

COLLABORATION TRANSITIONS

Calling:

Transitioning from Unified CM to Webex Calling

CTG Technical Marketing Engineering Team

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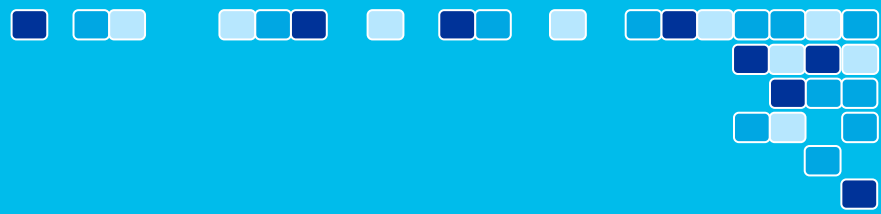
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Collaboration Transitions

Calling: Transitioning from Unified CM
to Webex

Scenario Introduction

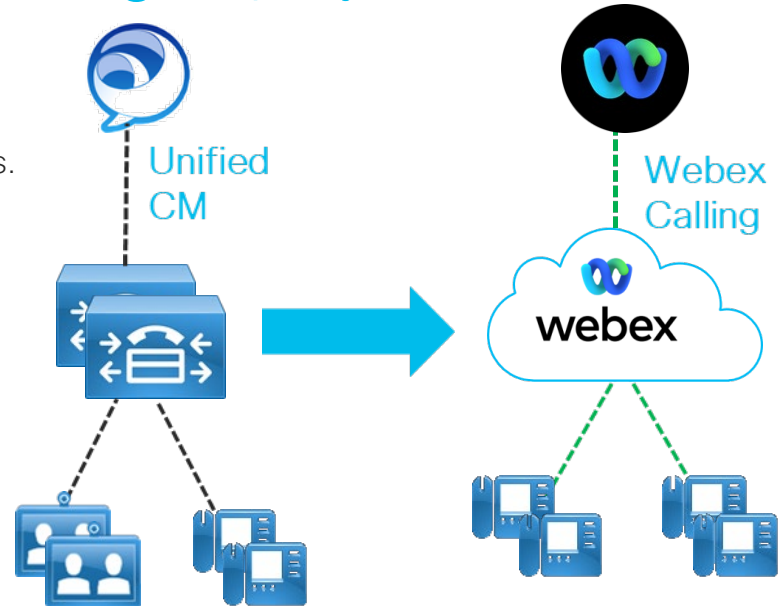
Calling: Unified CM to Webex

Scenario Introduction: Decision

This scenario applies specifically to transitioning from on-premises Unified CM to **Webex Calling** deployments.

If any of the following are critical for or apply to your deployment, carefully review all material before transitioning:

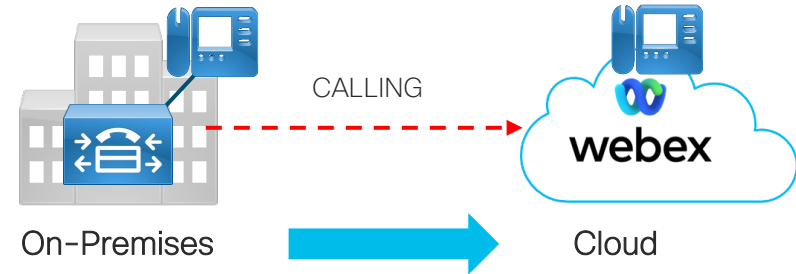
- » Phone models other than Cisco 7800 & 8800 IP phone series.
- » Complex or numerous integrations with other on-premises systems / solutions.
- » Complex dial plan and/or highly granular classes of service.
- » Calling is predominately on-net within a single site.
- » Restrictive, limited, or unreliable Internet access.
- » Stringent data privacy and ownership policies.
- » Compliance requirement for on-premises or in-country media recording and storage.
- » Requirement for more than 250 concurrent PSTN and cloud / on-premises interop calls per Local Gateway.



Calling: Unified CM to Webex

Scenario Introduction: Overview

Calling transition scenario covering the transition from on-premises Unified CM calling to Webex Calling deployment

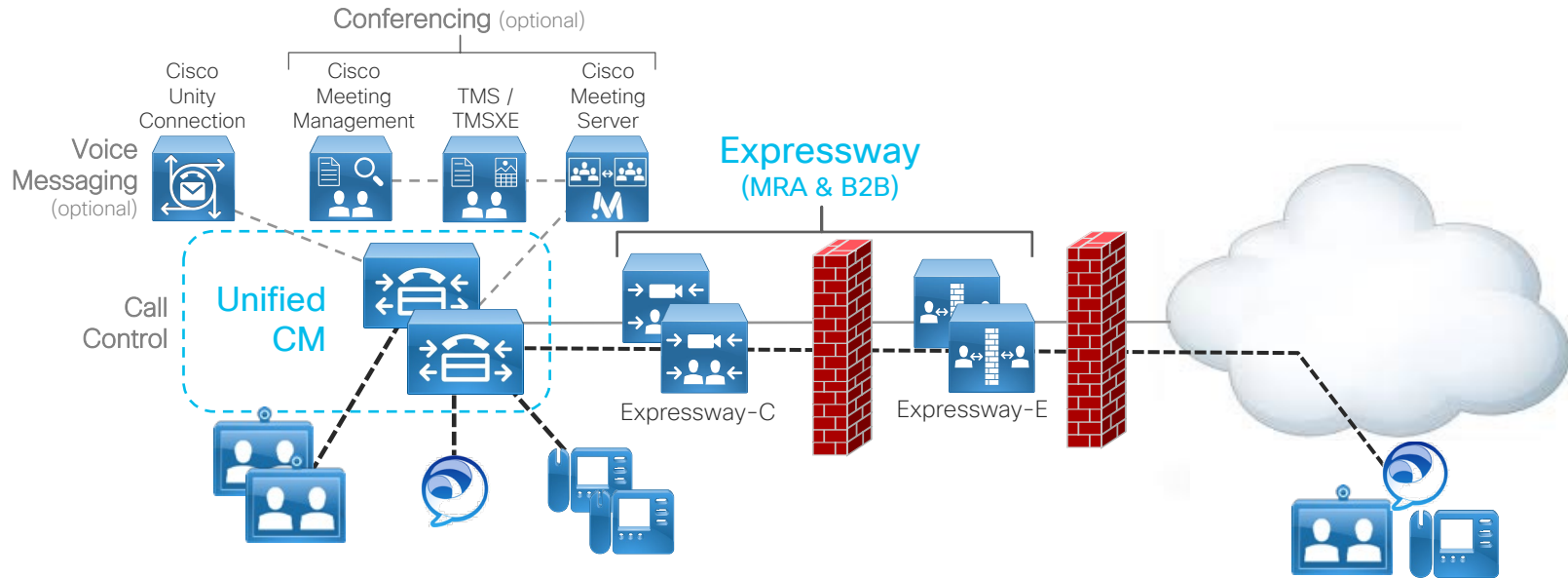


Scenario Objective

- To evaluate the transition **FROM** Unified CM (on-premises calling solution) **TO** Webex Calling (cloud calling solution)
- To explore this calling solution transition with a focus on:
 - » **User experience:** Device user interface, calling features and functions.
 - » **Administrative experience:** Provisioning, management, and troubleshooting

Calling: Unified CM to Webex

Scenario Introduction: Base Architecture



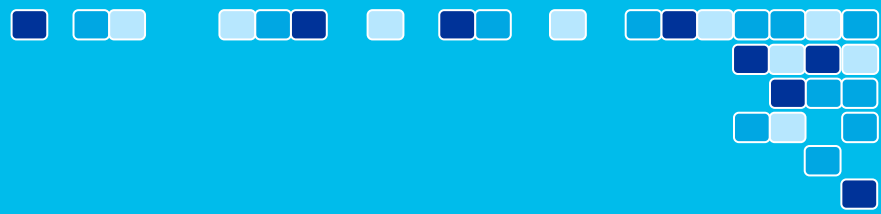
- » Architecture based on the **Enterprise On-Premises Preferred Architecture** (version 12.x)
- » **Unified Communications Manager (Unified CM)** call control
- » Video endpoints, desk phones, and Jabber software clients register to Unified CM for calling services
- » **Expressway-C/E** pairs for firewall traversal



