



# Calling Migrations

An Interactive Session to Share Experiences, Ideas,  
Solutions, and Best Practices

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IBOCOL-2420



# Webex App

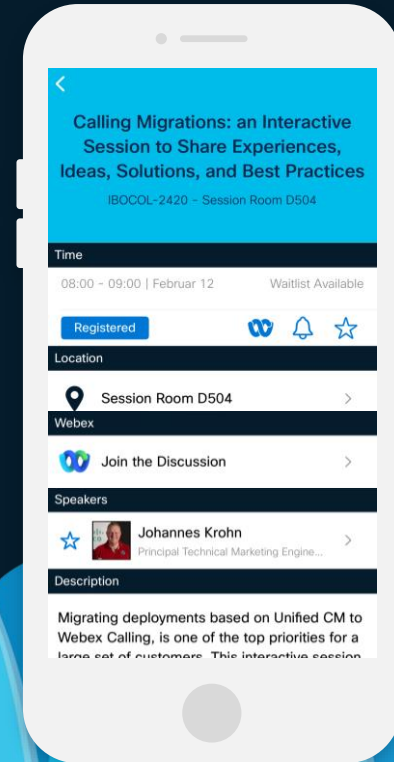
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Webex spaces will be moderated by the speaker until February 28, 2025.



# Abstract

Migrating deployments based on Unified CM to Webex Calling, is one of the top priorities for a large set of customers. This interactive session is meant to create a **forum** to openly talk about **experiences from past migration projects** and to share best practices that made migrations successful. Please bring your thoughts, best practices, challenges you faced road blocks you hit and together with all participants in this session we will **develop solutions that help to make future migrations successful**.

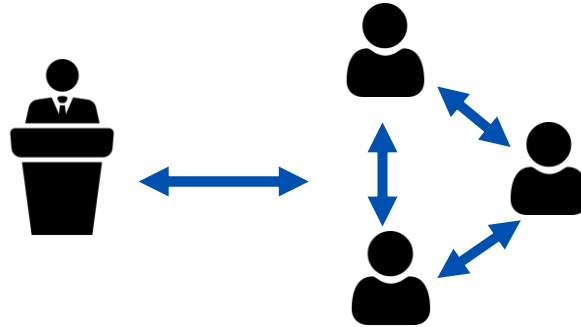


# Agenda

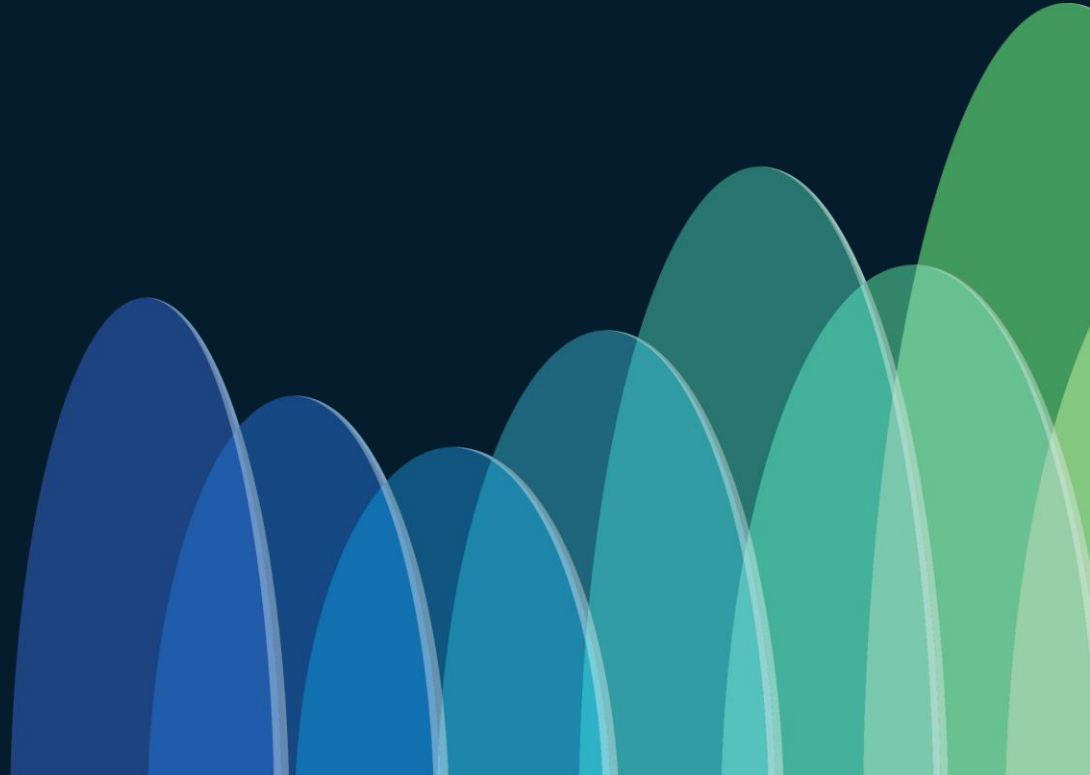
- Introduction
- Migration phases
- Experience from past migrations
- Discovery / Export
- Design
- Deploy/Migrate
- Programmability
- Closing

