Introducing Cisco Unified Communications System Release 9.0
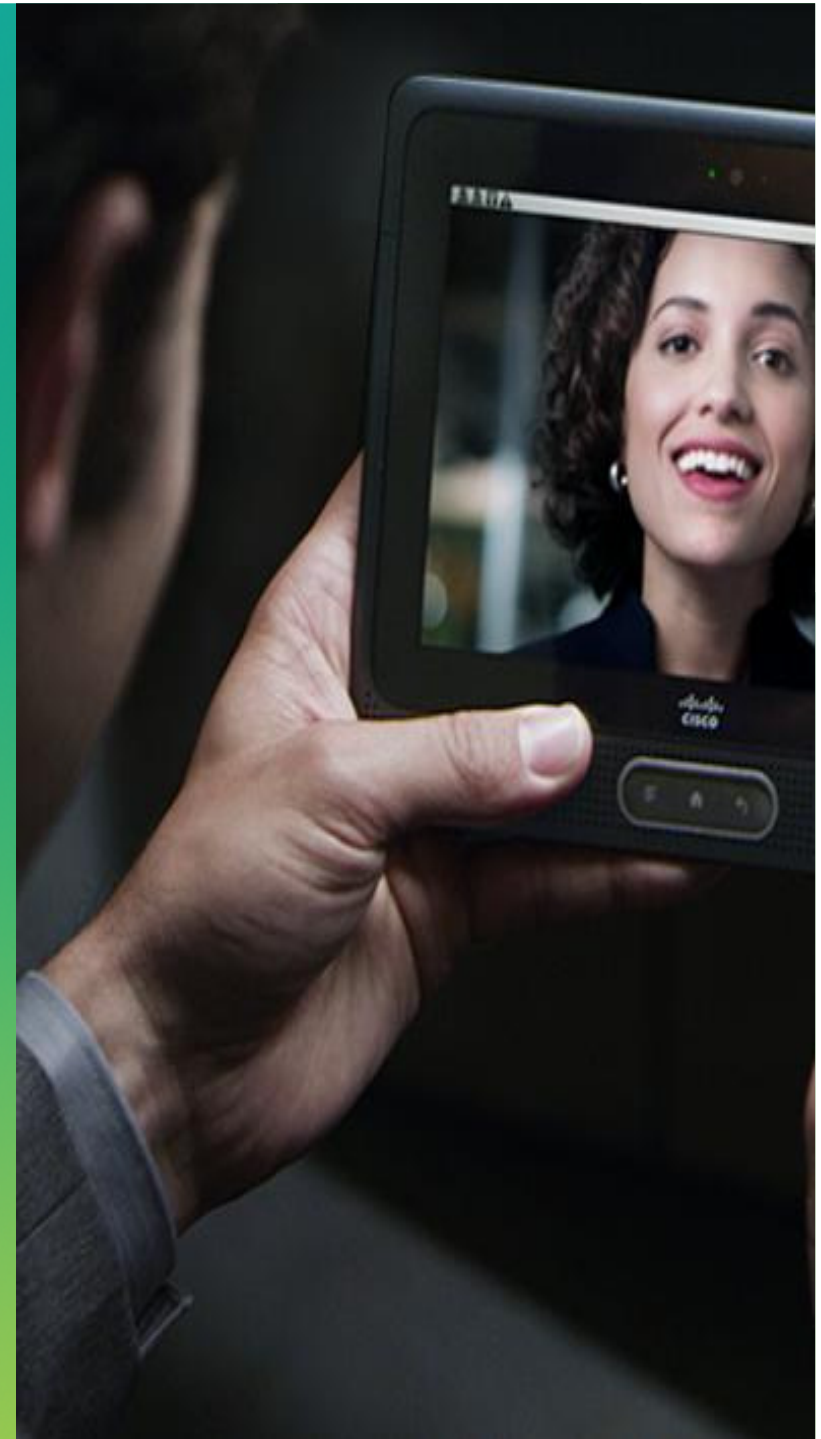