Calling: Unified CM to Webex

Scenario Introduction: Scope

- Enterprise calling resources are moved from traditional on-premises Unified CM calling solution to cloud calling solution, Webex Calling.
 - » While video conferencing and other meeting flows are not included as part of this scenario evaluation, for the purposes of endpoint transition it is assumed that video endpoints in these deployments are shared devices used for point-to-point or multi-point conferencing.
- Only **features and functions for enterprise on-premises calling deployments** were evaluated with the Webex Calling environment.
 - » 80/20 Rule: It is expected this scenario will be applicable to ~80% of enterprise customers, understanding that ~20% of customers may have additional considerations or requirements not covered. However, even in those cases, this transition map may still be used as a potential future path of transition.
- Only **Cisco Jabber** (desktop and mobile), **7800 / 8800 series** endpoints, **CE** video endpoints, and **Webex App** (desktop and mobile) were evaluated.



Collaboration Transitions

Calling: Transitioning from Unified CM
to Webex

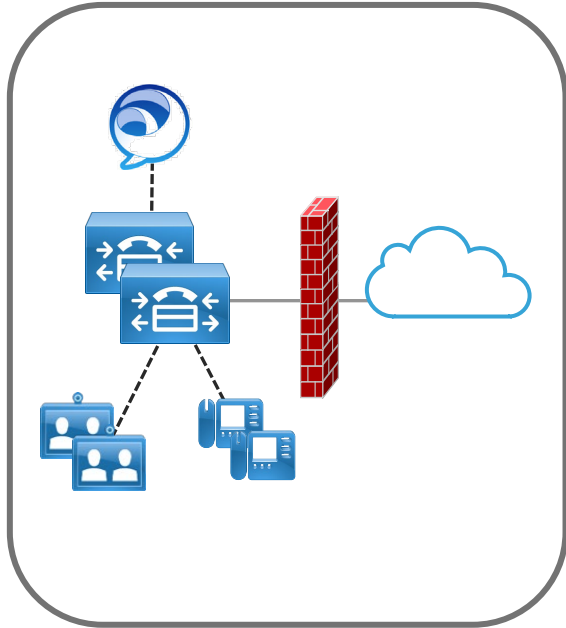
Mapping the Transition

Calling: Unified CM to Webex

Mapping the Transition: High-Level Transition Map

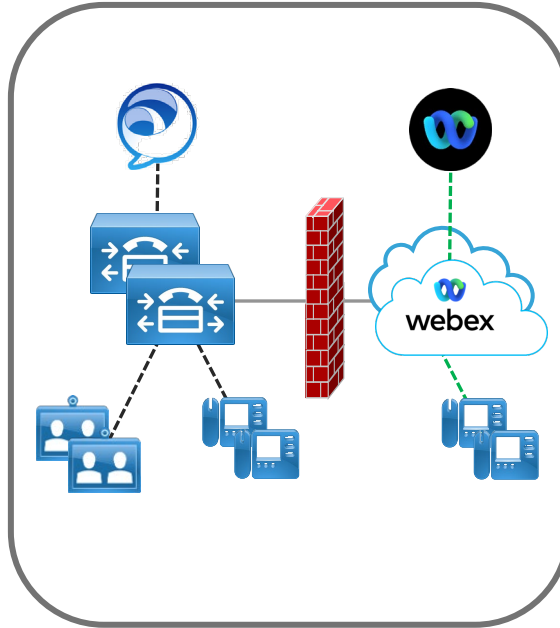
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Unified CM Calling



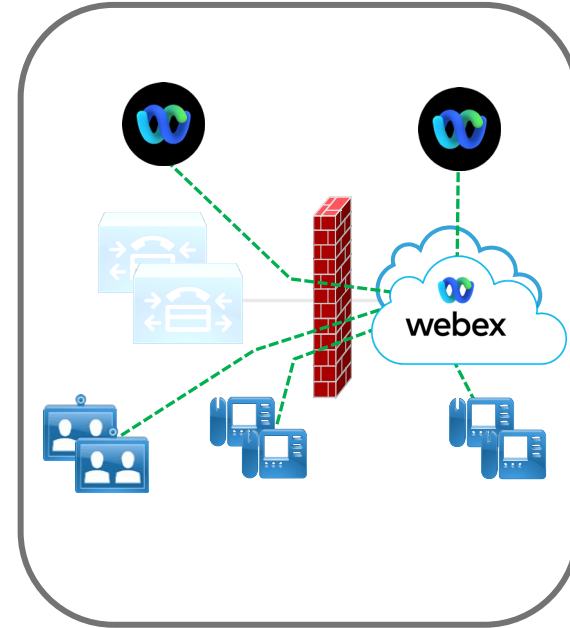
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Unified CM + Webex Calling



2

Webex Calling¹



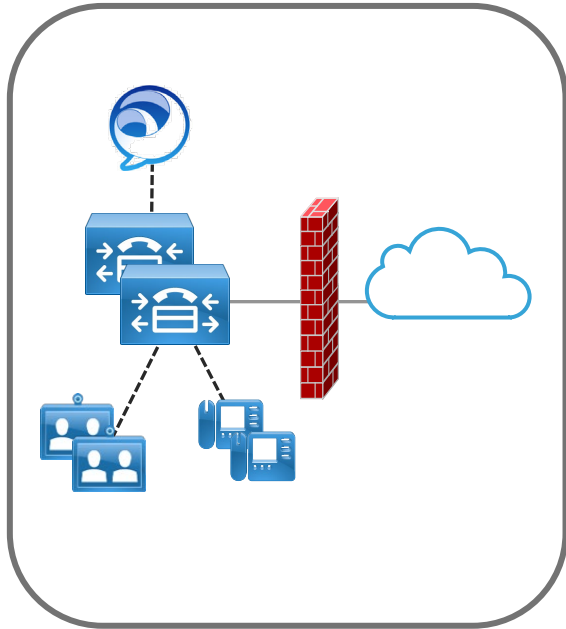
Note: This map is a visual representation of the workload transition(s), highlighting the primary architectural changes during the deployment.

Calling: Unified CM to Webex

Mapping the Transition: Step 0 – Unified CM Calling

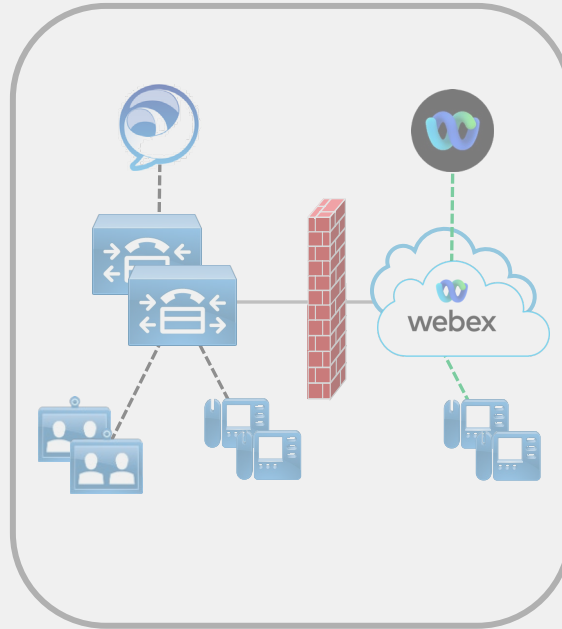
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Unified CM Calling