# “Interactive Breakout” – What I Think it Should Be

- Information flow not only speaker to attendees
- .. But also
  - Attendee to speaker
  - **And most importantly: attendee to attendee**



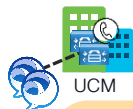
# Migration Phases



# On-Prem UCM to Webex Calling Journey

Required Activity  
Recommended Activity  
Optional Activity

Migration Ready



## Pre-Migration

### Create Webex org

- Create / Verify Production Webex Org
- Add / Verify Licenses

### Enable Analytics

- Cloud-Connected UC
- Jabber Telemetry

### Control Hub Setup

- Verify / Claim Domain(s)
- Claim Users
- Deploy SSO
- User Provisioning (Directory Connector, SCIM, CCUC, CSV, Manual, API)
- Configure Users' Phone Numbers

### Network / Security Readiness

- Validate Network Connectivity
- Security / InfoSec Approvals

## Migration Prep

### Discovery, Planning & Design

- Understand UX changes
- Identify Calling Location, Features & Service requirements
- Design dial-plan & PSTN/ UCM/ PBX Integrations
- Define 3rd Party, Protocol handler & API integration requirements
- UCM Data extraction
- User & Device validation

### Control Hub Config

- Calling Features & Services (Org settings, Calling settings, Dial plan, Client settings, etc.)
- Locations & Location services/features
- PSTN services
- Users and Devices
- Phone numbers
  - Deploy UCM/PBX interop - LGW
  - Review / Configure App update schedule

### Application Prep

- Configure 3rd party & API integrations
- Identify client requirements (Desktop, Mobile, VDI)
- Understand deployment options (desktop & mobile)
- Develop migration plan
- Stage Webex App installation file

## Rollout & Decom

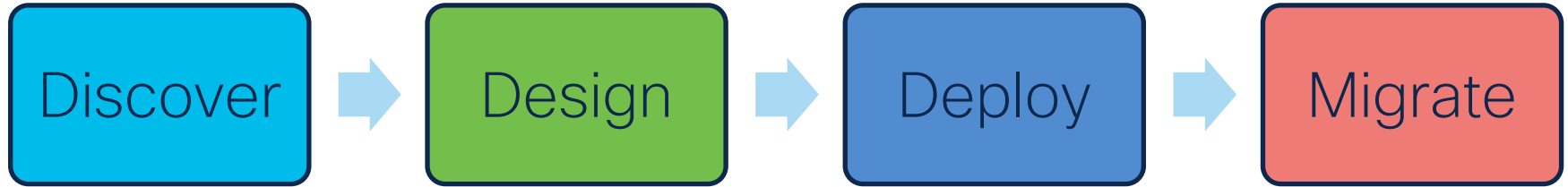
### Application rollout

- End user comms/ training
- Migrate users (UCM to WxC)
- Phone FW Updates
  - Ent > MPP (MT)
  - Ent > Ent (DI)
- PSTN Number Porting
- Migrate User/Org Contacts
- MS Office integration
- Update Protocol Handlers for 3rd party integrations

