COLLABORATION TRANSITIONS

Calling:

Transitioning from Unified CM to Webex Calling

CTG Technical Marketing Engineering Team

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Contents

Scenario Introduction 3

Decision Tree

Overview

Architecture

Scope

Mapping the Transition 8

High-Level Transition Map

Step 0: Unified CM Calling
Unified CM Calling Flow

Step 1: Unified CM and Webex Calling
What Changes w./ Unified CM and Webex Calling
After: Unified CM and Webex Calling
Unified CM and Webex Calling Flow

Step 2: Webex Calling
What Changes w./ Webex Calling
After: Webex Calling
Webex Calling Flow

Mapping the Transition (cont.)

Webex Calling Reduces Cost & Simplifies Management

Why Move to Webex Calling?

What is Different when Moving to Webex Calling

Considerations: Licensing
Endpoints
Features
Automation and Integrations

References 28

Collaboration Transitions

Calling: Transitioning from Unified CM to Webex

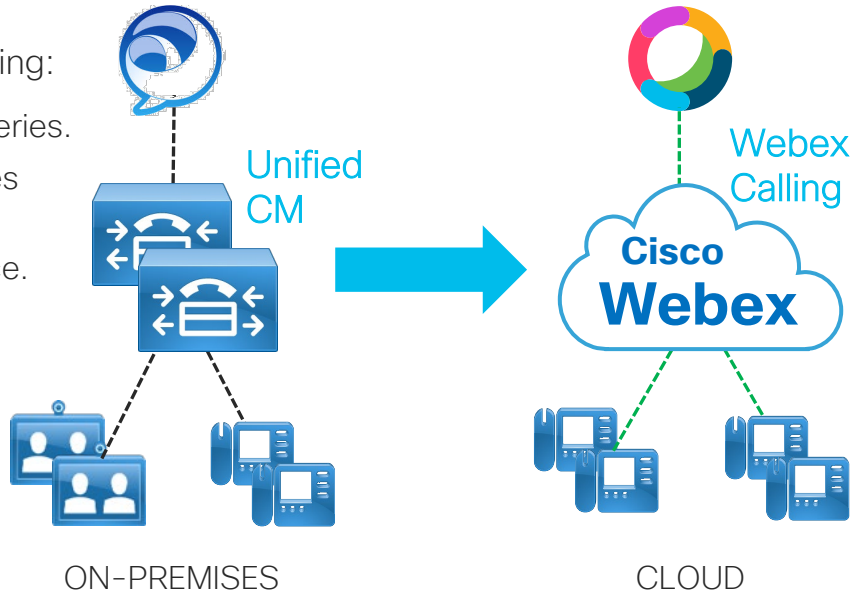
Scenario Introduction

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 150 concurrent PSTN and cloud / on-premises interop calls per Local Gateway.



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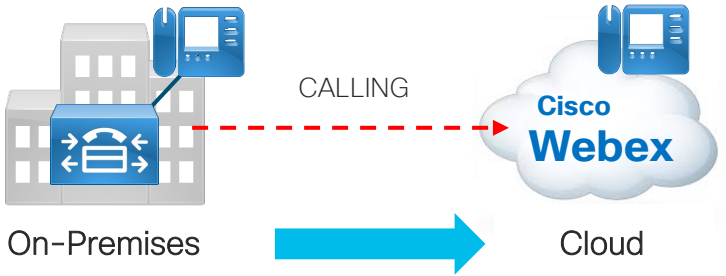
Calling: Unified CM to Webex

Scenario Introduction: Overview

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

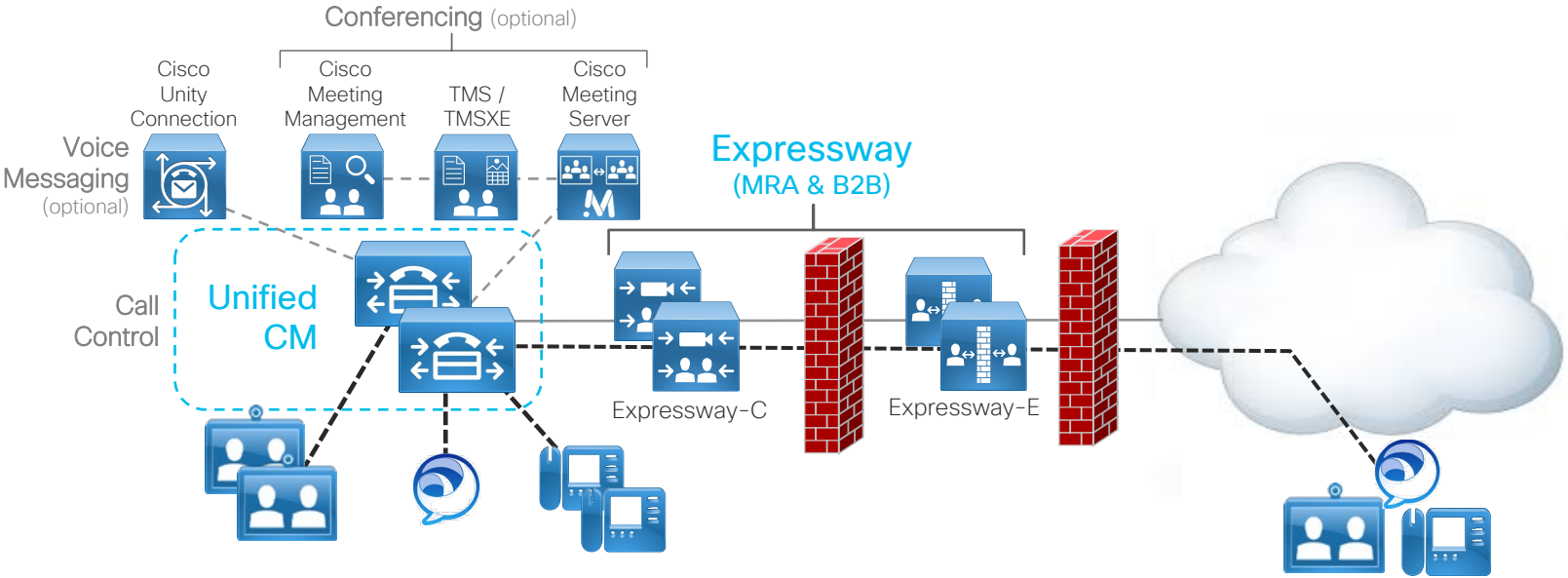


Scenario Objective

- 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

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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 Teams (desktop and mobile) were evaluated.