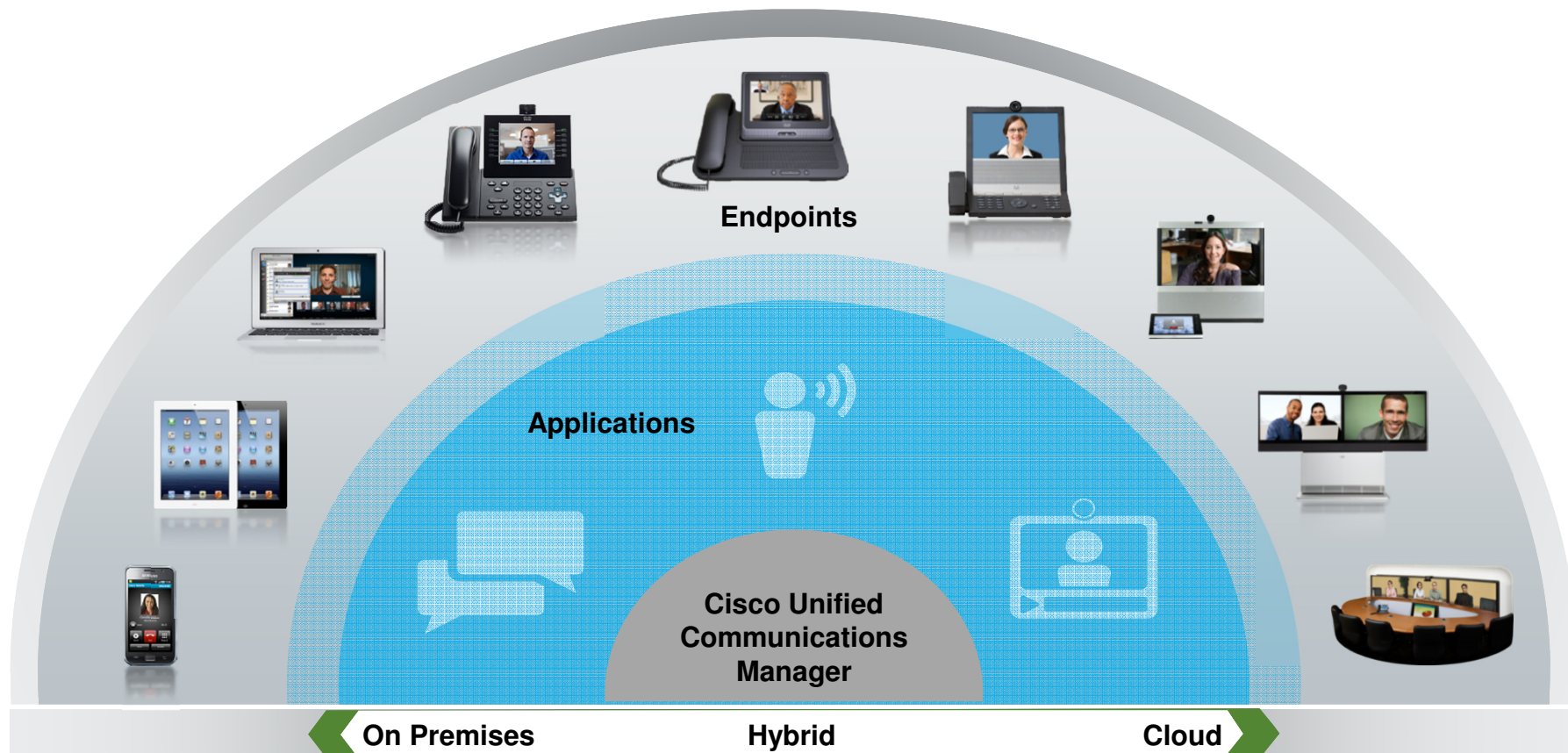# Cisco Collaboration
Comprehensive Portfolio of Applications, Solutions, and Services