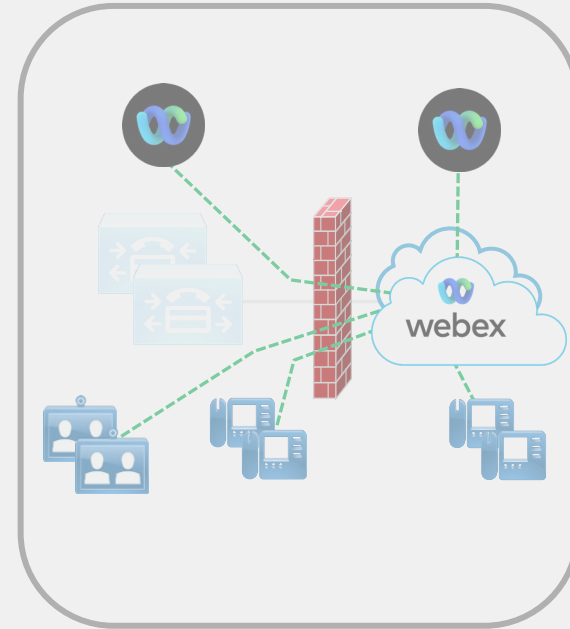
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Unified CM + Webex Calling



2

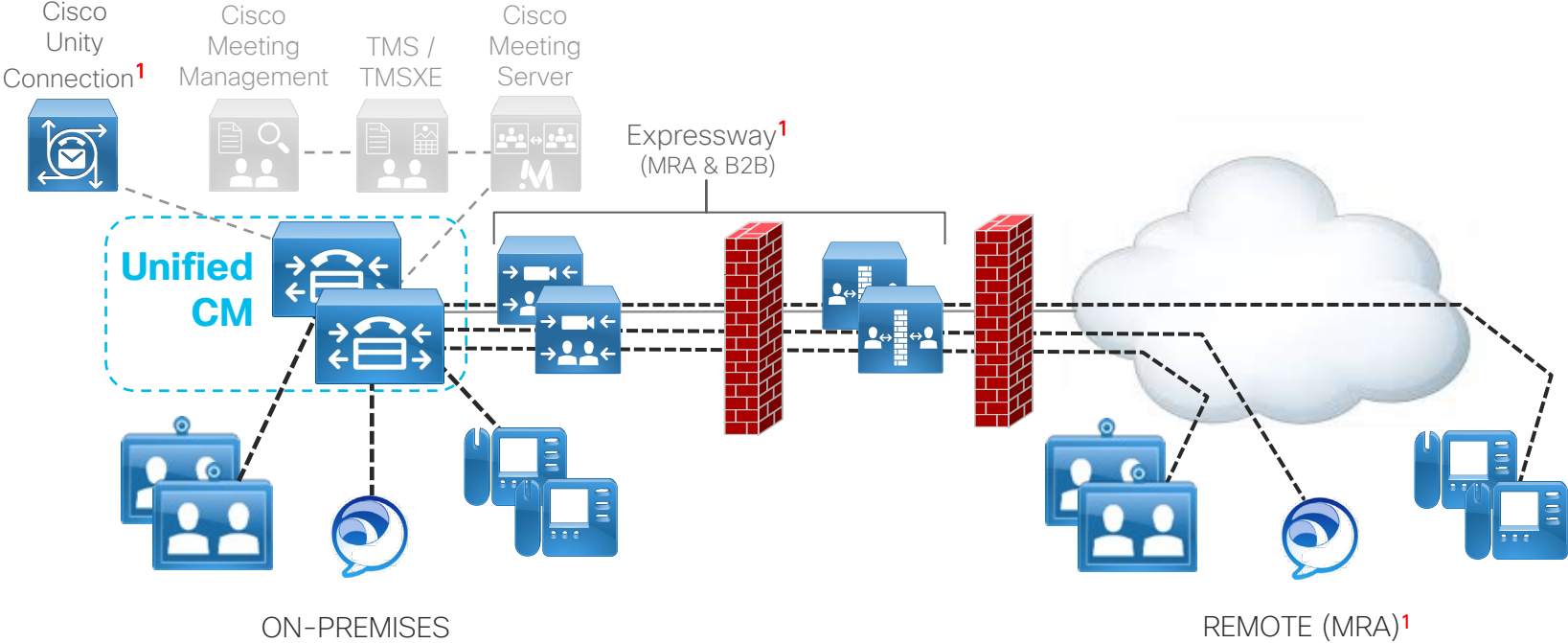
Webex Calling



Note: This map is a visual representation of the workload transition(s), highlighting the primary architectural changes during the deployment.

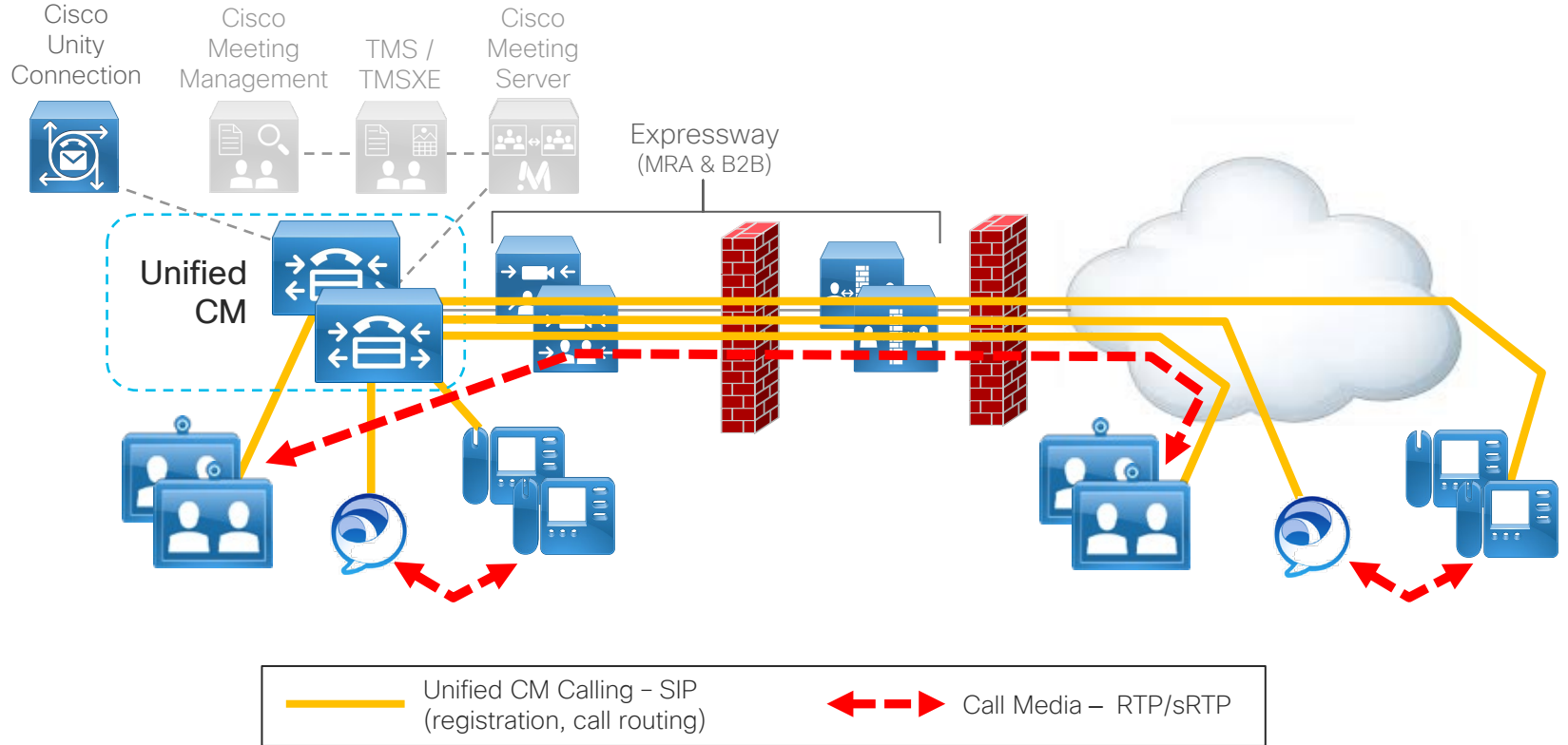
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Calling: Unified CM to Webex Unified CM Calling Deployment