### Complete Migration

- Remove Jabber from user's devices

# General Migration Process



- Requirements
- Config assessment
- Inventory
  - users, devices, locations, ...
- Feature utilization
- Integrations
- Validate network requirements

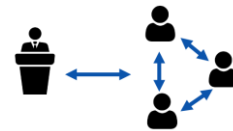
- Network requirements
- Feature mapping
- Migration batches
- Integrations
- Dial plan

- Infrastructure setup
- Base configuration
- Interworking setup
- Licensing

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



# Past Experience



# Experience From Past Migrations

- How many customers?
- Typical size?
- PSTN choice?
- Hybrid deployment (w/ LGW)

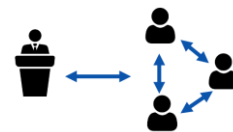
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# Experience From Past Migrations

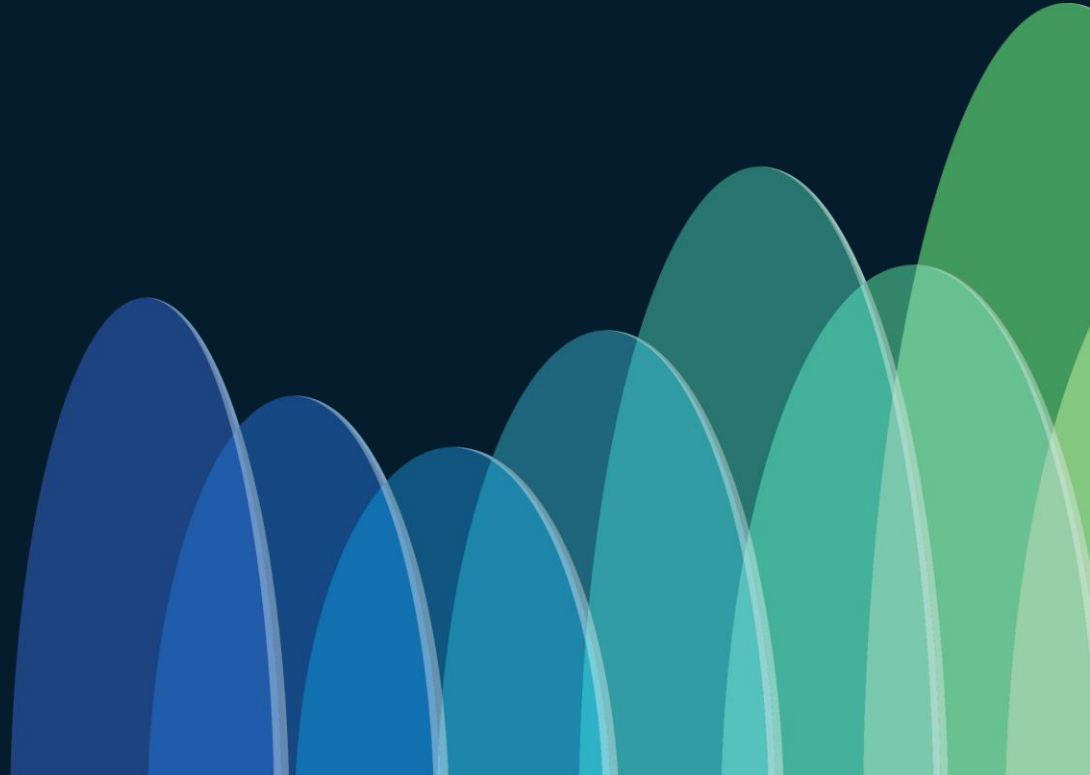
- How many customers?
- Typical size?
- PSTN choice?
- Hybrid deployment (w/ LGW)
- Challenges
  - Pre transition
  - Process: ordering, licensing, number porting, ...
  - During transition
  - Post transition



# What do you see as the biggest challenges for migrations from UCM to Webex Calling?

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# Discovery



# Analyze Existing Unified CM Setup

- Static analysis
  - Review configuration in admin GUI
  - Config export (bulk export)
  - Config export (AXL), thin/thick
  - CCUC
  - Migration insights
  - 3rd party tools
- Dynamic analysis
  - hard, based on trace analysis or CDR data
  - Migration insights (CDR data)
  - CCUC

# Analytics – Usage Statistics

- Gather insights of existing installation
- Cloud Connected UC
  - Call volume
  - Registered endpoints
  - (CAC) locations
  - Trunk utilization
- RTMT
- ...