Unified
Communications

Customer
Collaboration

Collaboration
Applications

TelePresence

CLOUD

ON PREMISE

Cisco Unified Communications
The Heart of Cisco Collaboration

Endpoints

Applications

Cisco Unified Communications Manager
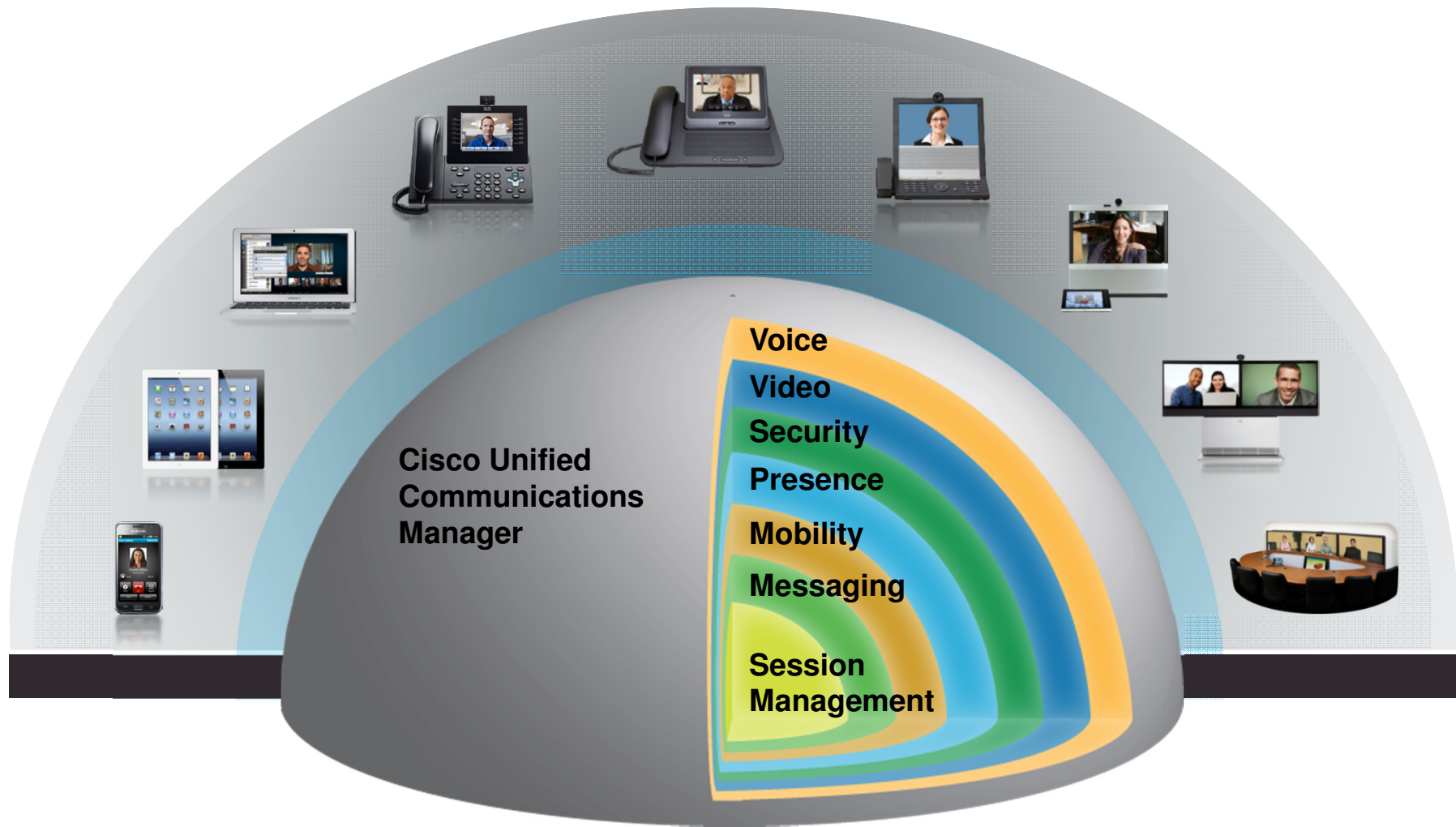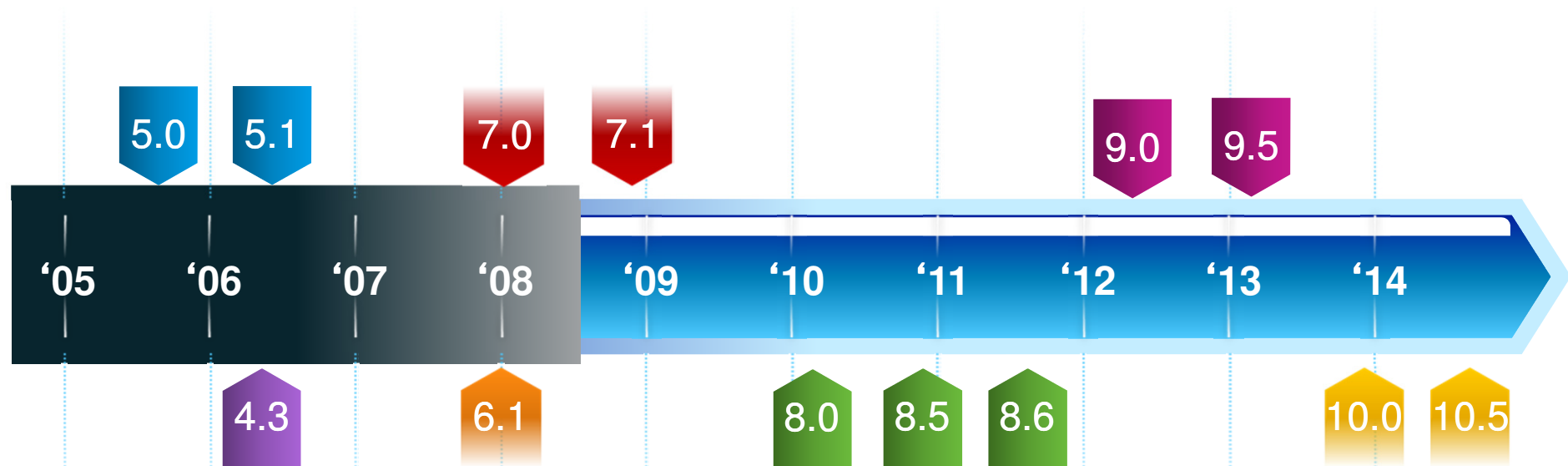
On Premises   **Hybrid**   **Cloud**