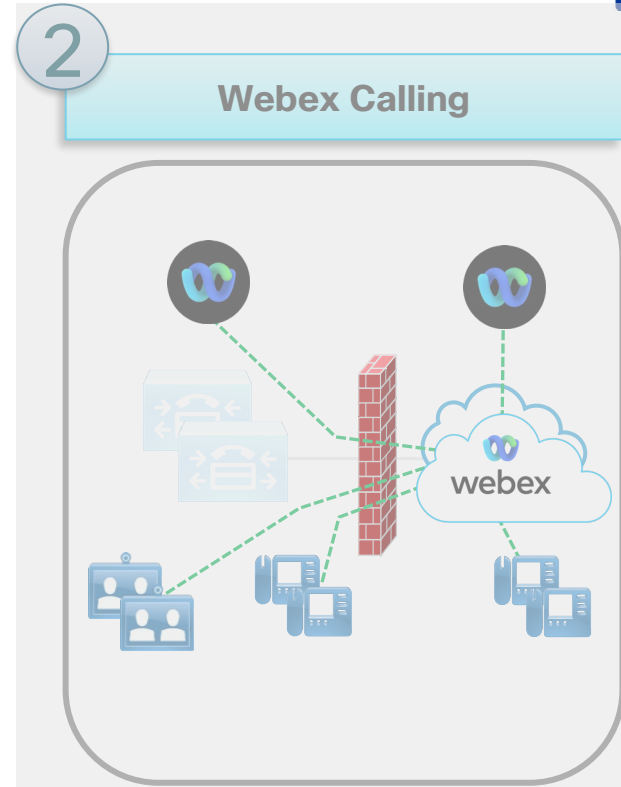
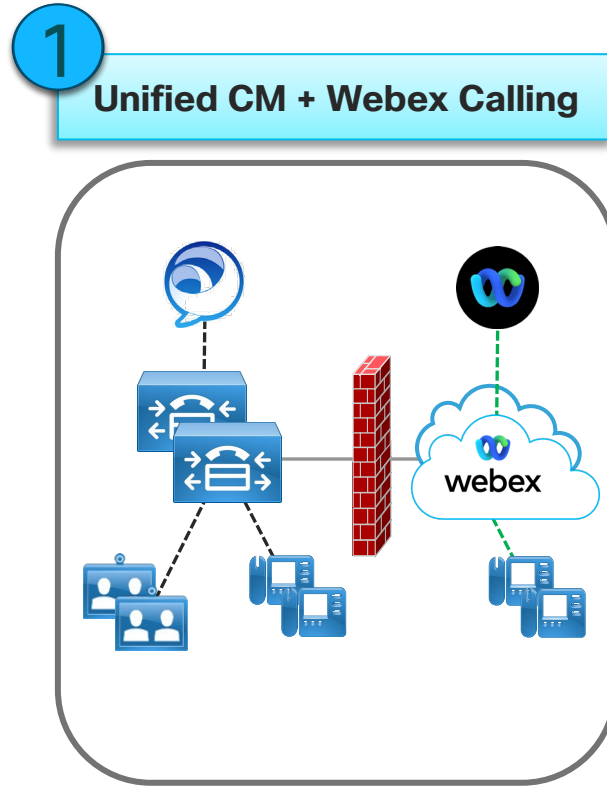
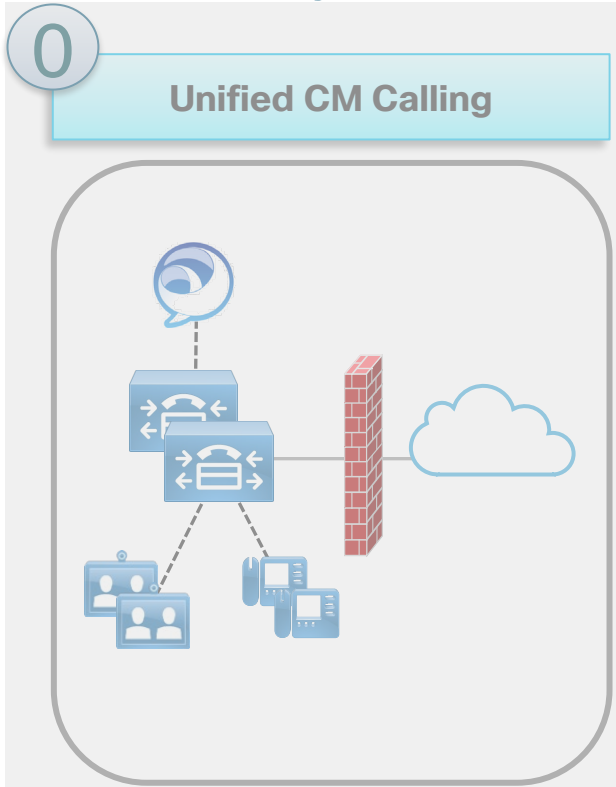
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Calling: Unified CM to Webex Unified CM Calling Flow



Calling: Unified CM to Webex

Mapping the Transition: Step 1 – Unified CM + Webex



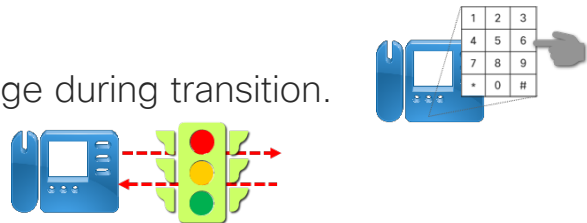
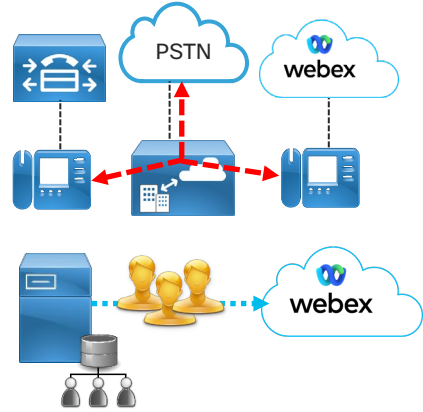
Note: This map is a visual representation of the workload transition(s), highlighting the primary architectural changes during the deployment.

1

Calling: Unified CM to Webex

What Changes with Unified CM and Webex Calling?