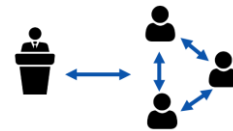


# Unified CM Data Extraction Options

- AXL – Administrative XML
  - SOAP based provisioning API
- BAT – Bulk Administration Tool
  - CSV based
- Config Export
  - Single file Unified CM config export
- Third party tools

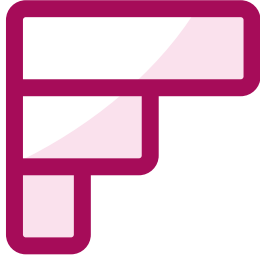
# Discovery Options

	AXL	BAT	Migration Insights	Config Export	3rd Party
Coverage	++ All feature can be read using thin or thick AXL	-- Very little coverage (built for provisioning)	-	++ Full DB coverage	+
Ease of use	-- Programmatic approach requires some development experience	+ UCM admin GUI	++	+ UCM admin GUI	++
Flexibility	++	-- Limited coverage	- Limited coverage	++	++
End-to-end (incl. provisioning)	O Not integrated. Data can drive Webex Calling provisioning (manual, bulk, or API)	-- Limited coverage	-- Only meant to provide insights	O Not integrated. Data can drive Webex Calling provisioning (manual, bulk, or API)	++ Integrated mapping and provisioning



# Feedback: Discovery Options

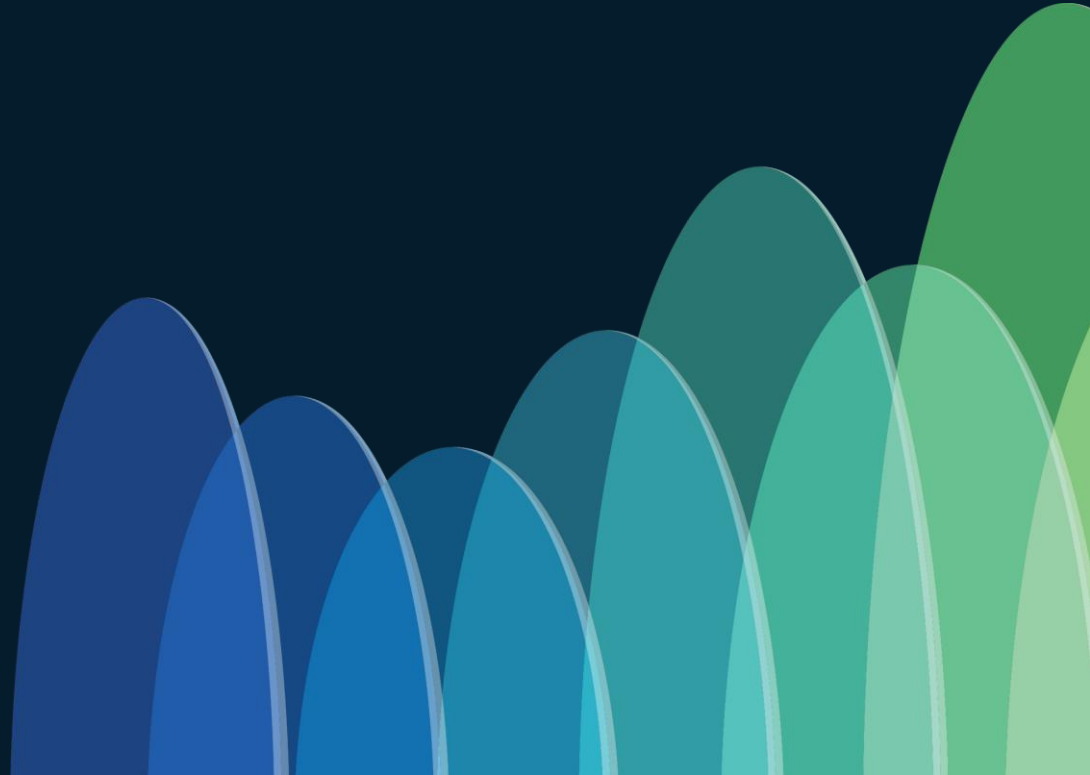
- Usefulness/value of discovery options
  - Config review in admin GUI
  - BAT
  - Bulk config export (single TAR file)
  - AXL
  - CCUC
  - Third parties