CUCM 9.0 Update

Cisco Unified Communications Manager
Uniting applications and endpoints

Cisco Unified Communications Manager

Voice
Video
Security
Presence
Mobility
Messaging

Session Management

Cisco Unified Communications Manager Release Roadmap

| '05 | '06 | '07 | '08 | '09 | '10 | '11 | '12 | '13 | '14 |

Releases: 5.0, 5.1, 7.0, 7.1, 9.0, 9.5, 4.3, 6.1, 8.0, 8.5, 8.6, 10.0, 10.5
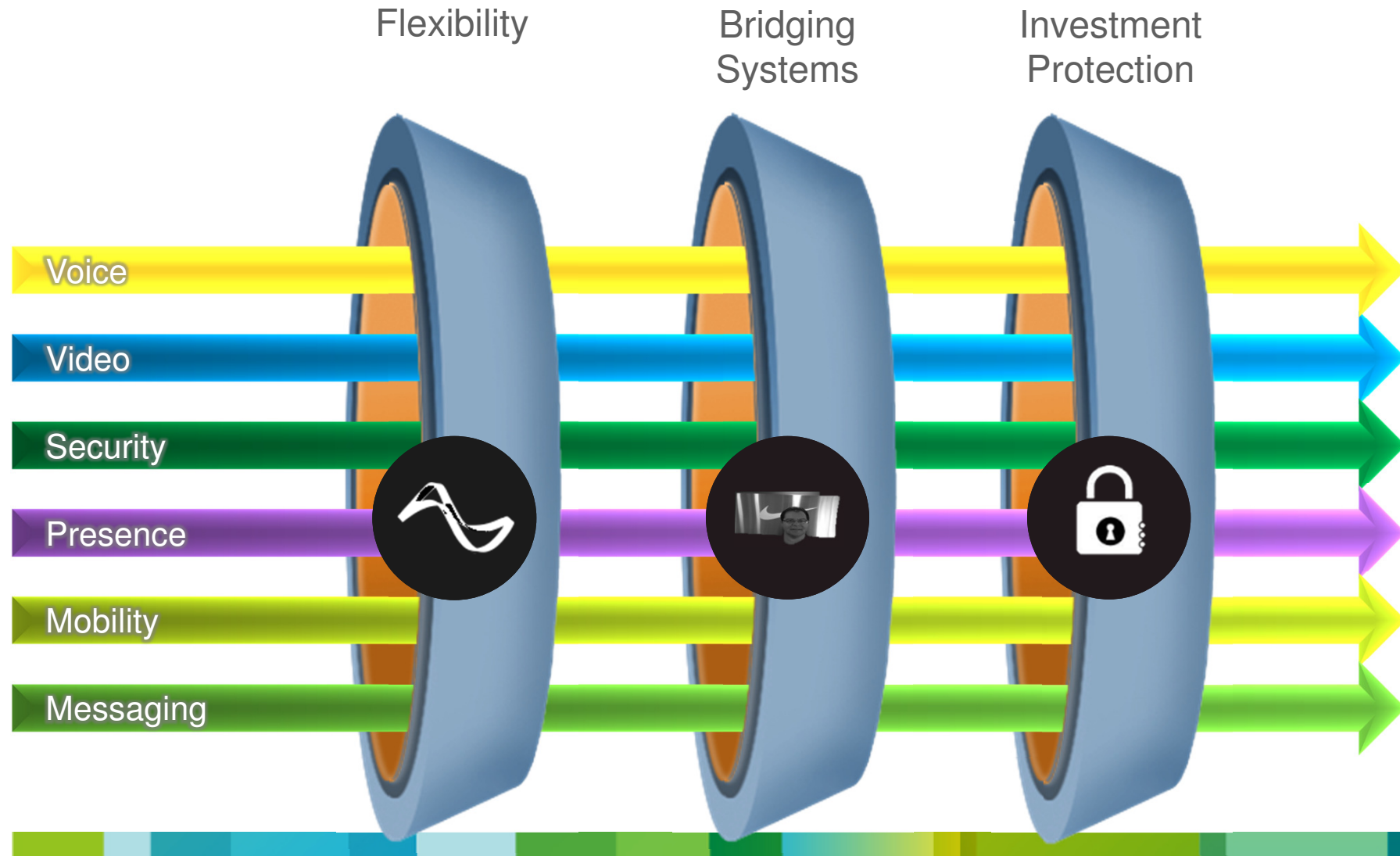
Long Life Releases
8.6(2) and 9.5(2)

Cisco Unified Communications 9.0
Key Benefits

Unified CM 9.x Features
Continued Evolution in Unified Collaboration

Video

Native IM/Presence

Single Call Control Voice and Video

- URI Dialing

- Locations CAC for complex networks

- SIP Normalization and Transparency - Line Side

- RTCP and presentation channel

- iX Channel support for better interworking with conf infrastructure

Voice, Video, IM, Presence from a single cluster.

- Common Collateral/Ordering

- Reduce Operating Expense with common
  - Install
  - Administration End user/Device
  - Licensing

- Common Documentation and TAC support

Unified CM 9.x Features
Continued Evolution in Unified Collaboration

Licensing

Licensing Simplification and alignment with User Model

- Simplification

- Alignment with UCL/CUWL

- Better reporting and migration

- More flexibility with overages.