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Collaboration Transitions

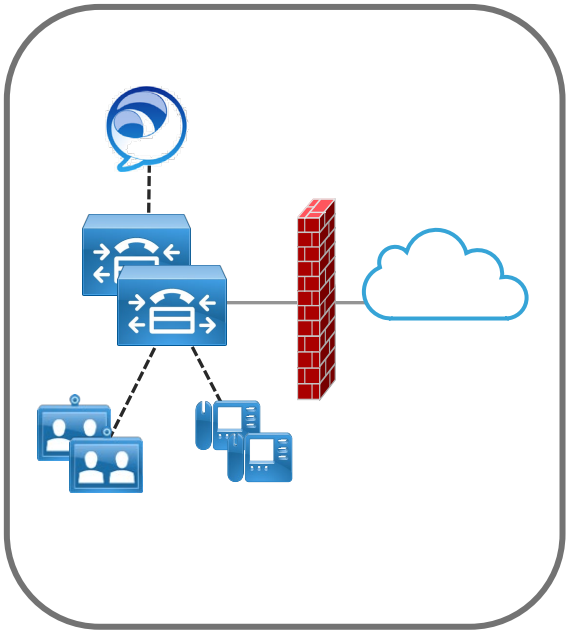
Calling: Transitioning from Unified CM to Webex

