings for certificate expiration
- Jobs tab to view certificate actions in progress and history of actions taken in the past

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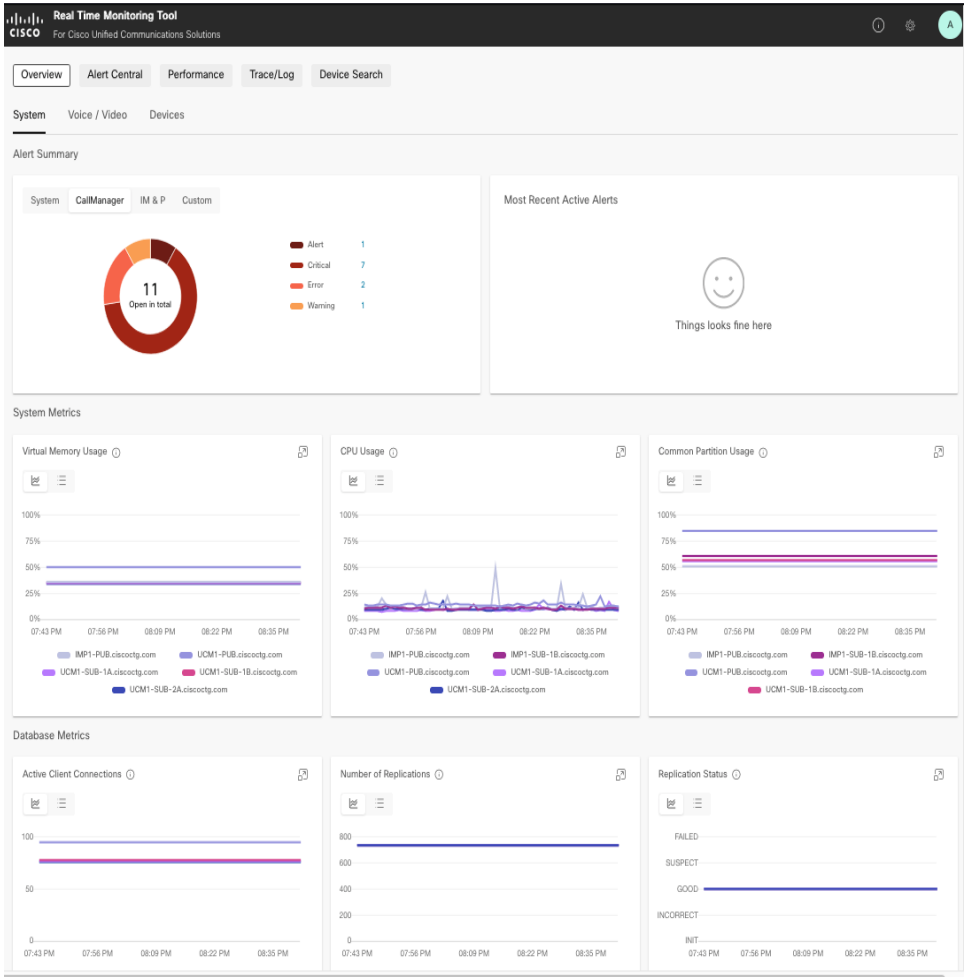
Web RTMT Overview

New tool that simplifies and enhances the administration and troubleshooting experience.

- Unified Web-based interface to monitor the real-time behavior of your system components, configure alerts to take suitable action in CUCM, IM&P and Unity Connection.
- Available via Operations Dashboard to troubleshoot and collect logs per cluster or node basis.
- No dependency on Java and OS/Browser platform.
- The data displayed remains on-prem.
- Cloud upgradeable via Cloud-Connected UC.



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Prerequisites
Cloud-Connected UC

UC infrastructure minimal versions

Cisco UCM, IM&P, Unity and CER: 11.5(x), 12.0(x), 12.5(x), 14

COP file to be installed except with release 12.5(1)SU4+ and 14

Network port requirements

TCP Port 443 outbound to the Webex®

Configure firewall to allow access to the following URLs:

*.ucmgmt.cisco.com
*.webex.com

Network proxy support

Unauthenticated and authenticated http proxies are supported

Onboarding flow is triggered by a "full admin" in Control Hub, who should preferably (but not necessarily) also be an "OS admin" for the UC nodes, so they can install COP file (if needed) for CCUC agent

See CCUC System Requirements and CCUC Network Requirements

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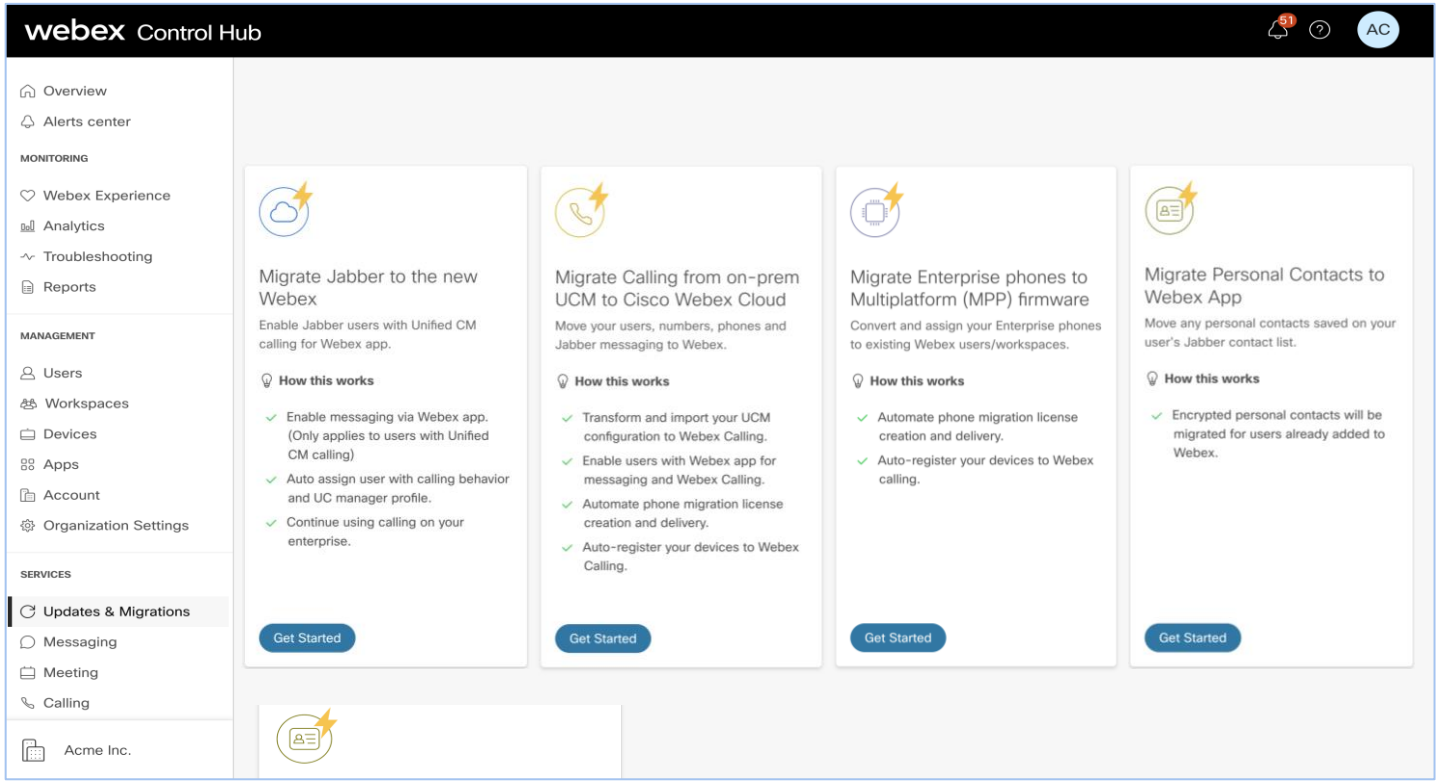
Cloud migrations are easy

Updates & Migrations

Update to the new Webex



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Cisco Cloud Collaboration

Trusted quality and reliability

99.99%

Committed uptime

Security

Built from the ground up

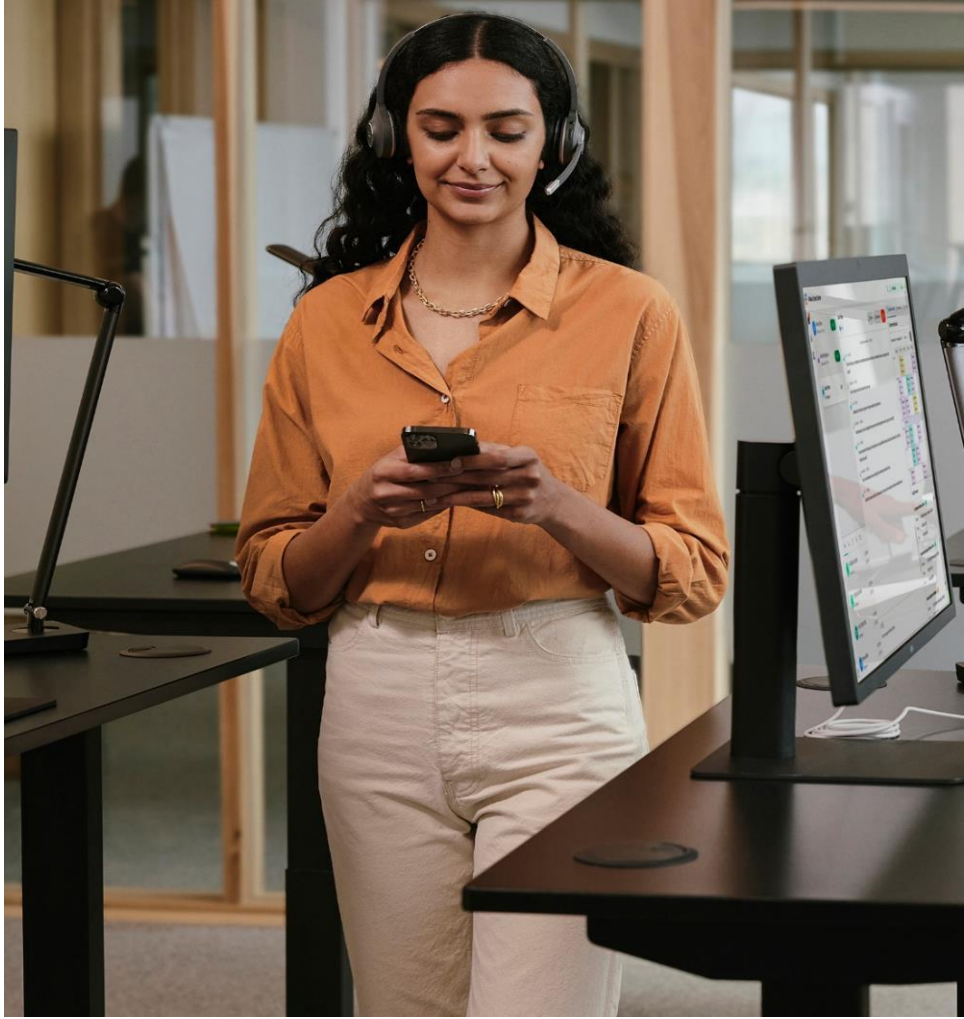
Geo-Redundancy

Data centers in every region

Global support

Operations

** Our *actual* uptime performance: 99.999%



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Webex Calling

- Enterprise-grade calling features
- Easy-to-use, secure, and reliable
- Flexible migration to cloud
- Unparalleled global coverage
- Centralized management and administration via Control Hub
- Multiple deployment options

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Webex Calling - Architecture

- Global cloud calling platform
- Centralized administrative experience from the cloud
- Multi-tenant and Dedicated Instance platforms pre-integrated for call routing interoperability
- Flexibility to provision users across multi-tenant and Dedicated Instance as needed, to best address cloud calling business needs
- Flexible PSTN options
- Multiple network connectivity options to fit enterprise of various sizes
- Webex App for a unified end-user experience

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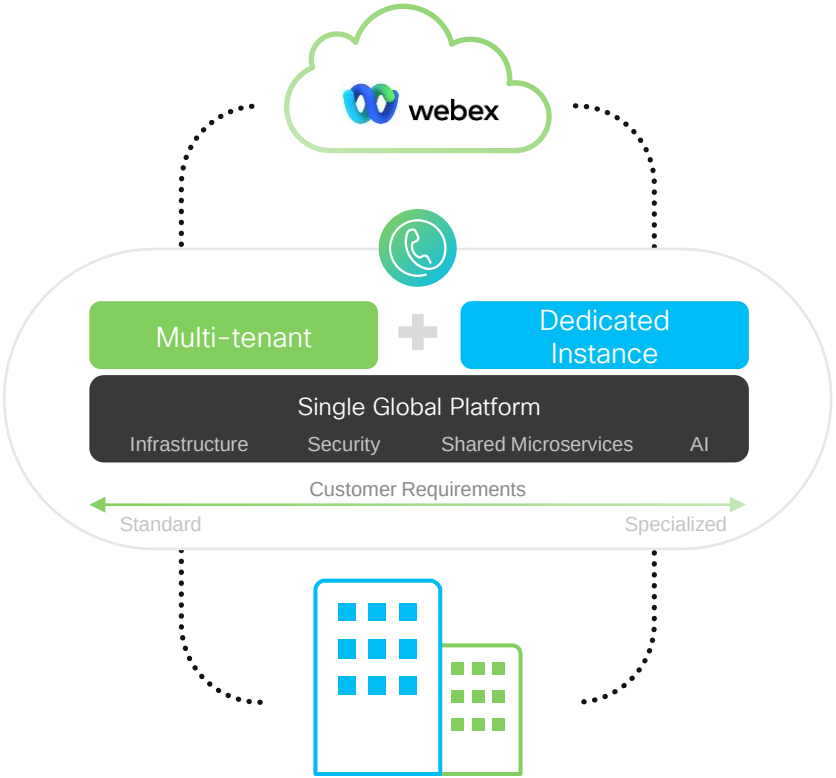
Dedicated Instance for Webex Calling

- Dedicated cloud instance
- Based on CUCM
- Integrated into Webex Calling leveraging Webex platform services
- Delivers cloud innovation / enhanced experience for customers who need
  - Support for older Cisco endpoints
  - Local survivability
  - Existing business integrations and workflows
- Extends familiar features and calling capabilities for customers who want to preserve their UCM experience



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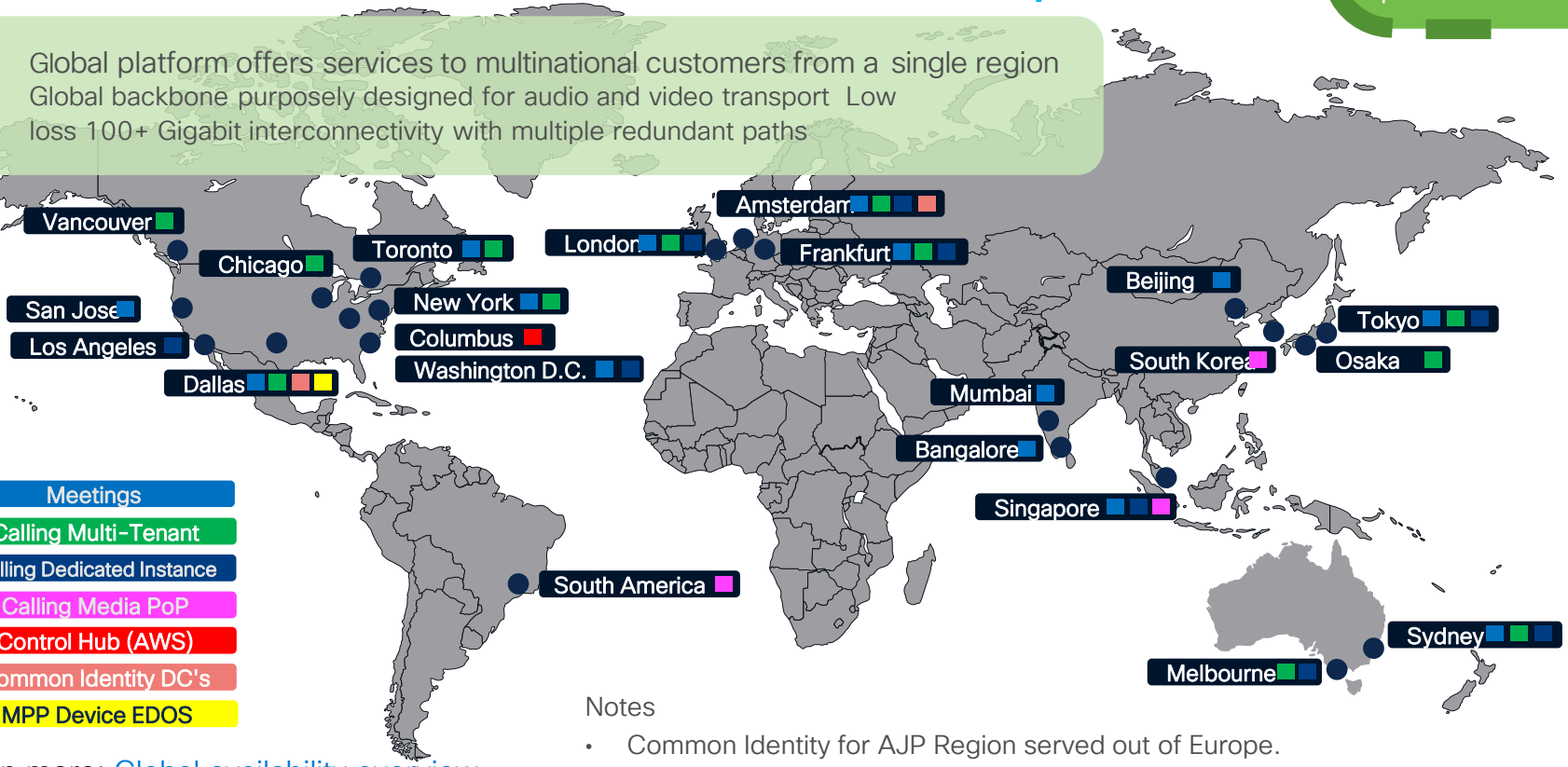
Global availability

Webex Global Data Center Footprint

Enterprise performance

Global platform offers services to multinational customers from a single region
Global backbone purposely designed for audio and video transport Low loss 100+ Gigabit interconnectivity with multiple redundant paths



Learn more: Global availability overview

Notes

- Common Identity for AJP Region served out of Europe.
- Cities with multiple services may have these services across multiple DC's

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Available globally

Learn more:
Global availability overview
Webex Help Center

Enterprise performance

135+ supported markets around the globe

Commercially available in seven currencies

Customer UX/UI provided in 30+ languages*

Partner support services provided in 9 languages

*Control Hub admin portal

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Service restrictions in India

The Webex Calling partner is responsible for the regulatory compliance of its customers

Cisco would not require a license from India regulators to provide service from Webex Calling APJC data centers.

1. Logical partitions enabled for on-net calling (to adhere to India toll-bypass regulations)
2. For International OSP's, a copy of CDRs and system logs must be available at the International OSP premise based in India. Additional DoT guidelines for OSPs: LINK

All logical partitioning letters can be requested via these URLs:

- Non-Service Provider: LINK
- Service Provider: LINK

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Service restrictions in China

The Webex Calling partner is responsible for the regulatory compliance of its customers

The following analysis applies if Cisco® sold direct to a customer. The same analysis could be applied by partners.

Cisco would not require a license from Chinese regulators provided that:

1. Sale is to multinational customers headquartered outside of China for use in branch offices in China.
2. Sales or marketing is not targeted at customers based in China, rather, we sell and market to multinationals who use the service globally.
3. Data transmission capacity is not provided (PSTN, leased circuits, etc.) in connection with the offer
4. Does not operate from a data center or other infrastructure located in China.

Our Chinese counsel confirms that the regulator would conclude this does NOT constitute providing a Telecom Service if the criteria listed above is met.

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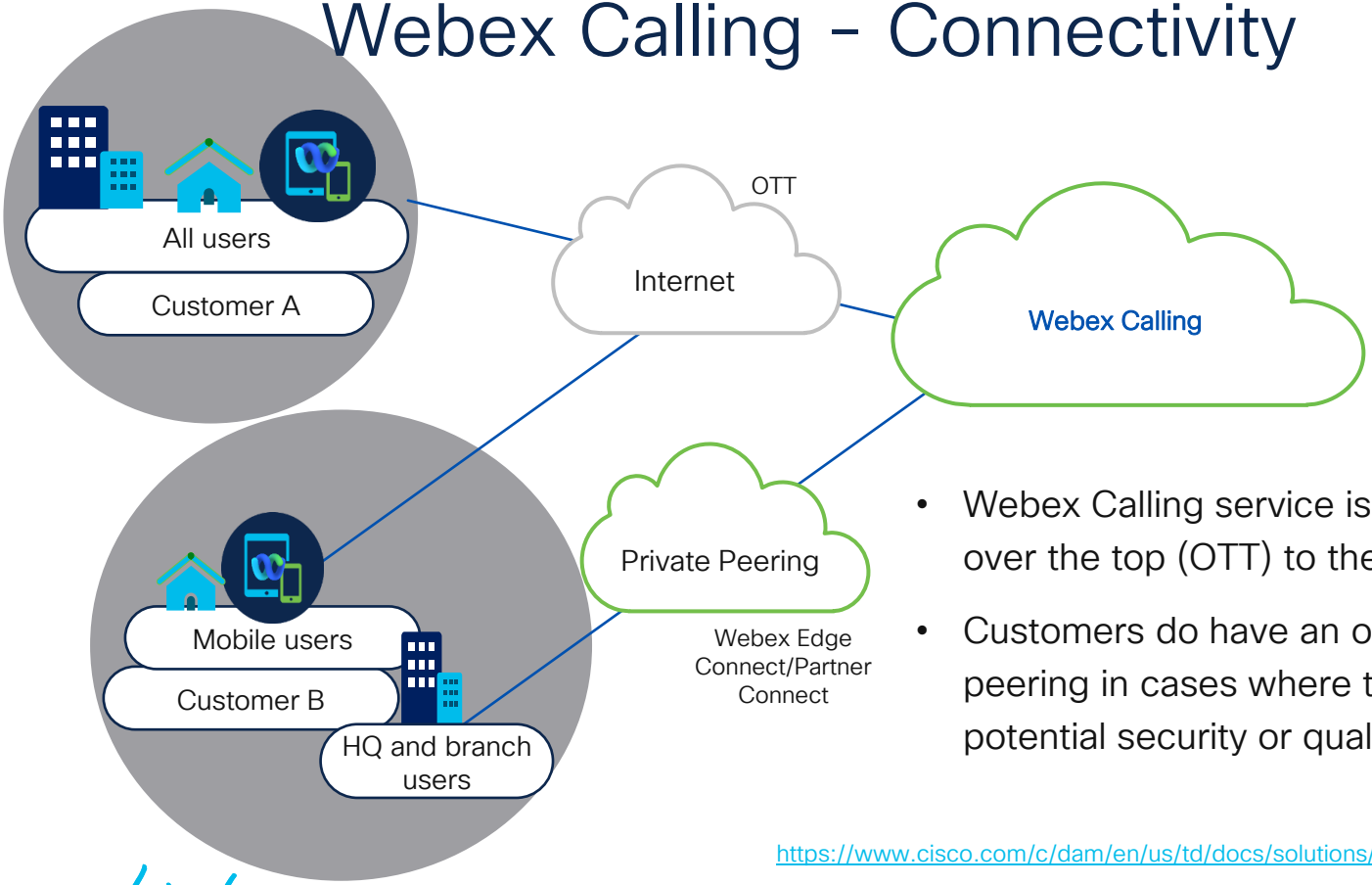
Peering Considerations

Cloud Calling Design

Webex Calling – Connectivity



- Webex Calling service is primarily delivered over the top (OTT) to the customer
- Customers do have an option to go a private peering in cases where they want to address potential security or quality concerns

https://www.cisco.com/c/dam/en/us/td/docs/solutions/CVD/Collaboration/cloud/PA-PNC.pdf

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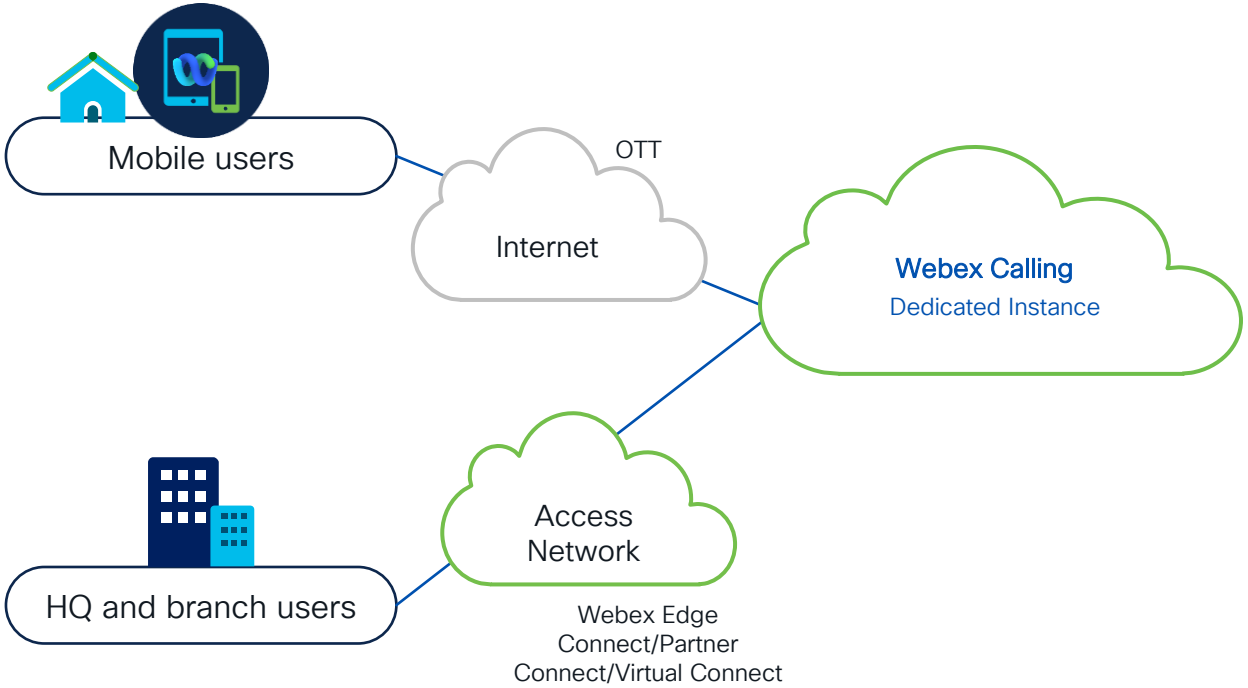
Dedicated Instance – Connectivity



- Dedicated Instance service is primarily delivered over a private connection to the customer premises
- Connection requires peering via Webex® Edge Connect, or Partner Connect, or Virtual Connect
- OTT access is included to service mobile and remote workers (MRA)
- Peering is required in each geographic region where service is provided to customers

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Webex Edge Connect Data Center locations