Please rank the following discovery options in order of usefulness (most useful at top of the list).

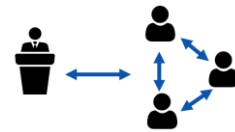
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# Design



# Mapping

- Unified CM and Webex Calling are different (stating the obvious)
  - DN vs user centric
  - Location concept
  - Dial plan concepts
  - Feature differences...
  - Call routing logic
  - ...
- Tough to map Unified CM setup 1:1 to Webex Calling



# Mapping Unified CM to Webex Calling?

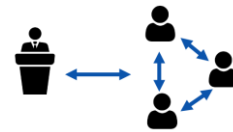
- Replicate existing setup as closely as possible in Webex Calling
- ... or
- Assess requirements and design a new solution based on capabilities of Webex Calling?
- Discussion
  - What do you do/prefer?

# Deploy/Migrate



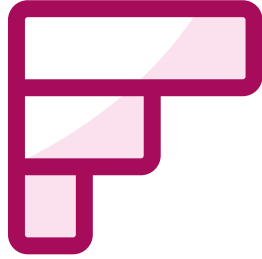
# Migration Options - Comparison

	Manual Provisioning	Control Hub Tool	Import from UCM	Bulk Provisioning (CSV)	API	3rd Party
Ease of use	0 initial training	++	+ (somewhat hidden, CSV review, Unity Connection Call Handler export)	- Process setup (data source, data format, ..)	-- Steep learning curve, development required for integration	+ Needs some training due to breadth of coverage
Flexibility	++	0 limited to devices, users, numbers	+ Limited coverage	+ limited coverage	++ increasing API coverage	++ uses Webex APIs
Integration into business processes	None	None	None	Possibly limited integration via customized data export/import	Tight integration possible	Primarily intended as standalone tool Other tools available supporting day to day operations
Speed	--	+	+	+	++	++



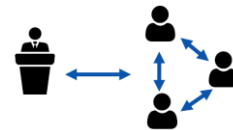
# Feedback: Provisioning Options

- Which provisioning options do you use during migrations?
  - Manual provisioning in Control Hub
  - Control Hub migration tool
  - Unified CM Data Import
  - Bulk provisioning (CSV)
  - Third party tools
  - In-house developed tools using Webex APIs