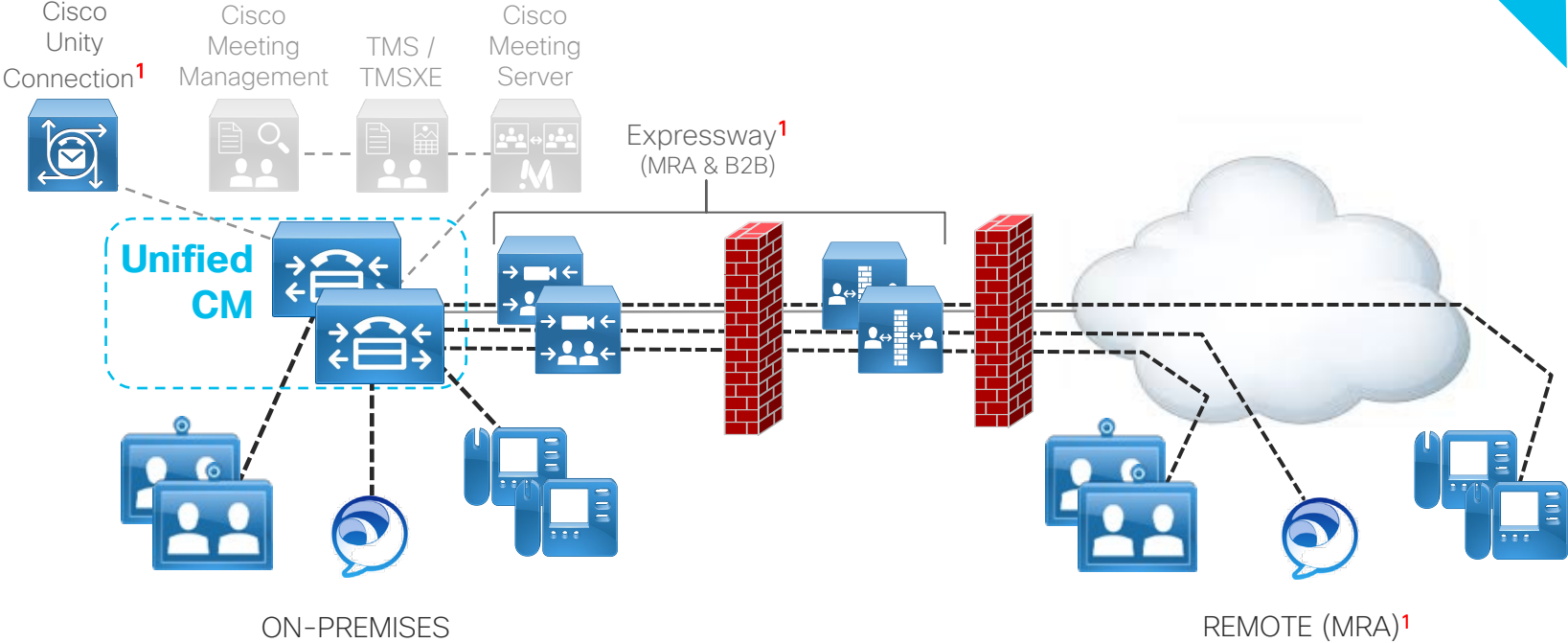
- **Licensing:** Move to Flex Calling licensing to begin consuming Webex Calling which includes CUBE Trunk for Local Gateway and firmware migration licenses¹.
- **On-Premises Calling Integration:** **Local Gateway** (IOS-XE-based) for Webex Calling integration to Unified CM and access to the PSTN.
- **Directory Integration:** **Directory Connector**² pushes and regularly synchronizes on-premises users in the corporate directory to the organization's Webex identity store.
- **Dial Plan:**
 - » Given dual call control systems, dialing habits for users **can** change during transition.
 - » Dialing class of restrictions must be revisited during transition.



¹ CUBE platform licensing (voice, security, throughput (vCUBE only)) also required and not included in Flex Calling license.
² Directory Connector is an optional component. Users may also be added manually.

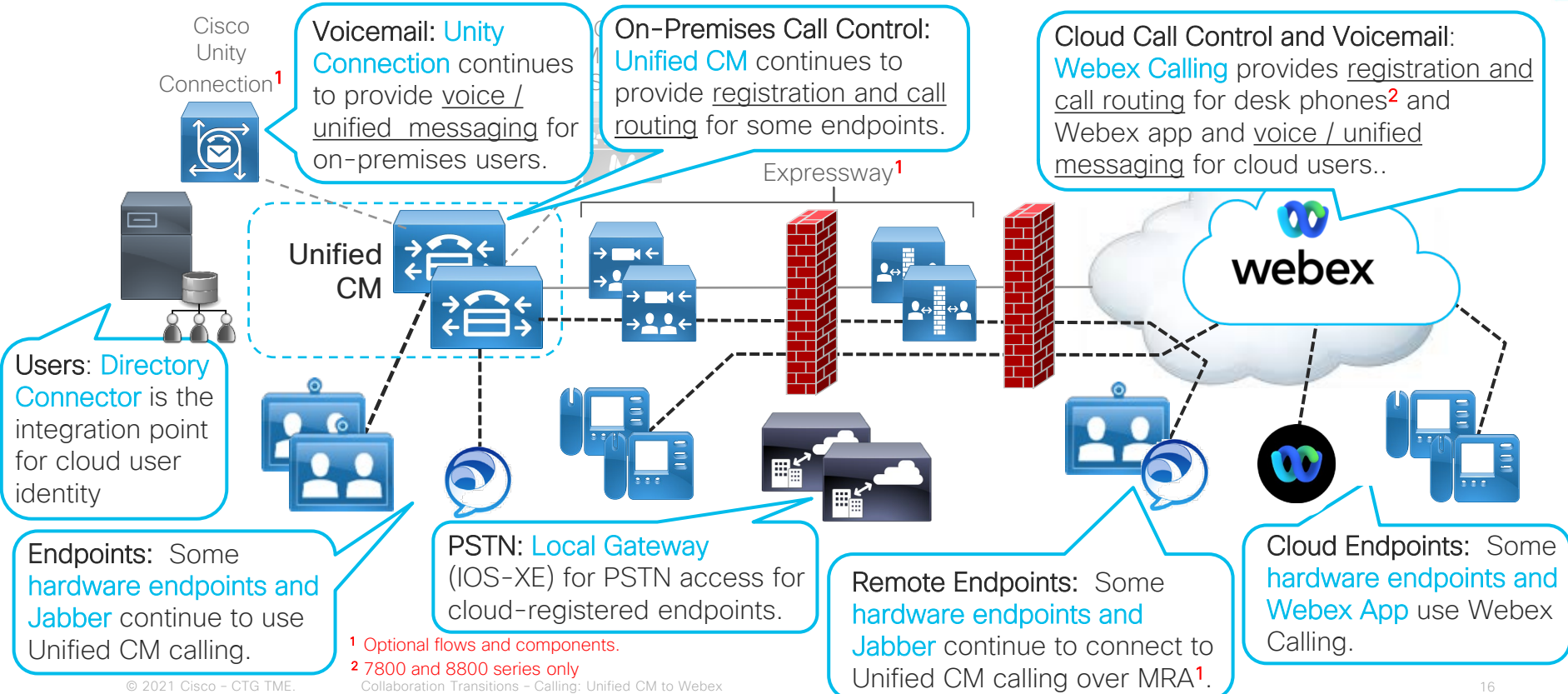
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Calling: Unified CM to Webex Before – Unified CM Calling

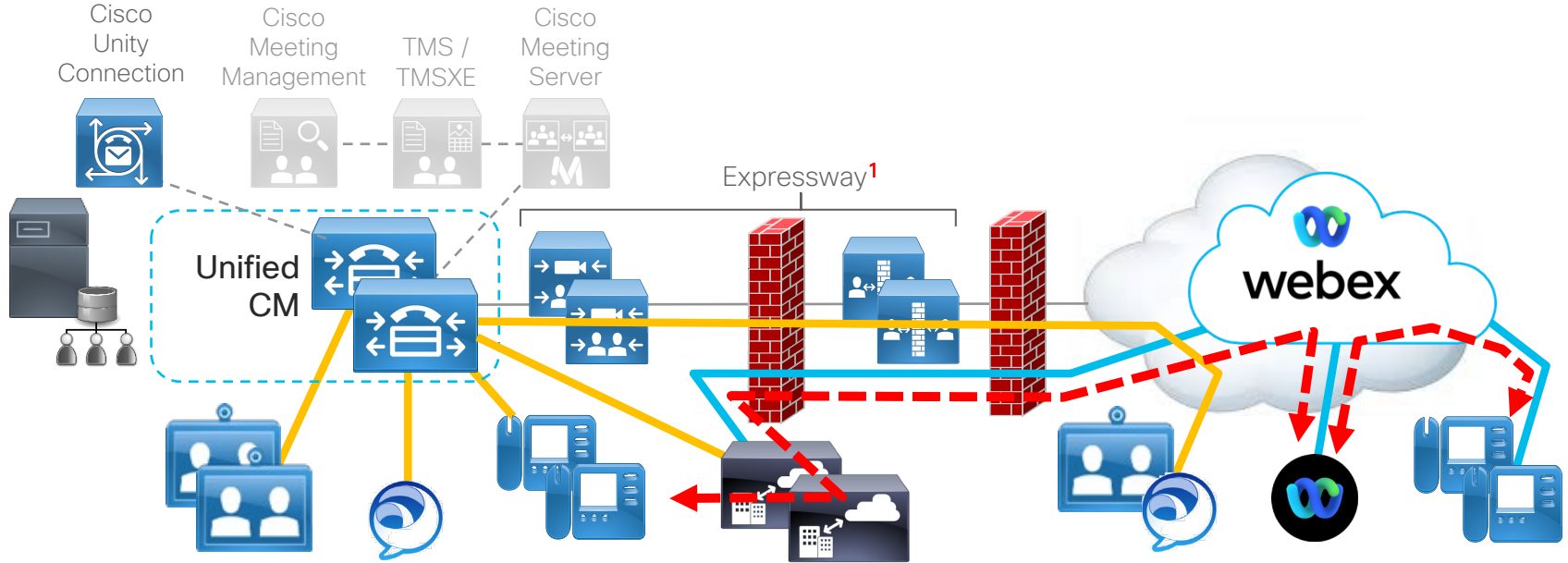


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Calling: Unified CM to Webex After – Unified CM and Webex Calling Deployment