Mapping the Transition

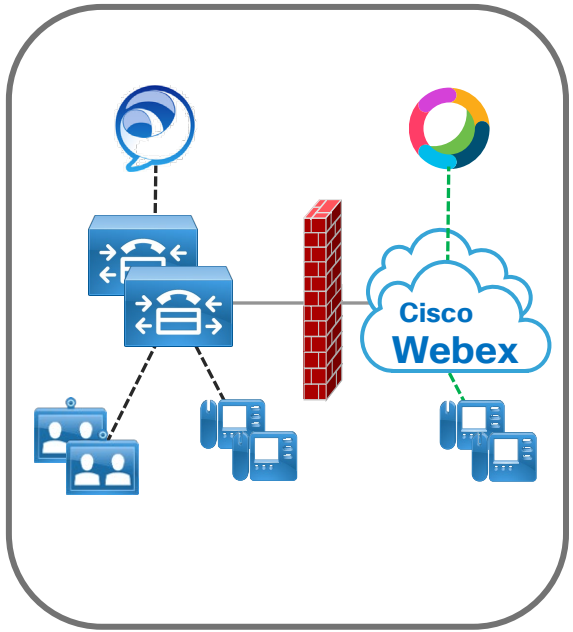
Calling: Unified CM to Webex

Mapping the Transition: High-Level Transition Map

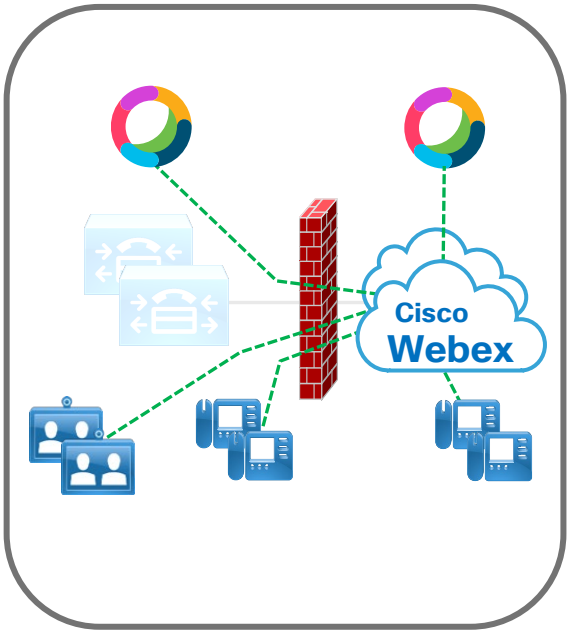
0 Unified CM Calling



1 Unified CM + Webex Calling



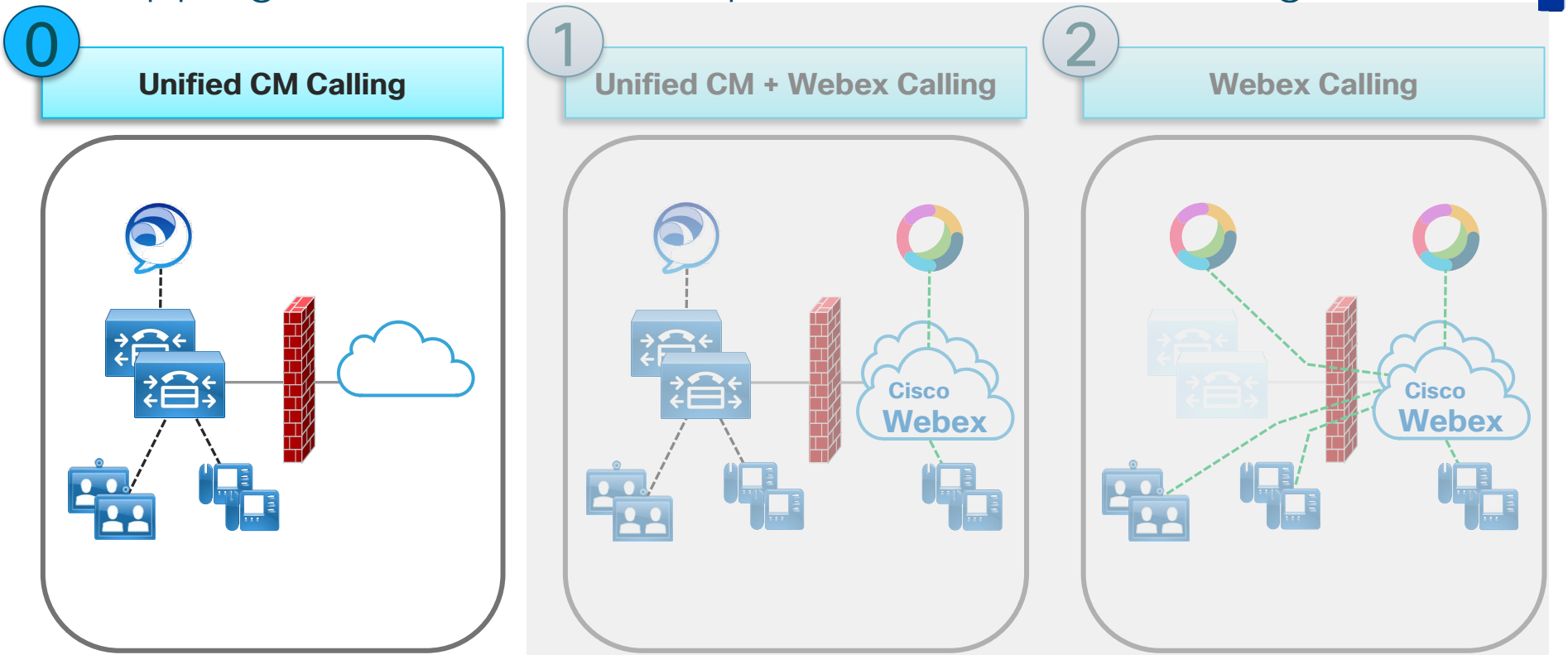
2 Webex Calling[1]



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

[1] CE video endpoints register to Webex Teams platform.

Mapping the Transition: Step 0 – Unified CM 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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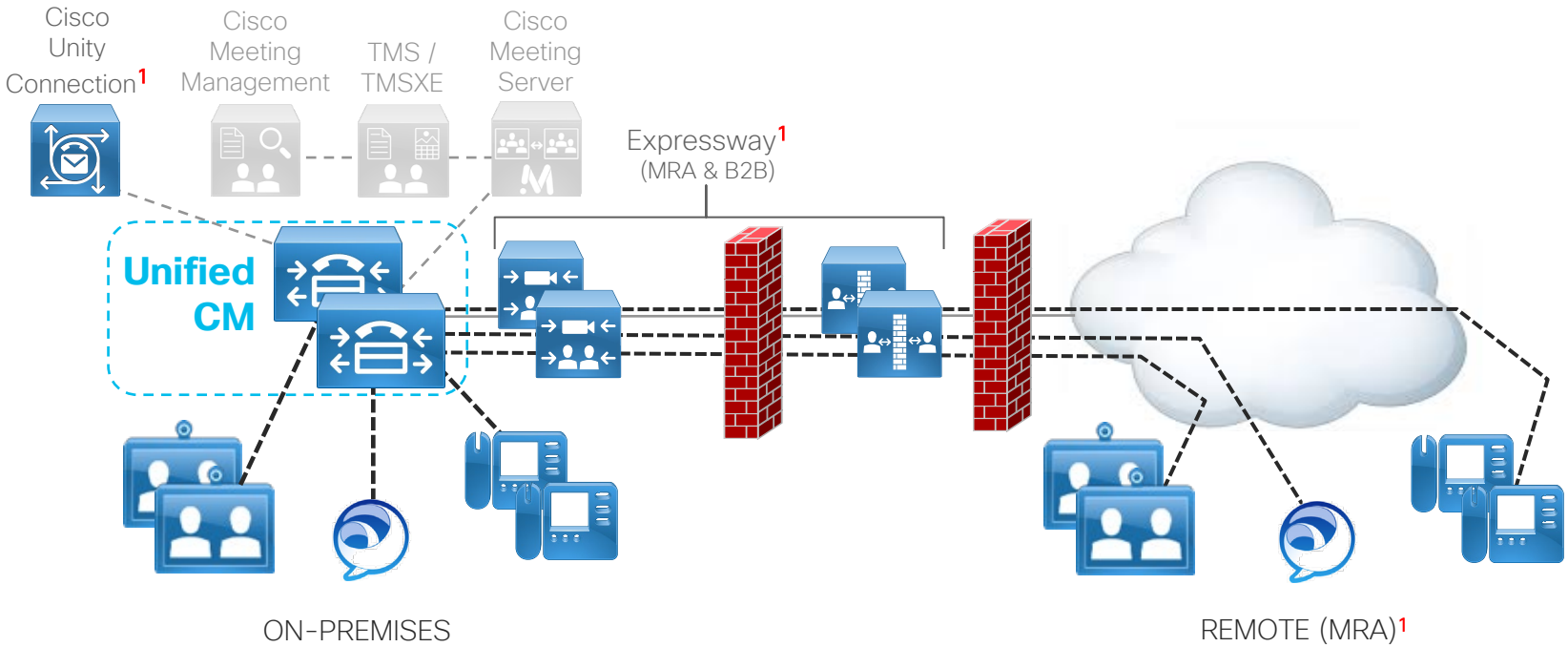
Calling: Unified CM to Webex