- Enterprise wide licensing

Mobility

Improved Mobility User Experience with video

- 2-way video support over WiFi, 3G/4G (via VPN)

- Video support for SNR

- Video session handoff

- TLS/SRTP and Hunt Group Logout

- DVO VM Detection

- Simplified Mobile Provisioning

Unified CM 9.x Features
Deployment Options: Hosted, Enterprise, and Mid Market

Hosted service

Session Management Edition

IMS interface for Mobile phone integration. TCO *reduction*.

- Backup and Restore timing and APIs

- IMS ISC Interface - CF, MWI, CW, CB, Hold, Resume, Conf etc

- Cisco Mobile Client on the top of IMS network

- AXL Change Notification

Deliver applications to 3rd party/PBX phones. Deployment Simplification.

- Cisco "Extend and Connect" – CTI application for PSTN and 3rd party TDM/IP phones

- Global Deployments – Single cluster spans multiple continents.

- Custom codec preference list in region configuration and from SIP devices

Unified CM 9.x Features
Simplify your network and lower your TCO

Platform

More Virtualization flexibility and tools

- VMware vSphere 5.0

- Lower-cost/complexity VMware vSphere

- New Intel CPU and UCS support (E7 at 2.4+ GHz UCS M2)

- RH 5.7 and Tomcat 7.0

- Upgrade Orchestration

- Virtualized IME

Directory Enhancements

- Cluster Discovery

- Service Discovery

- UDS API Enhancement

- Flex Fields

- Manual + Automatic directory population

Unified CM 9.x Features
Continued Evolution in Unified Collaboration

Some key UCM Features

- Secure Cross Cluster Extension Mobility

- Pause in Speed Dials

- User page/client Improvements

- Native Queuing

- AS SIP Line

- Connected Number support for Hunt Pilot

- G.Clear

- SIP Redirection Counter

More UCM Features

- Layer 2 location discovery of VXC-based endpoints for E911

- Directory Improvements.

- RTCP through UCM for better

- Start/Stop Recording Key on the phone and apps

- E911 support for remote workers (for hardware IP phones; with framework for future client support)
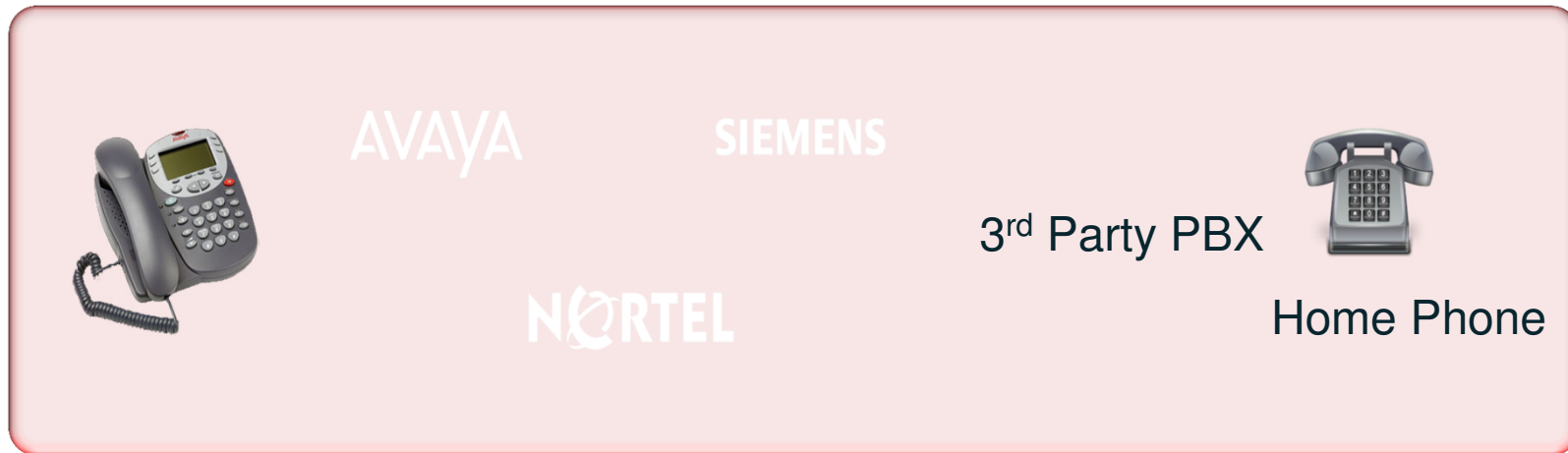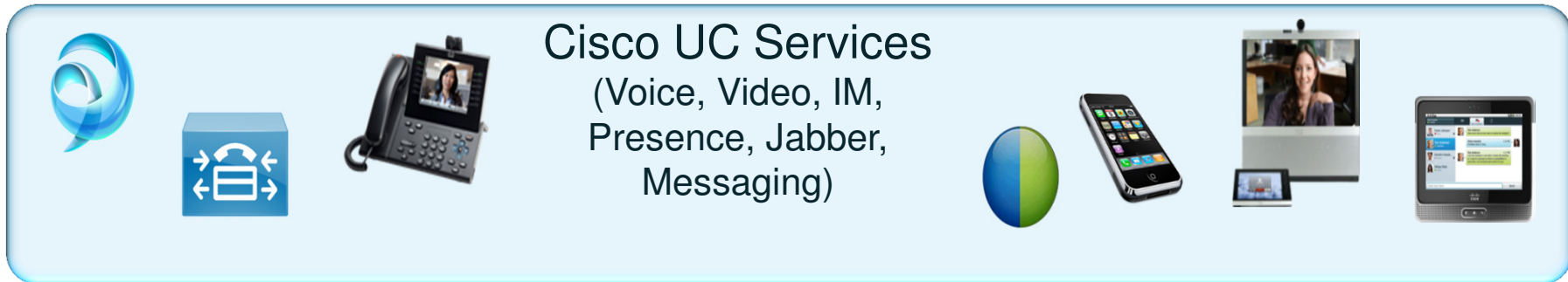
Enterprise License Manager (ELM):
Enterprise-wide management of all your UC licenses