1 Calling: Unified CM to Webex After – Unified CM and Webex Calling Flow



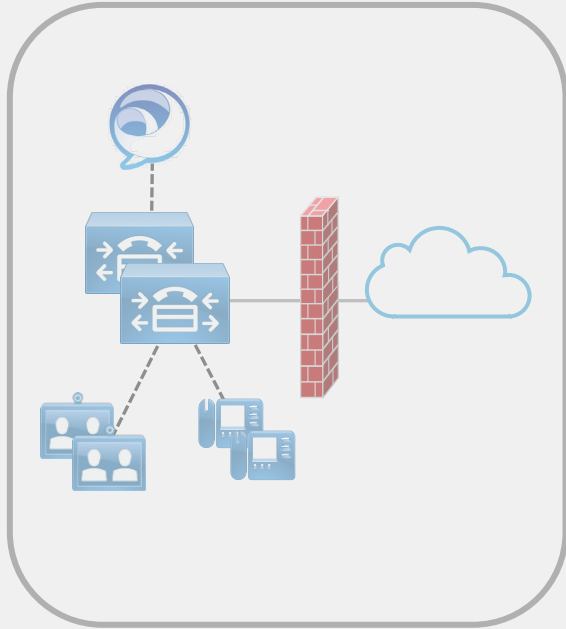
Note: On-premises call flows are unchanged and are therefore not shown.

Calling: Unified CM to Webex

Mapping the Transition: Step 2 – Webex Calling

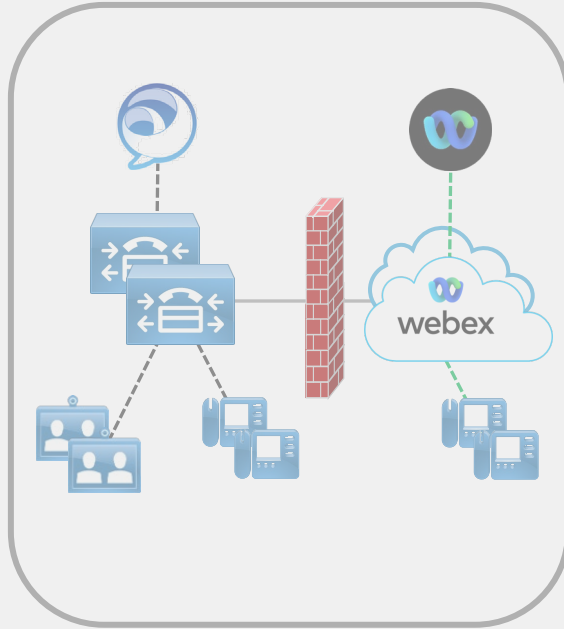
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Unified CM Calling



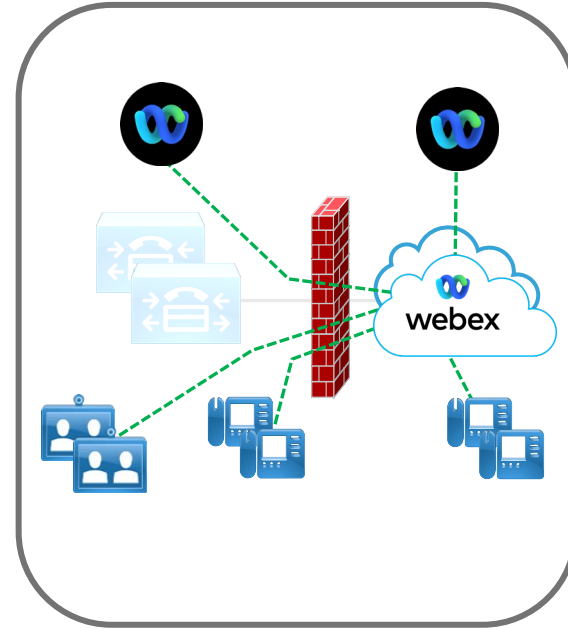
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Unified CM + Webex Calling



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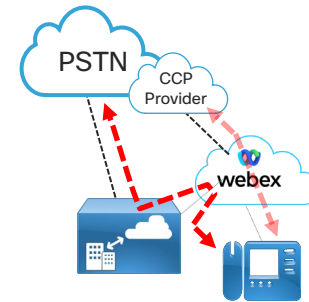
Webex Calling¹



Note: This map is a visual representation of the workload transition(s), highlighting the primary architectural changes during the deployment.

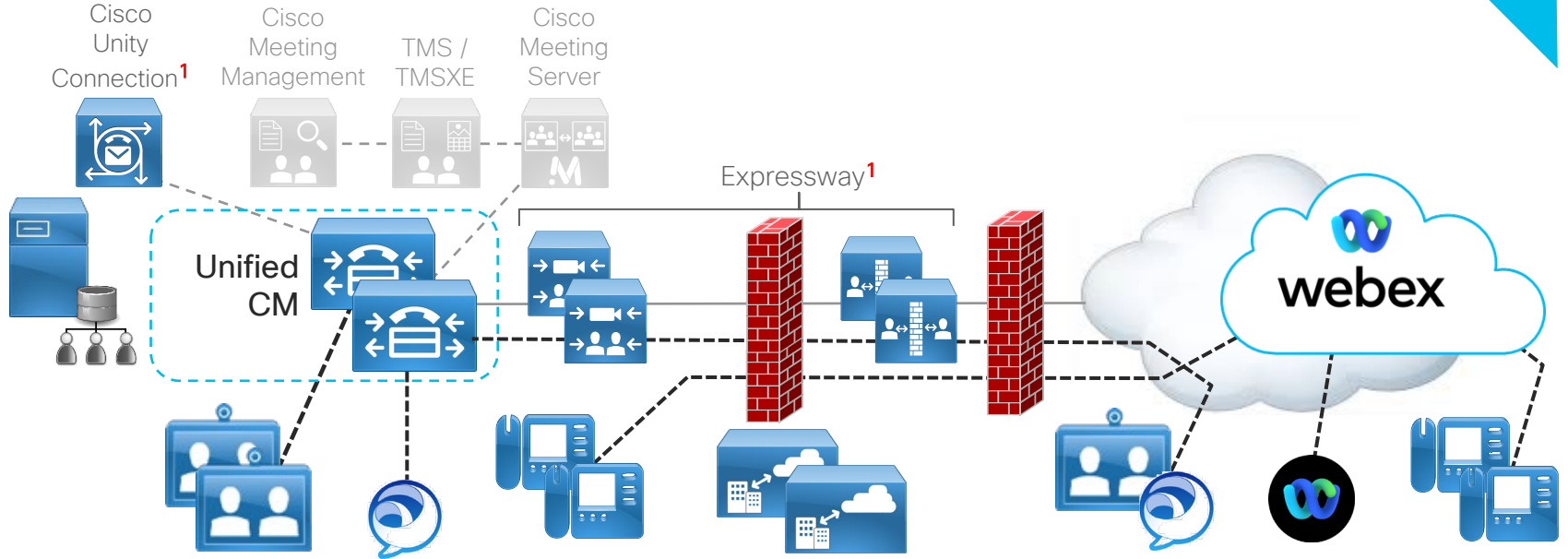
2 Calling: Unified CM to Webex What Changes with Webex Calling?