Unified CM Calling Deployment

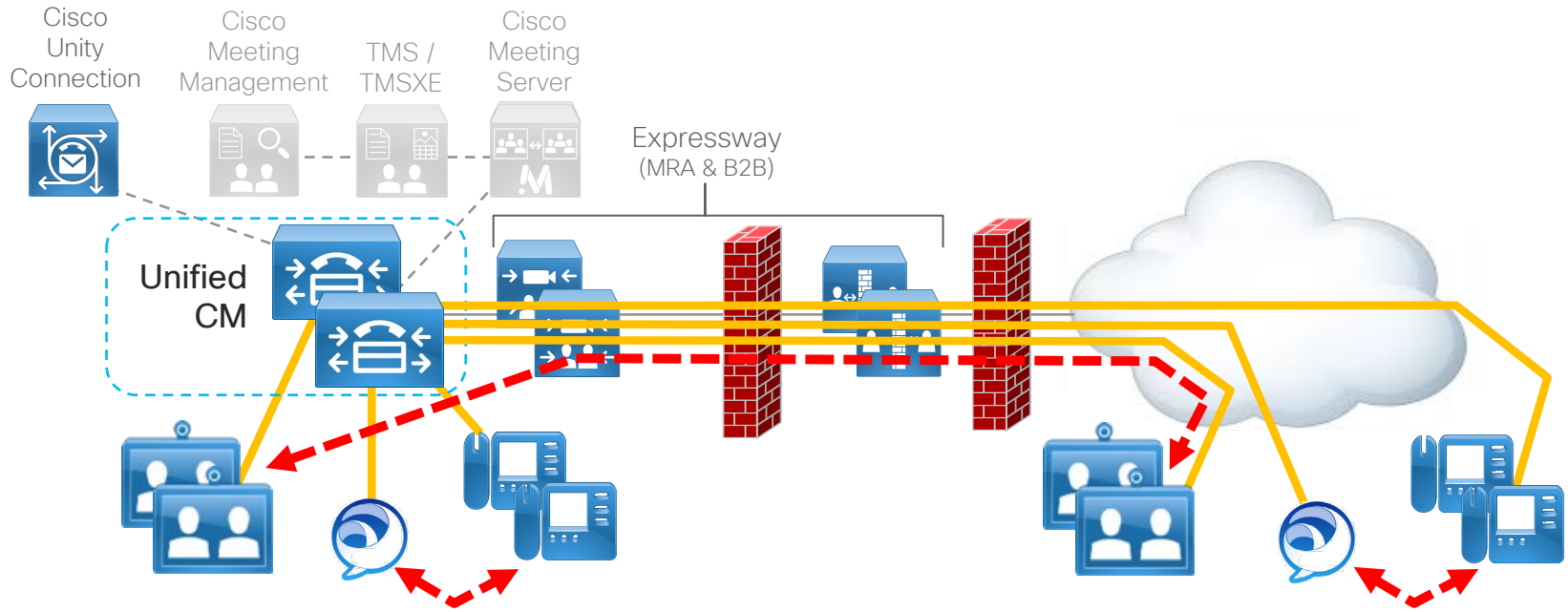


[1] Expressway MRA/B2B and Unity Connection voice / unified messaging are optional.

0

Calling: Unified CM to Webex

Unified CM Calling Flow



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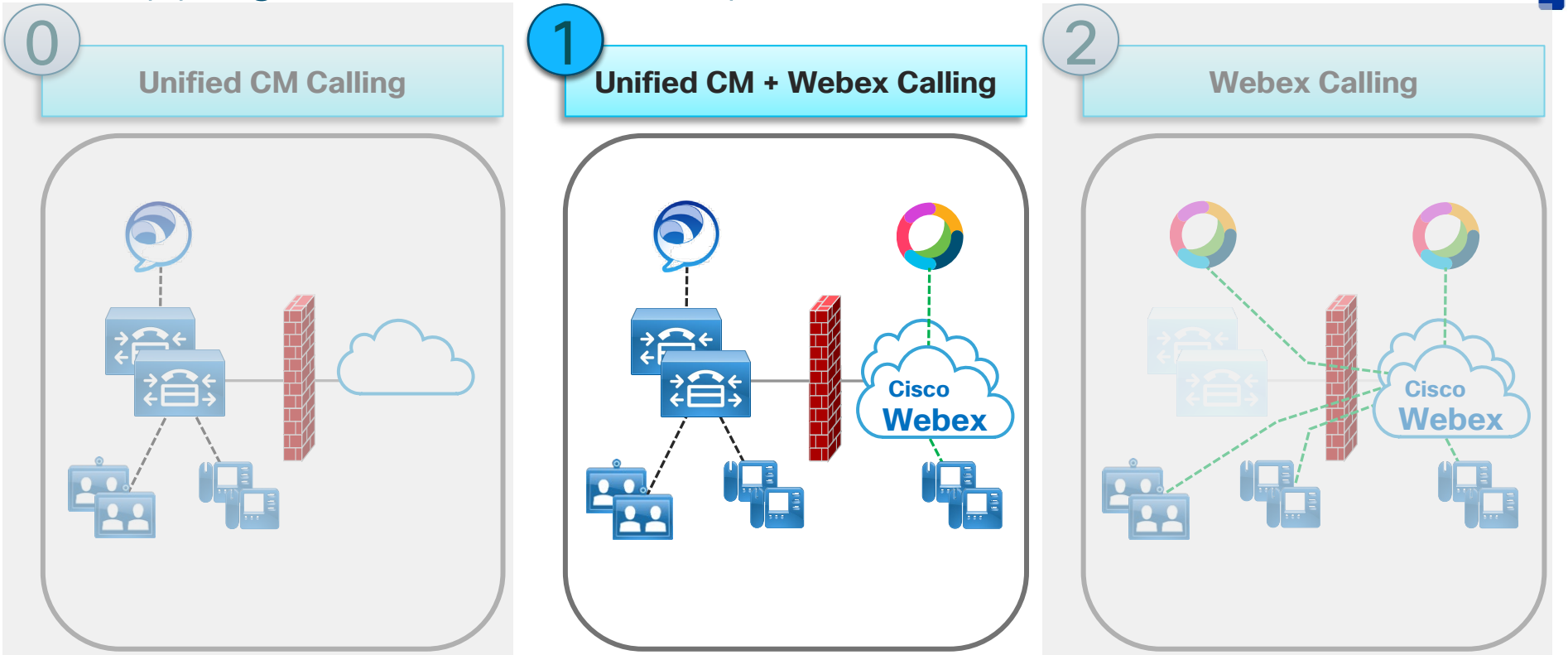
Calling: Unified CM to Webex

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.

