CISCO *Live!*

Let's go

Agenda

- General Migration Process

- Cisco at a Glance

- Current Architecture

- Discover and Design

- Migration Strategy

- Site Analysis

- Automation

- Migration Roadmap and What's Next

Revolutionising UC
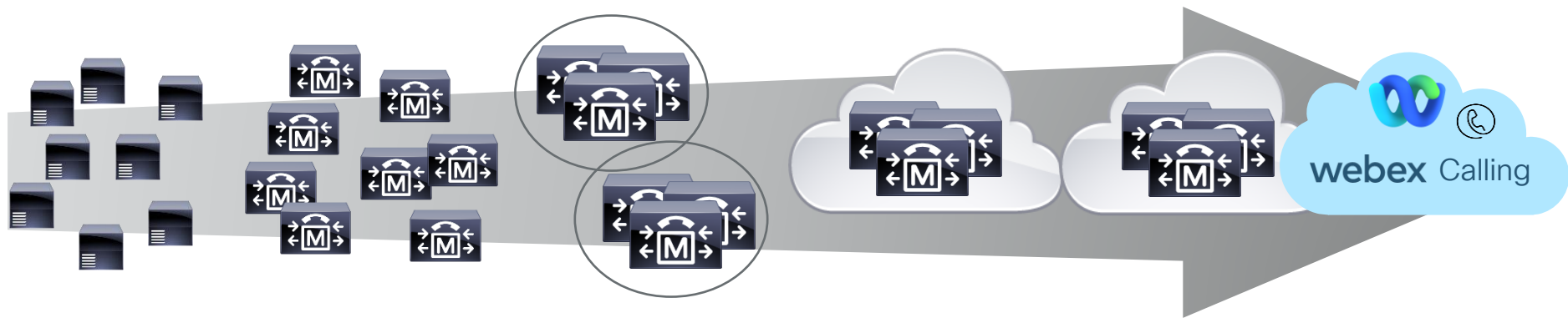
Non IP	IP		

Per site	Centralised		Cloud

Dedicated Hardware	Virtualised	Dedicated Instance	Webex Calling

PSTN Breakout	(Centralised) SIP Breakout	Cloud PSTN

General Process

Discover	→	Design	→	Deploy	→	Migrate
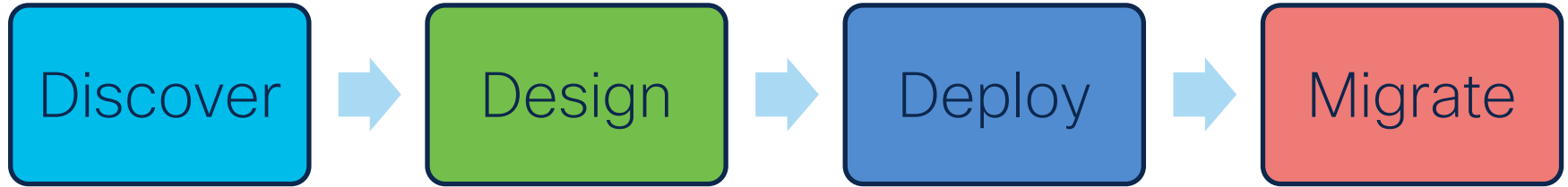
Discover
- Requirements
- Config assessment
- Inventory
  - users, devices, locations, …
- Feature utilisation
- Integrations
- Validate network requirements

Design
- Network requirements
- Feature mapping
- Migration batches
- Integrations
- Dial plan

Deploy
- Infrastructure setup
- Base configuration
- Interworking setup
- Licensing

Migrate
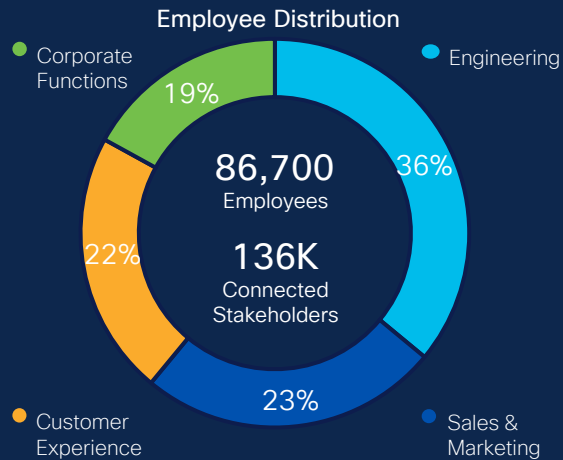- Users
- Devices
- Features
- PSTN porting
- Acceptance test

Session BRKCOL-2481: Johannes Krohn

Cisco at a Glance

Cisco at a Glance

Employee Distribution

- Corporate Functions: 19%
- Engineering: 36%
- Sales & Marketing: 23%
- Customer Experience: 22%

86,700 Employees

136K Connected Stakeholders

2,393 Routers

8,196 LAN Switches

11,432 Unified Computing System Servers

23.8B DNS Requests per Day

Global Cisco Distribution

- APJC: 27%
- Americas: 55%
- EMEAR: 18%

95 Countries

295 Offices
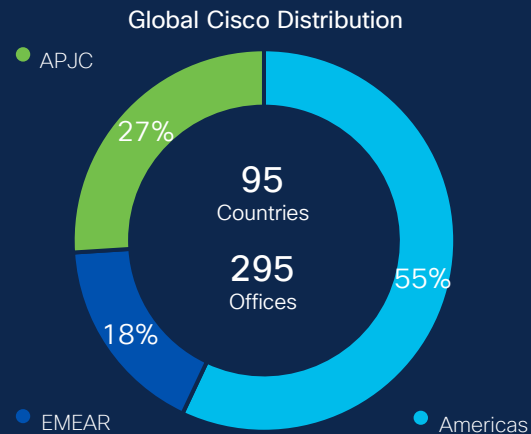
25,983 Cisco Video Devices

60,607 Virtual Machines

63,628 Mobile Devices

175PB Overall Usable Storage

1.46M Webex Meetings per Month

6.25M DNS Threat Requests Blocked per Day

CISCO Live!