Equinix Fabric extended locations

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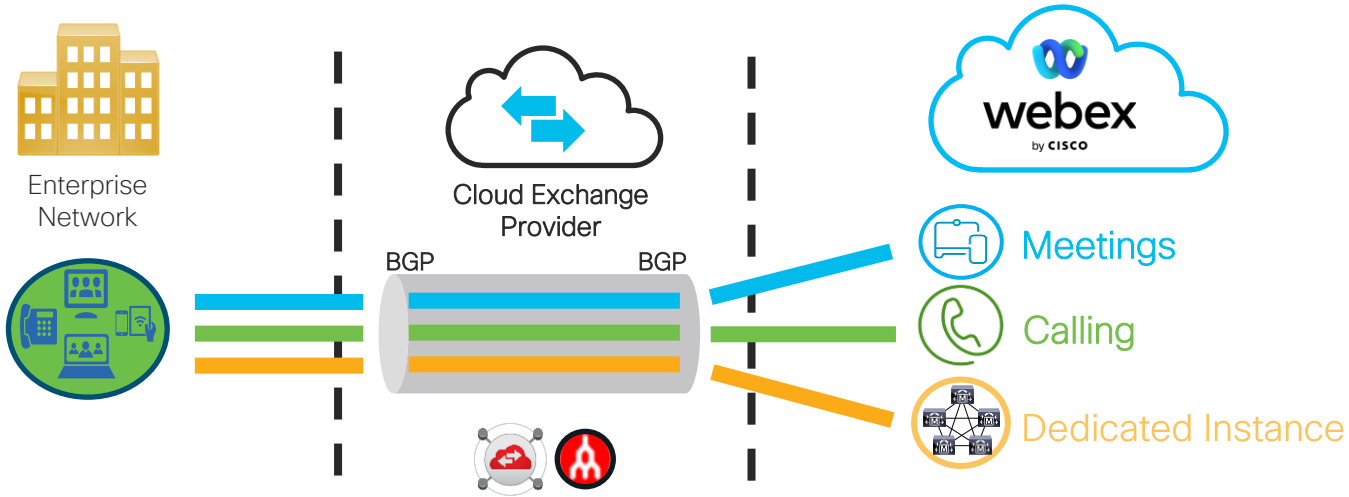
Edge Connect - New Connectivity Offerings



Webex Meetings, Calling, Dedicated Instance

Choice of Providers Equinix or Megaport

Single Peering for Webex Suite Customers

** Leveraging Webex Edge for optimal performance- BRKCOL-2096**

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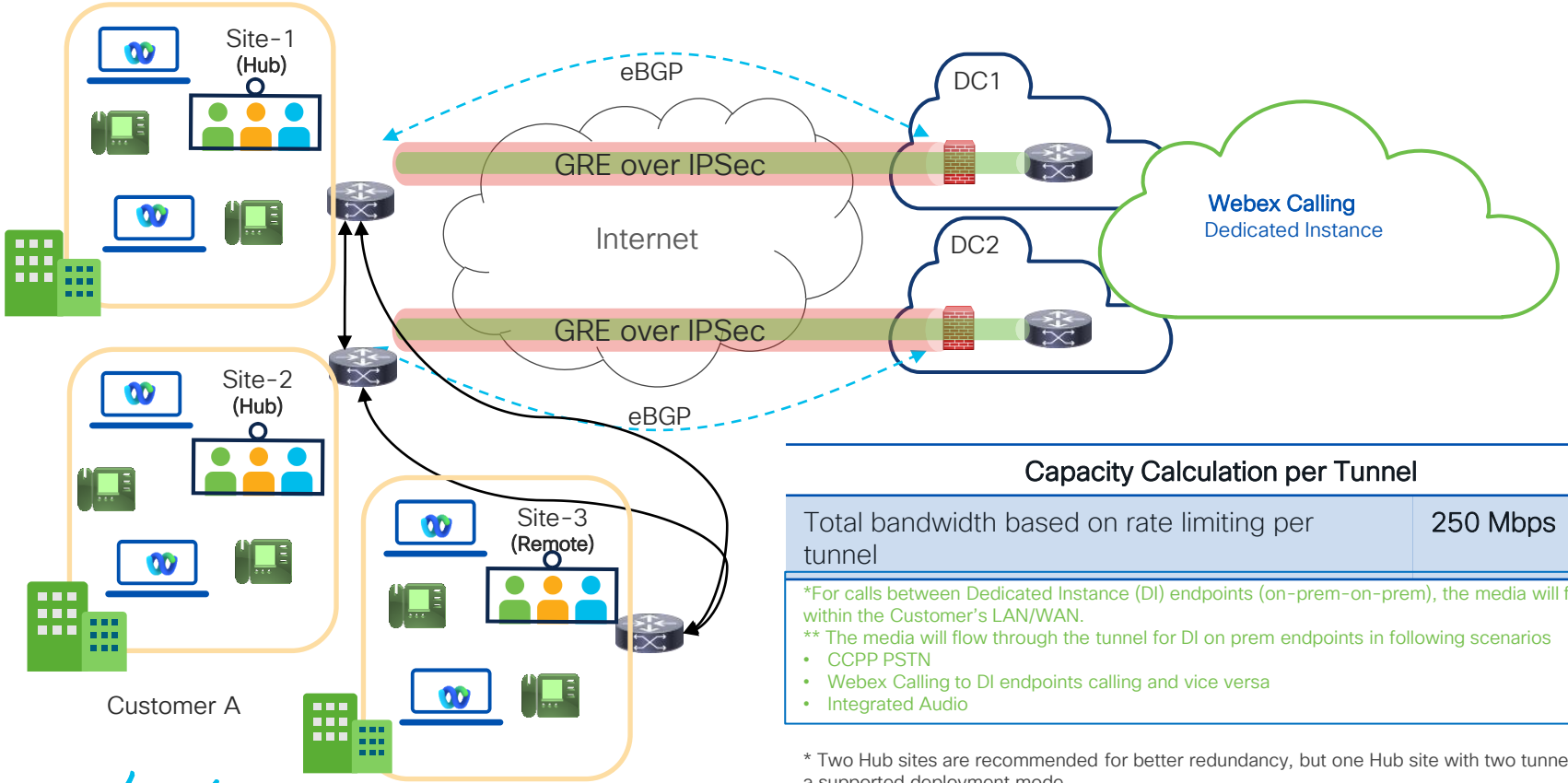
Dedicated Instance Virtual Connect



Capacity Calculation per Tunnel	
Total bandwidth based on rate limiting per tunnel	250 Mbps

*For calls between Dedicated Instance (DI) endpoints (on-prem-on-prem), the media will flow within the Customer's LAN/WAN.
** The media will flow through the tunnel for DI on prem endpoints in following scenarios
- CCPP PSTN
- Webex Calling to DI endpoints calling and vice versa
- Integrated Audio

* Two Hub sites are recommended for better redundancy, but one Hub site with two tunnels is also a supported deployment mode

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PSTN Considerations

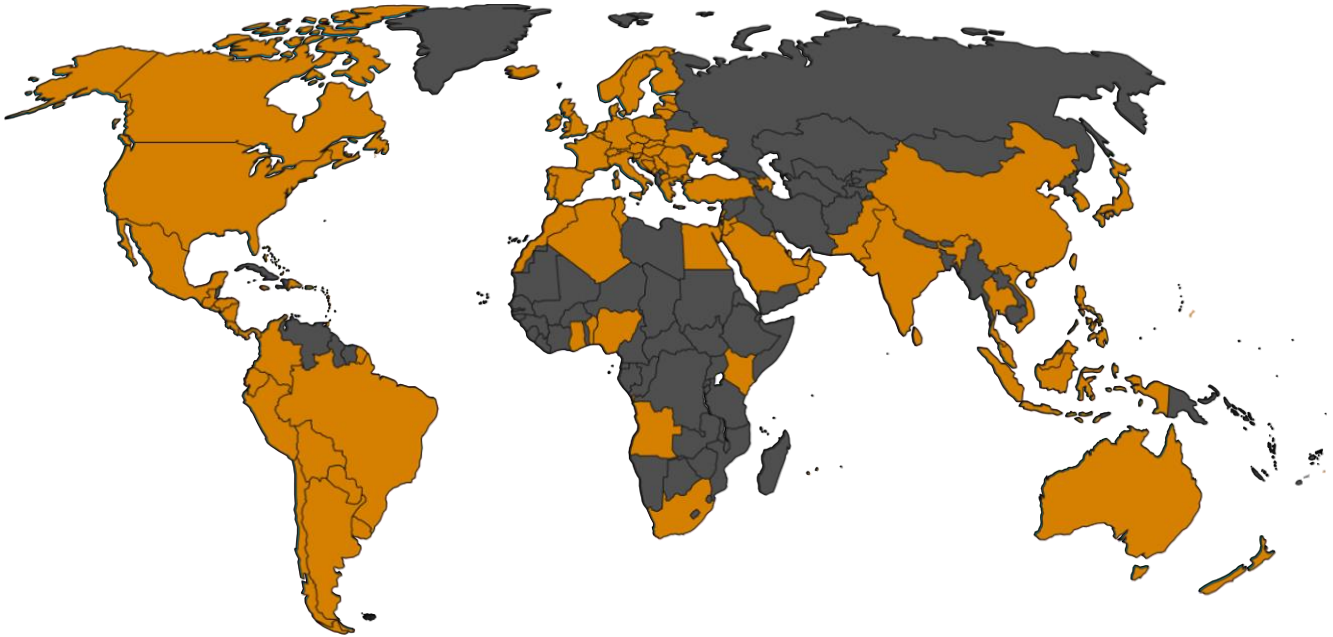
Cloud Calling Design

Flexible PSTN options

Cisco Calling Plans
19 countries with more coming soon

Cloud Connected PSTN
65+ countries Cisco-certified providers

Local gateway
117+ countries BYOC



https://help.webex.com/en-us/article/nousk9ab/Get-Started-with-the-Cisco-Calling-Plan
https://www.webex.com/products/calling-global-availability.html

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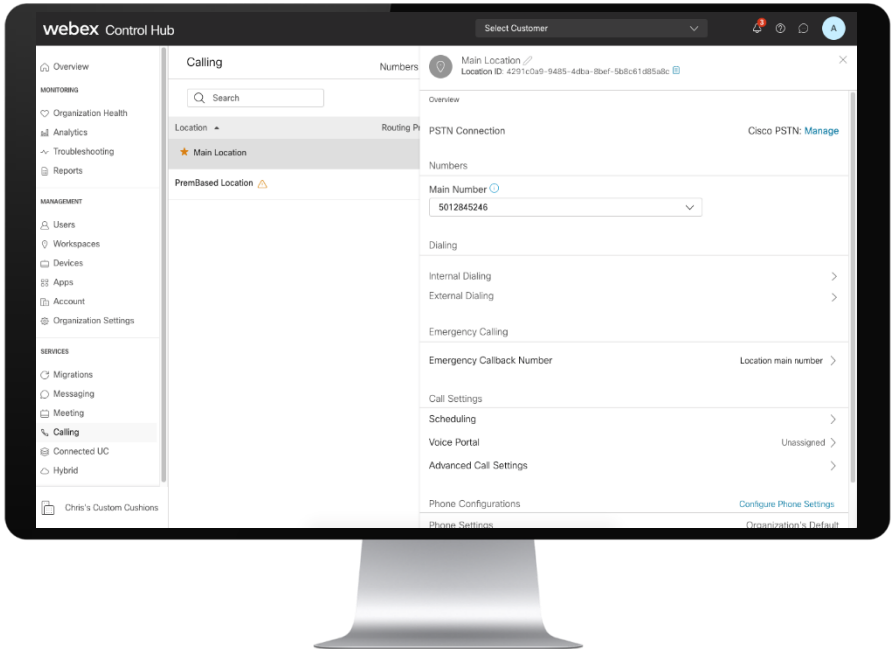
PSTN Flexibility

Global coverage, optimized for cost and quality

- Support multiple PSTN providers
- Define PSTN providers at the location level
- Centralized management with Control Hub



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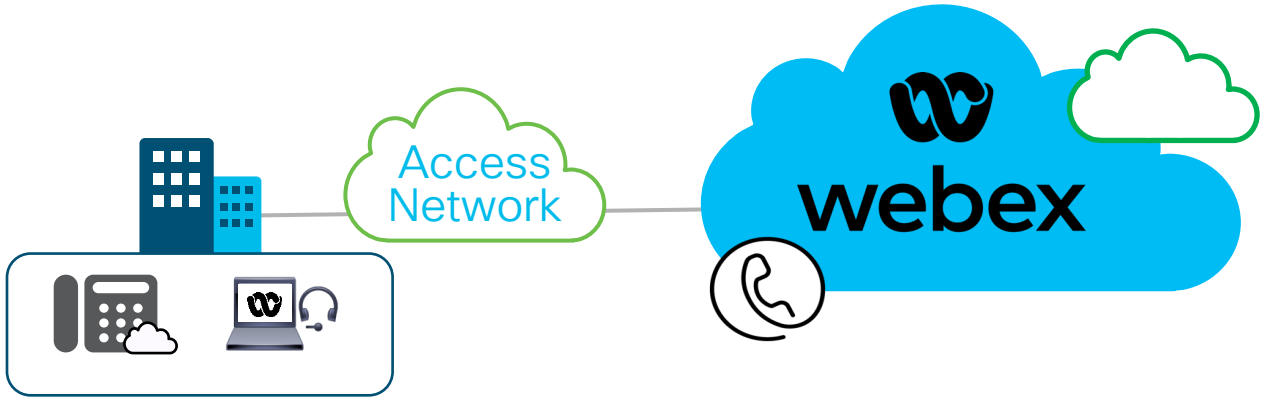
Webex Calling PSTN:
Cisco Calling Plan



- Webex Calling Multi-Tenant only
- PSTN access integrated in the Webex® Calling cloud
- Single offer thru Cisco or Partner and simply provisioned in Control Hub

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Webex Calling PSTN:
Cisco Connect

- PSTN access through peering with a selection of Cloud Connected partners integrated into the Webex® Calling cloud
- Partner helps enterprise procure and provision PSTN
- Available to service providers who serve customers with locations outside of their PSTN footprint

*Cloud Connect Provider

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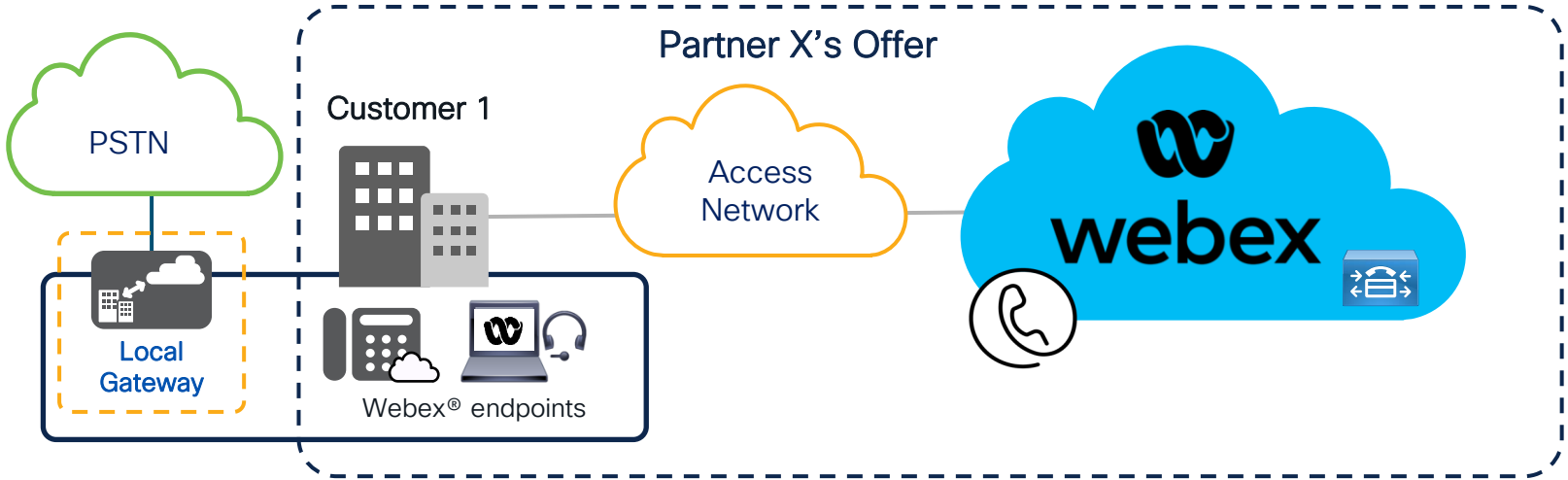
Webex Calling PSTN option:
Local Gateway PSTN through customer premises



- PSTN access through a Local Gateway device at the customer site and the customer's PSTN service (SIP Trunk, PRI, etc.)
- PSTN service decoupled from Webex Calling service

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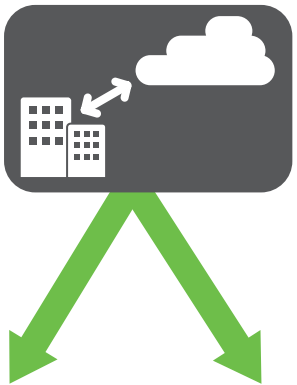
Local Gateway
Platform Support

Recommended – Latest of IOS-XE 16.12/17.3 recommended for all LGW deployments.

Local Gateway (LGW)



CUBE

IOS-XE GW

Cisco CUBE (for IP-based connectivity) or
Cisco IOS Gateway (for TDM-based connectivity)

Hardware and software requirements:

- ISR 4321, 4331, 4351, 4431, 4451, 4461 (IOS XE 17.3.2)
- vCUBE in AWS
- Catalyst 8300 series (IOS XE 17.3.2)
- CSR 1000v (vCUBE) (IOS XE 16.9(6) and 16.12.4 or later) –
  - CSR 1000v licenses are not included in Webex Calling Flex and need to be purchased separately
  - Estimate 200 kbps total data throughput for every audio call
- ISR 1100 (IOS-XE 16.12.4 or later)

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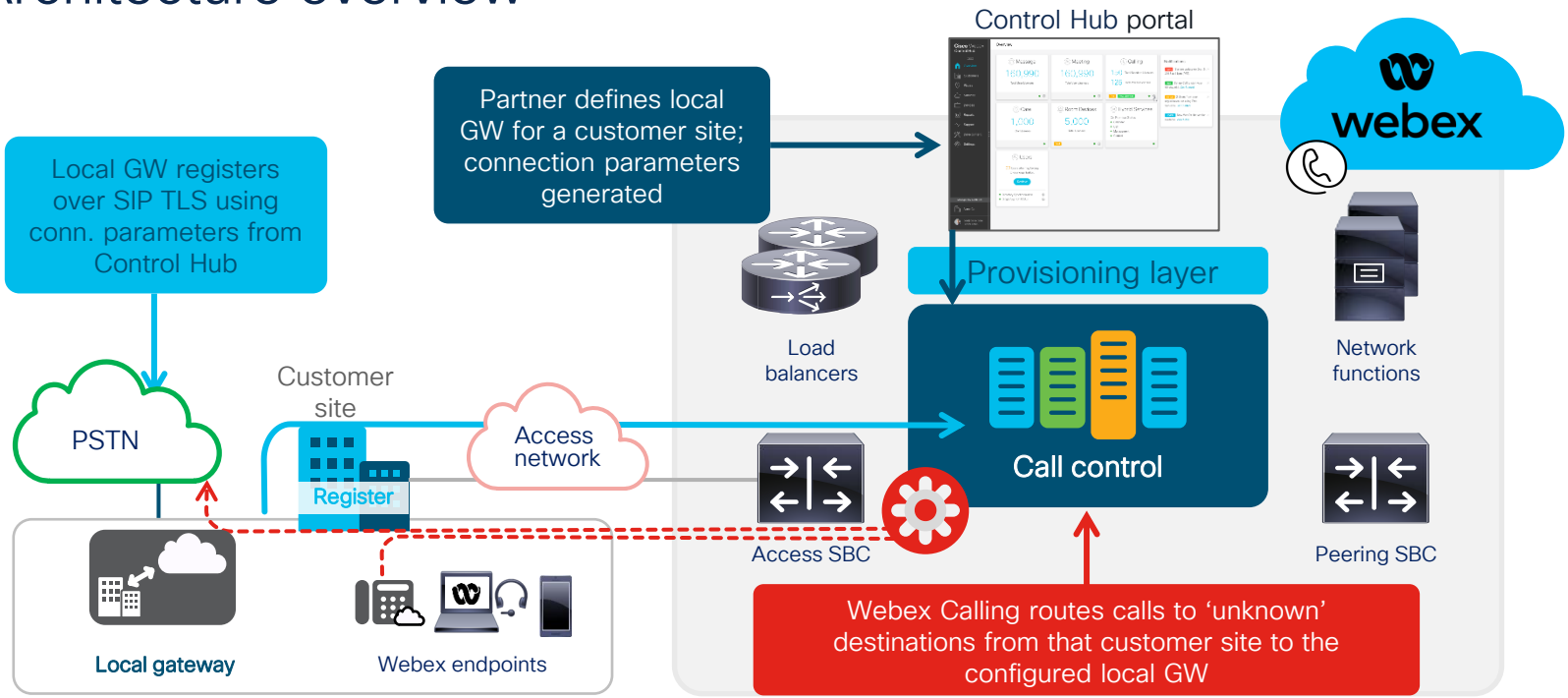
CUBE as a local gateway
Architecture overview



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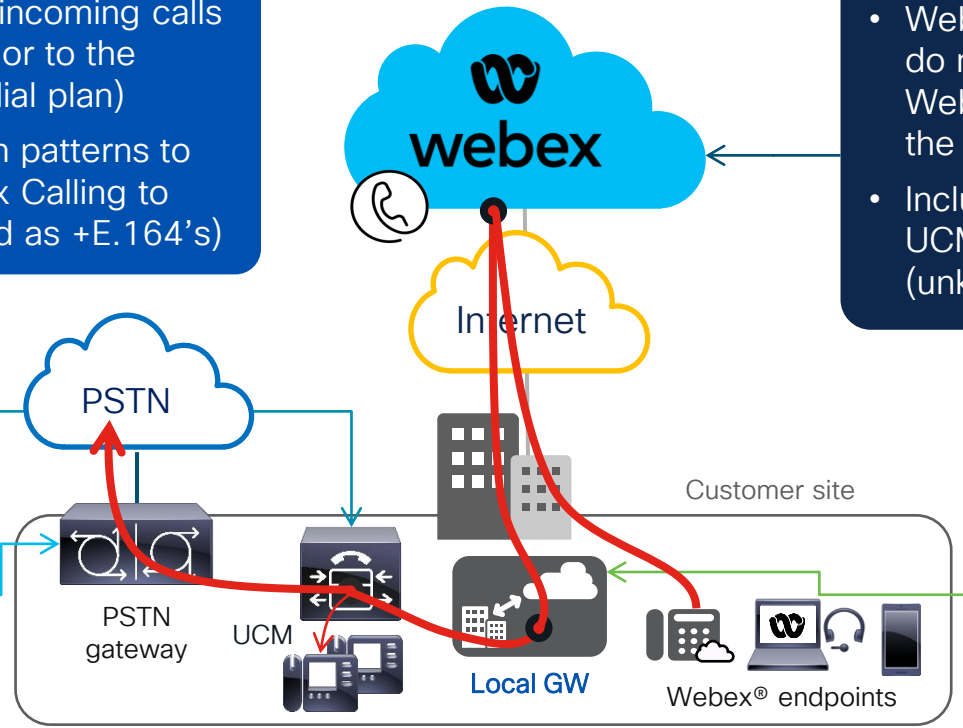
Call routing
With an IP PBX/CUCM

- Cisco® UCM routes incoming calls to local destinations or to the PSTN (per existing dial plan)
- Add route/translation patterns to send calls for Webex Calling to local GW (normalized as +E.164's)

- Webex Calling sends calls that do not match the customer's Webex Calling destinations to the local gateway
- Includes PSTN numbers and UCM internal extensions (unknown to Webex Calling)



PSTN gateway may be dedicated or co-resident with the local gateway

Local gateway routes calls coming from Webex Calling to UCM (and vice versa)

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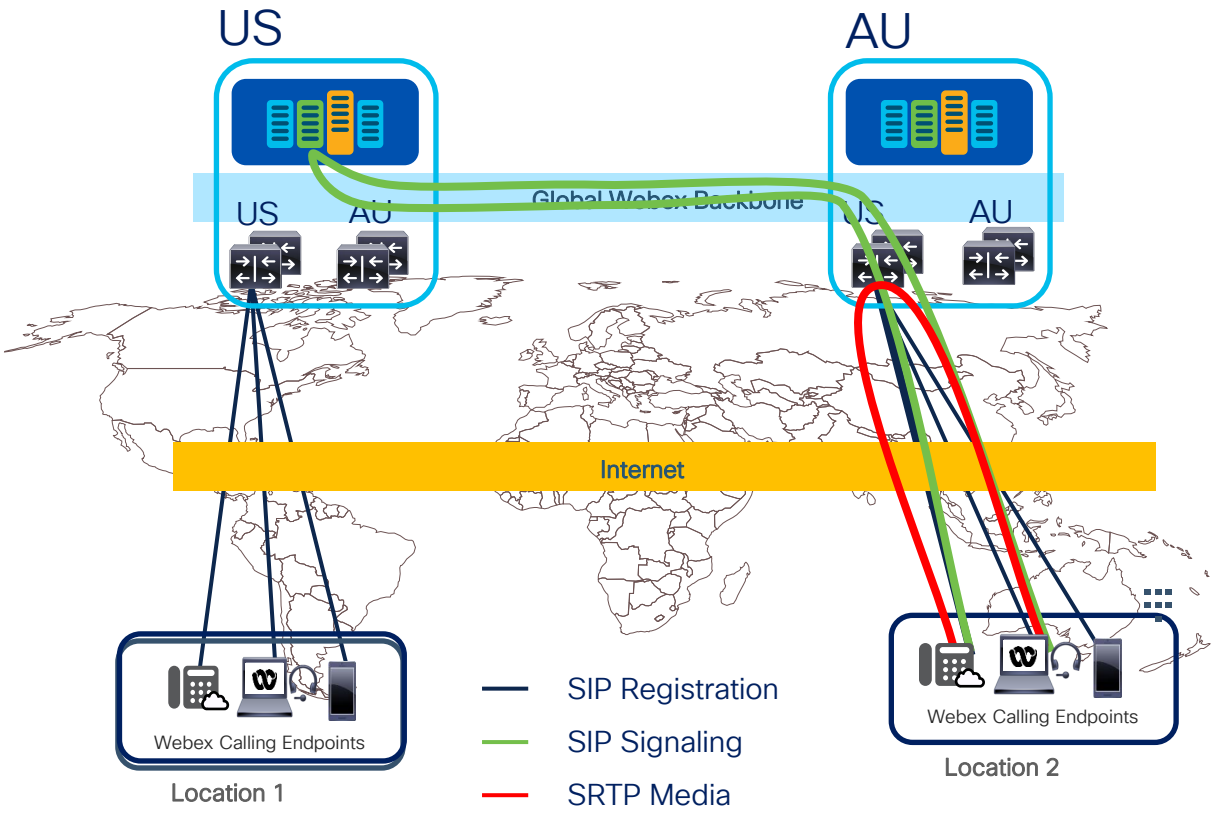
Multi-region customer: Regional media