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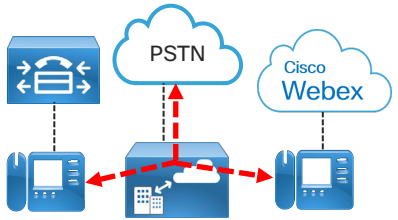
1

Calling: Unified CM to Webex

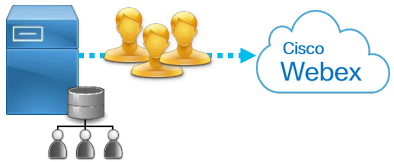
What Changes with Unified CM and Webex Calling?

- **Licensing:** Move to Flex Calling licensing to begin consuming Webex Calling which includes CUBE Trunk for Local Gateway and firmware migration licenses[1].

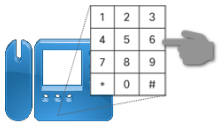


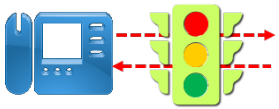
- **On-Premises Calling Integration:** Local Gateway (IOS-XE-based) for Webex Calling integration to Unified CM and access to the PSTN.

- **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.

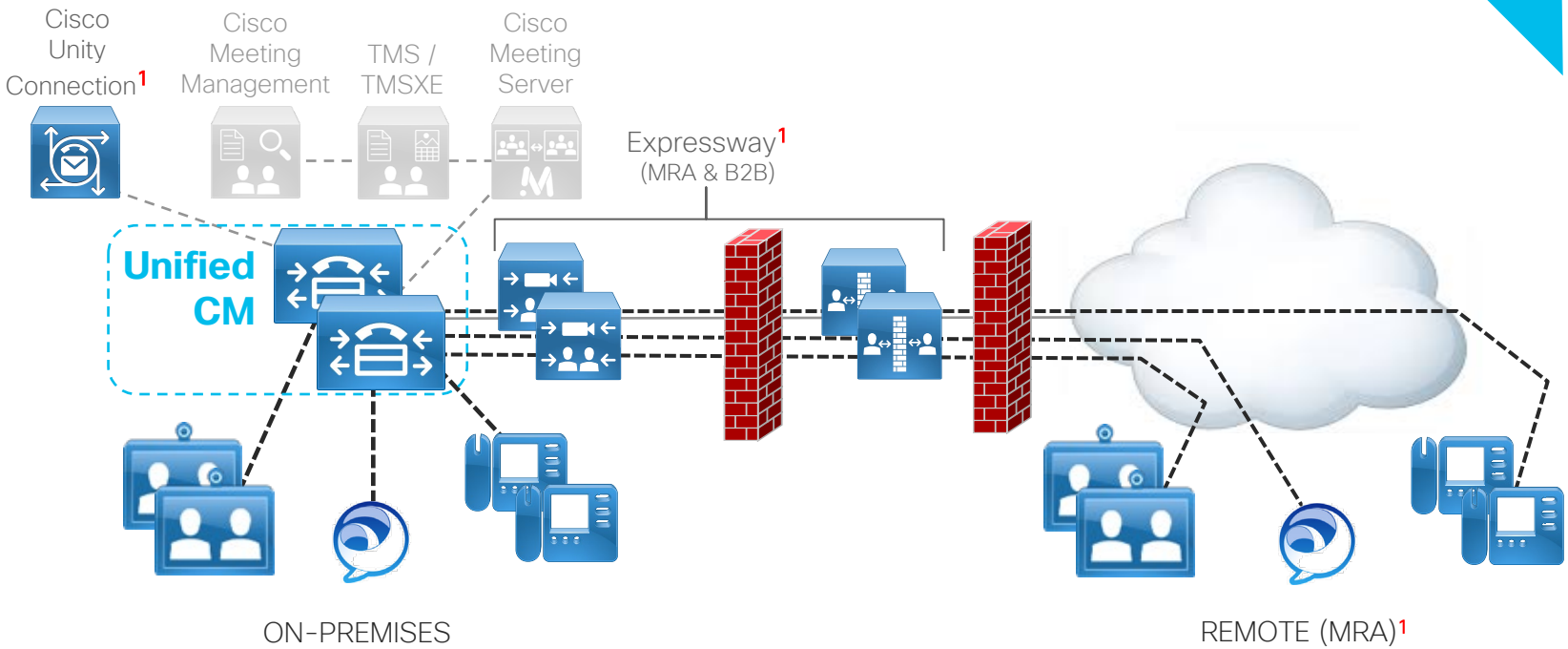
[2] Directory Connector is an optional component. Users may also be added manually.