Cisco IT

Cisco IT Collaboration Experience

97,005
Soft Clients

37,029
IP Phones

63,628
Mobile Devices

26
Panorama
Series

16,707
Desk Series

7,705
Multipurpose
Room Series

1,545
Board Series

Webex Metrics

6.02M
Avg Participants
per Month

1.46M
Avg Webex
Meetings per Month

125.7K
Active users
per Month

97.6M
Avg Messages
per Month

4.15M
Avg Files Shared
per Month

61.3K
Mac Laptops

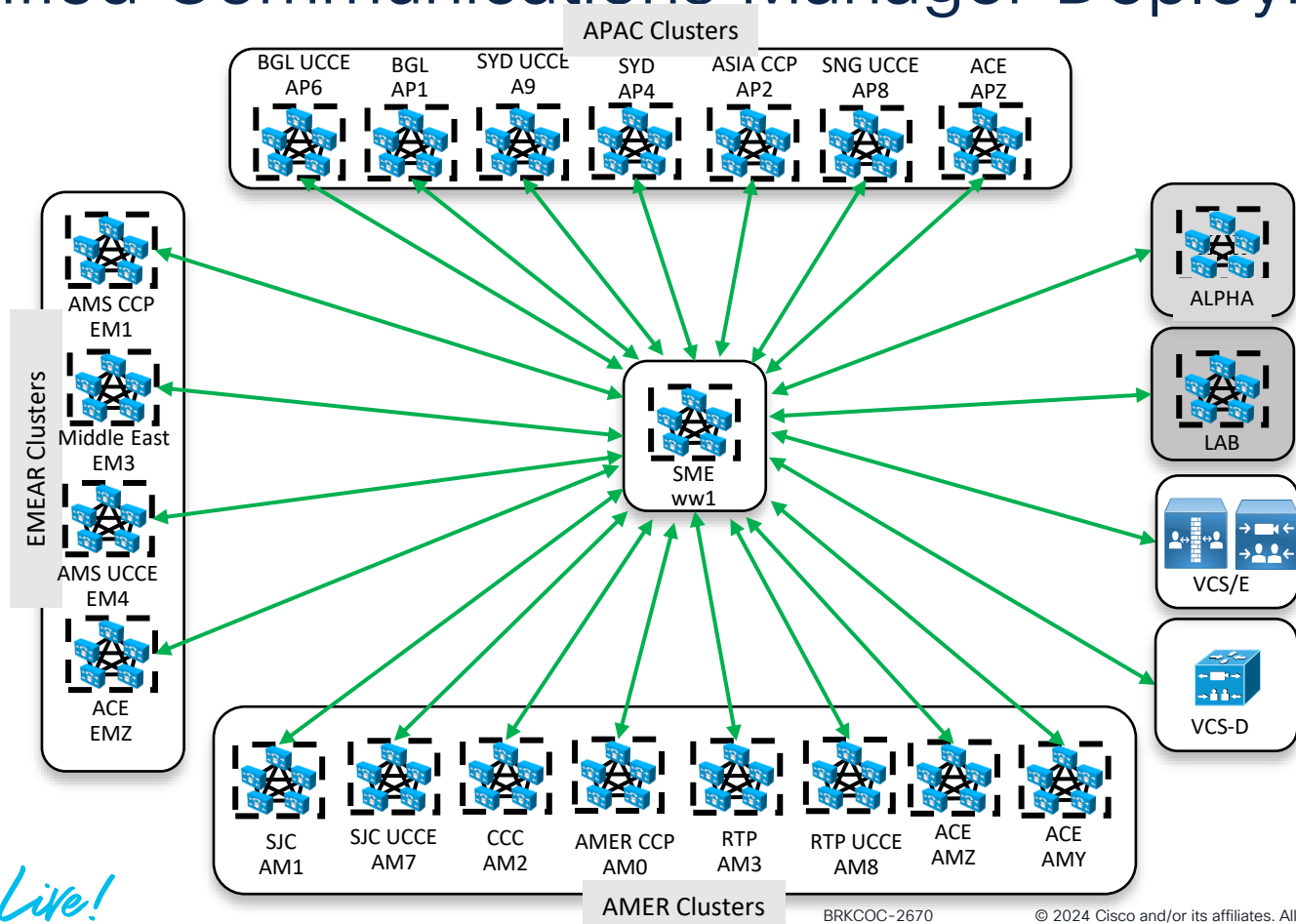**69.6K**
Windows Laptops

Current
Collaboration
Architecture

Unified Communications Manager Deployment

On Premise Call Control

Legend

- 🔵 UCM
- 🟠 Dedicated Instance
- ⚪ SME

PSTN Architecture

SME   UCM   SBC

PSTN

PSTN

Centralised PSTN   Centralised PSTN   Local PSTN   Local VG
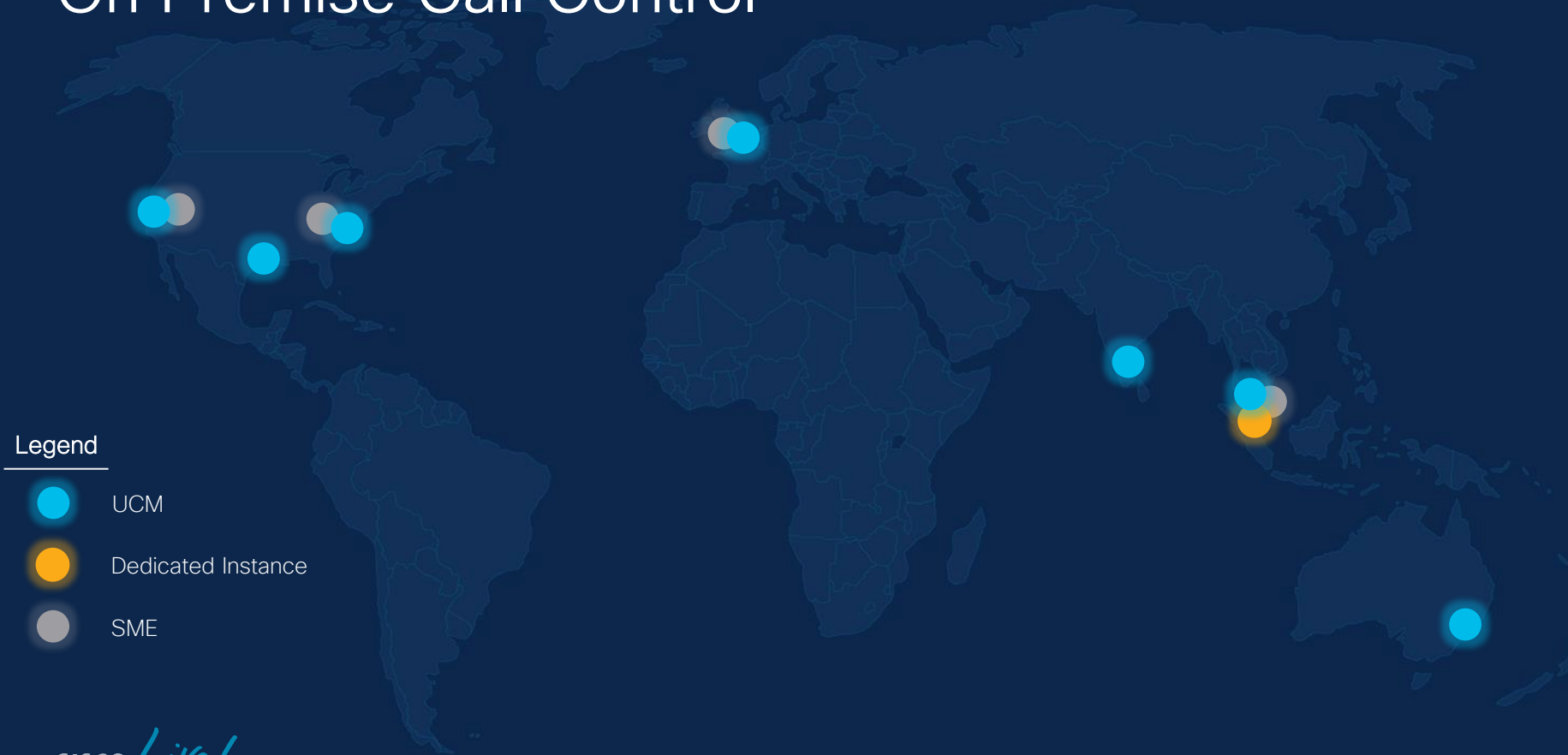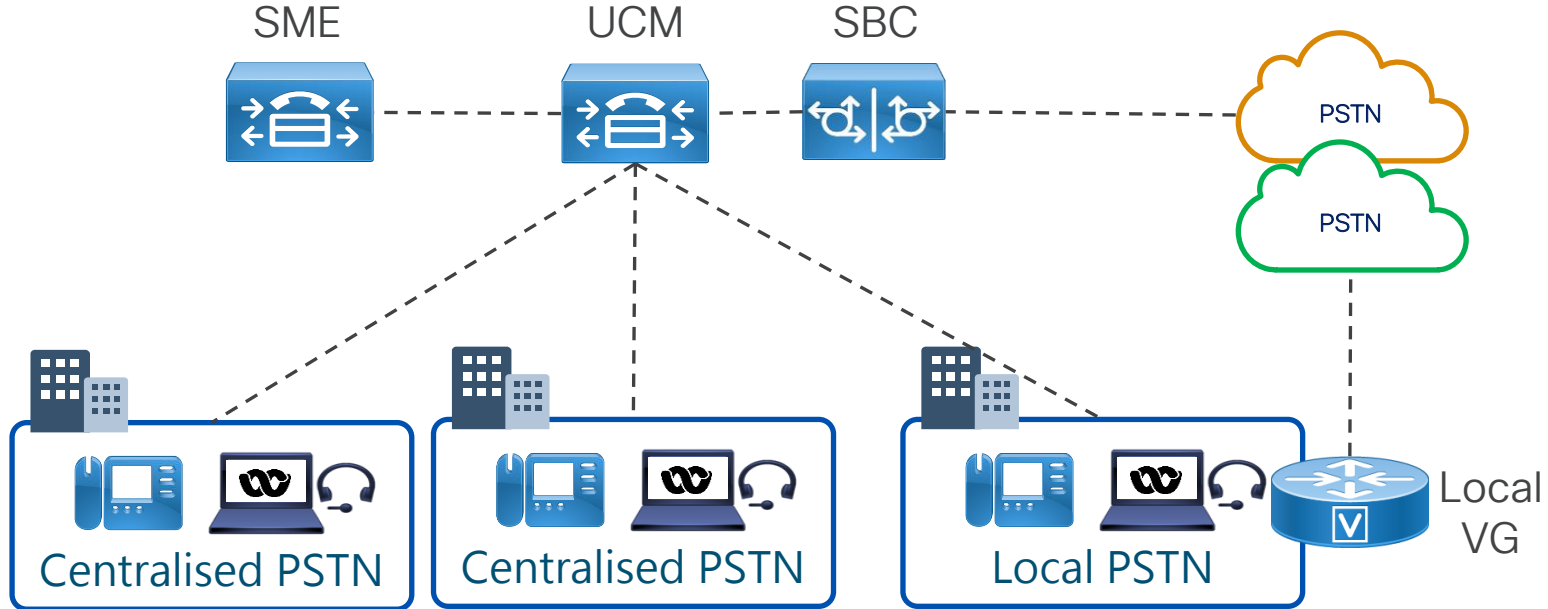
Centralised PSTN