- Access SBC presence in other regions
- In-region registration
- In-region media
- Signaling still inter-region
- Cut-through delay might still occur
- Media RTT not a factor



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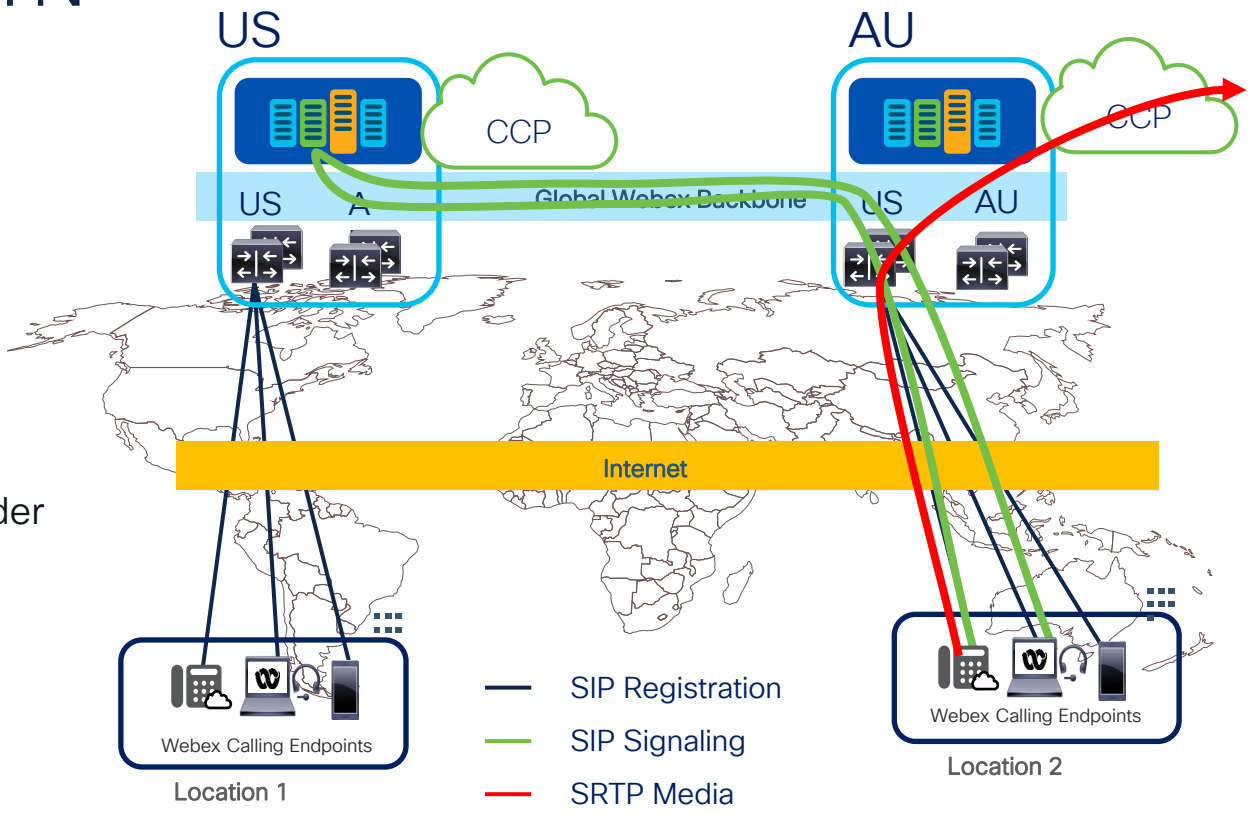
Multi-region customer: Regional media for Cloud Connected PSTN

- Locations in home region can use all CCP providers available in home region
- New: locations in remote region can now use CCP providers available in remote region
- PSTN media traffic stays within region if CCP provider in remote region is used



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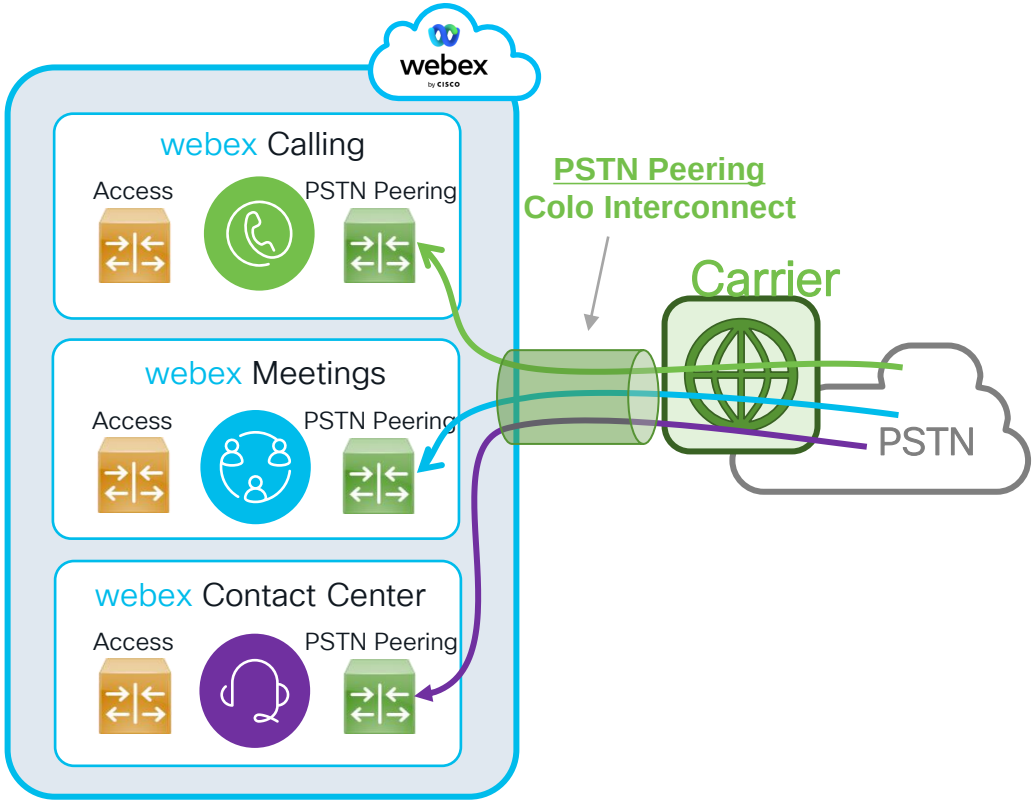
Network Peering: PSTN Peering (Future)

- Shared colo cross-connect across Calling, Contact Center, Meetings
- Single colo cross-connect will provide access to all services



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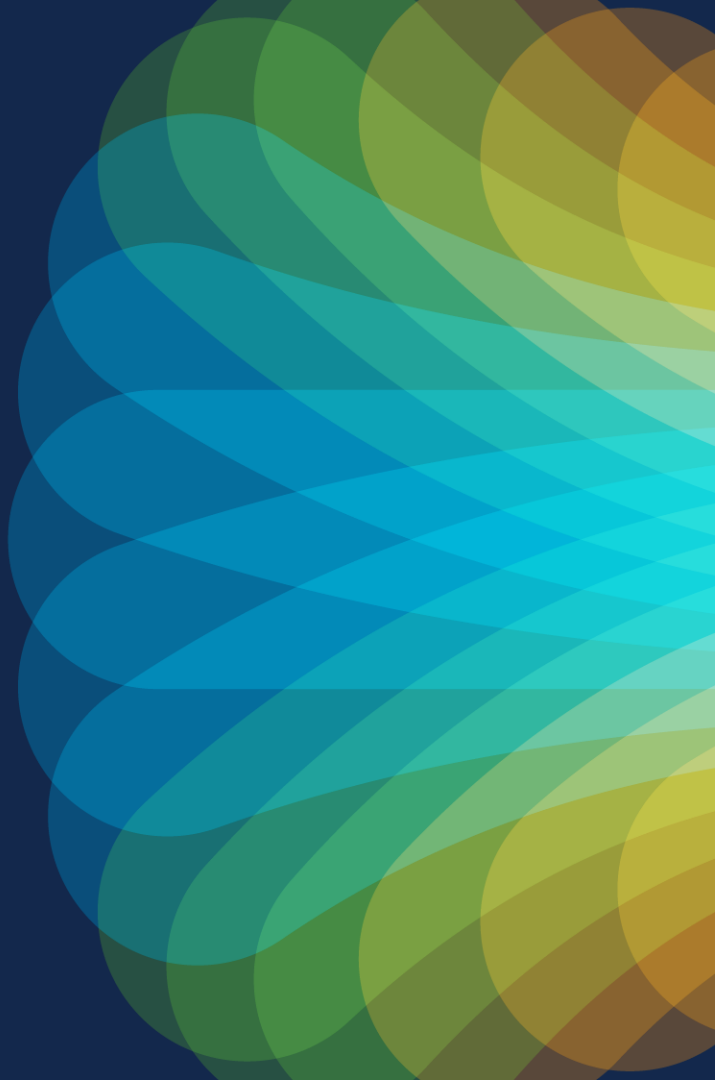
Administration



Control Hub

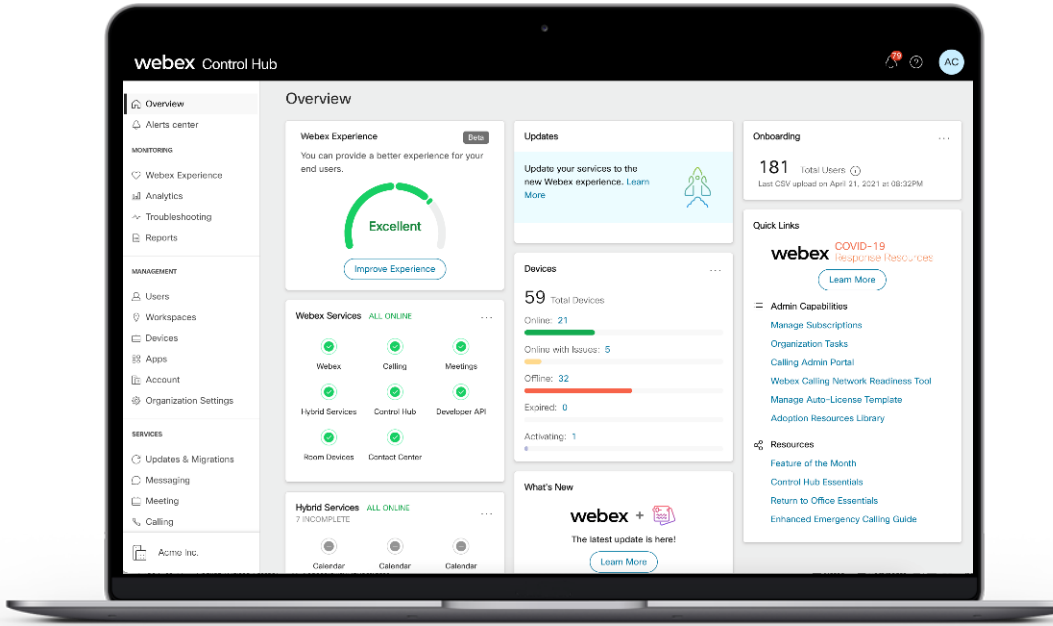
Integrated

Complete lifecycle

Realtime insights

Supports full Webex portfolio

Simple



Control Hub for collaboration management and analytics – BRKCOL-2689

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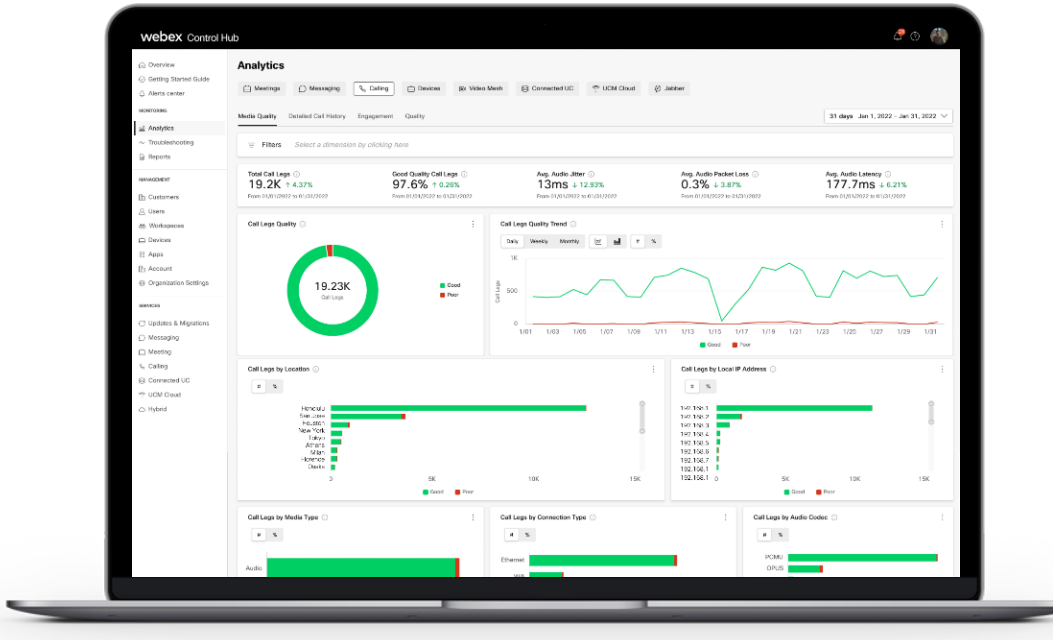
Enabling exceptional control of your service

- Calling Analytics
  - New dashboard for insight into call quality
  - View global KPIs to monitor call quality across your organization
  - Live charts and graphs show call quality by location, IP, device type, codec, and more
  - Apply filters to identify the root of call quality issues
- Detailed call history
  - New dashboard for a holistic view of every call made
  - Reports can be exported or accessed via API
- Call troubleshooting
  - Inspect individual calls to determine issues on call media on either end of the call



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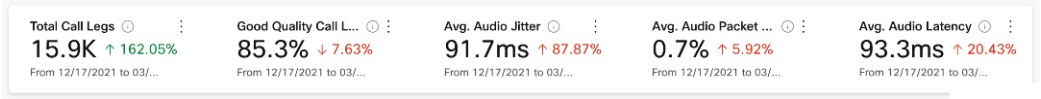
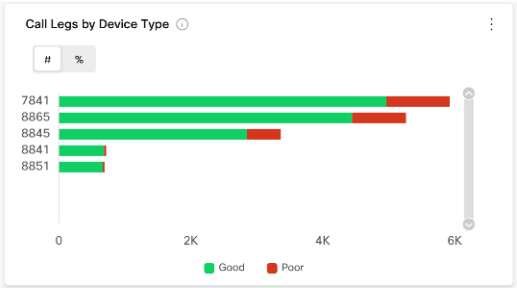
Calling Analytics

Provide a consistent, high quality calling experience across your organization

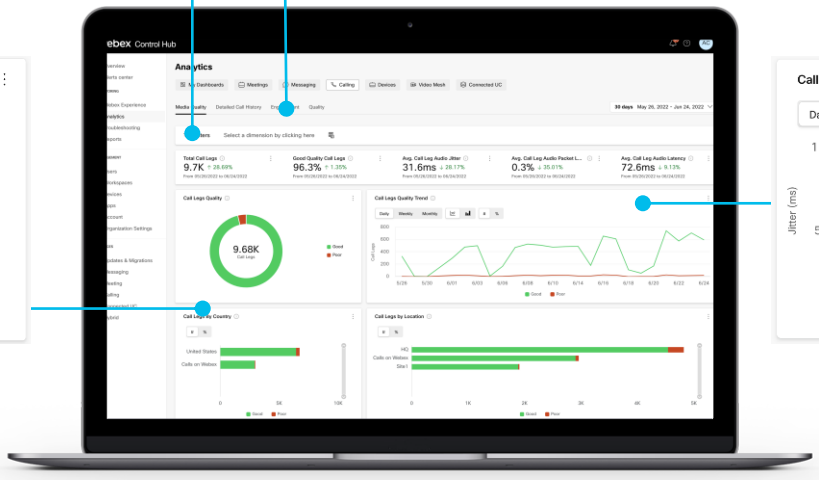


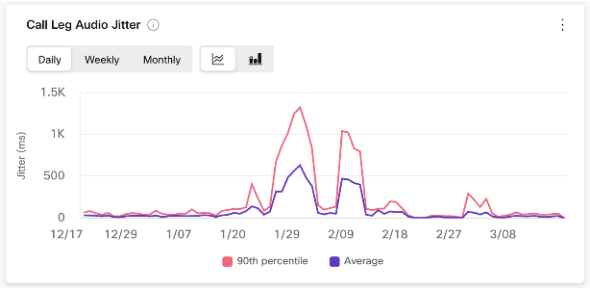
Monitor global call quality KPIs

Easily drill down into data with filters, from the filters bar, or any chart



See call quality detail by location, IP, media, path optimization, connection, codec, endpoint, IP phone type, and country





See call quality, jitter, packet loss, latency trends over time

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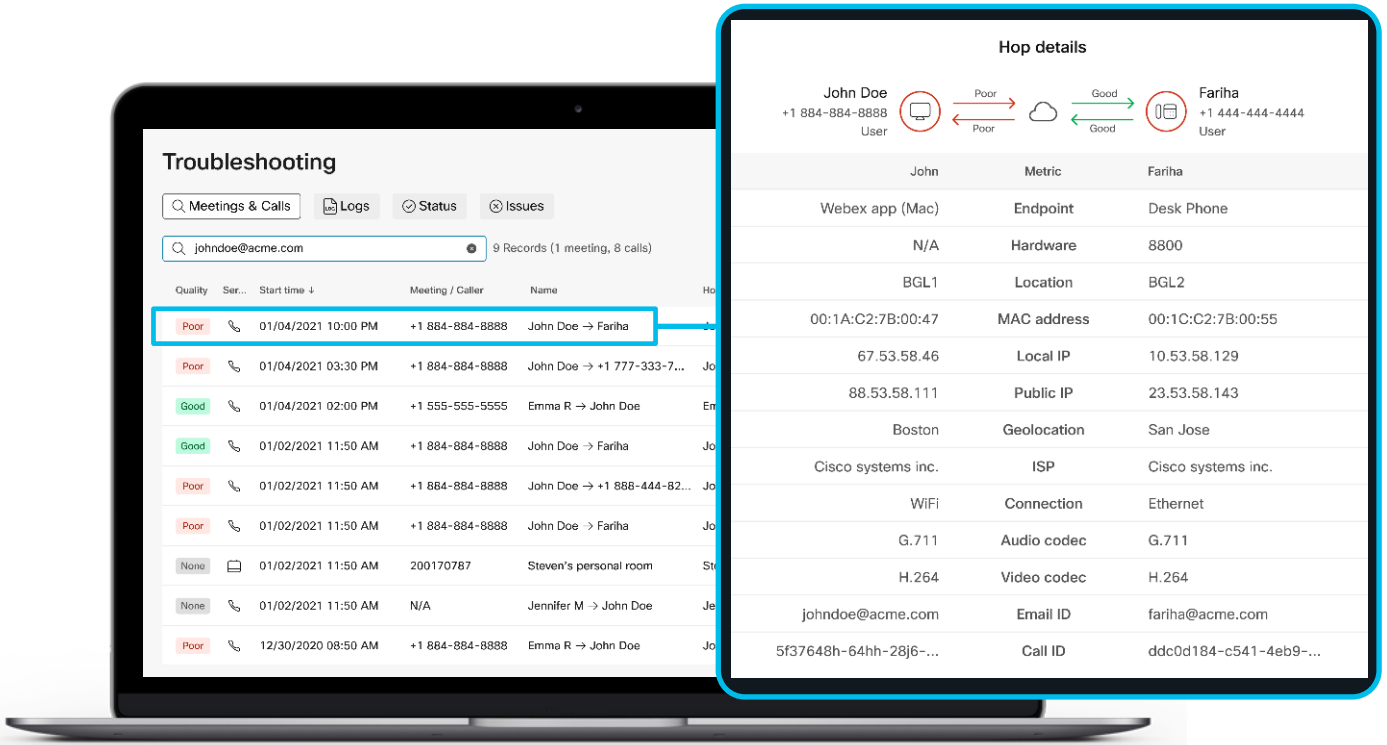
Call quality troubleshooting

Quickly identify and resolve call quality issues



Troubleshooting tool provides admins with:

- Capability to find calls with poor-call quality
- Information about both sides of the call and the network in between

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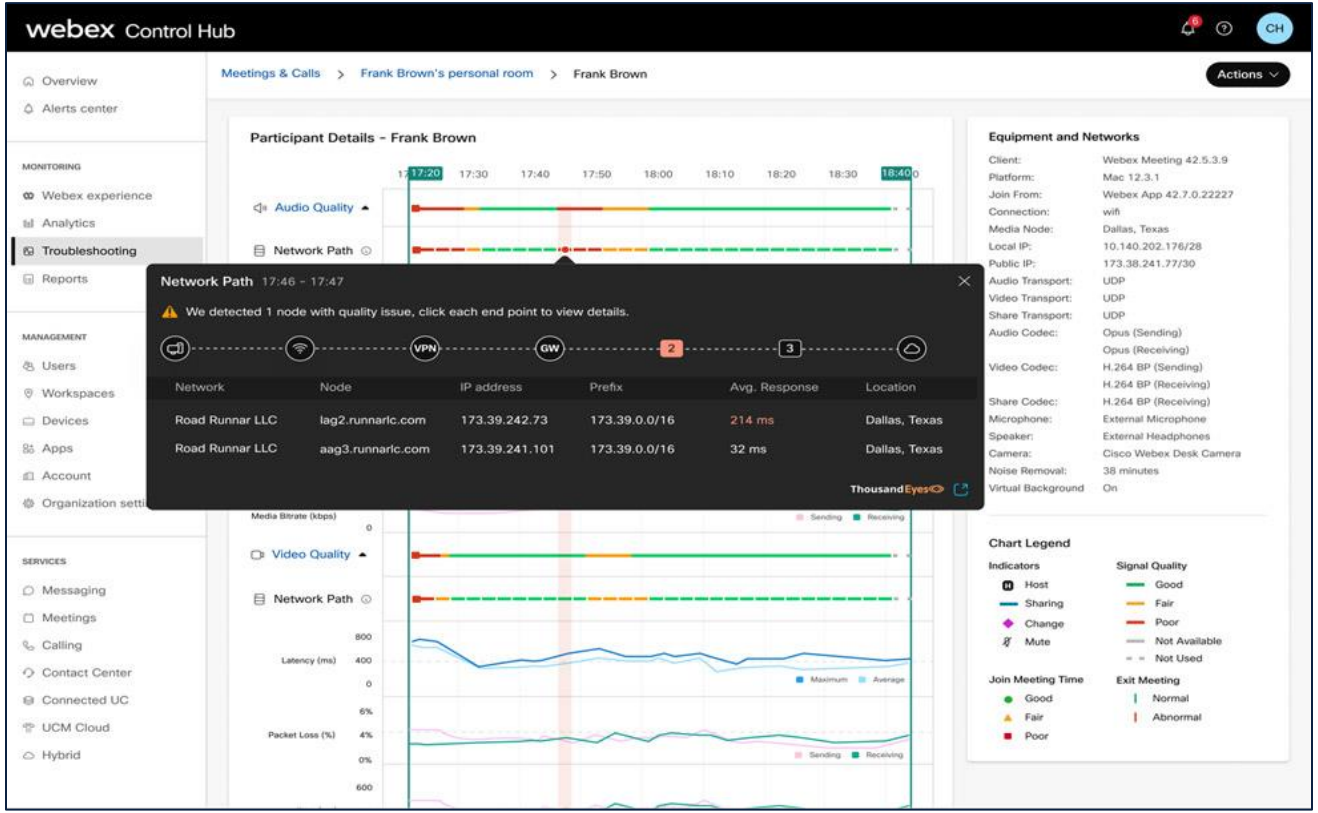
Thousand Eyes for Webex Calling



Coming Soon for Calling!