0

Calling: Unified CM to Webex

Before – Unified CM Calling

REVIEW

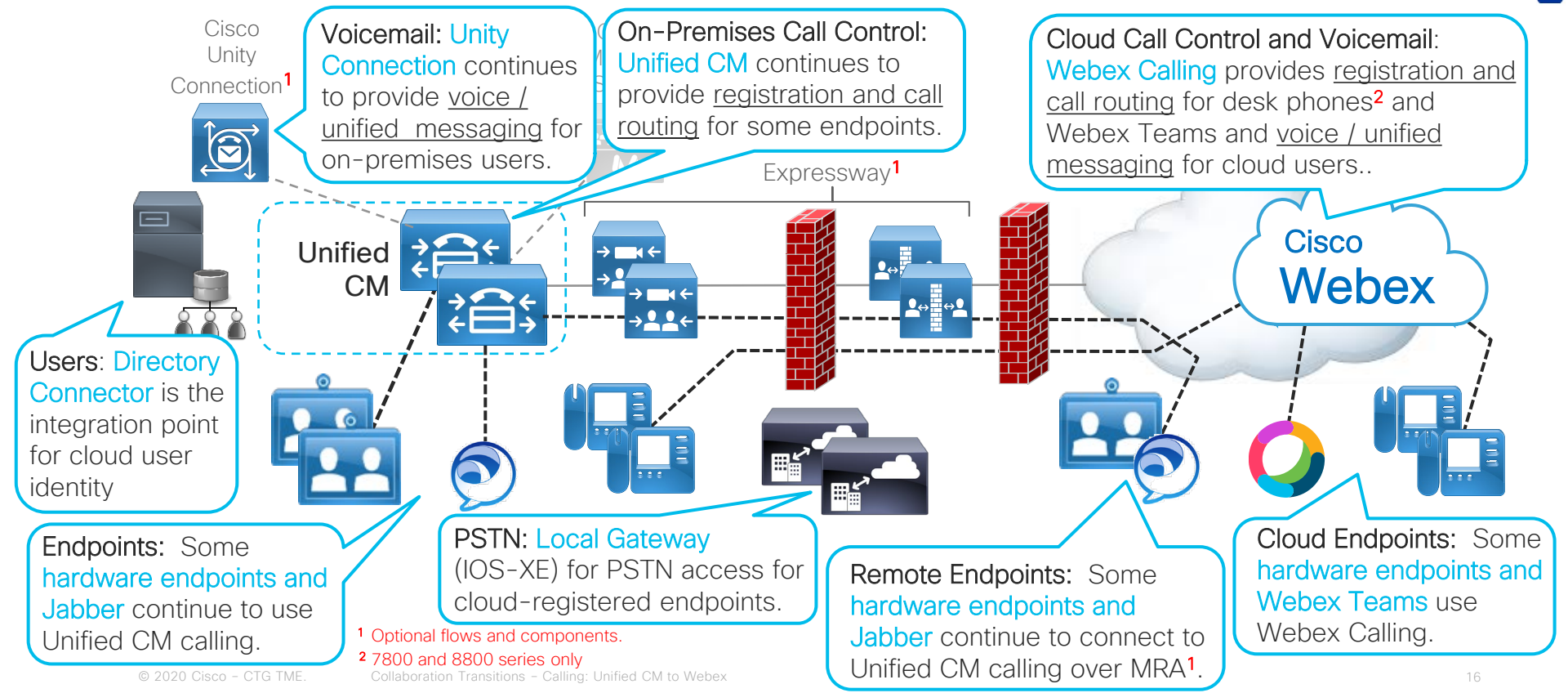


[1] Expressway MRA/B2B and Unity Connection voice / unified messaging are optional.

1

Calling: Unified CM to Webex

After – Unified CM and Webex Calling Deployment



[1] Optional flows and components.

[2] 7800 and 8800 series only

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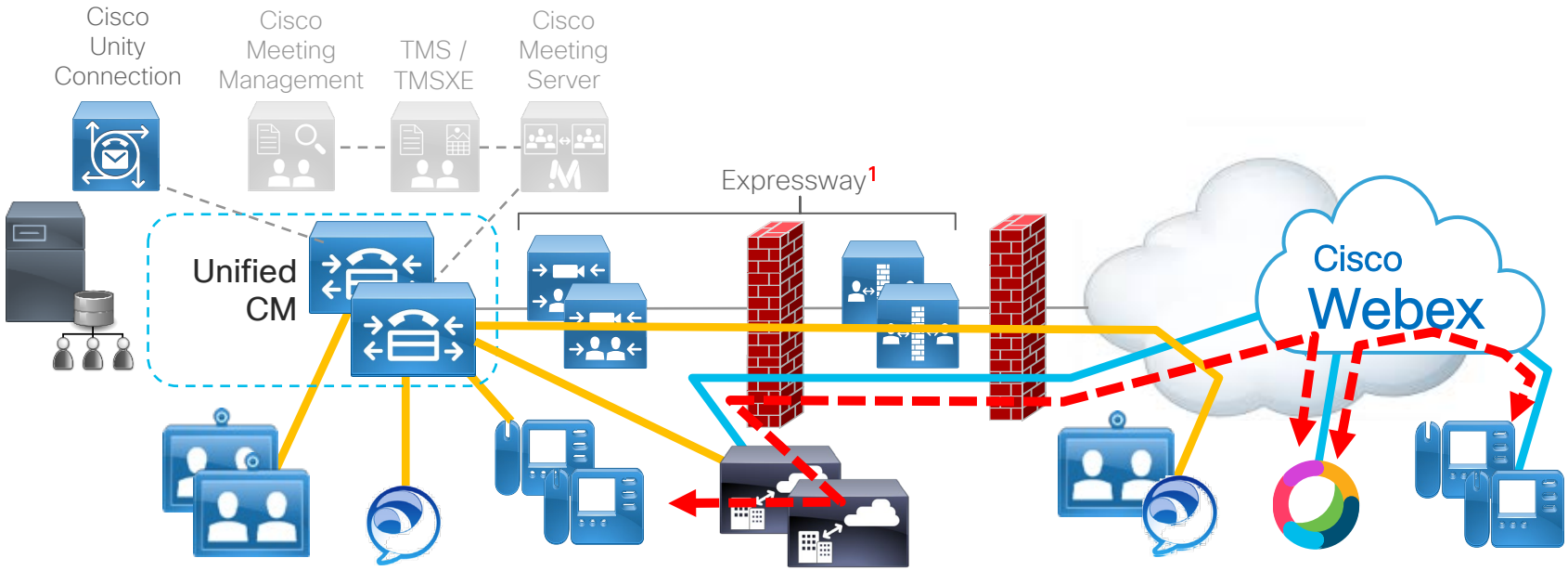
1