EMEA

CC +27 South Africa
CC +31 Netherlands
CC +32 Belgium
CC +33 France
CC +34 Spain
CC +351 Portugal
CC +352 Luxembourg
CC +353 Ireland
CC +358 Finland
CC +371 Latvia
CC +39 Italy
CC +41 Switzerland
CC +43 Austria
CC +420 Czech Republic
CC +44 UK
CC +45 Denmark
CC +46 Sweden
CC +47 Norway
CC +48 Poland
CC +49 Germany

APAC (Potential / Planned)

CC +61 Australia
CC +852 Hong Kong
CC +81 Japan
CC +60 Malaysia
CC +84 New Zealand
CC +65 Singapore
CC +886 Taiwan

AMER

CC +1 USA/Canada

Directory Numbers

- 8 Digit: Routing Digit , 3 Digit Site Code, 4 Digit Extension
  8 XXX XXXX
  - Globally Unique
    - Direct inward Dial (DID)
    - Non-DID (Logged Off Extension Mobility Devices, UCCE Agent Lines)

- +E164 (GDPR Locations)
  - 8 Digit Enterprise Alternate Number

Onboarding / Voice Services
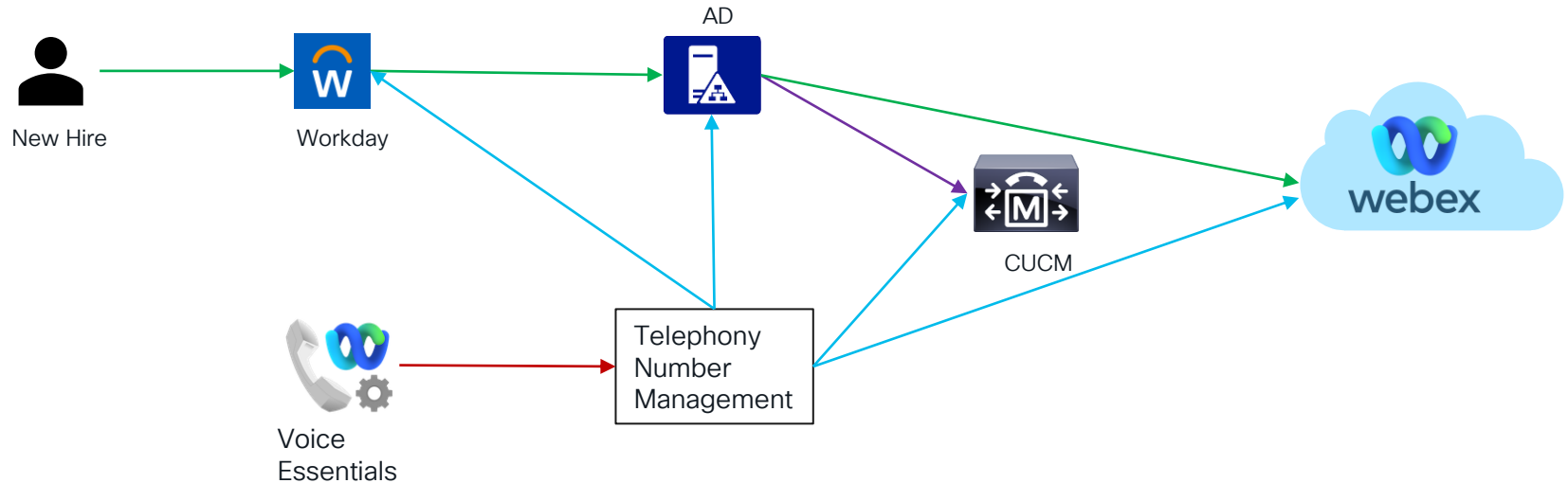
*Call on Webex enabled for everyone

Dialling Habits

- Abbreviated: 4/5 Digit

- 8 Digit

- Short dial: *55* and *88*

- +E164

Utilised SDL traces to find out how users are actually dialling as this shows the digits before getting transformed

Campus locations still heavily use abbreviated and 8 digit

Short dial patterns globally utilised

Dial Plan

CSS	Partition	RP / TP	Route List	Destination

CSS
- <sitename> Device
- <sitename> Unlimited

Unrestricted Device
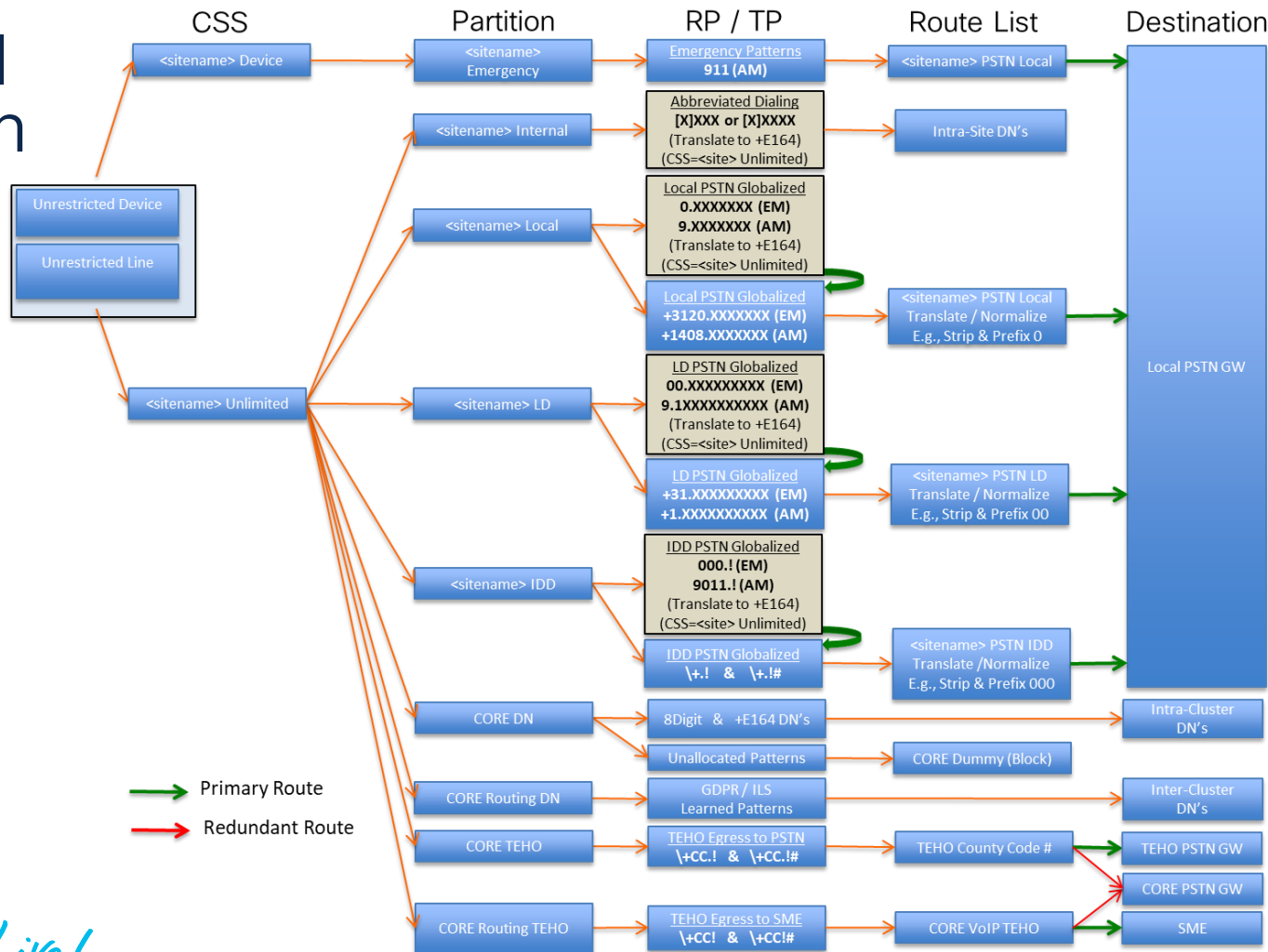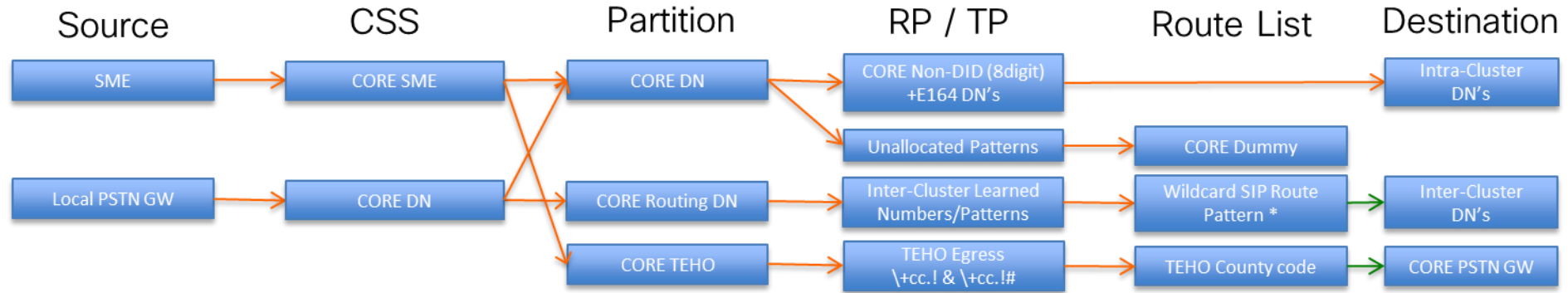Unrestricted Line