# Which provisioning options do you use during migrations? Please rank them.

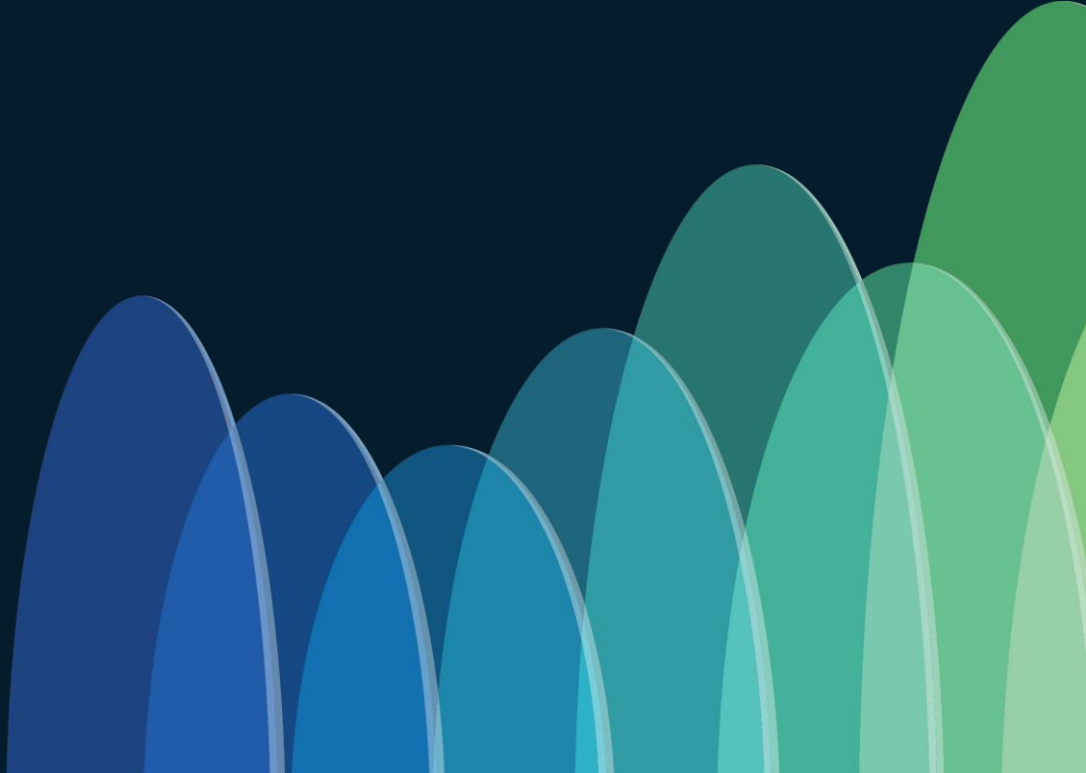
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# Discussion

- What are your solutions?
- Standard process?
- Development background?

# Programmability

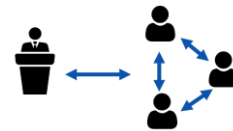


# Programmability / Coding

- APIs enable custom solutions ... not only for migrations
  - UCM: AXL
  - Webex Calling: Webex APIs
- (Steep) learning curve
- Learning by example can help to get up to speed

# References

- AXL: <https://developer.cisco.com/site/axl/>
- Webex APIs: <https://developer.webex.com/docs>
- Example repos/tools:
  - Analyze Unified CM config exports:  
<https://github.com/jeokrohn/ucmmigration>
  - API supported migration from Unified CM to Webex Calling, GDPR export, CSV export:  
<https://github.com/jeokrohn/migrationapi>
  - Python SDK for Webex Calling provisioning:  
<https://pypi.org/project/wxc-sdk/>



# Feedback: Coding Experience

- How would you rate your coding experience with respect to using APIs for provisioning?
  - no experience
  - some coding experience, but never used Webex APIs for provisioning
  - some coding experience and experience with Webex APIs for provisioning
  - expert in creating provisioning tools using Webex APIs for provisioning





How would you rate your  
coding experience with  
respect to using APIs for  
provisioning?

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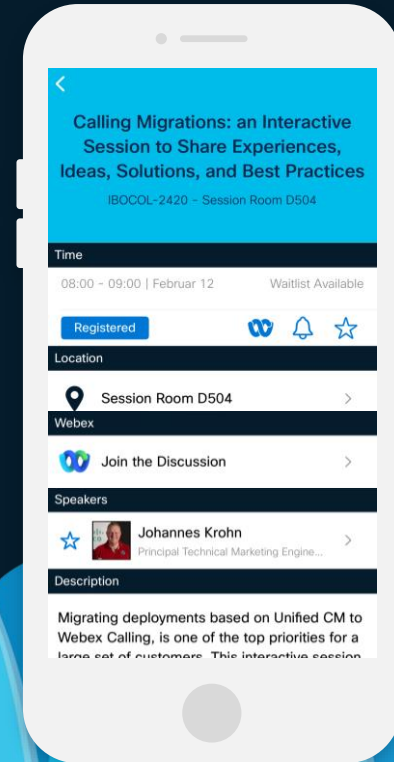
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