Calling: Unified CM to Webex

After – Unified CM and Webex Calling Flow



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

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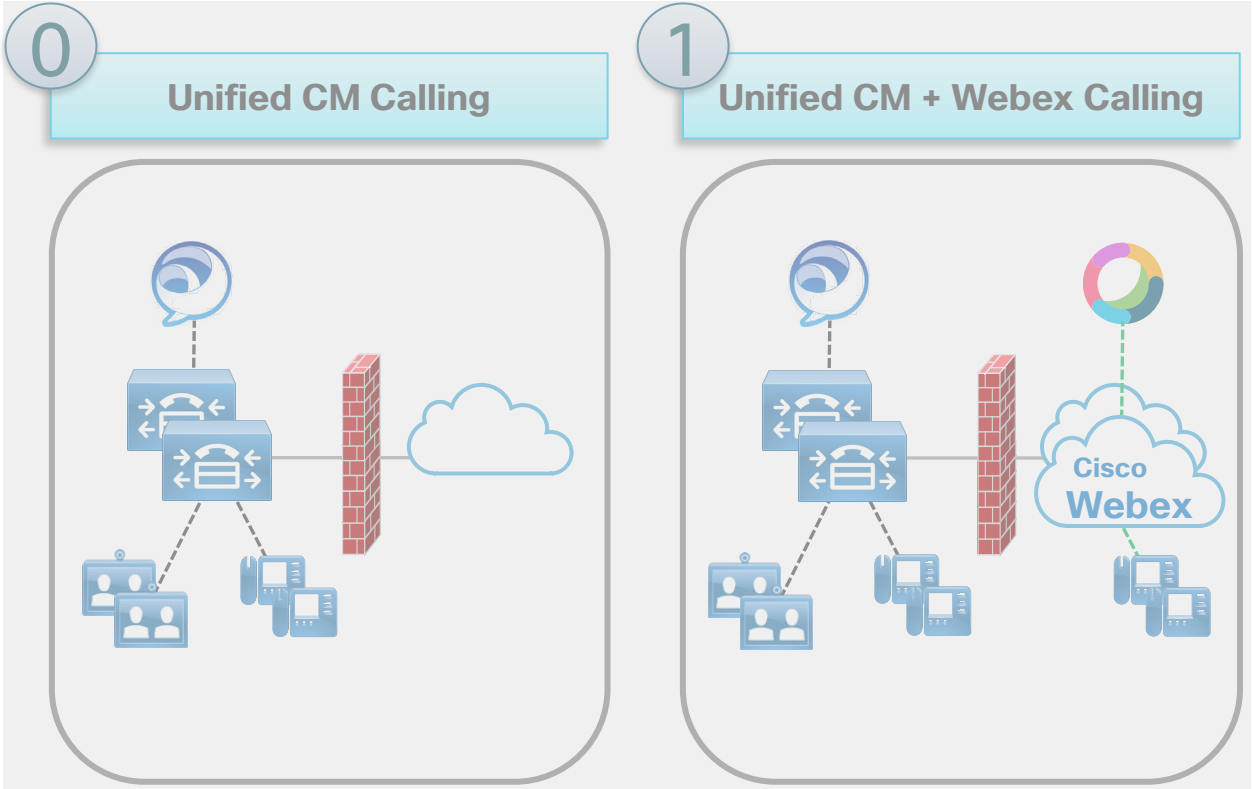
[1] Expressway MRA flow is optional.

Calling: Unified CM to Webex

Mapping the Transition: Step 2 – Webex Calling



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

[1] CE video endpoints register to Webex Teams platform.

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 Teams 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.

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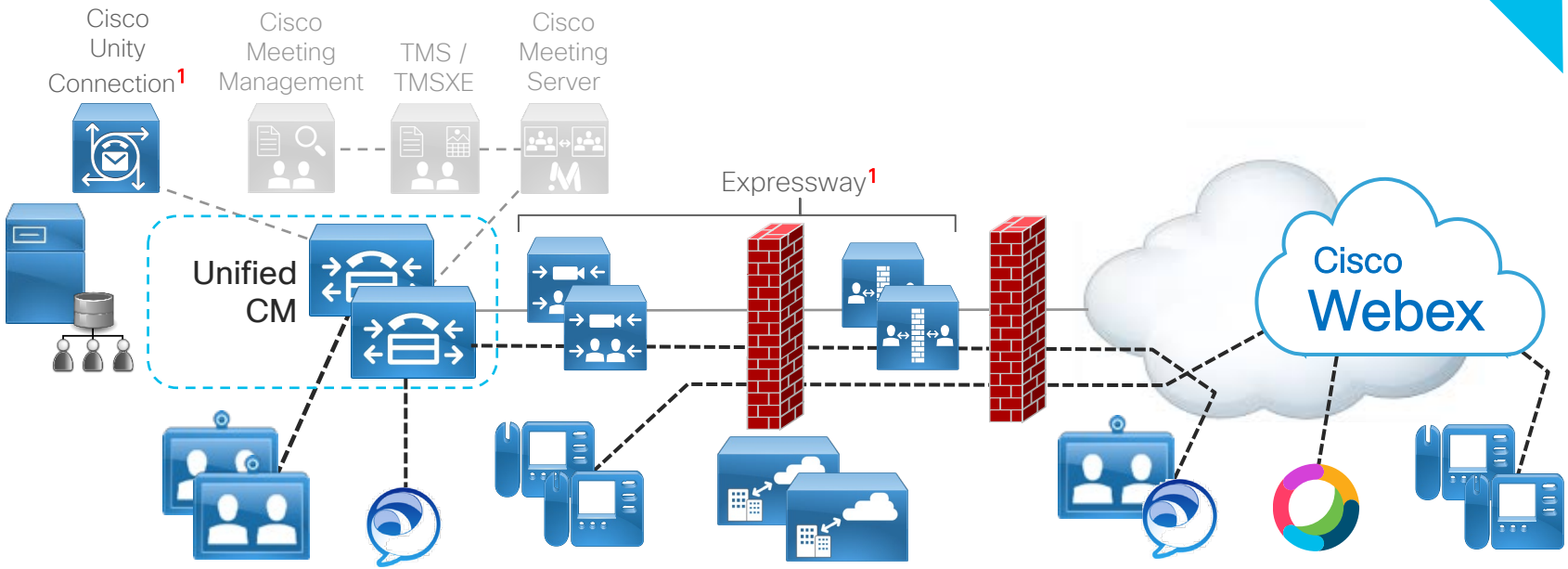
1