Partition
- <sitename> Emergency
- <sitename> Internal
- <sitename> Local
- <sitename> LD
- <sitename> IDD
- CORE DN
- CORE Routing DN
- CORE TEHO
- CORE Routing TEHO

RP / TP

Emergency Patterns
911 (AM)

Abbreviated Dialing
[X]XXX or [X]XXXX
(Translate to +E164)
(CSS=<site> Unlimited)

Local PSTN Globalized
0.XXXXXXX (EM)
9.XXXXXXX (AM)
(Translate to +E164)
(CSS=<site> Unlimited)

Local PSTN Globalized
+3120.XXXXXXX (EM)
+1408.XXXXXXX (AM)

LD PSTN Globalized
00.XXXXXXXXX (EM)
9.1XXXXXXXXXX (AM)
(Translate to +E164)
(CSS=<site> Unlimited)

LD PSTN Globalized
+31.XXXXXXXXX (EM)
+1.XXXXXXXXXX (AM)

IDD PSTN Globalized
000.! (EM)
9011.! (AM)
(Translate to +E164)
(CSS=<site> Unlimited)

IDD PSTN Globalized
\+.! & \+.!#

8Digit & +E164 DN's

Unallocated Patterns

GDPR / ILS
Learned Patterns

TEHO Egress to PSTN
\+CC.! & \+CC.!#

TEHO Egress to SME
\+CC! & \+CC!#

Route List

<sitename> PSTN Local

Intra-Site DN's

<sitename> PSTN Local
Translate / Normalize
E.g., Strip & Prefix 0

<sitename> PSTN LD
Translate / Normalize
E.g., Strip & Prefix 00

<sitename> PSTN IDD
Translate /Normalize
E.g., Strip & Prefix 000

CORE Dummy (Block)

TEHO County Code #

CORE VoIP TEHO

Destination

Local PSTN GW

Intra-Cluster DN's

Inter-Cluster DN's

TEHO PSTN GW

CORE PSTN GW

SME

Legend
- → Primary Route
- → Redundant Route

BRKCOC-2670

17

Dial Plan – Inbound

Source	CSS	Partition	RP / TP	Route List	Destination
SME	CORE SME	CORE DN	CORE Non-DID (8digit) +E164 DN's		Intra-Cluster DN's
			Unallocated Patterns	CORE Dummy	
Local PSTN GW	CORE DN	CORE Routing DN	Inter-Cluster Learned Numbers/Patterns	Wildcard SIP Route Pattern *	Inter-Cluster DN's
		CORE TEHO	TEHO Egress \+cc.! & \+cc.!#	TEHO County code	CORE PSTN GW

Migrate Cisco to Webex Calling and Cloud PSTN

- Minimal Impact to User Experience
  - Support Similar dialling habits
  - Keep same DID
  - Offer Similar Services/Functionality
  - Support seamless calling between both platforms

- Cost Neutral to Telephone Budget

Discover Webex Calling Solution

- Setup Webex Calling
  - Deployed Local Gateway
    - Migrated Workforce Collaboration Team
    - Tested Call Flows / Features
    - Tested available API's