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Dedicated Instance – Analytics features

Quality Metrics

- Call success, failures, quality and metrics
- Filter packet loss, jitter & latency

Feature Adoption

- Heat map for call/mid-call features and UC features

Asset Usage and Inventory

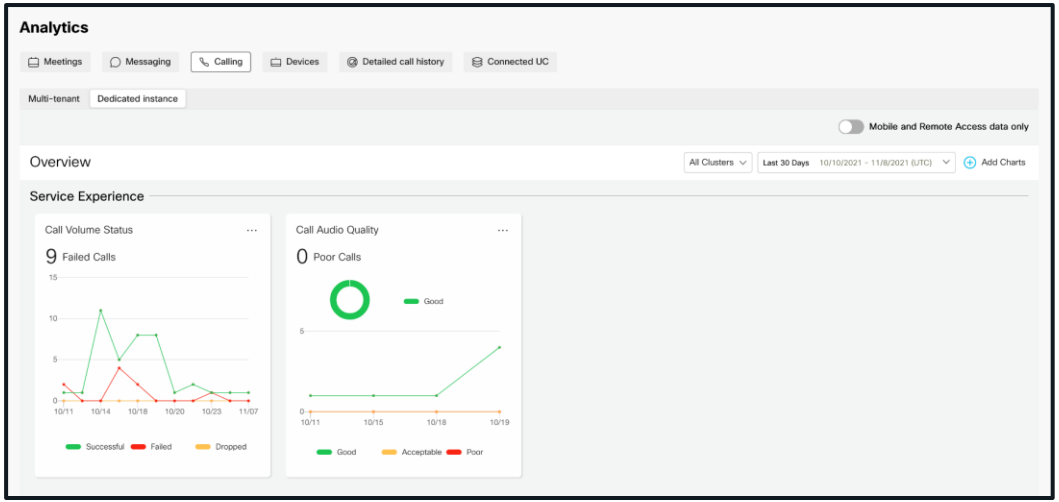
- Number of calls, talk time and messages
- Endpoint & headset usage

Engagement Analytics

- View calling across the organization, Call numbers & call minutes
- Daily, Weekly, Monthly views
- View endpoint, soft-client, and headset usage
- Region/Cluster-based filtering available for analytics

Capacity Analysis

- Trunk and route utilization



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Security built-in, not bolted on

Reliability
Fault-tolerant architecture and geo-redundant deployment

Physical security
15 data centers
8 countries | SSAE 16
and ISO 27001-audited

Audit and compliance
ISO 27001:2013 and
NIST 800-5 compliance

Data protection
Program is compliant with international regulatory organizations

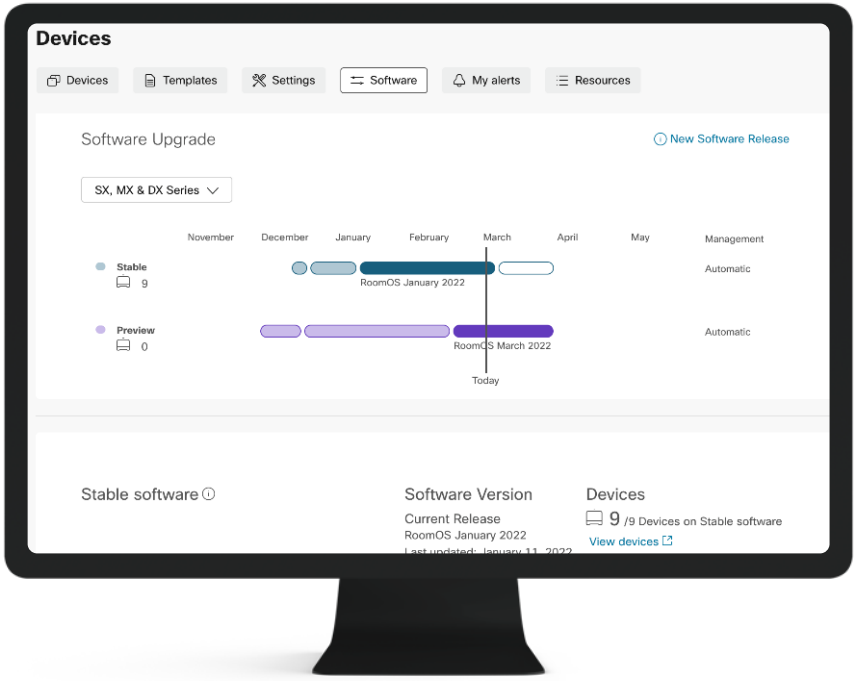
Product security
Secure software development lifecycle approach

Communications security
Demilitarized zone (DMZ), firewalls, intrusion detection system, AATA encryption, Transport Layer Security

Automatic updates
Intelligent devices automatically updated with latest secure firmware

Fraud detection
Real-time fraud detection mechanism

Anti-malware
Integrated anti-malware scanning in the Webex App



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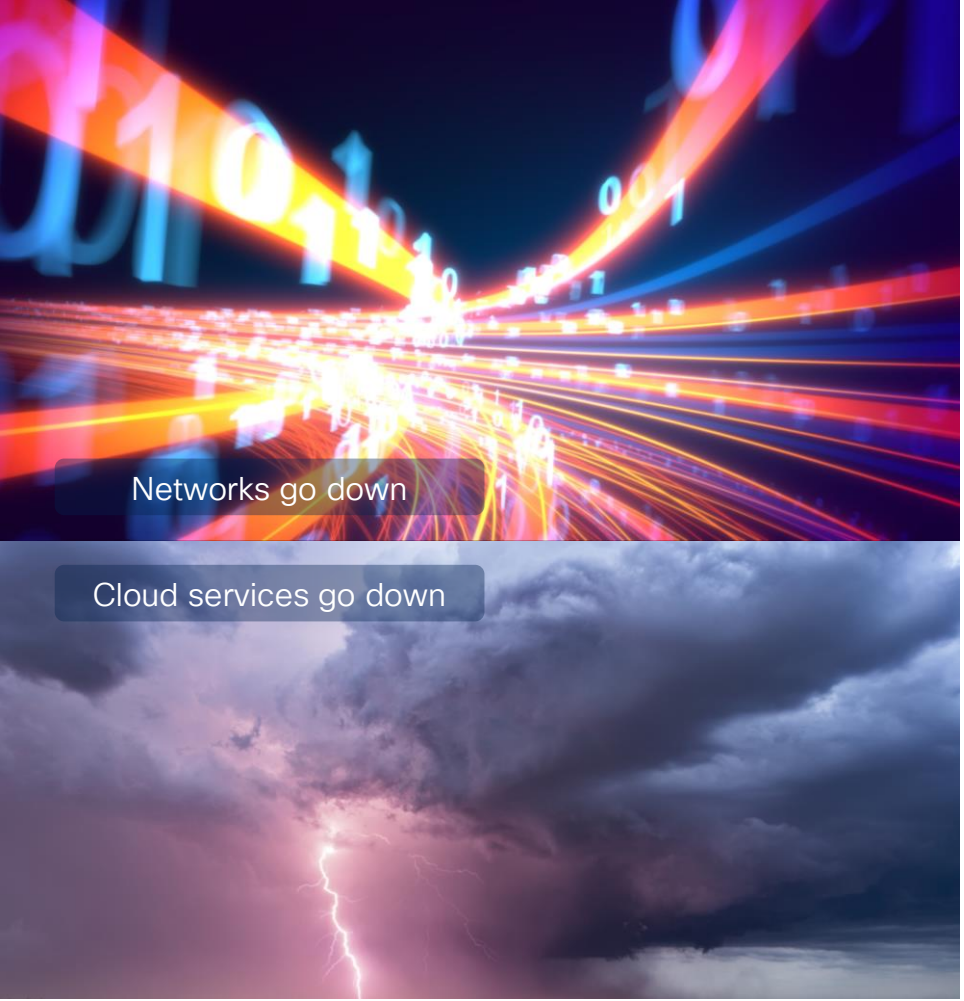
Survivability
Multi-Tenant



Why site survivability for a cloud calling service?

- Calling traffic becomes more critical during emergencies
- Having continuous communications channels accelerates recovery
- Need to remain “open for business”

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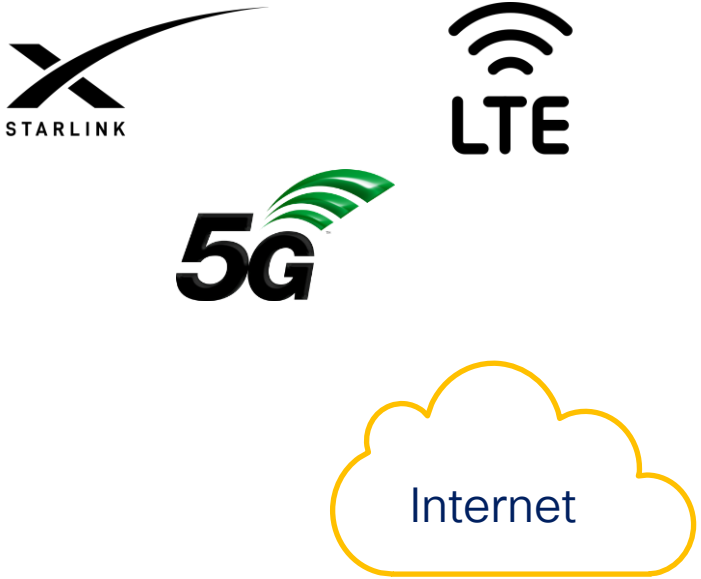
Survivability – Internet



As with any cloud service, internet connectivity is key

Suggested ways for internet redundancy

- Redundant internet links to organization
- Cellular failover in routers
- Decentralized Internet Access
  - Secure Direct Cloud Access

https://www.cisco.com/c/en/us/td/docs/solutions/CVD/SDWAN/cisco-sdwan-secure-direct-cloud-access-deploy-guide.html

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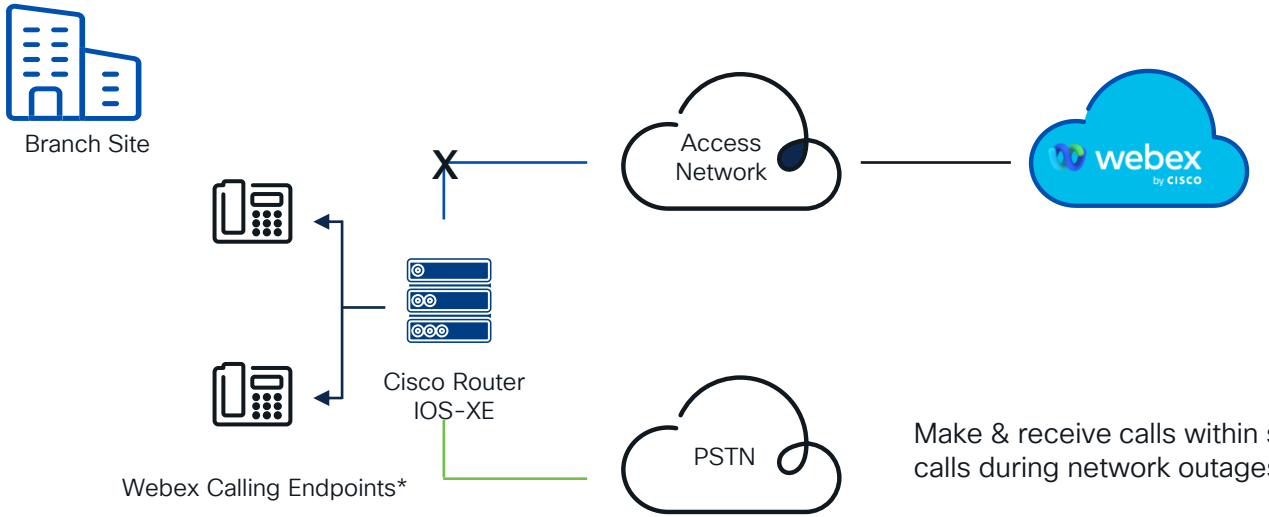
Webex Calling – site survivability

Continue calling even during internet outages with PSTN survivability



Simple deployment, manageability and analytics through Control Hub.

Make & receive calls within site & PSTN calls during network outages.

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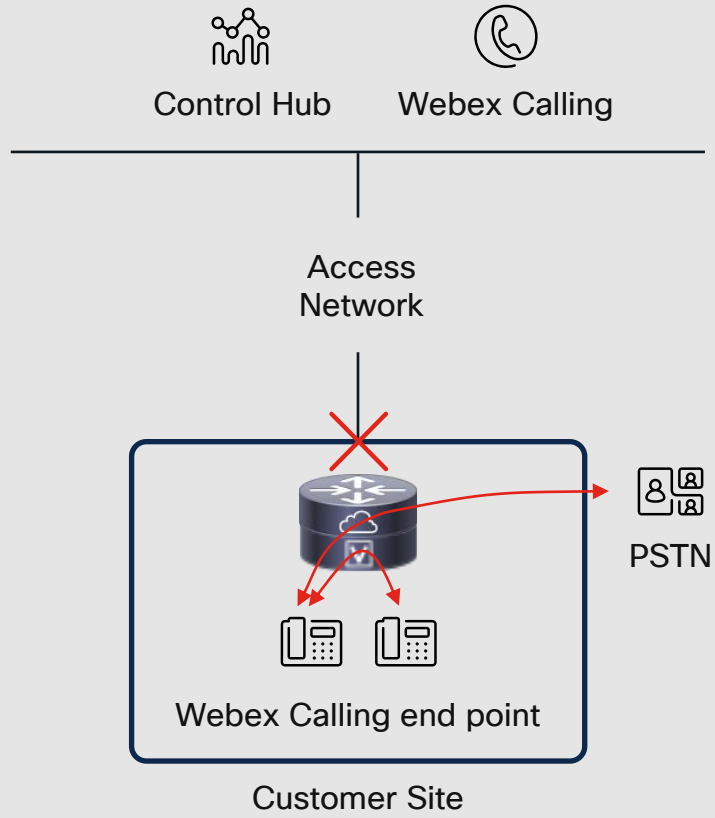
Solution Overview

- Webex Calling Site Survivability

- A Survivability Gateway is installed on site
- Gateway is managed, gets configuration details from Control Hub
- In the event of a network outage:
  - Internal/external calls routed via the gateway
  - Emergency calls are routed via the gateway
  - Mid-call and other calling features available

The Survivability Gateway is built on the IOS XE Survivable Remote Site Telephony (SRST) solution, allowing customers to migrate existing hardware, licensing and configurations to their Webex Calling solution. (On the ISR or Virtual Routers)



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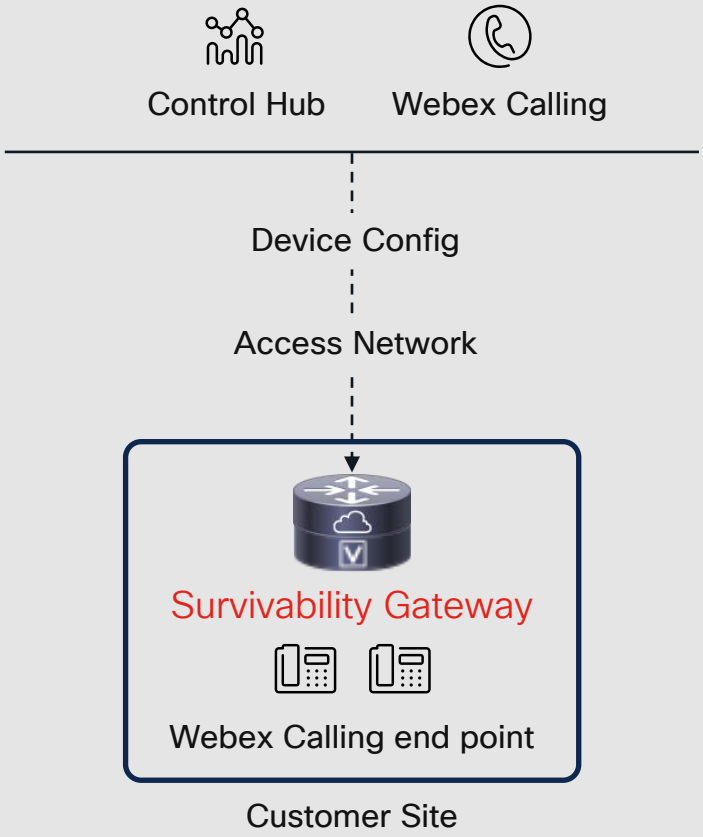
How it works

- The Webex Calling Survivability Gateway

- The Survivability Gateway is provided with a set of user account details in advance
- A connector agent connects the gateway with Control Hub, to ensure config data is always up to date
- Authentication and extension number mapping details are automatically downloaded from Control Hub, to validate device connectivity
- A public certificate is used to secure configuration data transfer and device registration



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Survivability zones

- Survivability sites are aligned with “locations” in Webex Calling
- Each Survivability Gateway is associated to a specific location (1:1)
- All supported devices added to that location are configured to use that gateway, in the event of an outage
- The Survivability Gateway is automatically provisioned with registration details for users/devices for its location
- No manual assignment of users to a survivability zone is required

Survivability Gateway support for multiple locations is planned for a future release.

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Supported call features

Feature	Comments
Intra-site extension calling	For supported endpoints. Alternate numbers & virtual extensions not supported
PSTN Calling Inbound/Outbound	Using either a direct PSTN circuit or SIP trunk
E911 Call Handling	Calls use specific registered ELIN for defined ERLs with Operator callback
Call Hold and Resume	MOH files manually provisioned on the SGW
Call Transfer Attended	Supported
Call Transfer Blind	Supported
Outbound Caller ID (Name & Number)	Supported
Inbound Caller ID (Name & Number)	Supported
Point to Point Video Calling	Supported
Shared Call Appearance	For simultaneous call presentation only

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Endpoint support

Type	Model	Launch	Roadmap
Desk Phones	6821, 6821, 6841, 6851, 6861, 6861 Wi-Fi, 6871	✓	
	7811, 7821, 7841, 7861	✓	
	8811, 8841, 8851, 8861	✓	
	8845, 8865	✓	
	8875		✓
Conference Phones	7832, 8832		✓
Wireless Phones	840, 860		✓
ATA	ATA 191, ATA 192		✓
VG400	VG400, VG420		✓
DECT	DECT 6800 Series		✓
Room OS Devices	Webex Calling Registered devices		✓
Webex App	Windows, Mac	✓	
	iOS, Android		✓
Third Party Devices	Various		✓

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Compatible platforms 17.9.3

Fully supported from IOS XE

Model	Max Registrations
Integrated Services Router 4321	50
Integrated Services Router 4331	100
Integrated Services Router 4351	700
Integrated Services Router 4431	1200
Integrated Services Router 4451-X	2000
Integrated Services Router 4461	2000
Catalyst Edge 8200L-1N-4T	1500
Catalyst Edge 8200-1N-4T	2500
Catalyst Edge 8300-1N1S-6T	2500
Catalyst Edge 8300-2N2S-6T	2500
Catalyst Edge 8300-1N1S-4T2X	2500
Catalyst Edge 8300-2N2S-4T2X	2500
Catalyst Edge 8000V Software – Small Configuration	500
Catalyst Edge 8000V Software – Medium Configuration	1000
Catalyst Edge 8000V Software – Large Configuration	2000

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Survivability
Dedicated Instance

Webex Calling Survivability

Calling is always available, even when the cloud is not

SRST
Provides basic remote site survivability for telephony, but lacks access to all features and integrations during network outages

Advanced Requirements
Some vertical markets, like Healthcare, deem calling as mission critical and require comprehensive redundancy options

Comprehensive Redundancy
Enhanced Survivability for Dedicated Instance supports all call-flows, features & integrations with an on-prem node in case of a complete loss of cloud access

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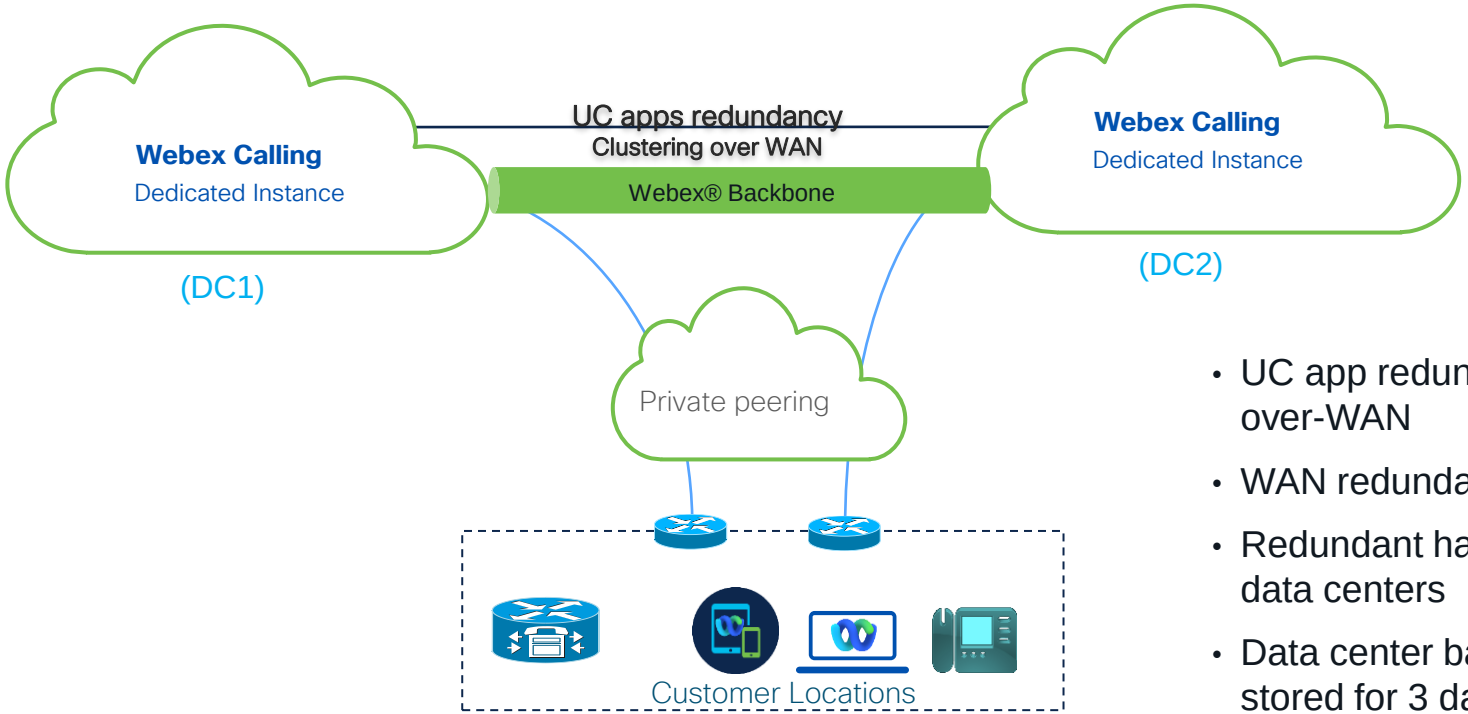
Dedicated Instance
Data center redundancy within each region



- UC app redundancy - clustering-over-WAN
- WAN redundancy
- Redundant hardware across the data centers
- Data center backups daily, stored for 3 days

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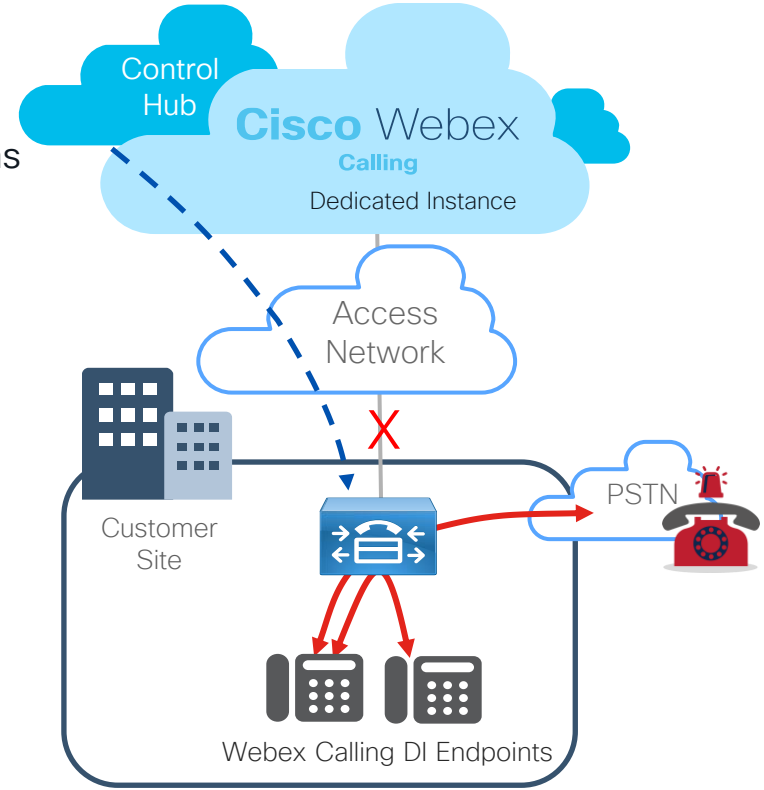
Enhanced Survivability

- A virtual application deployed on-premises that connects as a remote node to Dedicated Instance UCM cluster
- Devices register to the appliance when cloud services are unavailable.
- All call control functions, and 3rd-party integrations are preserved in the failover mode
- High density survivability: support ~10K devices per node
- Up to 8 remote nodes can be connected to a DI cluster
- Managed from the cloud
- RTT time for remote nodes >200ms
- One way sync from publisher to remote node
- Remote node is the tertiary node in the CM group



Now Available!

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Features

A complete enterprise feature set

Highlights of supported calling features

Inbound call management

- Auto attendant
- Call queue analytics
- Call routing and queuing
- Call waiting – Up to 4 calls
- Hunt group
- Inbound caller ID
- Music on hold
- Receptionist client
- Request call back
- Skills based routing
- Sequential ring

Make and receive calls

- Call forwarding, hold, transfer
- Call redial
- Directory search (Enterprise and Personal)
- Distinctive ring
- Do not disturb
- Outbound caller ID blocking
- Privacy
- Selective call rejection
- Speed Dial 100
- Three flexible PSTN options
- Availability in 120+ countries

Call history and voicemail

- Call history
- Call logs w/click to dial
- Convenience call recording
- Visual voicemail
- Voicemail transcription

Video, analog, fax, other devices

- ATA support
- Cloud-based fax
- DECT devices
- Video (point to point)

Multi call / line experience

- Alternate numbers
- Busy lamp monitoring
- Conferencing (site based)
- Exec / assistant roles
- Multi call window
- Multi line selection in App
- Multiple lines on Cisco Phones
- N-Way voice and video calling (6)
- Shared lines
- Three-way calling (variable length)
- Virtual extensions

Agent / supervisor

- Call queue analytics
- Call transfer – attended/blind
- Directed call pickup
- Monitor, coach, barge, takeover
- Skills based routing

Mobility

- Business texting
- Hot desking & hoteling
- Remote office
- Simultaneous ring
- Webex Go

Administration

- Analytics and troubleshooting
- Business continuity (CFNR)
- Call history reporting and API
- E911
- Single point of admin for Webex Suite

Integrations and partners

- MS Teams integration
- Google Chrome integration
- Recording, attendant, fax partners
- Security and safety partners
- 20+ Certified Calling Providers

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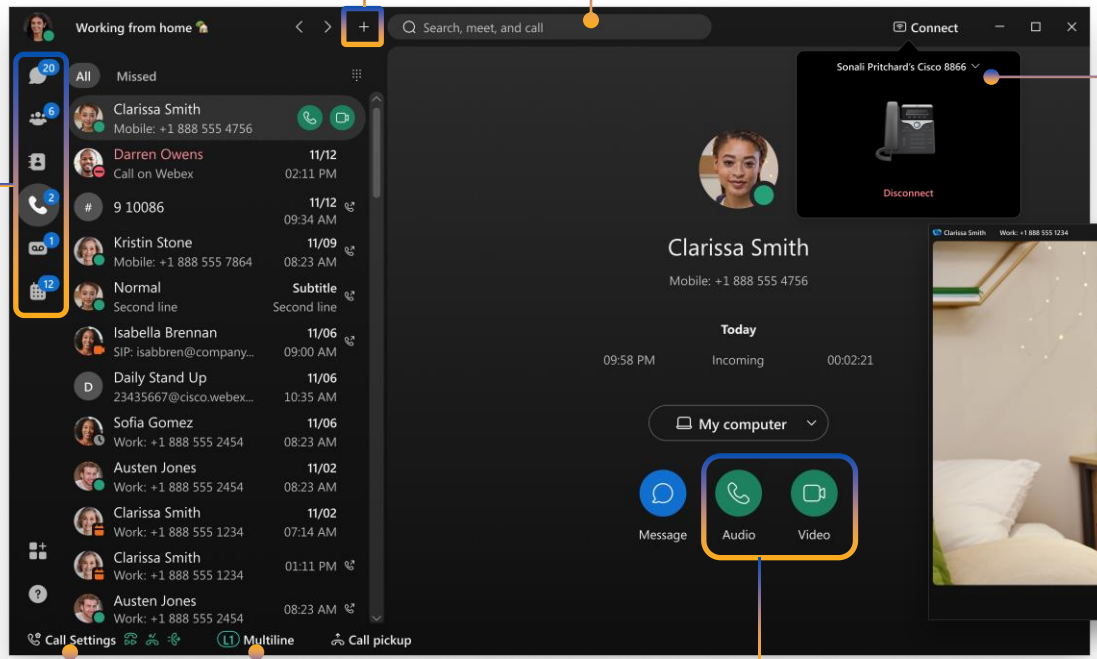
Calling features you need, available anywhere

Call, text, message, meet with one click

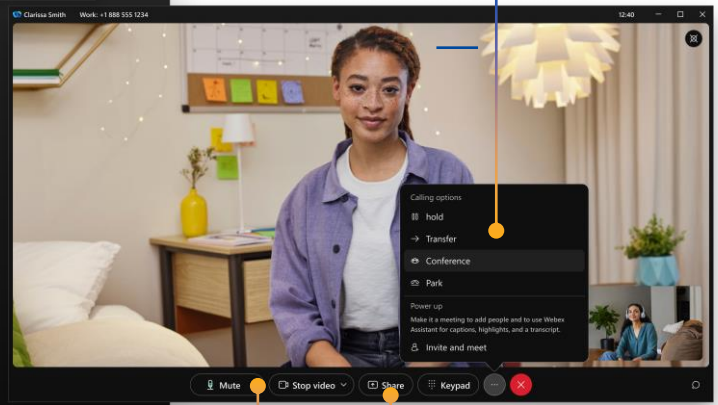
Directory search

Instant access to:
- Call history
- Visual voicemail
- Transcriptions
- Recordings
- Contacts
- Messaging
- Spaces
- Meetings