Calling: Unified CM to Webex

Before – Unified CM and Webex Calling

REVIEW

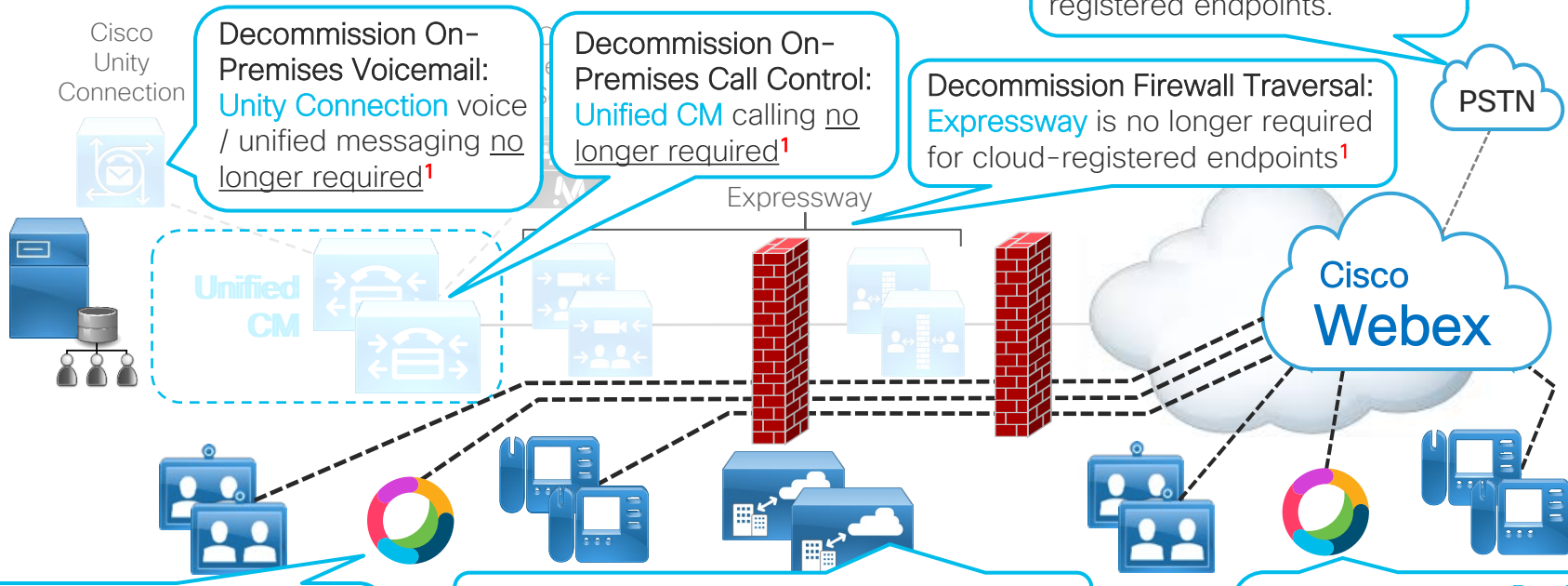


[1] Optional flows and components.

2

Calling: Unified CM to Webex

After – Webex Calling Deployment



[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 Teams replaces Jabber software client.

[4] Video endpoints running CE code.

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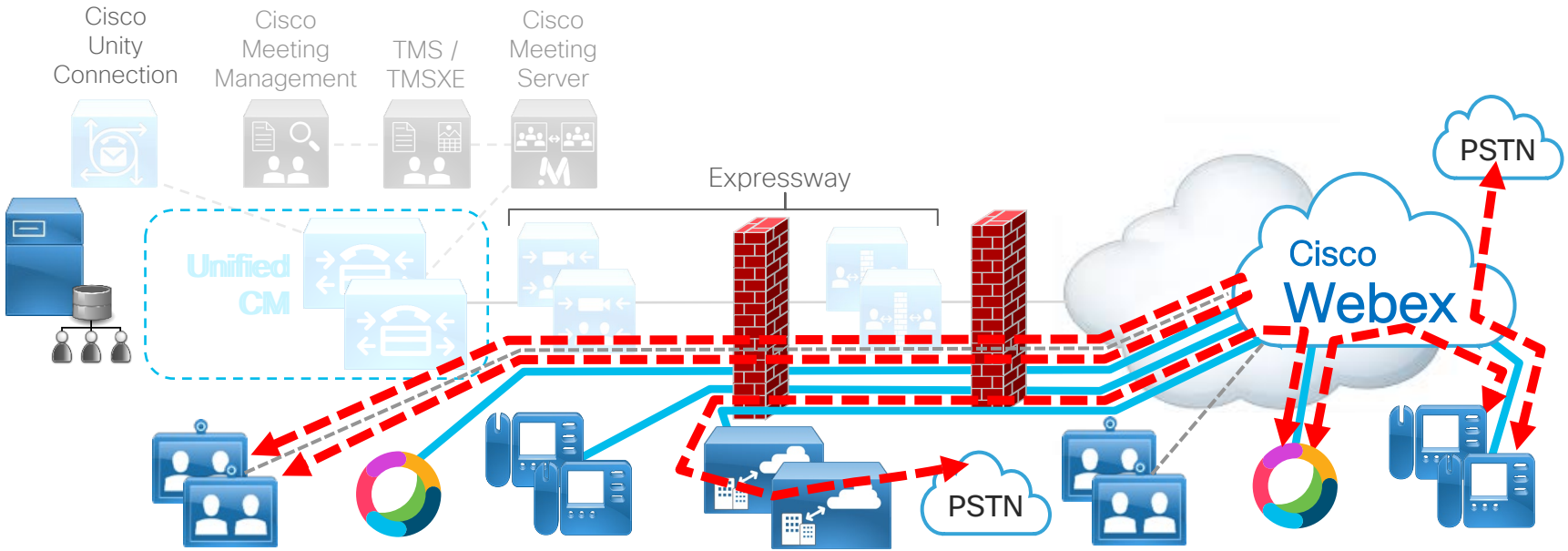
2

Calling: Unified CM to Webex

After – Webex Calling Flow



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.

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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.

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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

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Licensing and Endpoint Considerations

Considerations for licensing and endpoints

Category	Considerations
Licensing	• Make sure you have enough Flex Calling licenses in Webex 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	• 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 Teams platform.

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Features and Automation & Integrations Considerations

Considerations for calling features and automation & integrations

Category	Considerations
Features	• 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: » 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	• 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.

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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/nqqzbk7/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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