- Utilised Learnings from ACE and Alpha Teams

- Created Design and Migration Plan

- Provided Enhancements Requirements to BU

Local Gateway Architecture

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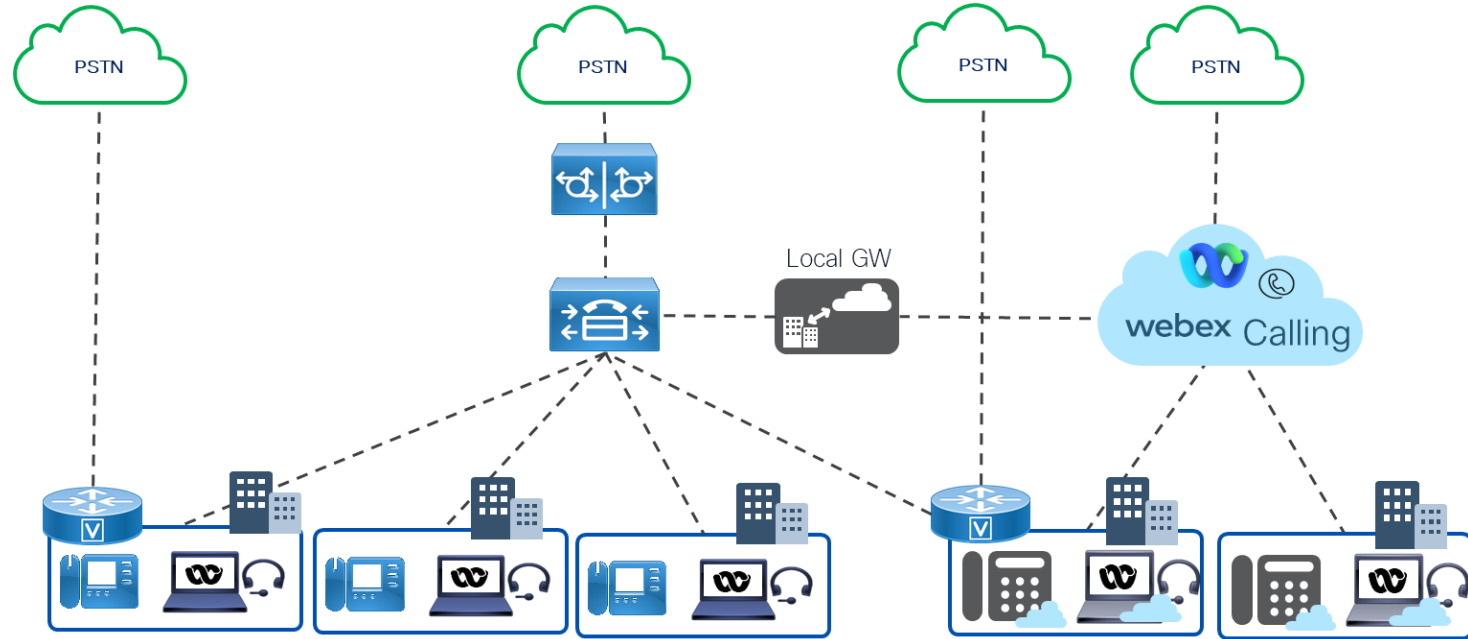
Local Gateway Locations
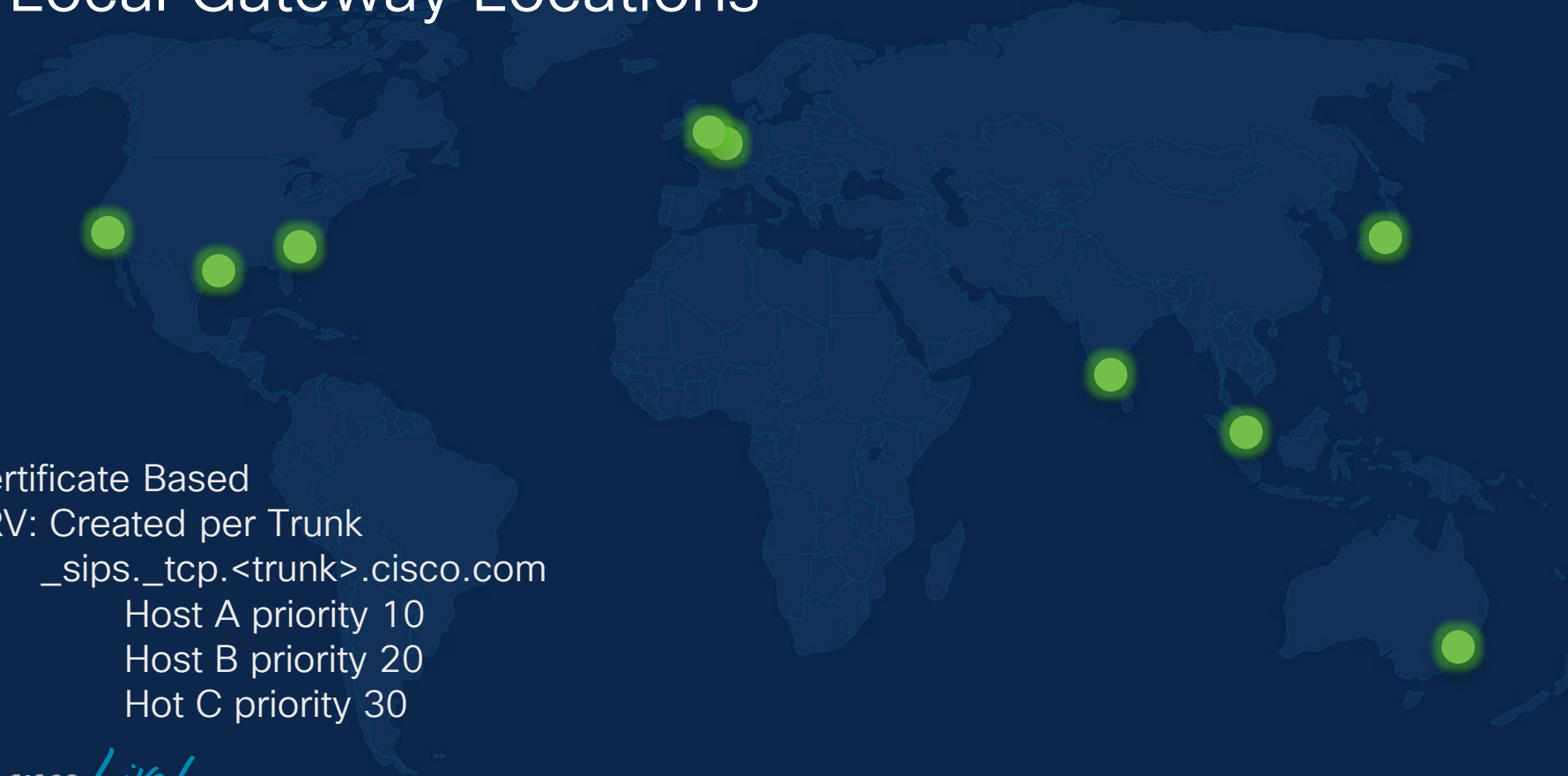
Certificate Based
SRV: Created per Trunk
      _sips._tcp.<trunk>.cisco.com
            Host A priority 10
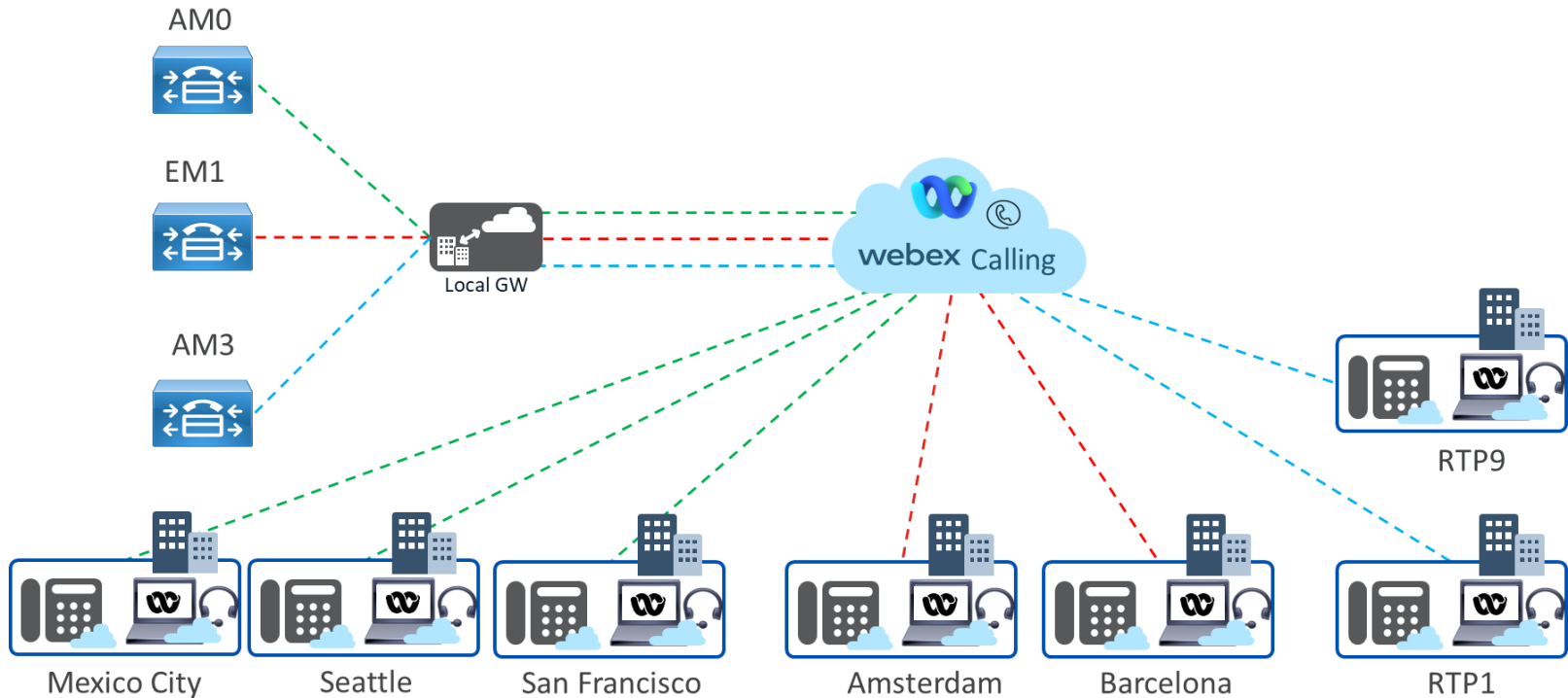   Host B priority 20
            Hot C priority 30