- **PSTN Access:** Local Gateway (IOS-XE based) for Webex Calling access to the PSTN. Optionally, Cloud-Connected PSTN (CCP) via provider can also provide PSTN access for cloud-registered endpoints.
- **Cloud Calling:** Remove on-premises call control, voice messaging, and Expressway MRA firewall traversal for complete cloud-based calling deployment.
- **Video Endpoints:** Register to Webex platform as Webex devices allowing continued use as shared device for point-to-point and multi-point conferencing. URI for video endpoints will change after transition.



1 Calling: Unified CM to Webex

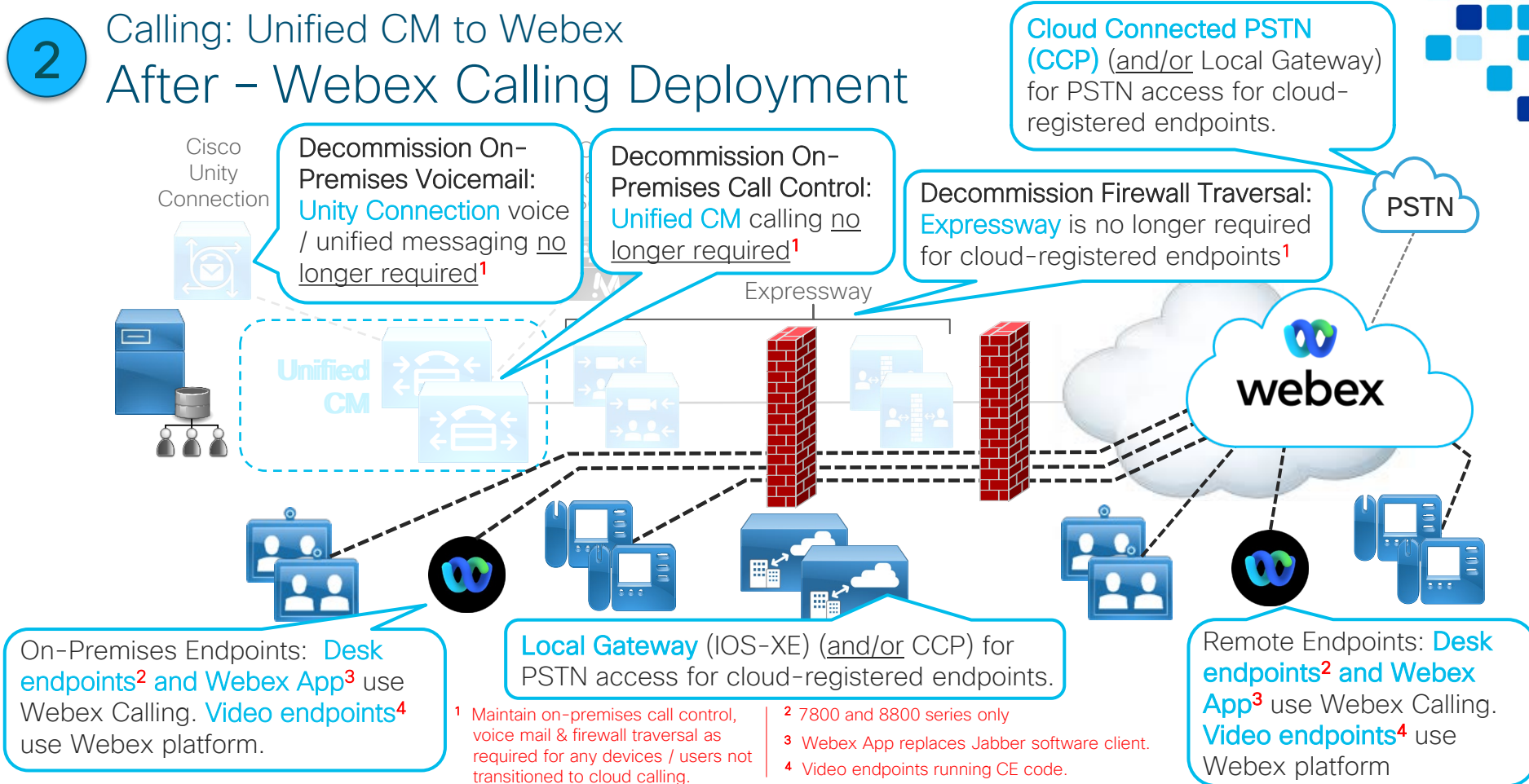
Before – Unified CM and Webex Calling



¹ Optional flows and components.

2

Calling: Unified CM to Webex After – Webex Calling Deployment



Decommission On-Premises Voicemail: **Unity Connection** voice / unified messaging no longer required¹

Decommission On-Premises Call Control: **Unified CM** calling no longer required¹

Decommission Firewall Traversal: **Expressway** is no longer required for cloud-registered endpoints¹

Cloud Connected PSTN (CCP) (and/or Local Gateway) for PSTN access for cloud-registered endpoints.

On-Premises Endpoints: **Desk endpoints**² and **Webex App**³ use Webex Calling. **Video endpoints**⁴ use Webex platform.

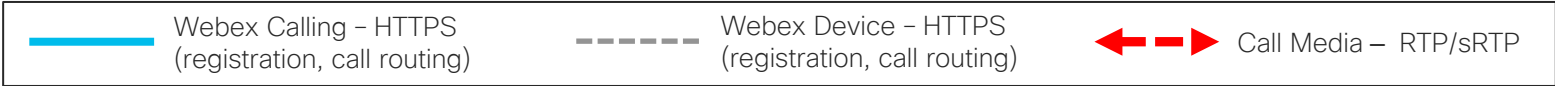
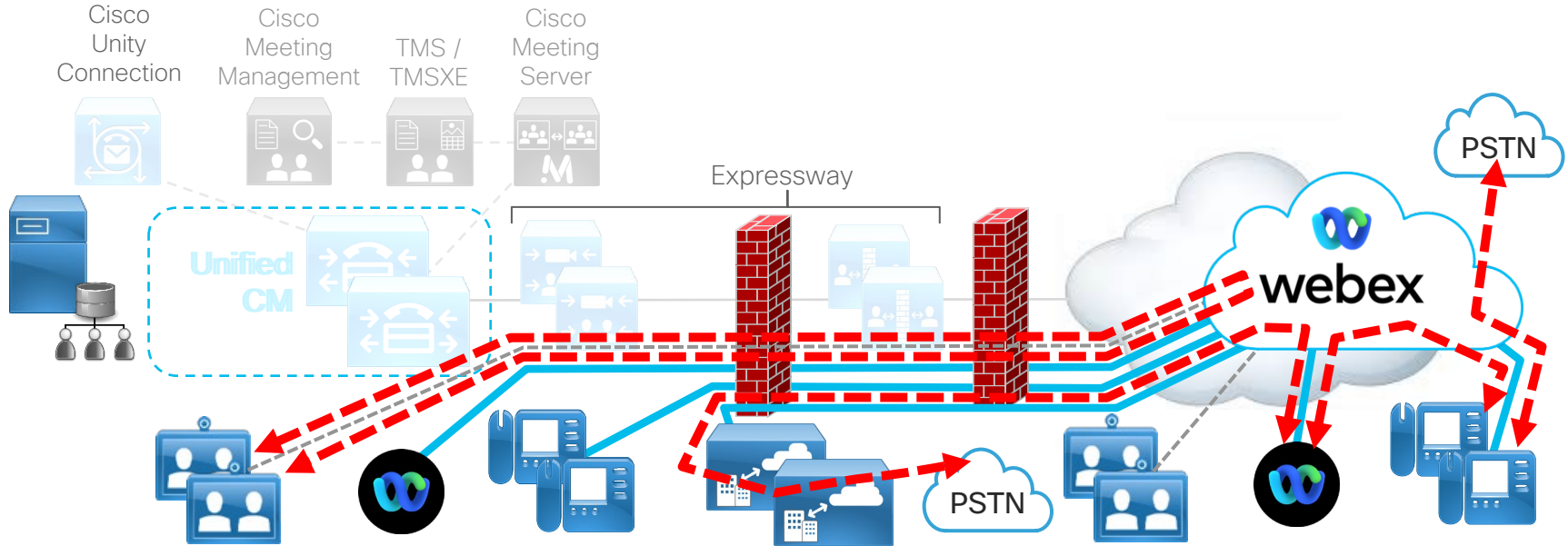
Local Gateway (IOS-XE) (and/or CCP) for PSTN access for cloud-registered endpoints.