Desk phone & room device pairing and control

Hold / resume, transfer, merge / conference, record, and elevate to a meeting



Call preferences, forwarding, single number reach

Select line, group, queue, shared line

Call on Webex or PSTN with video or video

AI-powered Audio Intelligence: Noise removal, optimize for my voice

Share content during a Webex Call

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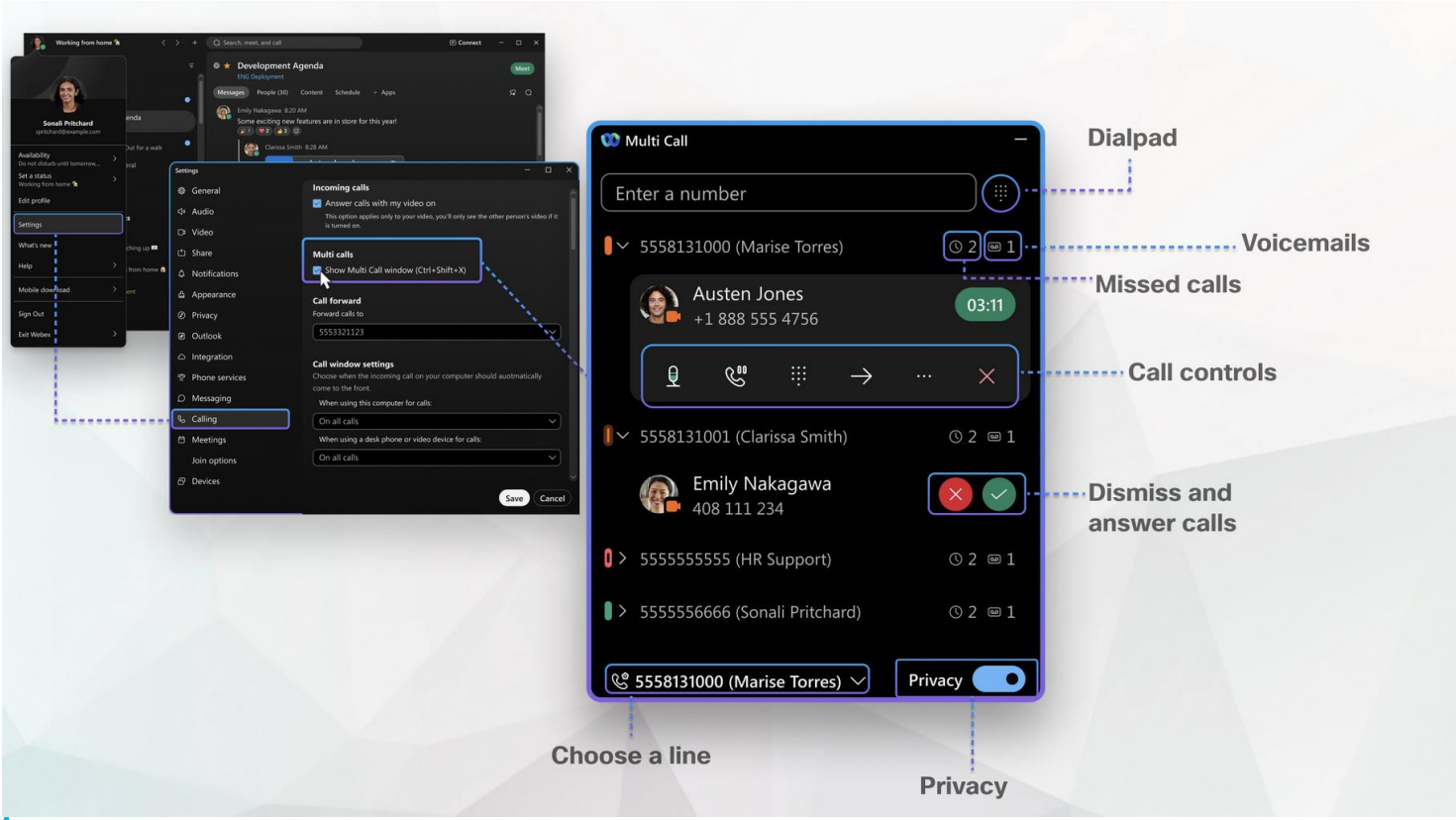
Webex Multi call Window



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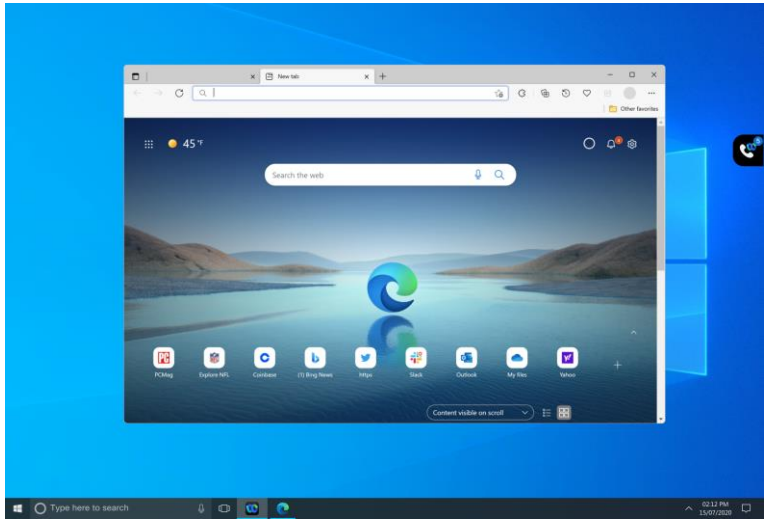
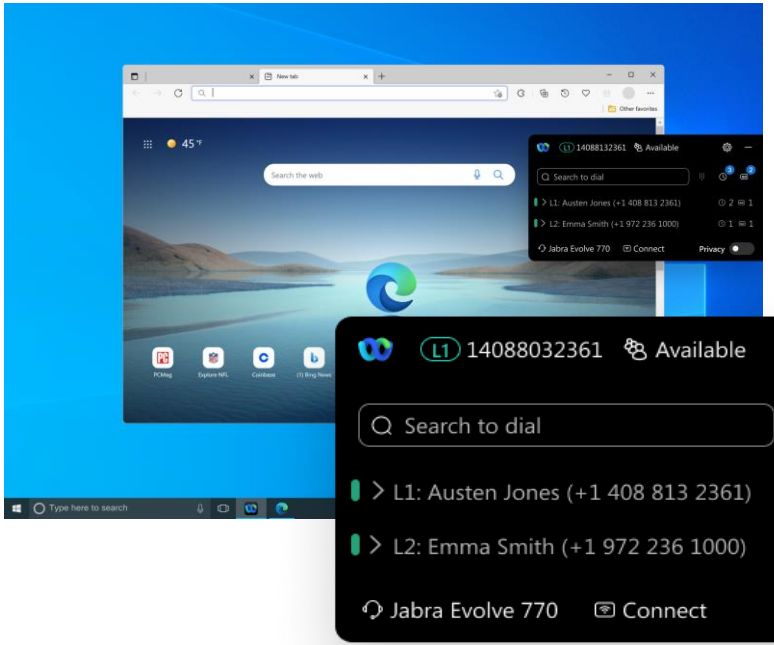
Enhancing Multi-call Window as Phone Widget

Flexible Docking with Notification badge





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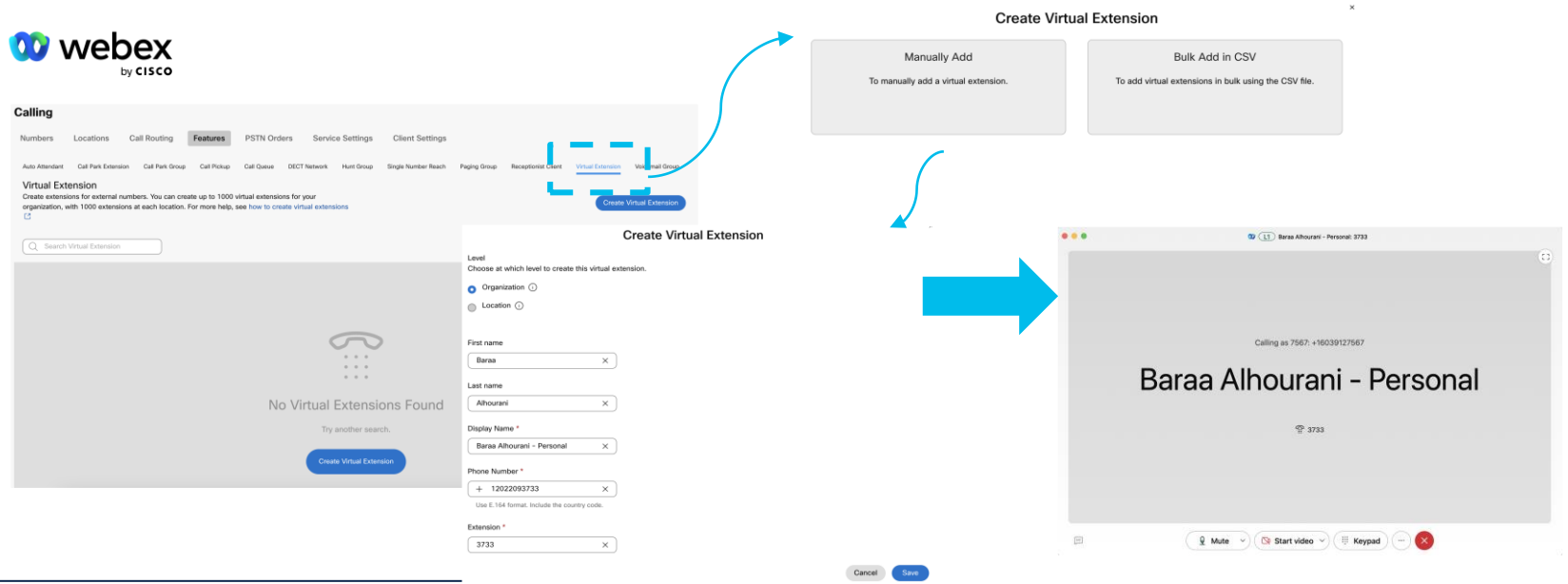
Virtual Extension – like speed dials



If customer has phone numbers outside their organization that users call on a frequent basis, they can make users' lives easier by assigning extensions to those numbers.

https://help.webex.com/en-us/article/fh3l46/Virtual-Extension-Configuration-in-Control-Hub

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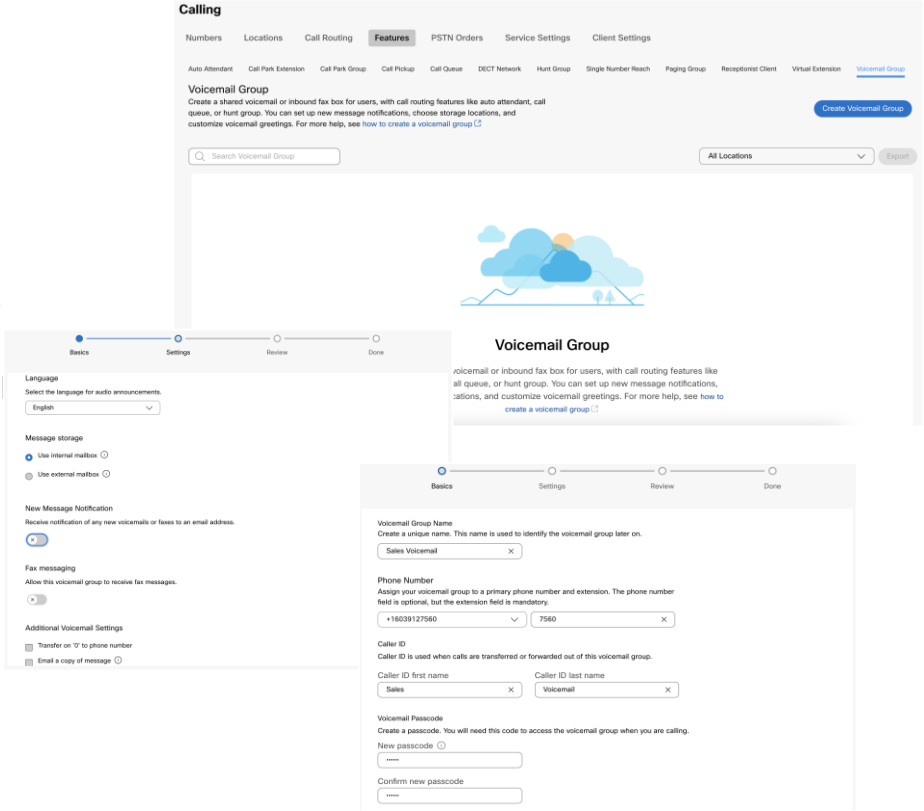
Shared Voicemail/ Voicemail Group

webex by cisco

Customer might use a voicemail group for any of the following scenarios:

- Need a general purpose voicemail for a department or workgroup.
- Need to add a voicemail option to an auto attendant or hunt group.
- Need to send the overflowed incoming calls from a call queue to a shared voicemail box.
- Have users who only need a voicemail box.



Learn More: Link

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GA

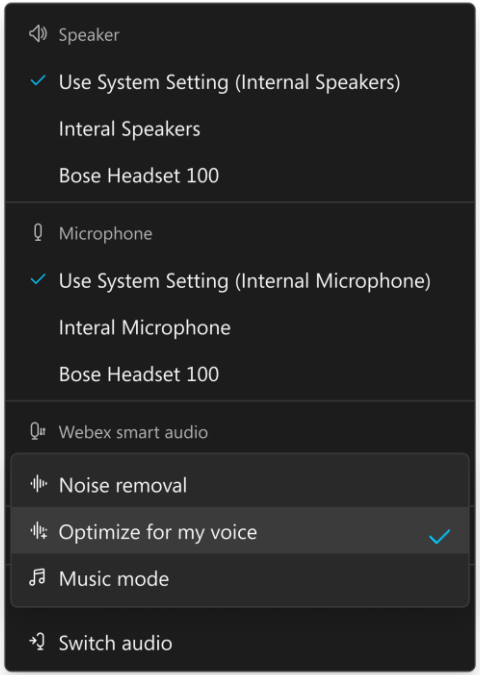
Remove noise on both ends of your calls

Control your audio for single speaker, multiple speakers, or music

Remove background noise from caller audio

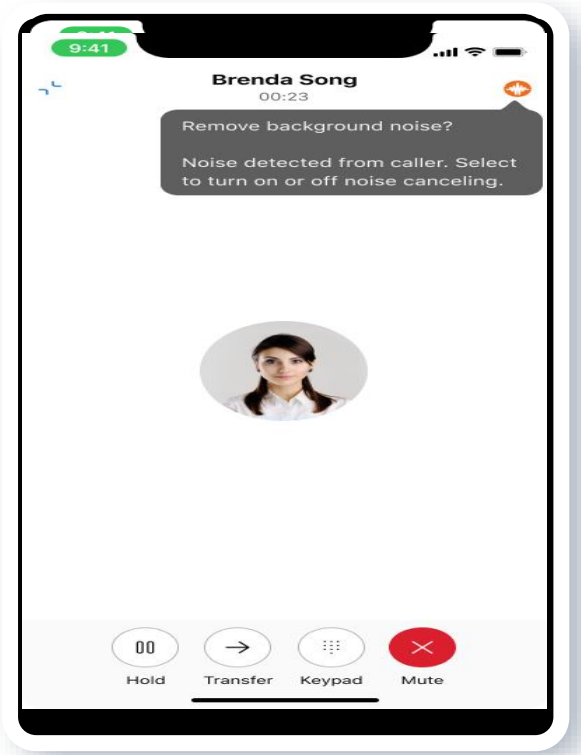
Optimize for my voice

Removes all background noise and background speech



PSTN noise removal

Webex App users can eliminate background noise from remote callers



Desktop & Mobile

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Roadmap

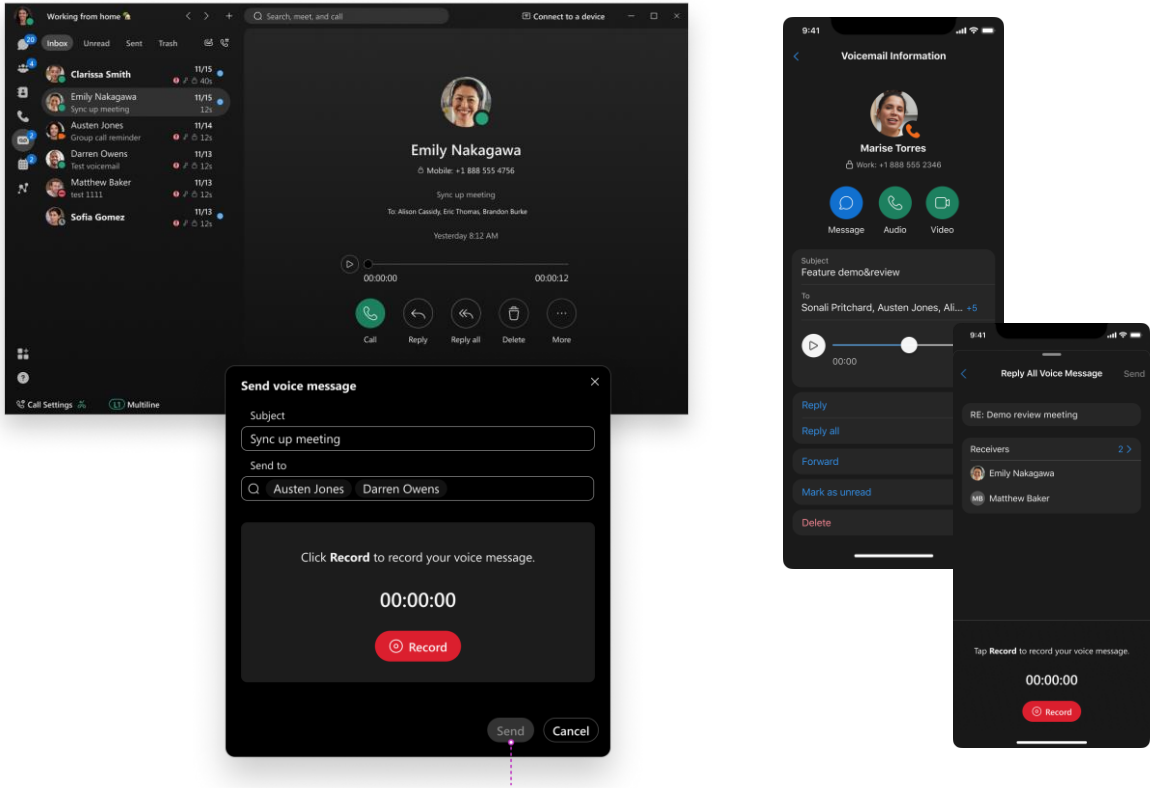
Coming Soon!!!

Advanced Voicemail Features

Forward & Reply

Allow you to record voicemail message to send, reply, or forward directly within Webex App

Available with UCM/DI first per Jabber migration request.



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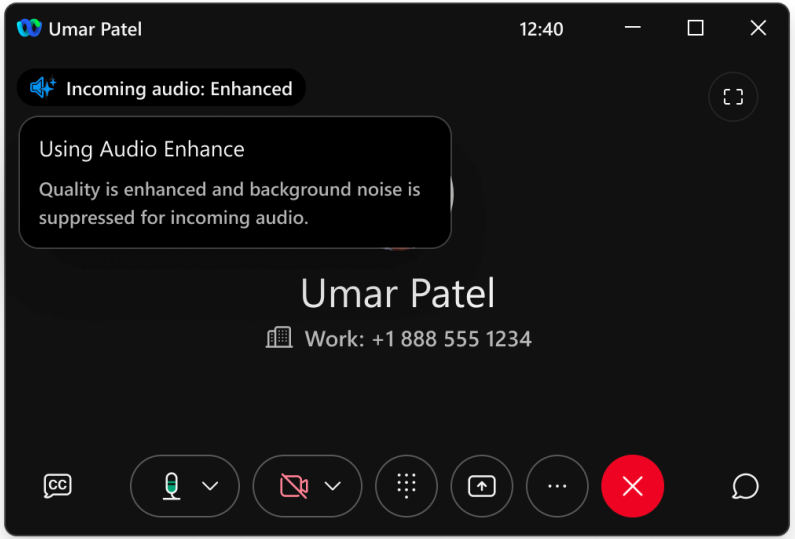
Roadmap

Beta

Bandwidth Extension (BWE) for PSTN

AI driven speech improvements

- AI powered audio enhancement for increased speech intelligibility and noise removal
- High fidelity audio stream for narrowband PSTN calls
- Superior speech quality decreases fatigue for calling users



**UI Subject to change

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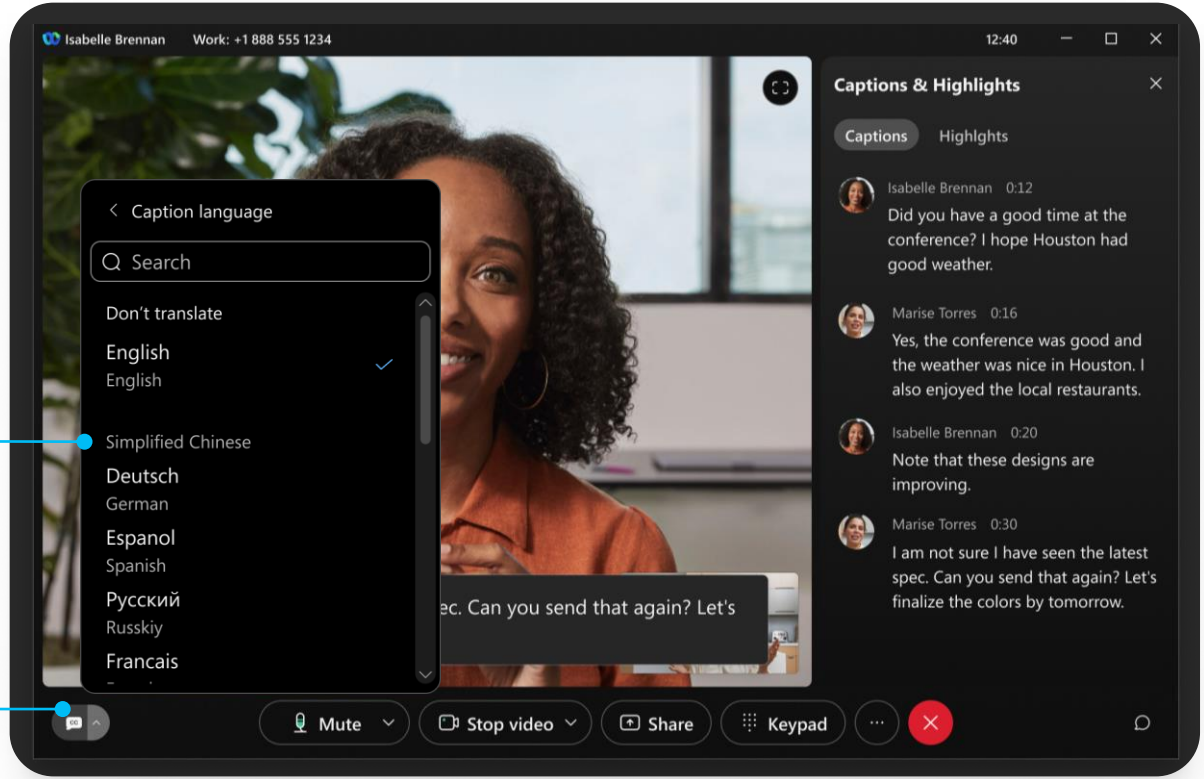
GA

Calling captions & translation

Select real-time translations from English to other languages

Turn on closed captions with one click



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Next generation hot desking

Delivering a personalised return-to-office experience

- Log in instantly with a QR code to reserve a Workspace (device) for up to 24 hours
- Make and receive voice and video calls from your business line
- Access call history, contacts, and voicemail
- Join scheduled meetings with a single touch
- Supported on 8875, MPP 8800 series and RoomOS

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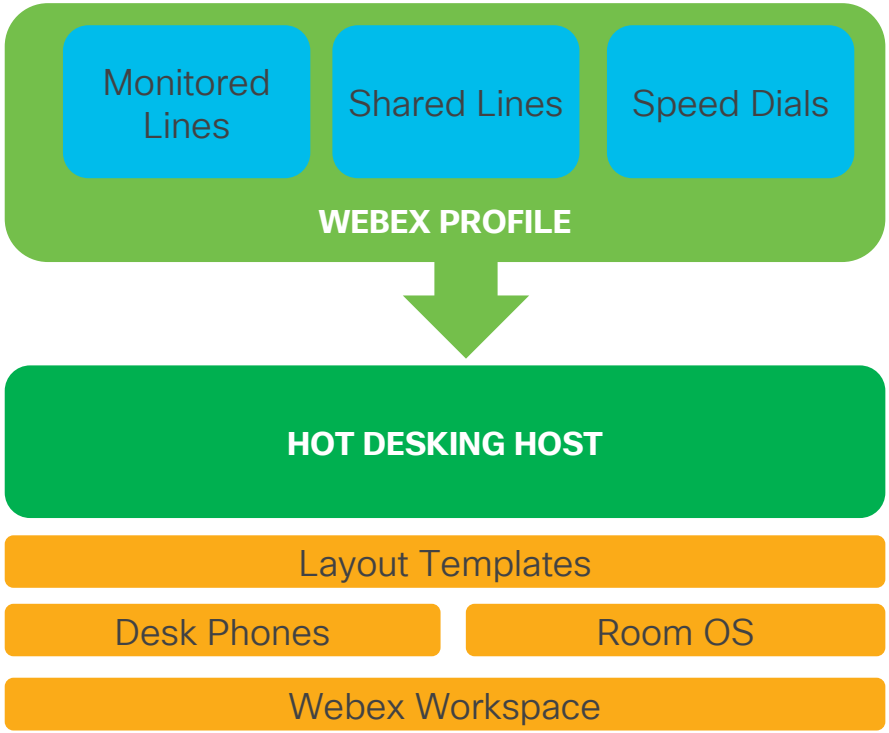
WEBEX PROFILES: BRING YOUR IDENTITY WITH YOU

- Take your identity with you.
- Similar to extension mobility.
- Monitored Lines, Shared Lines, Speed Dials
  - Tied to the user – not the device
- Webex Profiles will apply your Webex identity
  - Applied against specific layout templates