Local Gateway Trunk Design
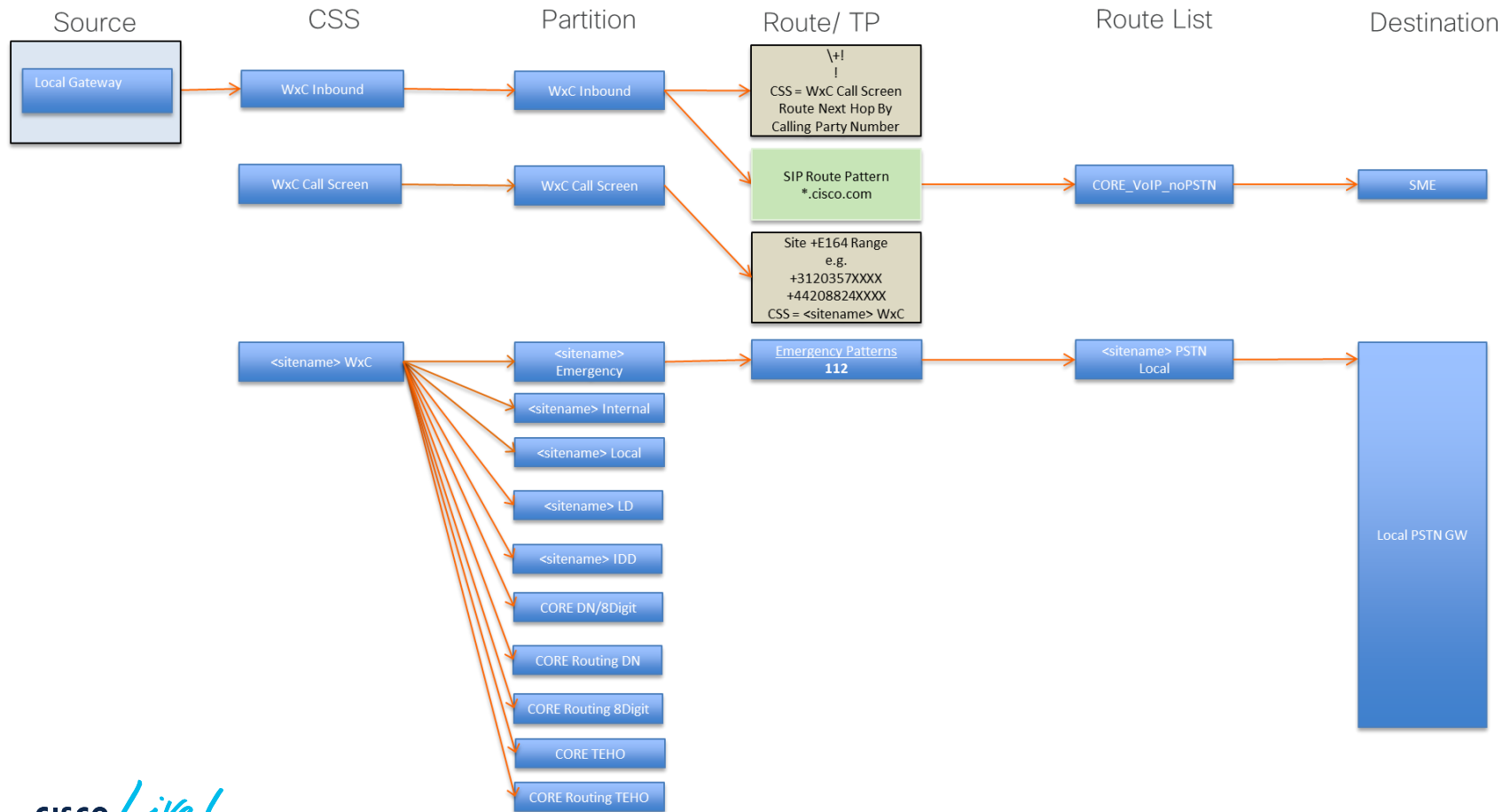
UCM Clusters supports multiple locations/countries

Each has different dialling plans and patterns
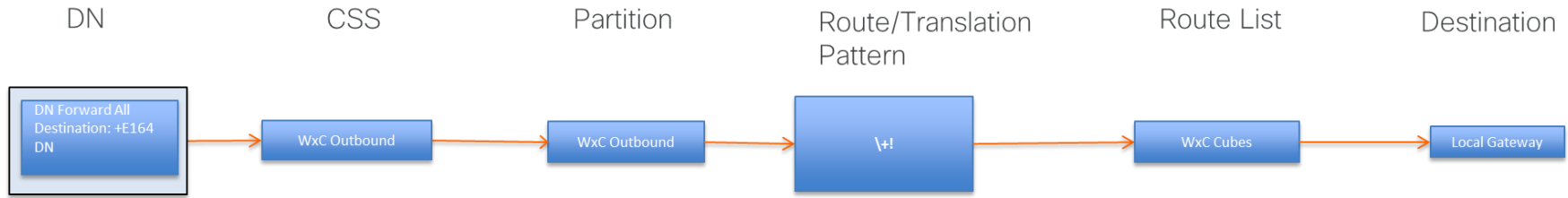
Do we need a trunk per location/country?

Single Trunk Per Cluster

AM0

EM1

AM3

Local GW

webex Calling

RTP9

Mexico City

Seattle

San Francisco

Amsterdam

Barcelona

RTP1

Call Routing: Webex Calling -> LGW -> UCM

Source	CSS	Partition	Route/ TP	Route List	Destination

Local Gateway → **WxC Inbound** → **WxC Inbound** →

```
\+!
!
CSS = WxC Call Screen
Route Next Hop By
Calling Party Number
```

WxC Call Screen → **WxC Call Screen** →

```
SIP Route Pattern
*.cisco.com
```
→ **CORE_VoIP_noPSTN** → **SME**

```
Site +E164 Range
e.g.
+3120357XXXX
+44208824XXXX
CSS = <sitename> WxC
```

<sitename> WxC →
- **<sitename> Emergency** → **Emergency Patterns 112** → **<sitename> PSTN Local** → **Local PSTN GW**
- **<sitename> Internal**
- **<sitename> Local**
- **<sitename> LD**
- **<sitename> IDD**
- **CORE DN/8Digit**
- **CORE Routing DN**
- **CORE Routing 8Digit**
- **CORE TEHO**
- **CORE Routing TEHO**

Call Routing: UCM -> LGW -> Webex Calling

DN	CSS	Partition	Route/Translation Pattern	Route List	Destination

```
┌──────────────┐     ┌──────────────┐     ┌──────────────┐     ┌──────────────┐     ┌──────────────┐     ┌──────────────┐
│ DN Forward All│    │              │     │              │     │              │     │              │     │              │
│ Destination:  │──▶ │ WxC Outbound │──▶ │ WxC Outbound │──▶ │     \+!      │──▶ │  WxC Cubes   │──▶ │ Local Gateway│
│ +E164         │    │              │     │              │     │              │     │              │     │              │
│ DN            │    └──────────────┘     └──────────────┘     └──────────────┘     └──────────────┘     └──────────────┘
└──────────────┘
```

For Cloud PSTN Locations 1 UCM Cluster is assigned "Ownership" of the Range. Route Pattern(s) Point To Local Gateway and are advertised in GDPR

Webex Calling Dial Plan

Routing from Webex Calling to UCM

- Deterministic Routing based on 8Digit and +E164 Patterns

- Utilise GDPR Learned Patterns on UCM to populate Webex Calling Dail plan
  - Export from Unified CM
    - Use thin AXL to read database directly
    - Need to read from multiple UCMs
  - Transform
    - Only wildcard in Webex Calling dial plan patterns is "X" at the end
  - Import into Webex Calling
    - Webex Calling dial plans patterns can be provisioned using CSV

- As sites migrate to Webex Calling remove dial plan entries for those sites

Developed by Johannes Krohn
https://github.com/jeokrohn/migrationapi
File: read_gdpr.py

Webex Calling Locations

- Should Locations be Physical or Logical?
  - Make use of Analytics within Control Hub for workspace, devices.... Then should be Physical

  Locations for Workspaces and Calling changed halfway through design.

- Maintain support for 8 Digit and abbreviated dialling by utilising Routing Prefixes (Site Codes) and Extensions
  - Can't use same routing prefix on multiple locations
  - What to do with locations needing multiple Routing Prefixes (SJC)?

Solution

- Configure 8 Digit Extensions

- Drop Routing Prefix on Location
  - Allows DID ranges to be split between locations
  - Removes need for multiple Routing prefixes

- Utilise Translation Patterns to support Abbreviated Dialling

Just 2 Problems: Extensions can only be up to 6 Digits and Webex Calling doesn't support Translation Patterns (Yet)

Extension Mobility

- ~ 17,000 EM devices on UCM

- Mainly Legacy 99xx series endpoints that do not support Webex Calling

- Many devices never used

Only Migrate what we really need

Webex Calling: Hoteling or Hot Desking

Hoteling:

- Enables a user's phone profile (Number, Features and Calling Plan) to be temporarily loaded onto the device
- Login with "username" and "password" (Really wants Number and Pin)

Hot Desking:

- Displays QR code that is scanned and books the Device for the desired amount of Time.
- Enables the users phone profile and Webex Calendar
- Works on IP Phones and Desk Systems

Premium Services

- Webex GO:
  - Mobile Operator
  - BYOD

- Business Texting

Additional Costs: Offered as Opt-in Services

Migration
Strategy

Migration Strategy

Groups: Work Force Collaboration, ACE, Alpha Groups

Site by Site

Migration Options:

- Straight to Webex Calling and Cloud PSTN

- Phased Migration:
  - Users + Devices -> Webex Calling
  - PSTN -> Cloud PSTN
  - Reduce On Premise Infrastructure

Room Systems already Cloud registered

Why a Phased Migration

- Allows for the migration of users that have inter-site dependencies

- Quickest way to Webex Calling

- Allows for a roll back of individual user and/or sites if unforeseen issues arise

- Allows UCM to cover for Webex Calling while required features are delivered.

- Isolates risk with Porting numbers between providers

Need to be able to change calling behaviour of a location to CCPP or Cisco Calling Plan with minimal impact.