Remote Endpoints: **Desk endpoints**² and **Webex App**³ use Webex Calling. **Video endpoints**⁴ use Webex platform

¹ Maintain on-premises call control, voice mail & firewall traversal as required for any devices / users not transitioned to cloud calling.
² 7800 and 8800 series only
³ Webex App replaces Jabber software client.
⁴ Video endpoints running CE code.

2

Calling: Unified CM to Webex After – Webex Calling Flow





Calling: Unified CM to Webex

Webex Calling Reduces Cost & Simplifies Management

- **Reduced total cost of ownership (TCO)**
 - » No requirement for on-premises Unified CM service nodes.
 - » No IT management resources required to maintain & support on-premises calling system.
- **Easy to maintain**
 - » Easier control and management for IT through simple web portals.
 - » Automatic continuous upgrades in the cloud ensure deployment is up to date with the latest security fixes and features, further reducing burden on IT management.



Calling: Unified CM to Webex

Why Move to Webex Calling?

There are many other compelling reasons for transitioning from Unified CM on-premises to Webex Calling:

- **Built for a mobile workforce enabling anywhere, anytime calling**

Cloud calling enables global reach without costly distributed on-premises infrastructure. Further, universal availability of internet bandwidth allows users at any location to make calls over their local Internet connection reducing enterprise network bandwidth consumption

- **Increased scalability and resilience**

Webex calling provides for larger scale deployments with greater reliability than on-site calling deployments.

- **Speed of innovation**

Cloud features are delivered faster without requirement for maintenance windows or complex upgrade processes

- **Encrypted secure calling delivered on carrier-grade cloud infrastructure**

With global regulatory expertise and compliance across all markets served, Webex cloud platform implements audited, professional security practices.



Calling: Unified CM to Webex

What is Different When Moving to Webex Calling

The following tables highlight key technical considerations to be aware of when transitioning **from** Unified CM on-premises calling **to** a Webex Calling cloud deployment.

The considerations have been divided into the following categories:

- » Licensing
- » Endpoints
- » Features
- » Automation and Integrations



Calling: Unified CM to Webex

Licensing and Endpoint Considerations

Considerations for licensing and endpoints

Category	Considerations
Licensing	<ul style="list-style-type: none">• Make sure you have enough Flex Calling licenses in Control Hub to support user and endpoint transition.• CUBE platform licensing (voice, security, throughput (vCUBE only)) also required and not included in Flex Calling license.• Please refer to the data sheet for important information on Flex licensing for Webex Calling.
Endpoints	<ul style="list-style-type: none">• Device support with Webex Calling is currently limited to the Cisco IP Phone 6800, 7800, and 8800 series devices. Refer to Supported Devices for Webex Calling for information on the latest supported devices.• In order to transition on-premises phones (7800 and 8800 series) to Webex Calling firmware migration is required to register the devices to the Webex Calling platform.• Video endpoints running CE firmware (including desktop and room video devices) for point-to-point and multi-point conferencing register to the Webex platform.

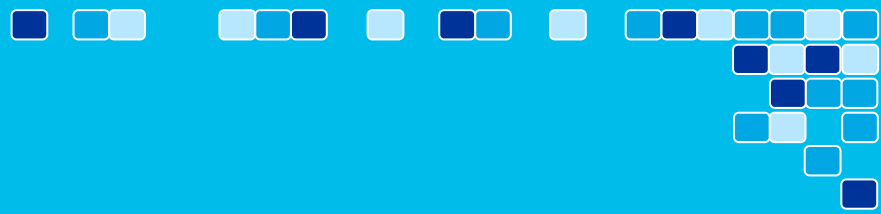


Calling: Unified CM to Webex

Features and Automation & Integrations Considerations

Considerations for calling features and automation & integrations

Category	Considerations
Features	<ul style="list-style-type: none">• Webex Calling supports the most common set of calling features, with more features planned for future releases. Information about the latest supported features are documented in the Webex Calling release notes available here.• Specific features which might prevent full migration include:<ul style="list-style-type: none">» On premises audio conferencing with Unified CM features» Forced authorization codes (FAC) / Client matter codes (CMC)» Corporate branding for phones and music on hold» Least cost routing / tail end hop-off (TEHO)
Automation and Integrations	<ul style="list-style-type: none">• Currently APIs and other automation features are not available for Webex Calling deployments. APIs are critical for automating configuration as well as monitoring cloud calling• Integrations to 3rd party applications (Attendant Console, Paging, etc.) are not currently available for Webex Calling deployments.



Collaboration Transitions

Calling: Transitioning from Unified CM
to Webex

References



Calling: Unified CM to Webex References

Licensing

- Cisco Collaboration Flex Plan:
<https://www.cisco.com/c/en/us/products/unified-communications/collaboration-flex-plan/index.html>

Network Requirements

- Prepare Your Environment for Webex Calling
<https://help.webex.com/en-us/n4cprps/Prepare-Your-Environment-for-Webex-Calling>
- Port Reference Information for Webex Calling
<https://help.webex.com/en-us/b2exve/Port-Reference-Information-for-Cisco-Webex-Calling>

Phones

- Supported Devices for Webex Calling
<https://help.webex.com/en-us/qkwt4j/Supported-Devices-for-Webex-Calling>
- Configure & Manager Webex Calling Devices
<https://help.webex.com/en-us/n9r1aac/Configure-and-Manage-Webex-Calling-Devices>

Users

- Getting Started with Cisco Webex Control Hub
<https://help.webex.com/en-us/nkhozs6/Get-Started-with-Cisco-Webex-Control-Hub>
- Configure & Manage Webex Calling Users
<https://help.webex.com/en-us/nz0krq9/Configure-and-Manage-Your-Webex-Calling-Users>



Calling: Unified CM to Webex References

Calling Configuration

- Configure Webex Calling for Your Organization
<https://help.webex.com/en-us/njvdjf2/Configure-Cisco-Webex-Calling-for-Your-Organization>
- Configure Webex Calling Features
<https://help.webex.com/en-us/0r7a2z/Set-Up-Your-Webex-Calling-Features>
- Configure Unified CM for Webex Calling
<https://help.webex.com/en-us/nqqzkb7/Configure-Unified-CM-for-Webex-Calling>

Local Gateway

- Configure Local Gateway (IOS-XE) for Webex Calling
<https://help.webex.com/en-us/b2exve/Port-Reference-Information-for-Cisco-Webex-Calling>

dCloud Lab

- Transitioning from Unified CM to Webex Calling Lab
https://dcloud-cms.cisco.com/demo_news/transitioning-from-unified-cm-to-webex-calling-lab

Calling Transition Deployment Guide

- Calling: Transitioning from Unified CM to Webex Deployment Guide
https://www.cisco.com/c/dam/en/us/td/docs/solutions/PA/mcp/DEPLOYMENT_CALLING_Unified_CM_to_Webex_Calling.pdf



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