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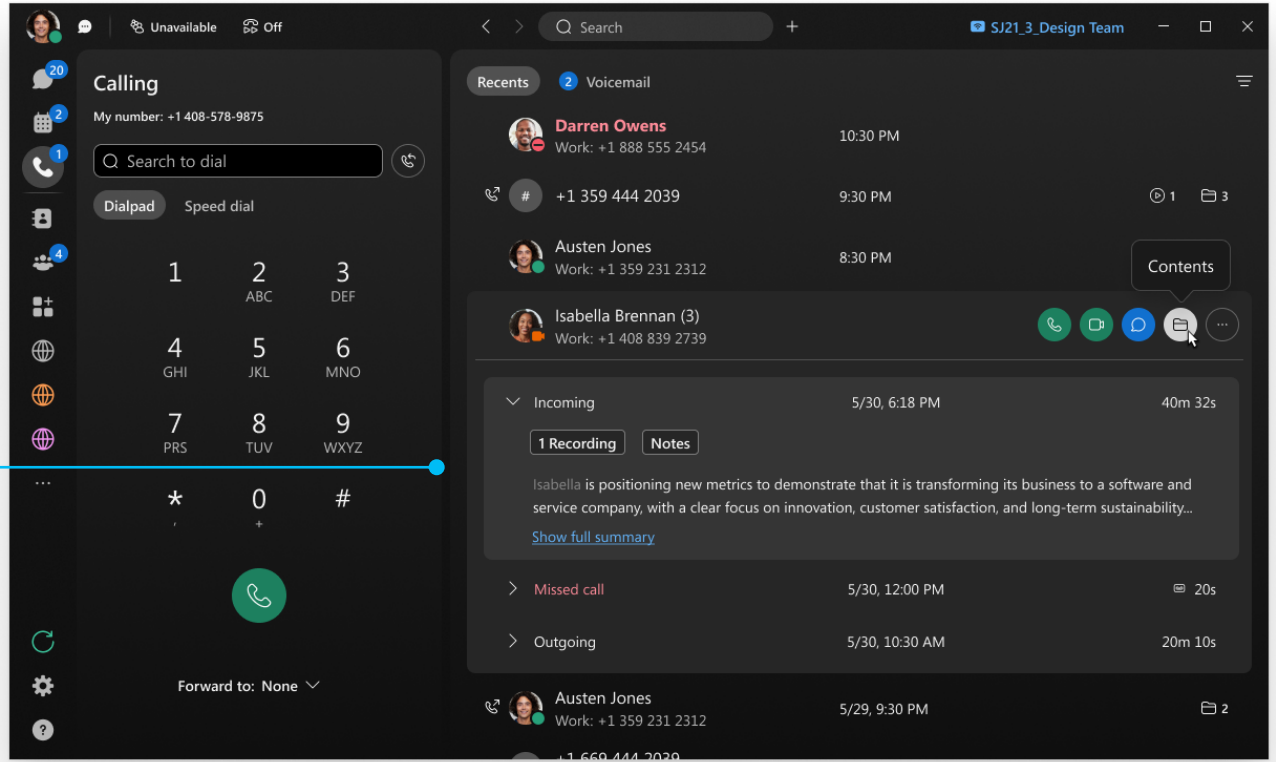
Roadmap

UI Not Final

Call Summary

Your personal AI assistant

AI generated post-call summary with note editing capability



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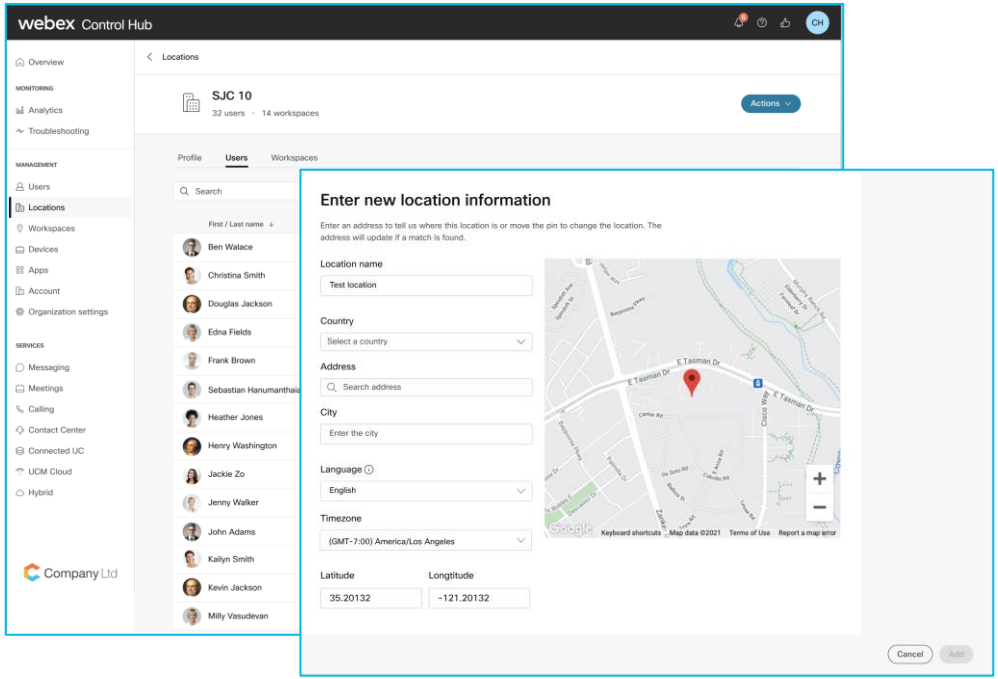
Webex Locations

Control Hub Locations

- Centralizes “locations” across Webex services.

  - Faster, more granular search options
  - Manage Users, Workspaces, Devices, Calling config centrally
  - Location-Assigned Administrators
  - Location-Assigned Webex Services
  - Journey-based, more intuitive Calling Administration
  - Each location can be configured with service-specific templates



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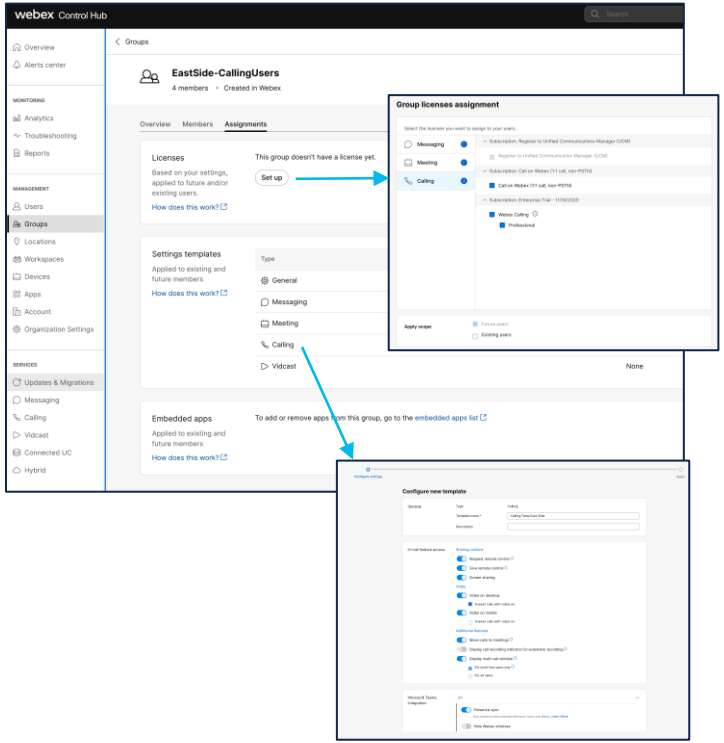
Bulk Administration

- **License Templates** allow the auto-assignment of licensed for individual users, groups of users, or an entire organization.
- **Settings Templates** will provision specific services within a workload, allowing mass configuration for specific profiles of users.
- Templates, when combined with directory synchronization, provide the tools for **zero-touch provisioning**.



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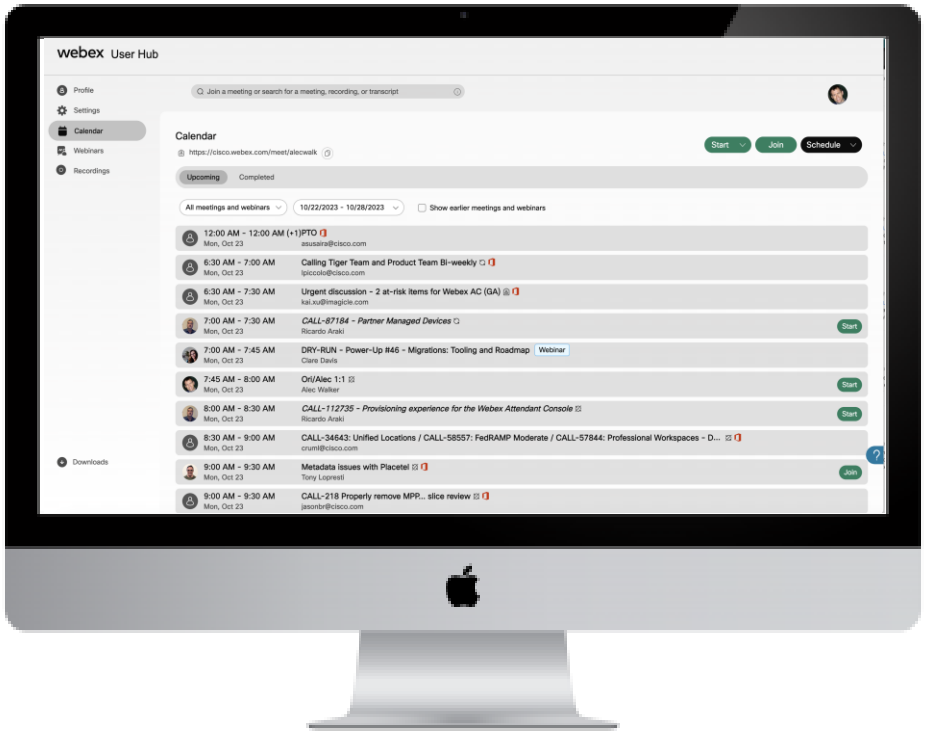
Newly Launched: End-user Portal

A new, end user experience is now GA at user.webex.com, which provides an updated experience for settings.webex.com.

This is a single end-user experience across wholesale, FLEX, and online customers.



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Cisco Managed Devices

Supported 3rd Party Devices:

- Poly Devices: VVX 101, 150, 201, 250, 301, 311, 350, 401, 411, 450, 501, 601, Trio 8300 / 8500 / 8800, SoundStation IP 5000*, 6000*
- Yealink Devices : IP Desk Phones – T41S, T42S, T46S, T48S, EXP40/50, T58A / T58V, T53W, T54W, T57W, T33G, T43U, T46U, T48U, T40G, DECT* – W52B, W56B, W60B, W70B, CP920, CP960
- SingleWire Fusion Server, Grandstream Door and Paging Devices, Algo Paging Devices, 2N IP Verso Door Devices, AudioCode (MP202, MP204)*
- Others (Roadmap):
  - All SIP devices compliant with Cisco Security requirements will be supported on the Wholesale platform via Partner Managed Devices option.

* – Available H2 23

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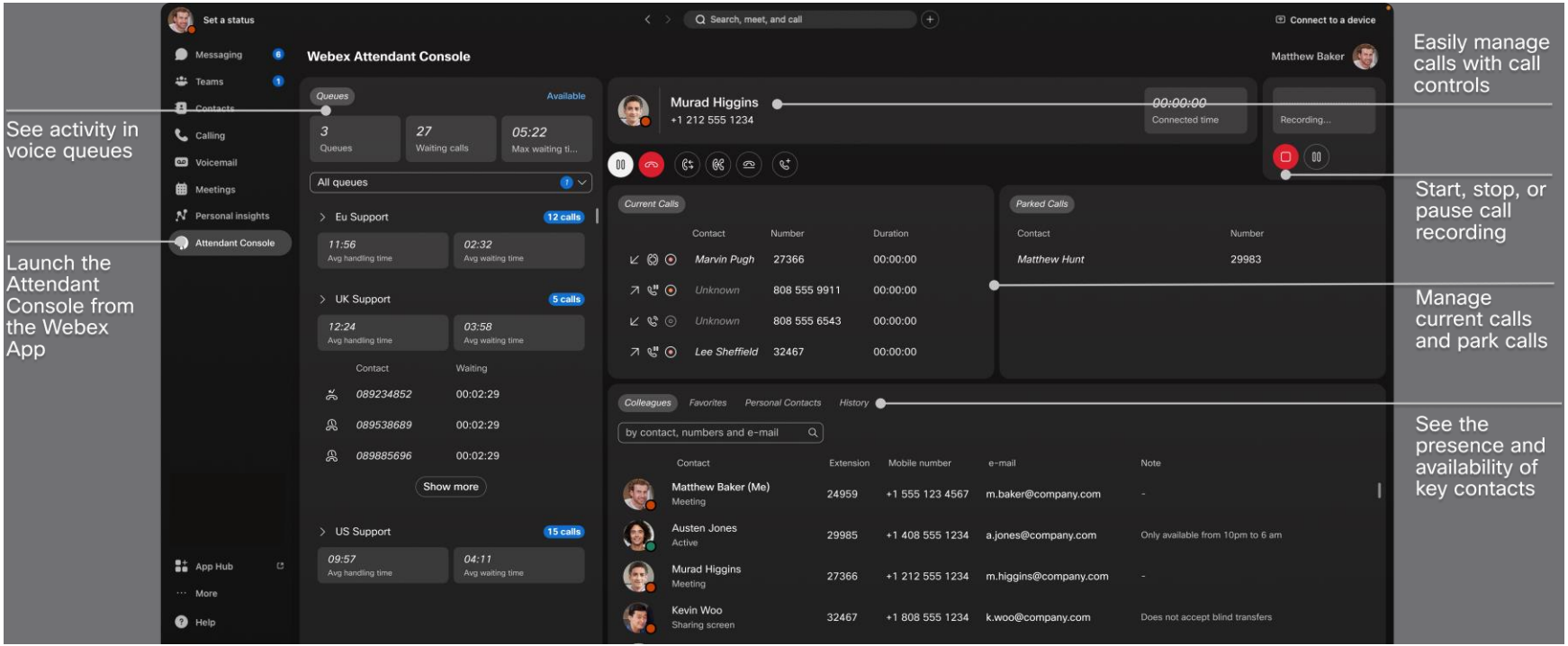
Webex Attendant Console

A modern interface for receptionists

Available Nov 15, 2023



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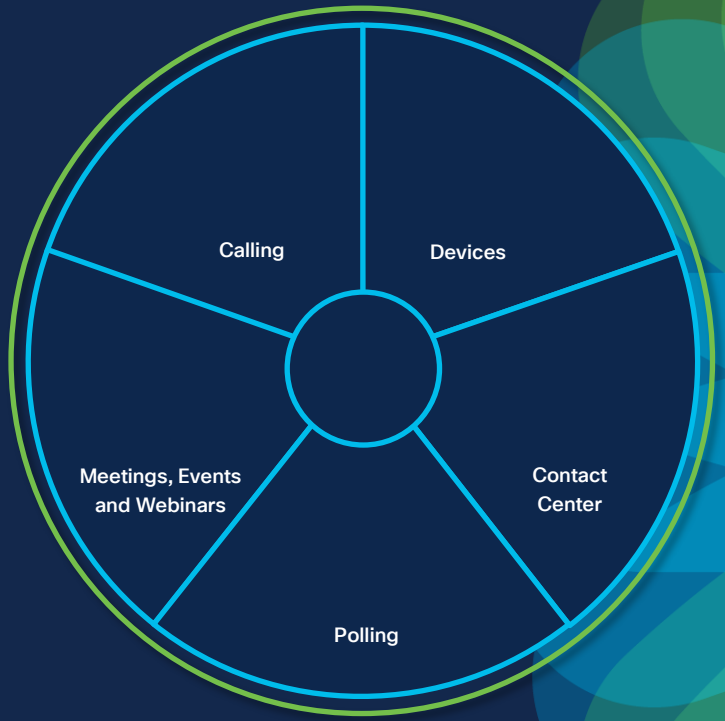
The bridge to possible

Webex and Microsoft: Better Together



A complete suite of collaboration services and devices that complement and enhance your Microsoft Teams Investments

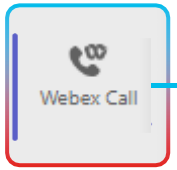
Microsoft Interop for Calling, Meetings, and RoomOS – BRKCOL-2692

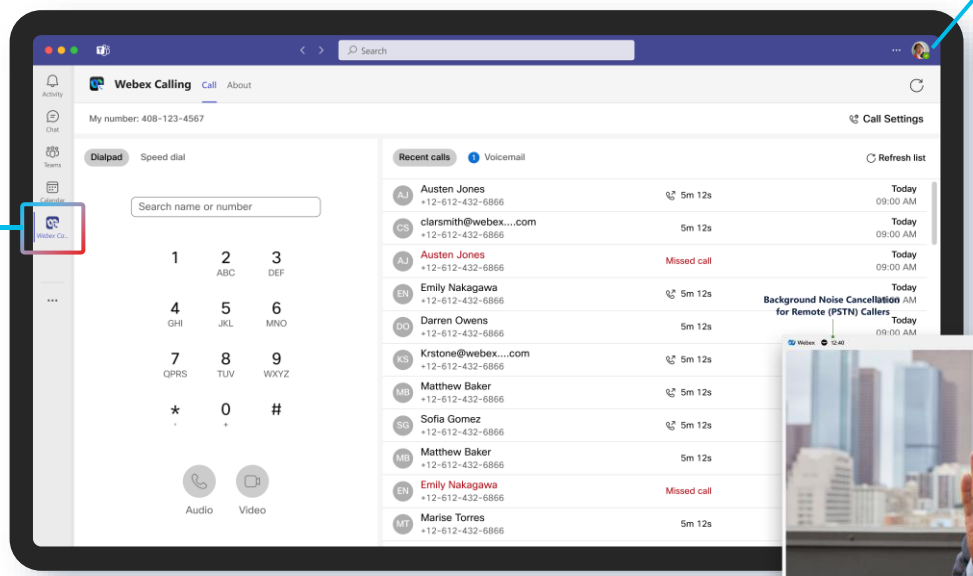
Webex Calling in Microsoft Teams

Bring the enterprise grade Calling experience to Microsoft Teams

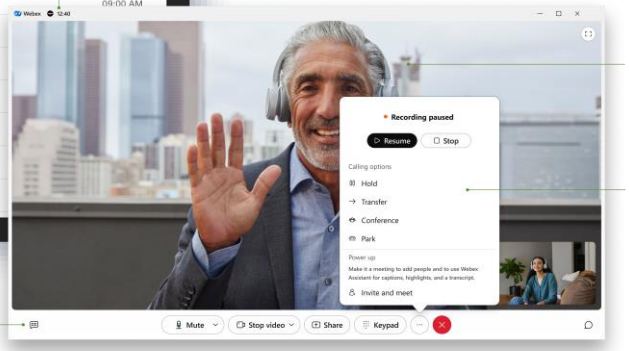
2-way presence sync

Make and receive internal/external calls





Works with Webex Calling, Dedicated Instance and CUCM



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Webex Calling for Microsoft Teams – Redesigned UI

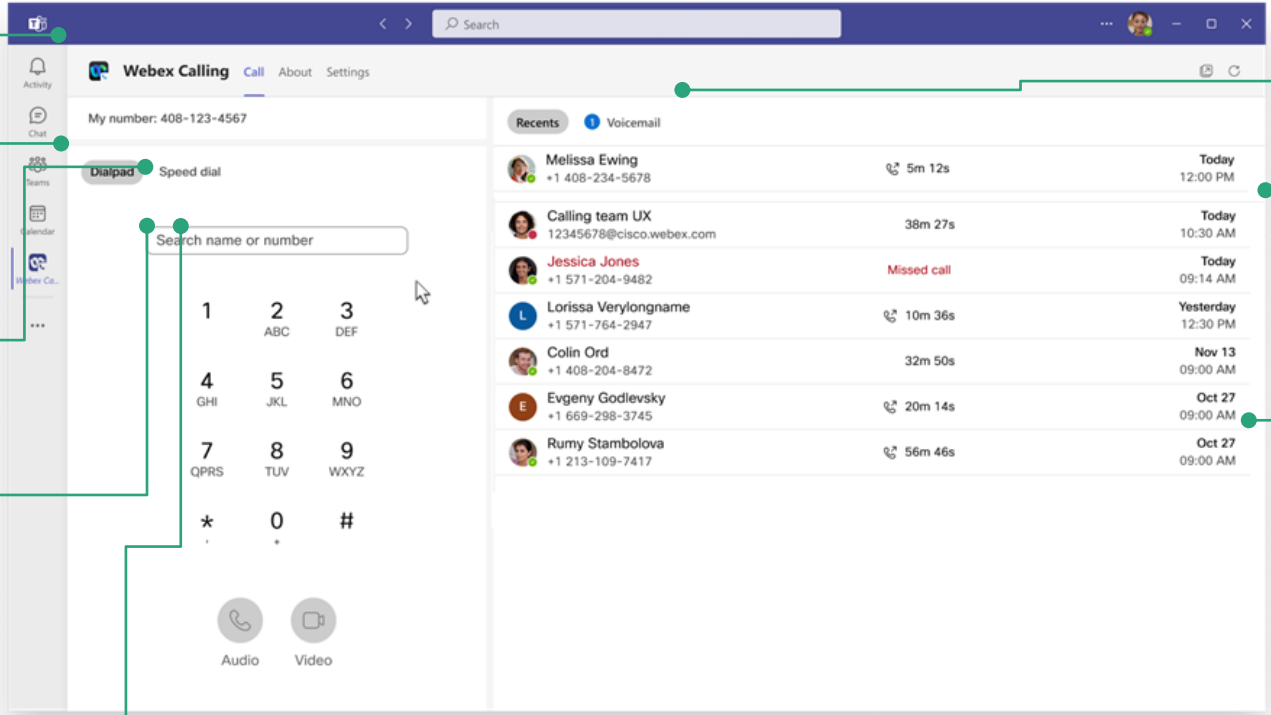
Call Tab
Access dial pad, contact search and speed dials

Dialpad
Access to dialpad to key in numbers

Add Speed dial
Click to add up to 25 speed dial cards

Contact Search
Search for personal and corporate contacts

Contact Resolution
Resolves the incoming call identifier to Azure AD



Voicemail
Access and play back the voicemail

Call History
See history of incoming/outgoing/missed calls

Call
Select number and call contact

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

UCM - Pre-Req:
UCM 12.5 SU7 or 14 SU3 (Q2CY23)
CUC - 12.5
On-premises: Webex Cloud-Connected UC (CCUC)

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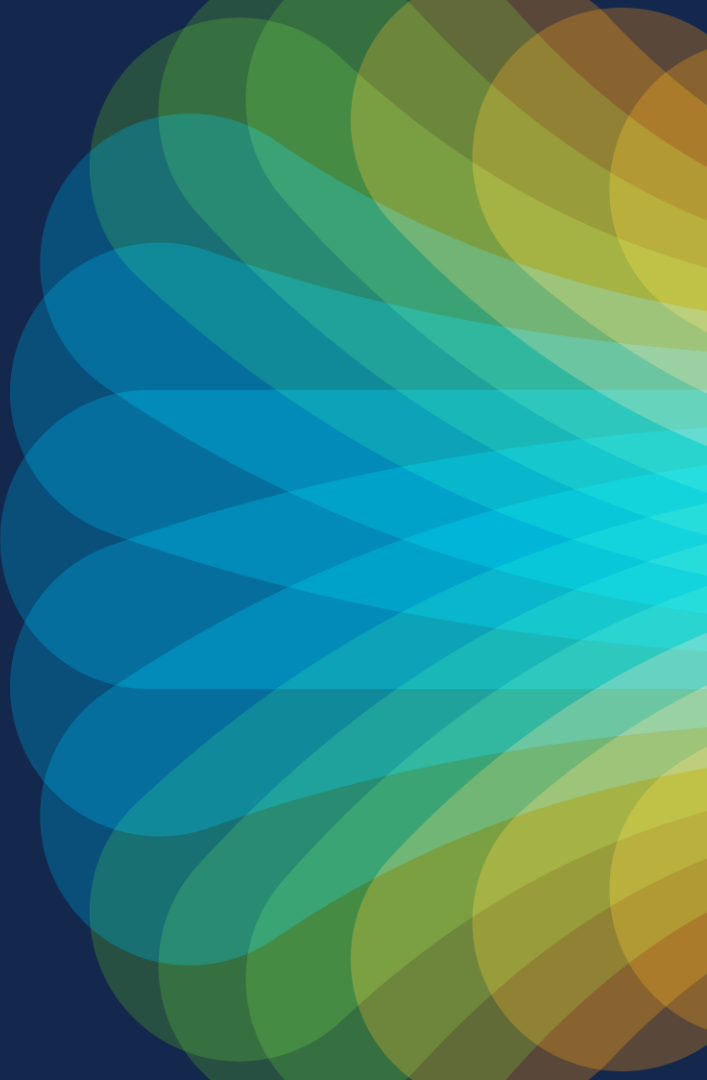
Customer Experience

Improving the Customer Experience



Customer experience is more important than ever

75%

Good customer service is a reason to be a repeat customer with a business – as important as price (76%)

55%

Would change brands for a better customer experience

72%

Want to choose their preferred channel to speak with a business

77%

Millennials who are comfortable using social media channels to interact with a business

Source: primary research "it's time to solve the customer experience trilemma"

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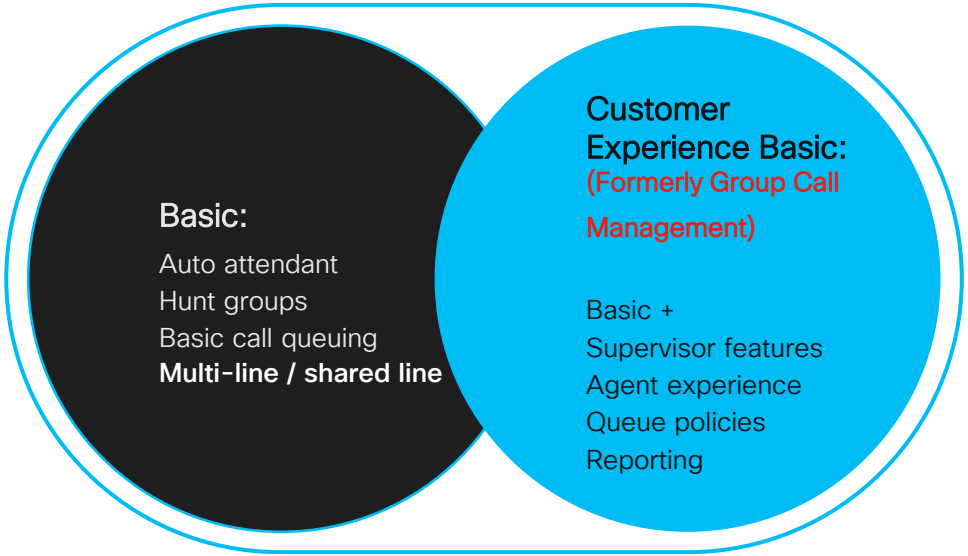
Webex customer experience options of any size
Serving the need for an informal call center

Webex Calling



Webex Contact Center

Included with Webex Calling

Add on to Webex Calling

https://help.webex.com/en-us/article/z7iyz9/Group-Call-Management

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Cloud Migration

Customer Experience Basic

A complete call center included with Webex Calling

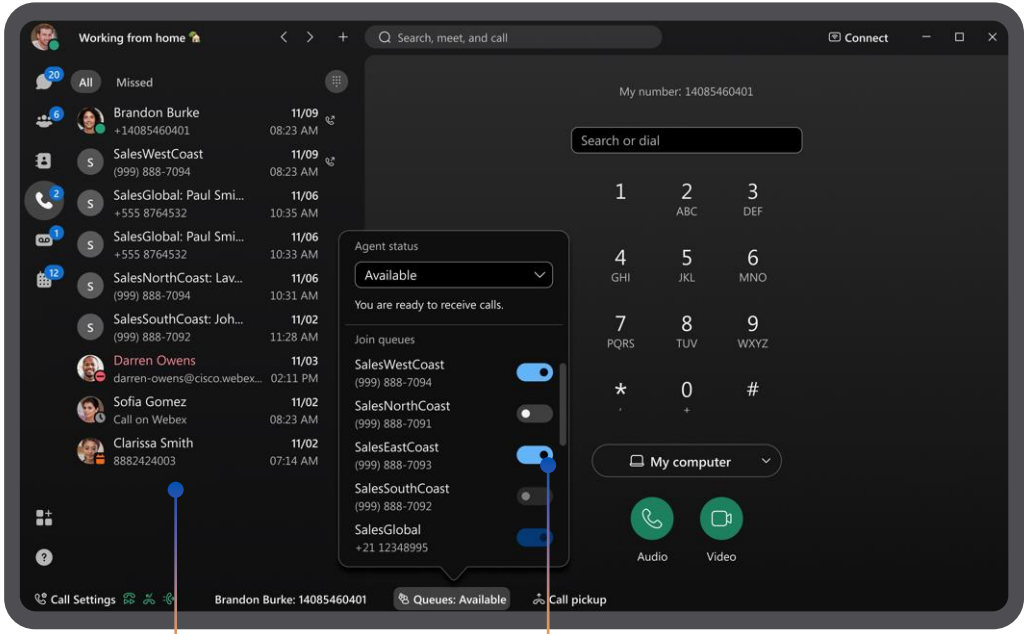
Included with Webex Calling out of the box for no additional fee

Advanced call queue capabilities (request call-back, skills-based routing)

Supervisor monitor, coach, barge-in, and takeover

Live and historical call queue analytics through Control Hub

End-to-end background noise removal



Call history across queues

Easily join / unjoin queues

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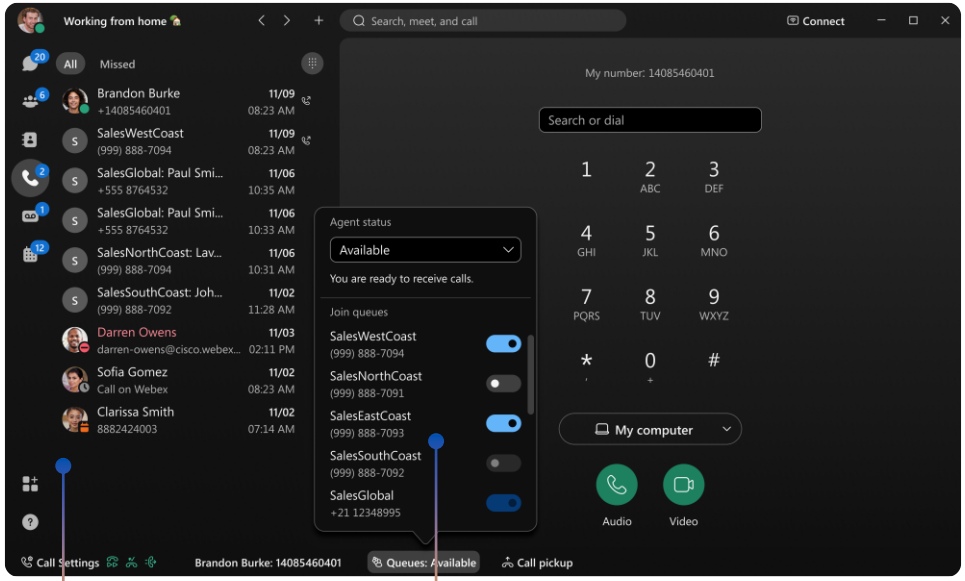
Agent Experience in the Webex app



Call history across queues

Easily join / unjoin queues

Queues Available icon will appear in the Webex app when the user has been added to at least one Call Queue.