User Migration

Control Hub

- Add Number to Location
- Assign Pro Calling License
  - Set Location, DN and Extension

If Needed:

- Add IP Phone(s)
- Add Virtual Line (Secondary or Shared)

Choose method that suits you best

- UCM
- Set CFwd All
  - Destination and CSS
- Delete Soft devices
- Disable Access

If Needed:

- Set Load Server on Device
- Reset Device
- Remove Device

Infrastructure Device

Control Hub

- Add Workspace

- Add Phone and Assign to Workspace

- Enable Calling: Set Location, DN and Extension

- UCM

- Set CFwd All
  - Destination and CSS

- Set Load Server on Device

- Reset Device

- Remove Device

User Communication

- Email Notification of Planned Migration

- Important Information and what to expect

- Link to SharePoint with more details and FAQ

- 2nd Email day before Migration

Day 2 and Beyond

How do we handle Moves, Adds and Changes (MAC's)

- TNM Changes
  - Site tagged as a Webex Calling and Webex Calling Location defined
    - New (Primary) numbers assigned from location enable the user with Webex calling and set appropriate configurations in Control Hub and UCM

Support

- Training / TOI

- Update Support Tools (BOT)

Webex Calling High Priority Requests to Webex BU

Blocked Start of Migrations

- Support *XX* Dialling (FY24Q2)

- Move user location without removing License and Number (FY24Q1)

Blocks Migration of Locations with Multiple Site Codes/Buildings

- 8 Digit Extensions (FY24Q3)

Blocks Cloud PSTN Migration

- Change Location PSTN Settings: LGW -> Cloud PSTN (FY24Q3 CCP)

- Block Numbers at Scale (BU Testing 3rd party)

- Translation Patterns (FY24Q3)

XX Dialling

XX Patterns in Webex are Feature Access codes

- Translation Patterns would allow for configuration of *55* and *88* but not available until

BU manually added Global Translation Patterns in the backend for *55* and *88* to 88885555 and 88888888

- Created a Dail Plan on Webex Calling and pointed Patterns back to AM0 Trunk
- Utilised same routing logic with Route Next Hop on caller ID to Look in correct CSS for the Site and translate and route to the correct IVR number

Webex Calling Enhancement Requests

USER

- Hotelling Login Prompt

- Additional Methods to sign in for Hot Desking

Admin

- Voicemail Enablement Control

- Ability to apply Templates for Settings to subset of users/devices

Site Analysis (Audit)

Site Analysis

- Dry Run of site Migration utilising Migration Tool
  - Test Adding Numbers to Control Hub
  - Cross Site Dependencies
  - User and Device Validation
  - Shared Lines

- UCM Configuration: Translation Patterns, Hunt Groups, Reception Setup, 3rd party devices, Analogue Lines

- Contact Site Co-ordinator

Additional Requests After Audits Completed

- Support Non-Geolocations Numbers in Finland (FY24Q4)

- Bahrain Dail Plan support for Area Code Range +97313XXXXX (FY24Q2)

- Simple Process to Remove Cisco Numbers from other Organisations

- Trunk Timeout Call Connect (FY24Q2)

Automations

Automate using

- AXL and CUC API
  to query and update UCM, query voicemail

- Enterprise backends (API or direct DB access)
  - TNM = Telephony Number Management
    contains DID and assigned users/infra
  - WPR = Workplace Resources
    all buildings with address and more details (e.g. reception number)

- Webex APIs

Before Migrations

UCM Global Routing

Call Routing Design

- Add CSSs
- Add Partitions
- Add RP / TP

AXL

UCM Site Routing

Get Site Number ranges

External

- Site specific WxC CSS for outbound
- Add DID ranges

AXL

Locations

Get location details
- Full Address
- Timezone
- Primary Number

External

- Add Physical Site
- Enable site for calling
- Set calling details

API

WxC Routing

Get all on-prem ranges

External

AXL

- Learned patterns from SME cluster
- Find ranges not in SME
- Link trunk with ranges
- Push dialplans into CH

API

Before Migrations

UCM Global Routing

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API

Migration

Collect: Users, Device and Numbers	Migrate Users	Migrate Phones	Extra Configuration

Collect: Users, Device and Numbers
- User list
- User associated devices
- User/Device associated numbers
- Infrastructure devices

Migrate Users

WxC
- Update licenses
- Check/Add number
- Assign number
- Set calling features

UCM
- Set CFwdAll
- Delete soft devices
- Disable access

Migrate Phones

WxC
- Add workspaces for infra phones
- Add phones in WxC

UCM
- Set load for MPP
- Reset
- Delete in UCM

Extra Configuration
- Secondary lines > Virtual lines
- Shared lines
- ...

- All the non-standard things, manually

Migration

Collect: Users, Device and Numbers	Migrate Users	Migrate Phones	Extra Configuration

- User list
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- Reset
- Delete in UCM

- Secondary lines > Virtual lines
- Shared lines
- ...

- All the non-standard things, manually

Webex APIs

- All documentation
  https://developer.webex.com

- All API accessible by the use of a auth token
  - get a temporary one from developer website
  - use an Integration or Service App for production

- Use sandbox for testing (fully functional Webex instance!)

- Demo code and more can be found at
  https://github.com/jseynaev-cisco/ucm-to-webex-calling-migration

Demo

- Add location
- Migrate user
- Migrate phone
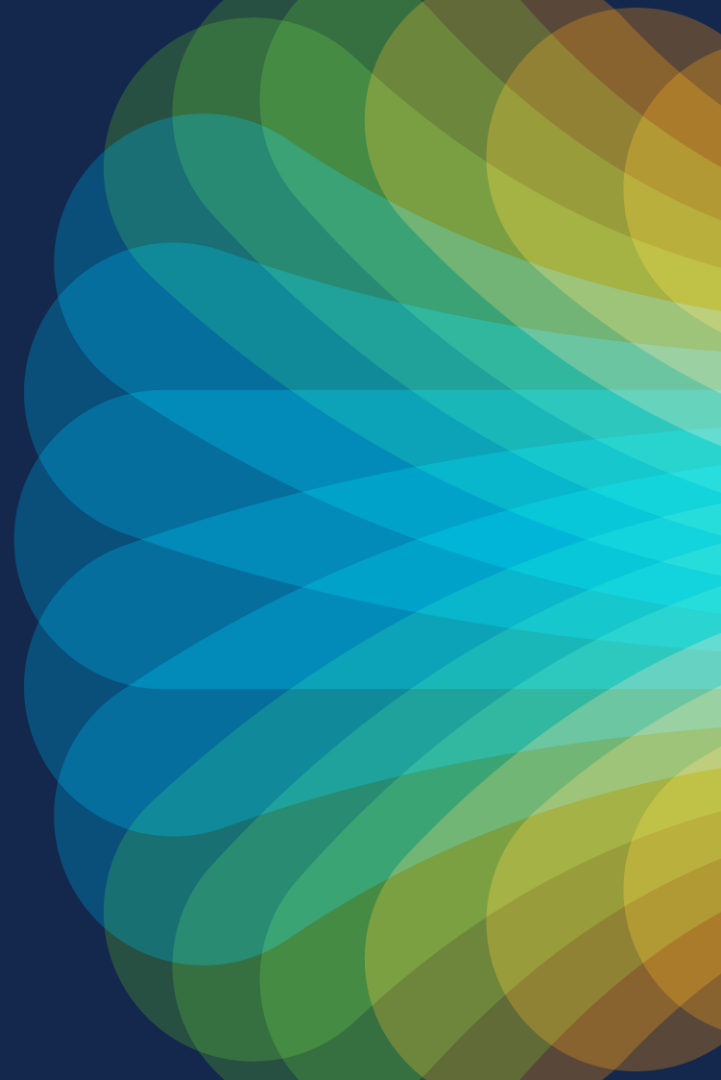
In practice

Adding

- WebUI

- queues and workers

- async

- API handling (rate limits, retry on fail, ...)

build a set of tools for the engineers to audit, update and migrate all systems involved ...

Before Migrations

UCM Global Routing

Call Routing Design

- Add CSSs
- Add Partitions
- Add RP / TP

AXL

UCM Site Routing

Get Site Number ranges

External

- Site specific WxC CSS for outbound
- Add DID ranges

AXL

Locations

Get location details
- Full Address
- Timezone
- Primary Number

External

- Add Physical Site
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API

WxC Routing

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Get all on-prem ranges

- Learned patterns from SME cluster
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- Link trunk with ranges
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API

Global Configuration

- Locations Script
  one-off, script run by engineer
  future locations in WPR enterprise workflow

- WxC Routing Script
  one-off, script run by engineer
  future add/change/delete in enterprise TNM workflow

On-prem call routing

Tool for checking and updating core and site routing

- RouteList for the local gateway must be in place

- Updates are done upfront as part of site audit (doesn't interfere with current routing)

- Site and Core Routing checked against standard

Routing

See the official design pages for WxC

UCM Cluster

EM1 ▼

Site

KJK   × ▼

[Check All] [Clear All]

CORE Inbound from Webex Clusterwide (Outgoing calls from the user) ↻

Incoming from webex should go through call screen

Test for	pass	response	reason	
Inbound partition	true	{'@uui...		Add/Update
Inbound Screening Partition	true	{'@uui...		Add/Update
Inbound CSS	true	{'@uui... CA00-		Add/Update
Inbound Screening CSS	true	{'@uui... 3B38- Scree...		Add/Update
Inbound + pattern	true	{'@uui... 8D543... None, 'Defau... CallM... '{3E6C... 'releas...		Add/Update
Inbound...		{'@uui... '#text' 'dialPl...		

Migration

Collect: Users, Device and Numbers	Migrate Users	Migrate Phones	Extra Configuration

Collect: Users, Device and Numbers
- User list
- User associated devices
- User/Device associated numbers
- Infrastructure devices

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- Add workspaces for infra phones
- Add phones in WxC

UCM
- Set load for MPP
- Reset
- Delete in UCM

Extra Configuration
- Secondary lines > Virtual lines
- Shared lines
- ...

- All the non-standard things, manually

Start a new migration

Mass Migration Management

Create Migration

Name

migration CLEUR example

Migrate by:

Site

Select Location

Prod-EMEA-KJK-Prem-EM1

Select License

Webex Calling - Professional (Sub-CSCO-WxC)

Select Voicemail:

Enable for Current Voicemail Users Only

Rings Before Voicemail

6

Cannot be less than 2 or greater than 20

Site:

KJK

32.5[...]9 ×   32.5[...]9 ×   Choose a site to select one or multiple ranges

Create

Ongoing and History

Name	Site	Date Started	Engineer	Status	Date Finished	Link

Can also migrate per user

Locations
pulled from WxC

Licenses
pulled from WxC

Extra Calling Settings
others are hard coded

'legacy' site
combined list from telephony management and UCM

DID Ranges
from telephony management, multiselect

Data Gathering

- ## Find all users that have a number in TNM
  list of users, list of numbers (these should be primary numbers, check!)

- ## Find all devices owned or associated with users or numbers
  list of devices

- ## Find numbers associated to users and devices in UCM
  updated list of numbers (secondary numbers, shared lines, might be non-site numbers)

- ## Find devices/users associated with updated numbers list
  more devices

- ## Find devices in <site> device pool
  Mostly infrastructure devices with internal numbers

Check

User Details

31 USERS   2 DEVICES (2 WITH ISSUES)

Show [10] entries

	User	Number	Devices	Voicemail	Problems
	st████	+325█████	0	✖	0
⛔	va████	+32█████	0/1	✖	0

Cisco 8865
SEP6████████
Device is not on compatible firmware
Device is not registered
✖ INELIGIBLE

Infrastructure Devices

26 DEVICES (26 WITH ISSUES)

Show [10] entries

	Name	Model	Number	Extension	Description	DID	Problems	Outbound Calls	Inbound Calls
🔵	SEP████████	Cisco 9971		0095	Logged off EM-82████		4	12 (0s)	
🔴	SEP████████	Cisco 9971	+21████████	4040	CAS Lobby	✓	2	2881 (62h 44m 14s)	567 (11h 38m 23s)

⚠ MODEL
Model ineligible for migration

⚠ FIRMWARE
Device is not on compatible firmware

Additional Lines

These lines will be added into webex as Virtual Lines, some lines may fail to add if a number is already assigned to a webex calling user

Show [10] entries

	Number	Location	Assigned Users	Problems
⛔	+3████████	Prod-EMEA-DBLIR-Prem-EM1	j████	1

⚠ USER
Virtual line has no unproblematic users associated

| | +4████████ | Prod-EMEA-FKF-Prem-EM1 | sl████ | 0 |

* in reality, most do not have issues ;-)

Upload numbers

- available
  = not in WxC yet

- existing
  = already in, but not used

- other location
  = already in, but assigned in other location

- other org
  = number in Webex, but owned by other org -> will need a case to free up

- Invalid
  already in use

End of audit

➢ Up to this point, no breaking changes

➢ Engineer will run upfront and fix / report issues

Start Migration

Migrate

When begun the migration will perform the following steps:

1. Set webex calling license and assign primary number only (number must exist in webex) to all users
2. Set voicemail and voicemail rings
3. Remove UCM calling license
4. Upgrade all devices without problems to MPP firmware and register to that user
5. Set cFwdAll in UCM to DN with WxC CSS
6. Set VM profile to None
7. Remove all configured devices and profiles from UCM

☑ I confirm that all numbers have been uploaded to control hub

Migrate

- Will migrate 100s of users in less than 10mins.

- Devices take longer due to firmware upgrade

- Runs multiple migrations in parallel

Finished

Migration Results

✅ **User Webex**

ℹ️ This step assigns a license, number, and voicemail info to all migration users within webex

✅ **User UCM**

ℹ️ This step performs the bulk of the user settings updates within UCM. For all users tt will; set CFwdAll, remove all RD profiles, remove associated CUCI devices, standardise user EM profiles, remove any corresponding .pstn user, set user service profiles to NoVM, set user profile to Factory Default and the associated pc field to WxC

✅ **Create User Devices**

ℹ️ Creates all user owned devices and assigns them to the corresponding user

✅ **Create Infra Devices**

ℹ️ We create a workspace for every device and create a device and assign it to that workspace

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✅ **Device Upgrade**

ℹ️ This step sets the Load ID to the MPP firmware and Load Server to cloudupgrader.webex.com for all devices in UCM, then it waits for the devices to reboot with the new firmware by detecting when the devices are no longer registered to UCM

✅ **Device Delete**

✅ **Infrastructure UCM**

ℹ️ This step updates the CFwdAll settings for the primary line associated with each migrated infrastructure device in UCM

✅ **Virtual Line Create**

✅ **Virtual Line Assign**

✅ **Virtual Line UCM**

Enhancements along the way

- Additional discovery tasks

- Additional checks

- Play around with the order of things
  Users are finished first now, so all calling is migrated and a user can use the Webex App for calling within the first minutes of the migration
  Devices (which need an upgrade) take a lot longer and are done towards the end

- Strategy for devices
  Only delete devices when seen in Webex. If for some reason the upgrade fails and a phone registers back to UCM, it will try again

Available Migration Tool(s) in Webex CH

Within Control Hub, different tools are available

- bulk add numbers (Local Gateway)

- bulk upload/update users

- bulk upload devices, assigned to either user or workspace

- Migration tool
  (includes enhancements from our advanced experience team like user filtering and setting specific call features)

Use it when (our opinion)

- doing green field implementations

- when migrating whole clusters or in 2, 3 batches

- no need for elaborate pre- and post-migration tasks

Available Migration Tool(s) in Webex CH

Main reasons why we don't use it

- it wasn't around when we started

- Based on BAT export, which on big clusters take hours to get

- doesn't help with auditing or post-migration updates
  (cross-site dependencies, shared numbers, receptions, …)

- Still need a list of users with their numbers to be migrated

- when automating the above, it's not a lot more work to use the Webex APIs and migrate

Migration Roadmap and Next Steps

Migration Roadmap

Currently

- 70 Sites Migrated
- 16,000 Users Migrated (2,000 Cisco Calling Plan)

By Mid March

- 170 Sites Migrated
- 26,000 users

FY24Q3

- 54,000 Users (APAC Locations)

FY24Q4/FY25Q1

- Large Site Migrations: SJC (12,500), RTP (6,500), India 16,000, BDLK: 2,000

Next Steps

- Complete Site Analysis for Campus locations

- Pilot Cloud PSTN Migrations

- Replace Analogue Gateways

Once 8 Digit Extensions Supported:

- Update extensions from 4 digit to 8 digit (Automation)
- Remove Site codes from Locations (Automation)

Plan UCM cluster size reduction

Plan Cloud PSTN Migrations

Plan UCCE Agent Migrations

Takeaways

- Discover the Webex Calling Solution

- Choose PSTN option that suites your requirements

- Think about cross site dependencies during migration

- Analyse your Current Environment

- 3rd party devices

- UCM Integrations

- Automation

Thank you

CISCO *Live!*

Let's go