Only the primary user\line is supported to provide the Queues option to be displayed on the Webex app.

Shared and Virtual lines can still ring in the app for joined call flows, but there is no way to change agent status.

A roadmap feature for 1HCY23 will provide additional line support with queue availability

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Agent States in the Webex App

Agent states are always displayed when in the Webex app when the user is added to a Call Queue.

Agent Status:

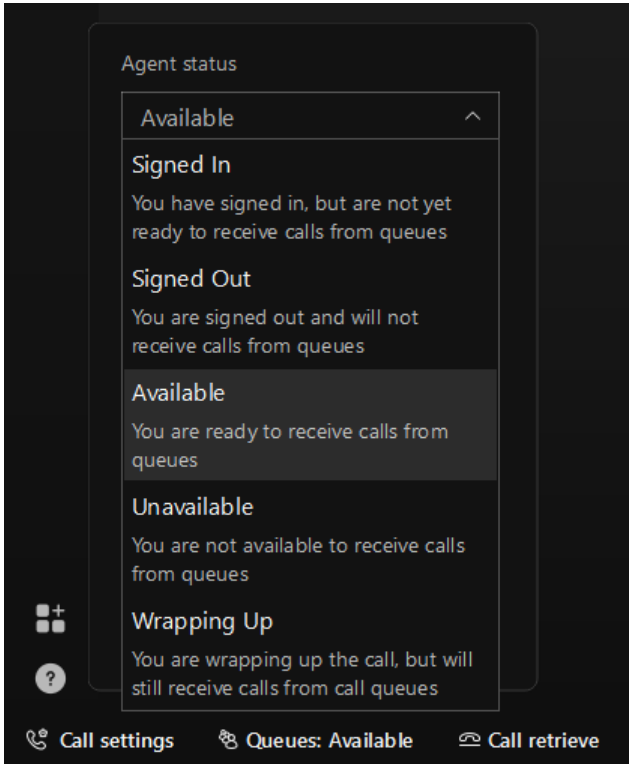
Signed In – No calls will be received

Signed Out – No calls will be received

Available – Agent will receive calls.

Unavailable – No calls will be received

Wrapping Up – If the agent is on a call and knows that they will sign off as soon as the call completes, the agent can change their status to Wrap-up. The agent will still receive calls unless they sign-out after the call.



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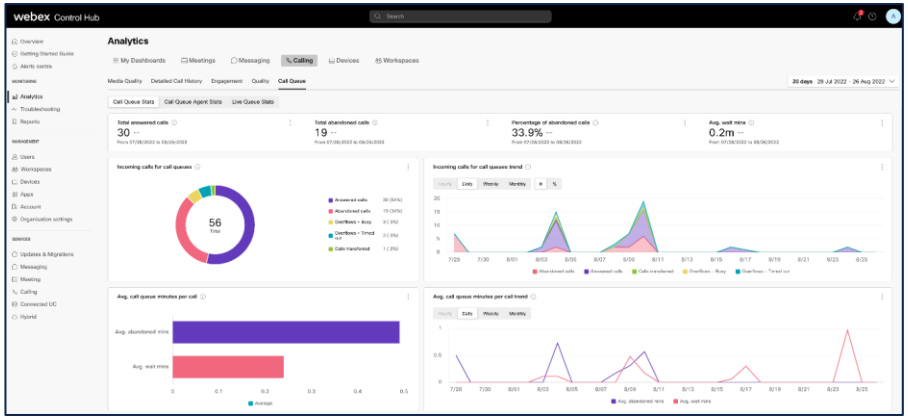
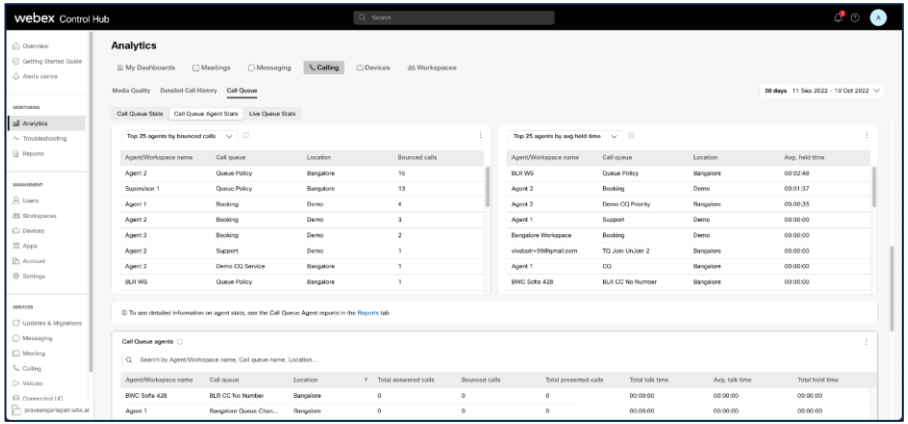
Analytics

Provides call queue performance reports for administrators

- Call Queue Stats
- Call Queue Agent Stats
- Live Queue Stats





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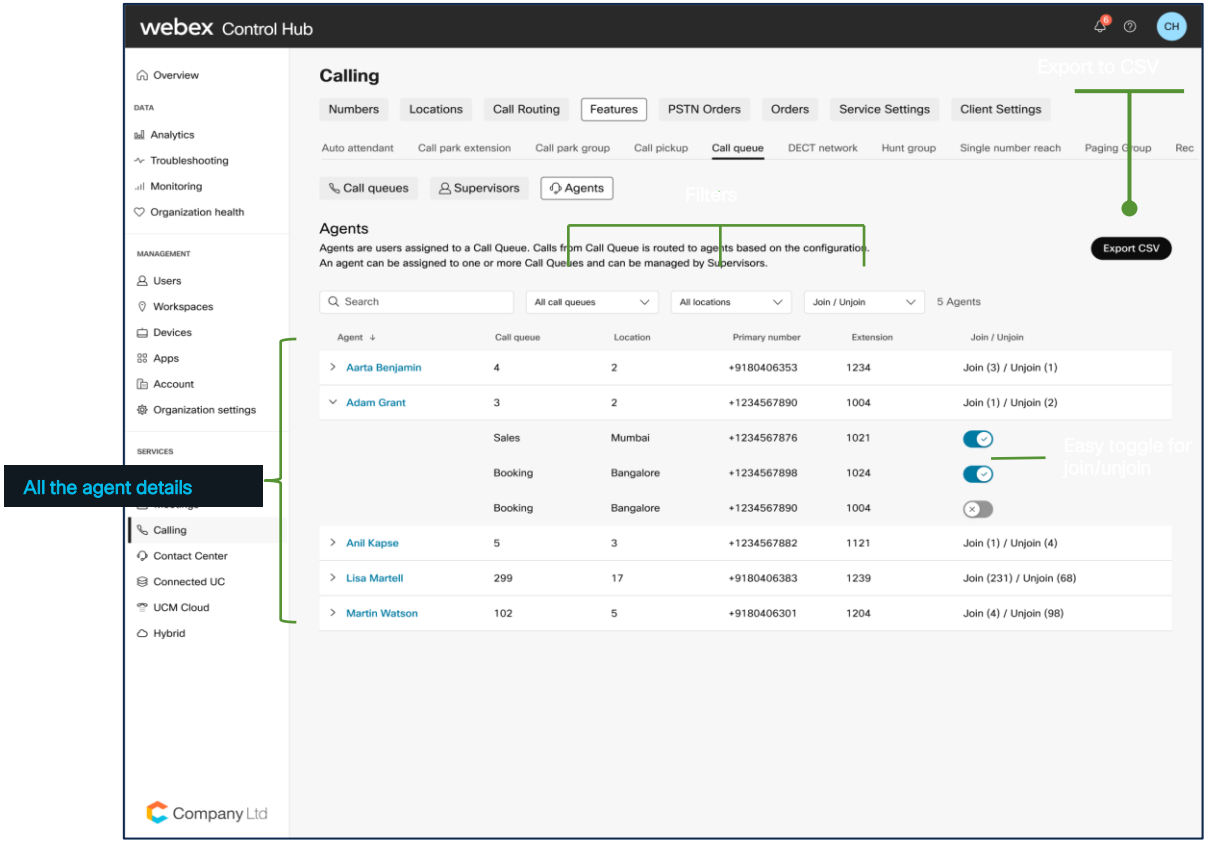
Call Queue Agent Dashboard

Agent reporting across all Call Queues

- A single dashboard for agents across all Call Queues
- Filter information of agents based on Call Queues, Join/Unjoin status or location
- One click toggle of join/unjoin status of agent from Call Queues
- Export the information to CSV



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A customer experience solution for any need

Webex Platform

Security, AI, Manageability, Sustainability

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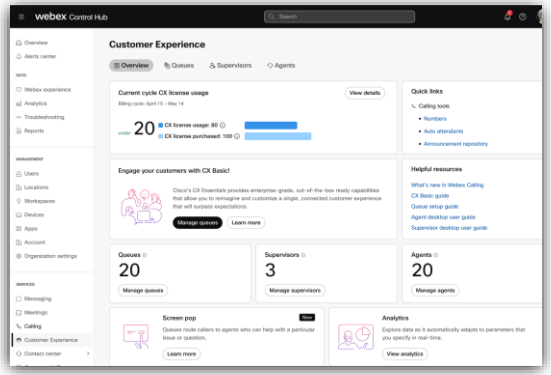
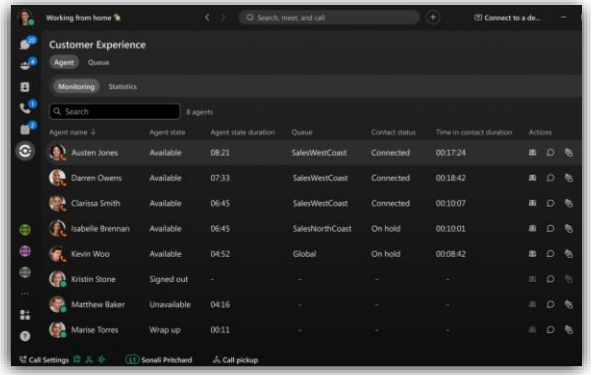
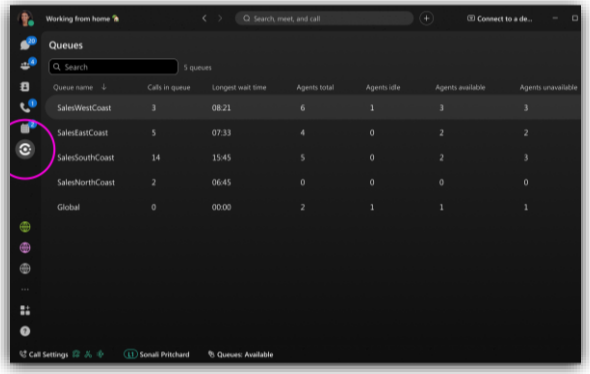
CX ESSENTIALS: FEATURE HIGHLIGHTS







Administration

- New Customer Engagement menu in Webex Control Hub with an overview
- Licensing CX Essentials users
- Easy configuration of call queues and associated resources
- Screen Pop configuration
- Access to call queue and agent analytics

Supervisor Desktop

- Familiar Webex App
- Realtime agents and queue view
- Ability to Monitoring agents
- Historical agents and queues analytics
- Set availability status for agents and change join/unjoin

Agent

- Manage availability and join/unjoin
- Select outbound Caller ID
- Screen Pop
- Queue visibility

90 Second Demo

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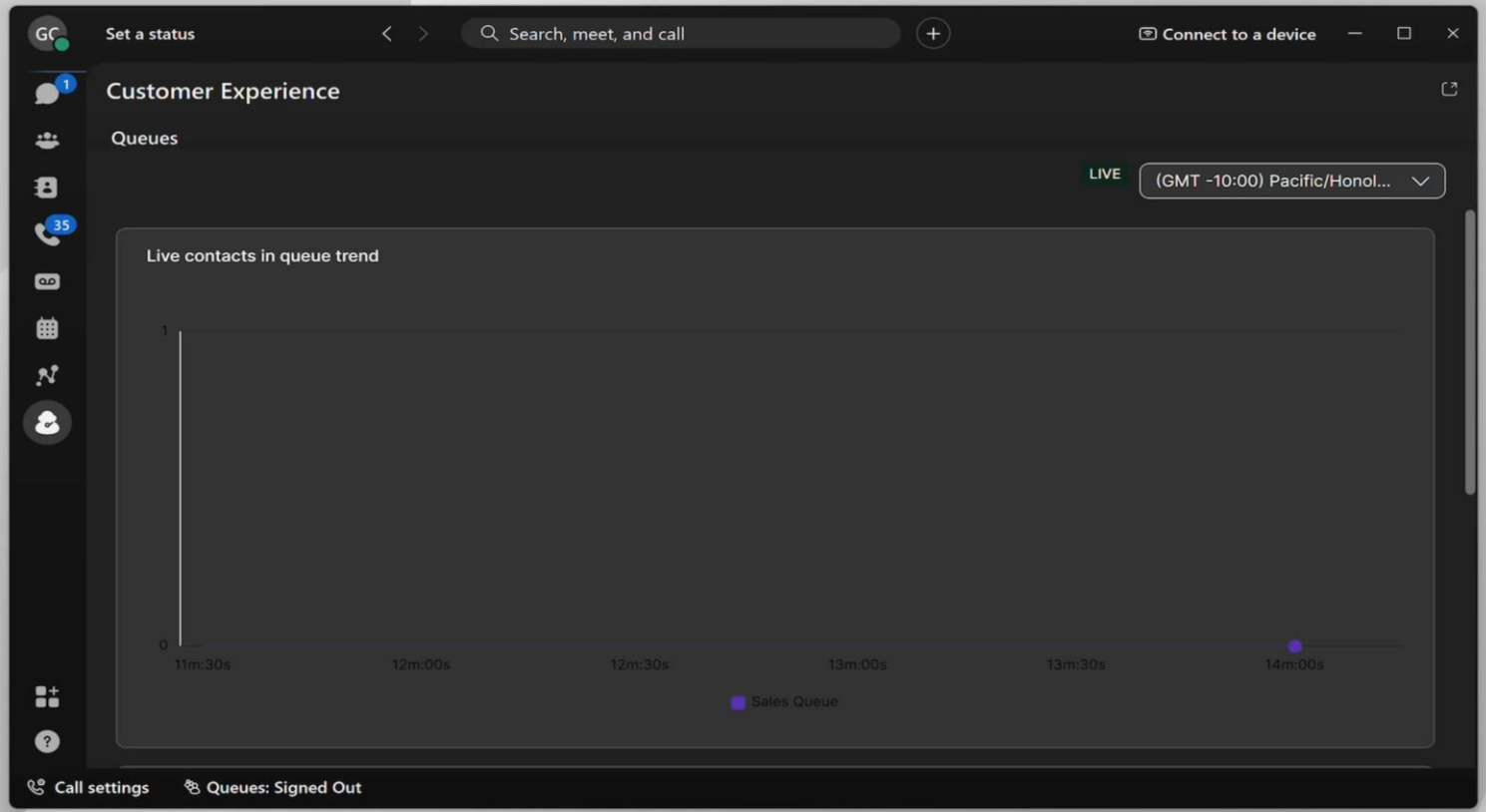

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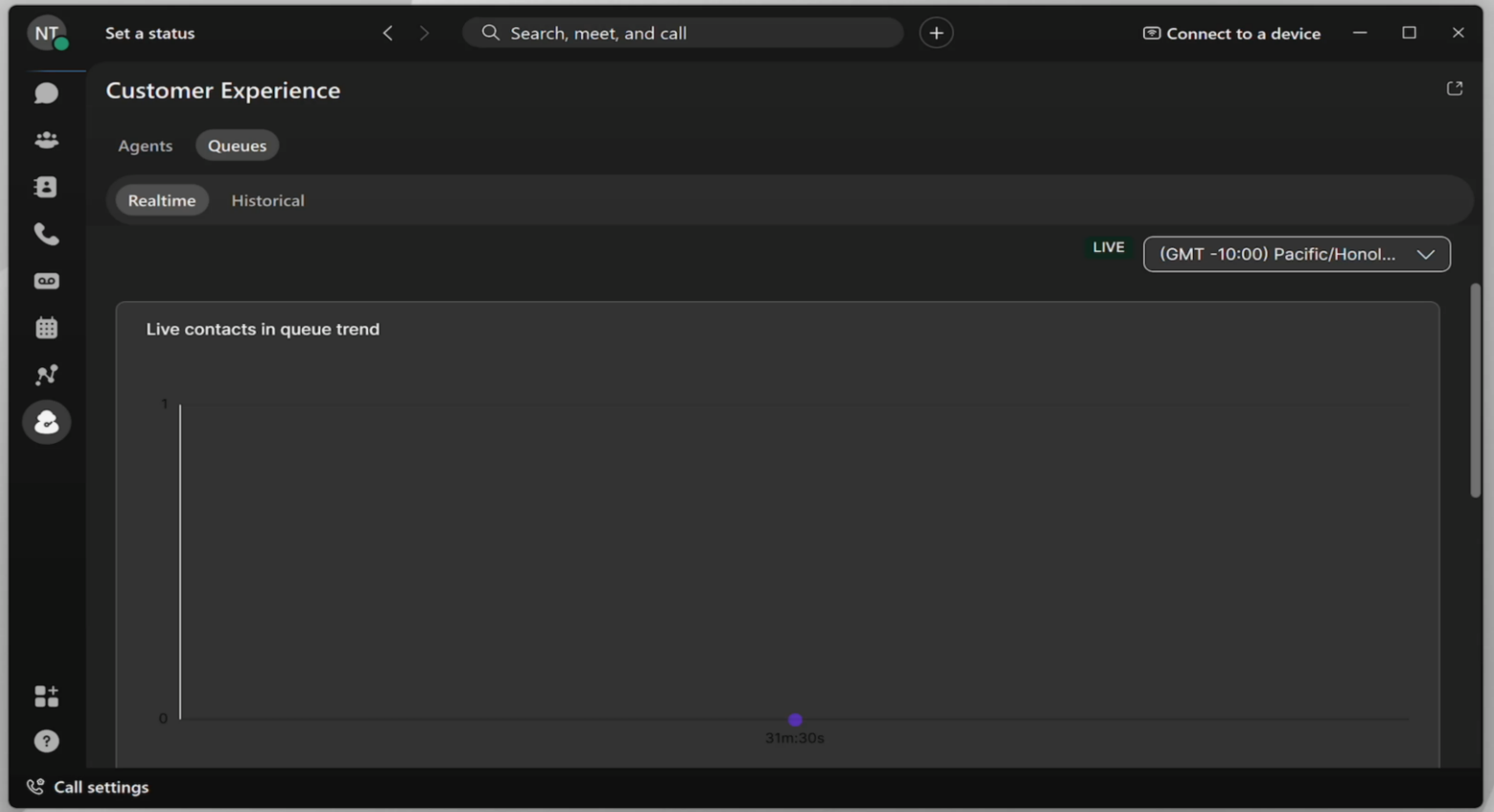

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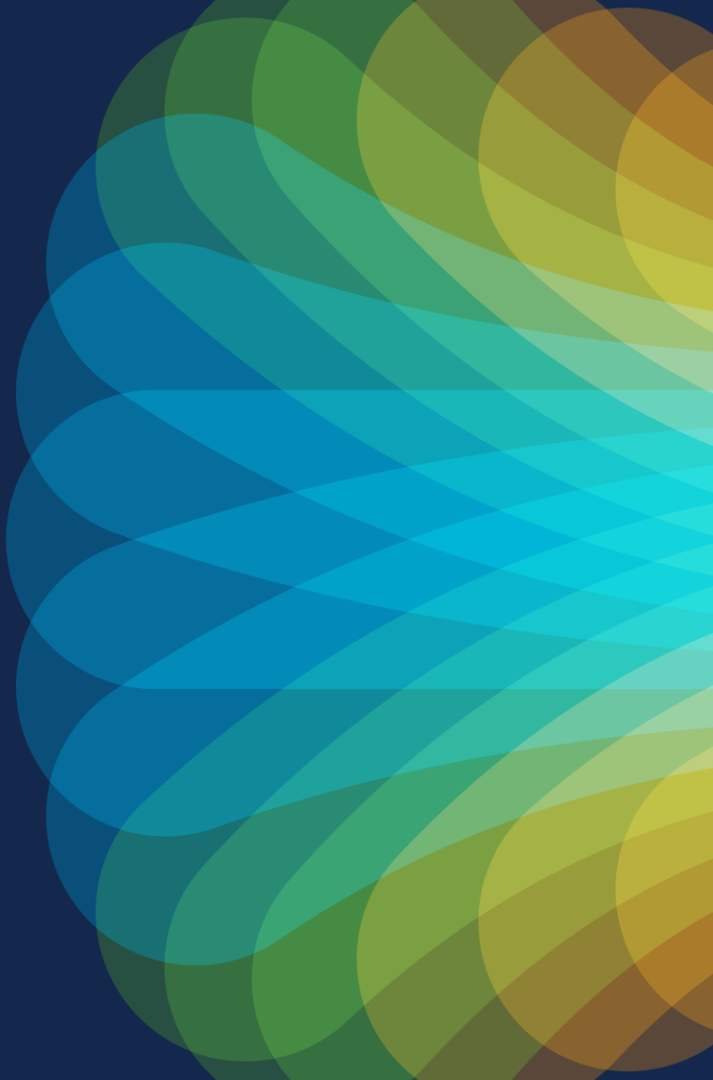
Migration Considerations



Decisions, Decisions

“If I would have known that, I would have done things differently.”

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Discover, Decide, Design, Deploy

Call Recording: yes, but which one do you need?

CDRs: got it, but what information do you need in them?

Call Center: what use case are you looking for?

Analog: what legacy or 3rd party SIP devices do you still support?

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Analog Voice Gateway Comparison

Voice Gateway	VG400	VG310	VG320	VG410 (NEW)	VG420	VG450
Software Image	IOS XE	IOS	IOS	IOS XE	IOS XE	IOS XE
Webex calling	Yes	No	No	Yes	Yes	No
FXS-E	Yes	First 8 Ports	First 4 Ports	Yes, 24 ports	108/84*	16(mode1)/ 56(mode 2)
Analog SIP Line Support	No	No	No	Yes	Yes	Yes
Native Media Recording (FXS/FXO)	Yes	No	No	No	No	Yes
FXO Failover Bypass	Built-In	No	No	Yes	SM-X Module	SM-X Module
Voice Module Support	No	VIC/VWIC	VIC/VWIC	No	NIM / SM-X	NIM / SM-X
SCCP Auto-Registration & Self provisioning	Yes	No	No	Yes	Yes	Yes

* VG420 Platform specific

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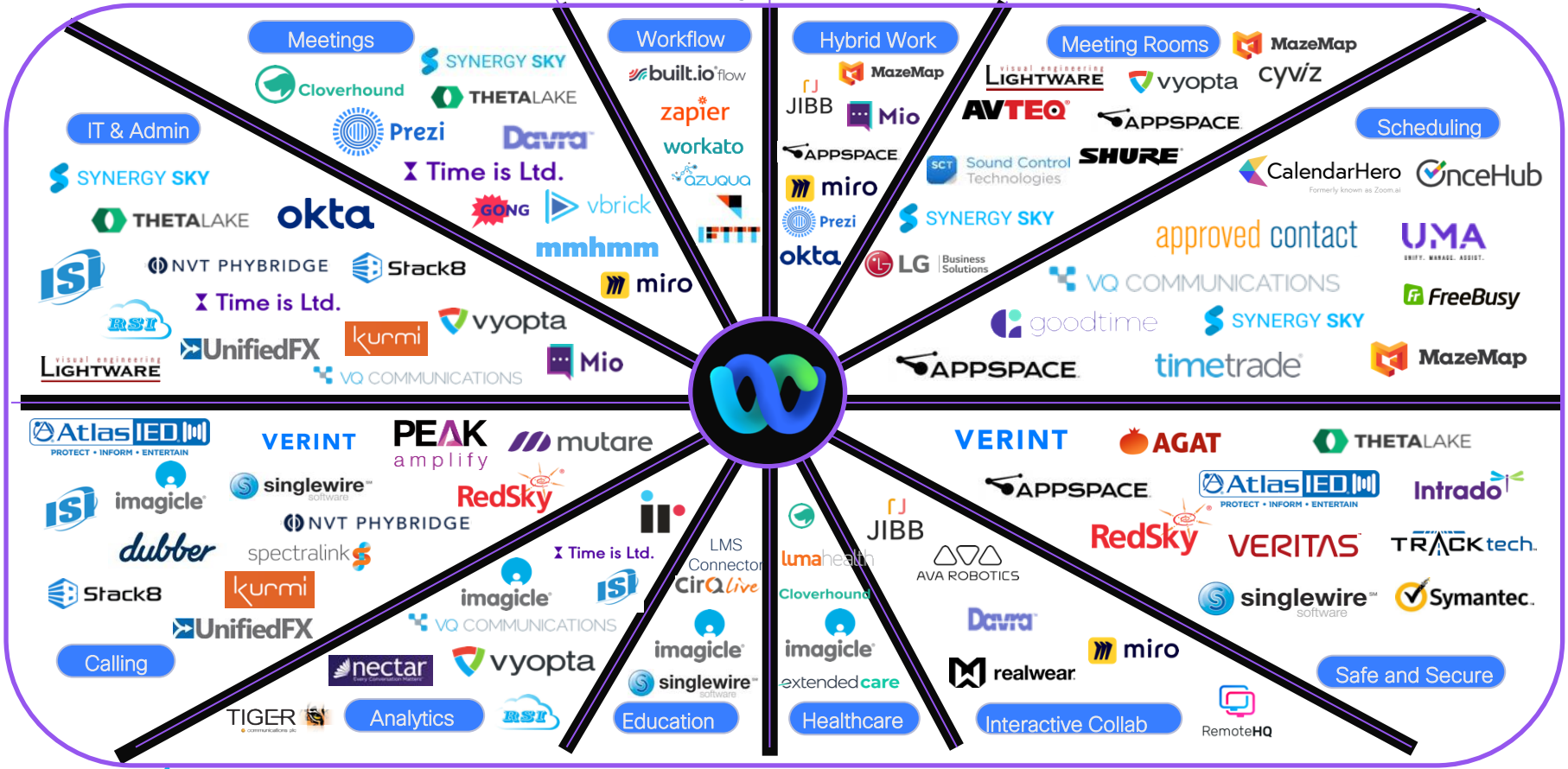
Cisco Collaboration ISV Ecosystem Outcomes



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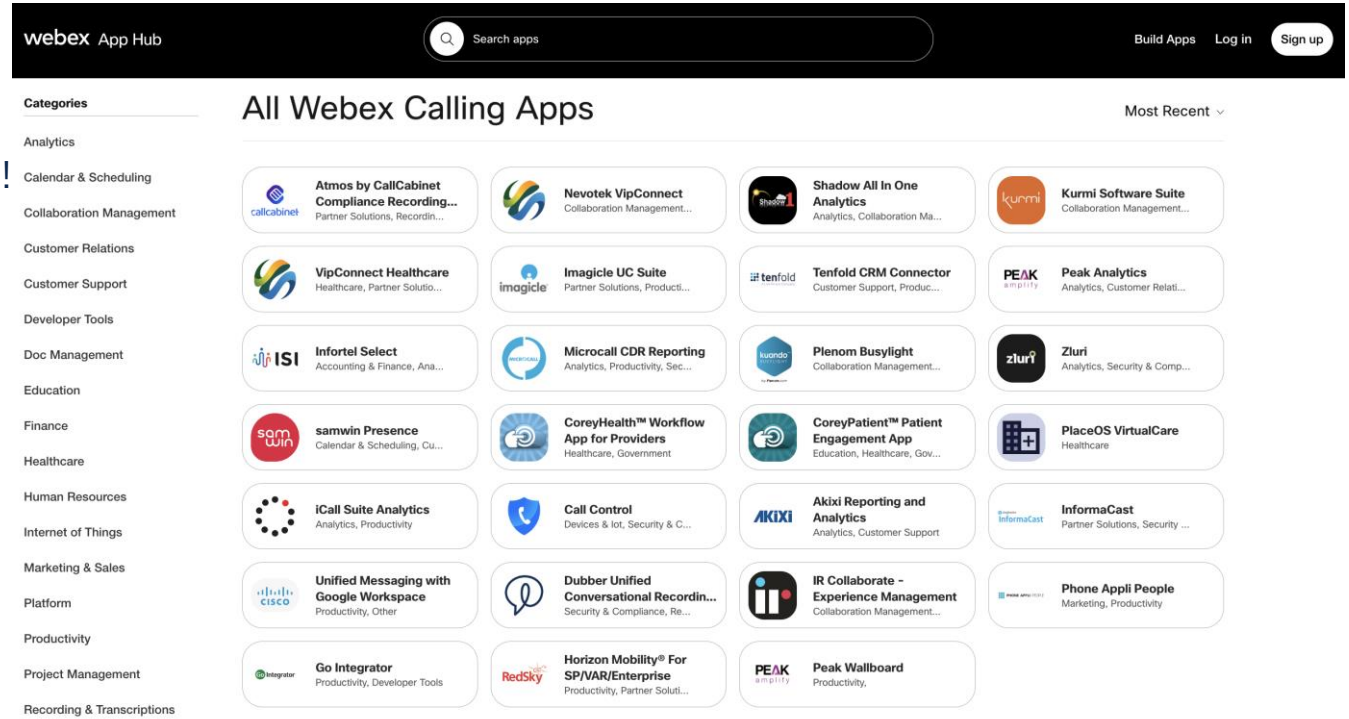
https://apphub.webex.com/

Webex App Hub for Calling

- Core ecosystem apps are available
- More coming every month!



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Hybrid
(Phased Migrations)

Successfully Migrating to and deploying Webex Calling

cisco Live!

Simplifying the transition to the cloud

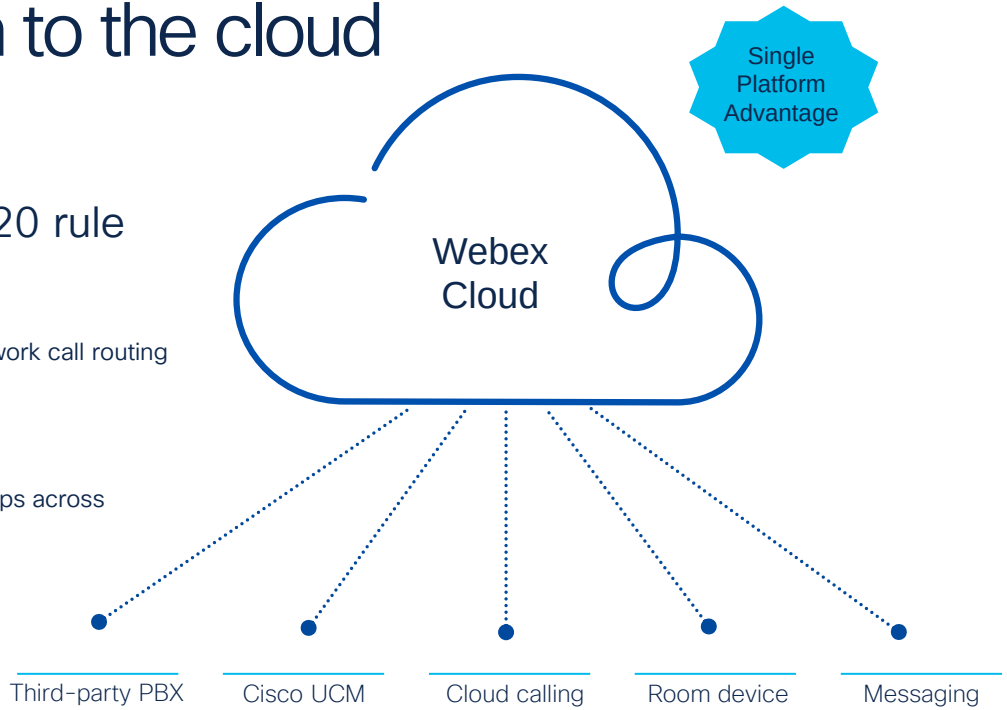
Hybrid and advanced calling features maximize ROI and flexibility – no 80/20 rule

Centralized enterprise dial plans
- Configure advanced Enterprise dial plans to optimize on-network call routing

Trunks and route groups
- Geo-redundant routing policies for enterprise trunks
- Scale call traffic to the PSTN using geo-redundant trunk groups across enterprise sites

Media optimization
- ICE for calling media
- Regional media for cloud connected PSTN

Centralized calling analytics
- Usage, call quality*



Hybrid-migration journeys from on-prem PBX to native cloud site by site, or user by user with full collaboration suite

*dependent on deployment model and devices

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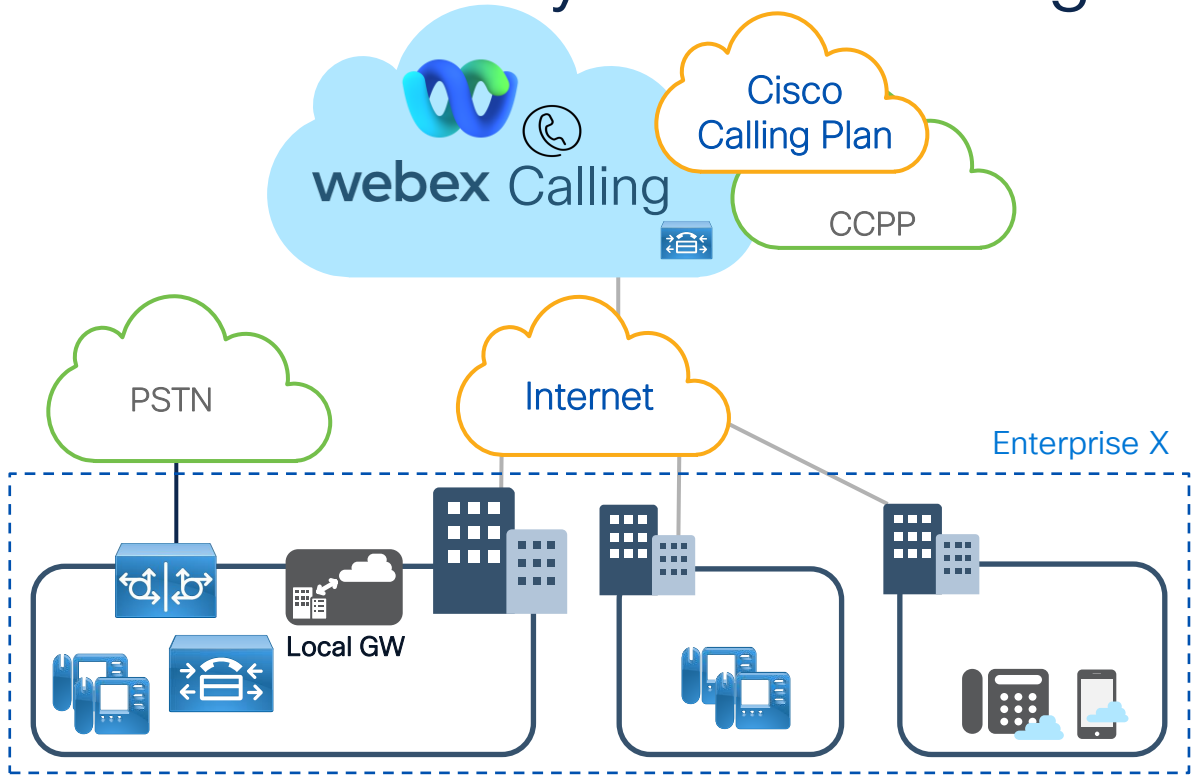
Local Gateway Dial Plan Integration



- Enterprise dial plan on Unified CM needs to deterministically send Webex Calling destinations to Webex Calling via Local Gateway
- Dial plan has to support “typical” dialing habits to reach Webex Calling destinations
- Webex Calling destinations need to be regularly updated during transition period as users move to Webex Calling

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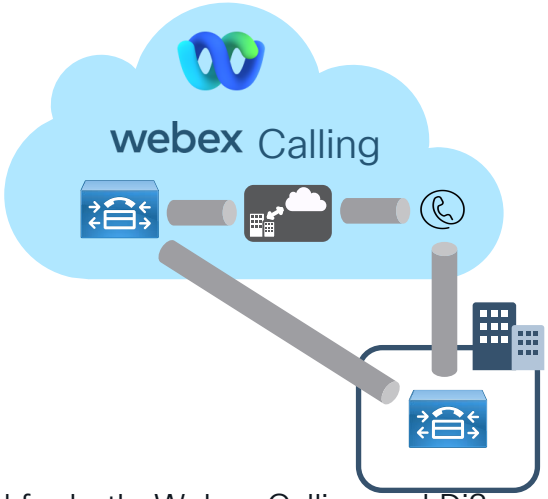
Interworking: Unified CM On-Premises, Webex Calling and Dedicated Instance

- Interworking w/ on-premises Unified CM required during transition period
- Connect Unified CM to dedicated instance or multi-tenant?
- Considerations
  - Dedicated instance not meant to act as tandem (session manager)
  - Where does the majority of the users live?
  - Capabilities: SIP/SIMPLE presence, CCNR/CCBS, …
  - PSTN: (ab)use CCPP for prem users using DI as transit? Use prem PSTN for both, Webex Calling and Di?
- Multi-tenant can route between users on dedicated instance and on-premises Unified CM using Webex Calling dial plans



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Let’s go on a Journey...

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The migration journey

① Gain insights into your user base and identify its cloud readiness using Cloud Connected UC

② Modernize the user experience with the Webex app or plugin into other apps

③ Subscribe to Webex Calling and plan the move

④ Start moving cloud ready users and devices leveraging built-in migration tools

⑤ Migrate remaining users at your own pace

CONNECT TO CLOUD

MOVE AT YOUR PACE

WebexGo for ultimate mobile experience

Growth -ready without friction

Cloud managed local survivability

Sustainability

PSTN consolidation

Workloads consolidation

Continued innovation with Cloud integrations

Modern devices

Operational efficiency with Webex APIs

THEN KEEP ADDING VALUE

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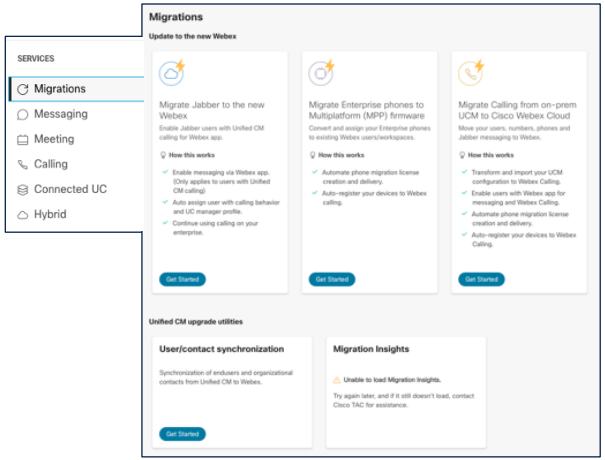
Migration Support

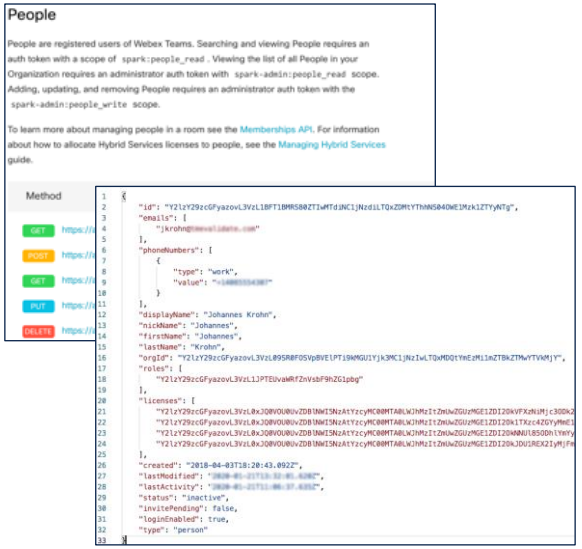
Methods Supporting Migrations and Beyond

MOVE AT YOUR PACE

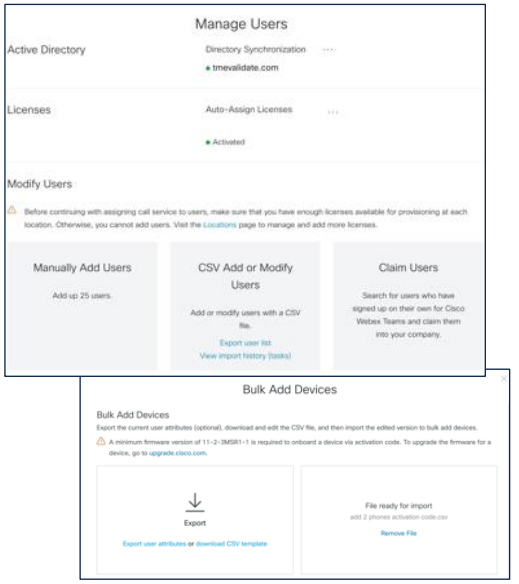
Control Hub Tools



Webex APIs



Control Hub Manual / Batch



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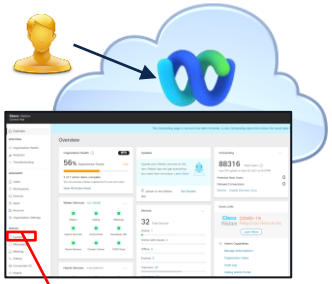
Control Hub migration tools



SERVICES

- Updates & Migrations
- Messaging
- Meeting
- Calling
- Vidcast
- Connected UC
- Hybrid

Migration Insights 1

- Plan your move to cloud effectively
- Gain insight into the on-premises features

View

Run pre-migrate checks on my on-premises.

User/contact synchronization 2

Synchronization of endusers and organizational contacts from Unified CM to Webex.

Get started

Migrate or sync my Users & Org/Personal Contacts.

3

Migrate Jabber to the new Webex

Enable Jabber users with Unified CM calling for Webex app.

How this works

- Enable messaging via Webex app. (Only applies to users with Unified CM calling)
- Auto assign user with calling behavior and UC manager profile.
- Continue using calling on your enterprise.

Get Started

Change softclients & messaging to Webex (calling stays UCM).

4

Migrate Calling from on-prem UCM to Cisco Webex Cloud

Move your users, numbers, phones and Jabber messaging to Webex.

How this works

- Transform and import your UCM configuration to Webex Calling.
- Enable users with Webex app for messaging and Webex Calling.
- Automate phone migration license creation and delivery.
- Auto-register your devices to Webex Calling.

Get Started

Change calling, messaging and softclients to Webex. Migrate UCM users, devices, locations, numbers.

5

Migrate Enterprise phones to Multiplatform (MPP) firmware

Convert and assign your Enterprise phones to existing Webex users/workspaces.

How this works

- Automate phone migration license creation and delivery.
- Auto-register your devices to Webex calling.

Get Started

Change phone firmware to Webex with less screens, clicks & time.

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APIs, CSV and Bulk

- API access
- CSV access
- Control Hub updates

Bulk Provisioning Tools

- Active Directory Integration
- Licensing Templates
- Calling Services Templates

Calling Capabilities with Groups

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Webex Setup Assist Migration Phases

Discovery & Assessment

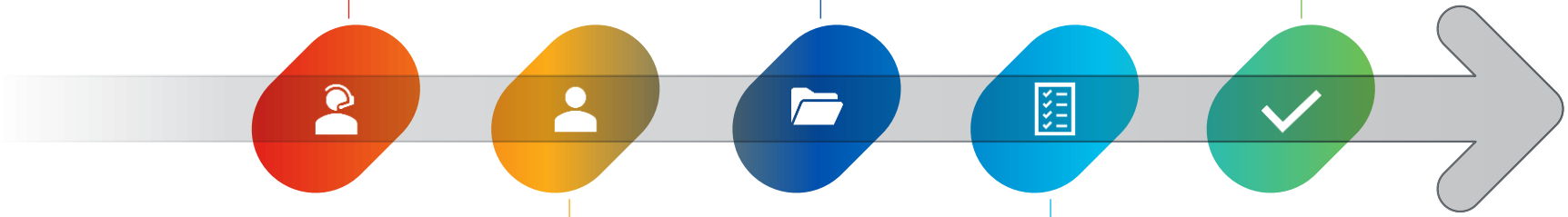
- Project Kick-off Call with Customer & Partner
- Determine project milestones and timelines
- Network and firewall requirements
- Assess out-of-scope elements
- Data Gathering Workbook review
- SIP endpoint and CPE compatibility

Planning Phase

- Define migration strategy
- Confirm location priority and scheduling
- Migration window plan confirmed
- Validate network changes
- Confirm new equipment readiness
- Verify onsite resources are engaged

Go Live

- Deploy onsite equipment
- Perform device upgrades and reconfigurations
- Port the telephone numbers
- Perform test plan to validate configuration
- Customer confirms project is complete
- Transition to long-term support 5 business days after Go Live
- Operations hand-off to partner/Customer



Solution Design Phase

- Review Data Gathering Workbook for feature gaps
- Workshop to finalize feature configuration
- Network requirements per location
- Develop test plan
- Consolidate, normalize, optimize lift and shift or a combination
- Define DI deployment: dial plan, PSTN routing, system feature configs, 3rd-party and external component connectivity, etc

Implementation Phase

- Gain admin access to Control Hub or Console
- Configure Cloud Calling services
- Receive number porting confirmation
- Confirm test phone to validate network configuration
- Execute migration and test plans to validate
- Adjust configurations as necessary
- Customer acceptance test plan

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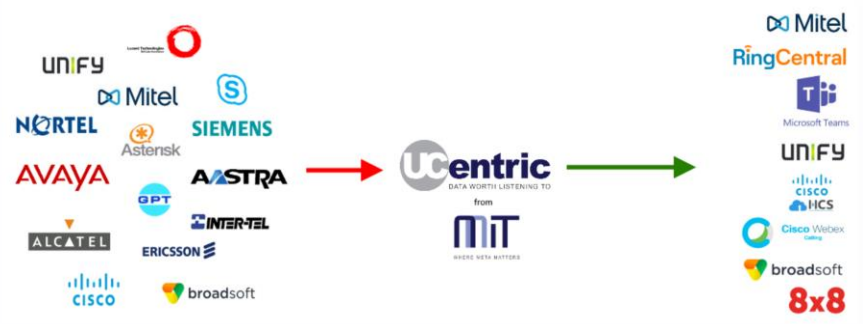
Pre-Assessment and Migration Partner ecosystem

kurmi

yarnlab

tuki by Correnet

MiT WHERE META MATTERS



VOSS DIGITAL WORKPLACE MANAGEMENT

Akkadian Labs®

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Thursday	**9:30am – 4:00pm**
Friday	**10:30am – 1:30pm**

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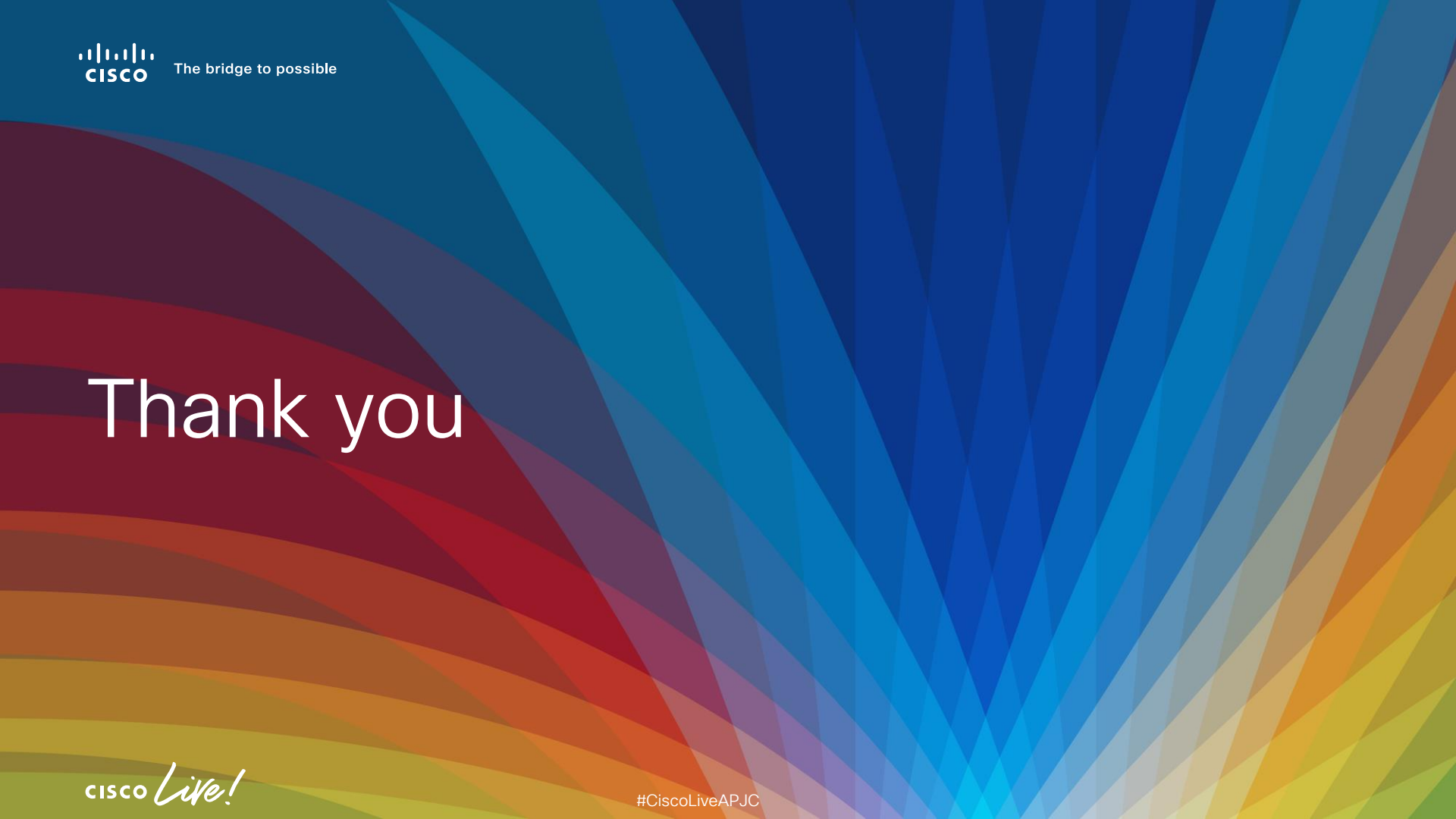
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The bridge to possible
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