- Simple, free (part of Unified CM 9.0)

- User license management, reporting, compliance

- Multiple applications/clusters

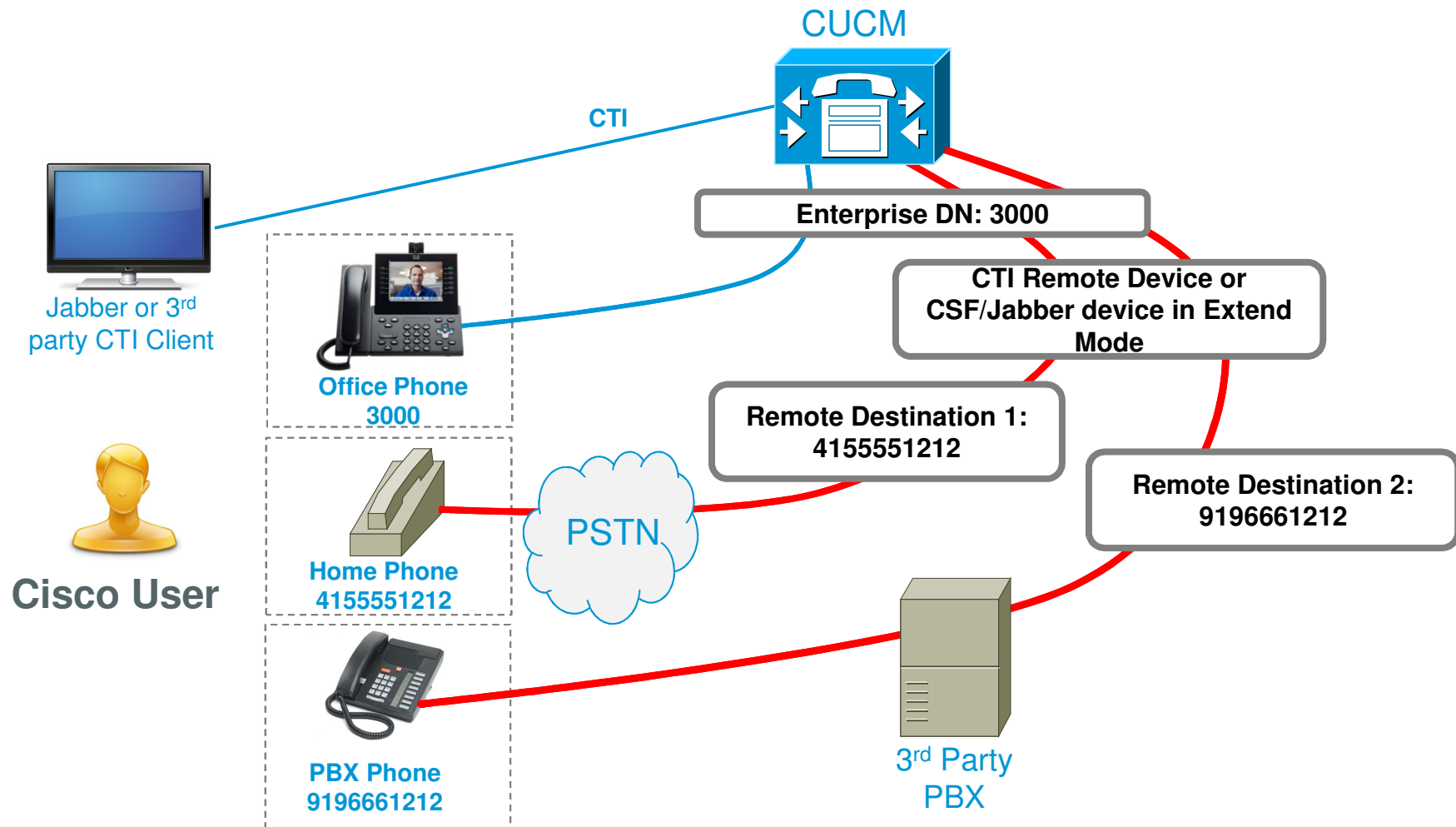- Unified CM, Unity Connection, IM, Presence

Cisco Extend & Connect

Cisco UC Services
(Voice, Video, IM, Presence, Jabber, Messaging)

AVAYA

SIEMENS

NORTEL

3rd Party PBX

Home Phone

Cisco Extend & Connect

Extending Cisco UC throughout your infrastructure/enterprise

Cisco UC Services
(Voice, Video, IM, Presence, Jabber, Messaging)

Extend and Connect

AVAYA

SIEMENS

NORTEL

3rd Party PBX

Home Phone

CUCM 9.0 - CTI Extend and Connect

CUCM

CTI

Jabber or 3rd party CTI Client

Cisco User

Office Phone 3000

Home Phone 4155551212

PBX Phone 9196661212

PSTN

Enterprise DN: 3000

CTI Remote Device or CSF/Jabber device in Extend Mode

Remote Destination 1: 4155551212

Remote Destination 2: 9196661212

3rd Party PBX

CTI applications have limited monitoring and call control capabilities for remote destinations

Cisco Extend and Connect

Deployment scenario

- 1) Contact Center agent working from home

  -low bandwidth at house, VOIP not an option (hard phone or soft client) and cell phone is not an option

  -Extend connect sends call to home phone and CAD agent allows enterprise features needed for contact center agents

- 2) Use Cisco Unified Communications with legacy PBX

  -Customer has PBX under contract and not ready to move phones

  -Customer wants UC for IM, Chat and messaging, but phones on PBX

  -Extend Connect enables Jabber deployment for UC, but enterprise control of PBX phone (as remote device for Jabber)

New User Pages

- Two types of users
  - Core Users with one phone and one line
  - Users with multiple phones with one or more lines on each device.

- New User Page UI targeted towards core users

New User Pages

URI Dialing
Simplify your reachability

Any Addressing Scheme

Product
Manager
My Company

johns@mycompany.co
Email, Jabber ID/IM

John
Smith

**408-555-1212**

Office

Native Queuing

- Hold hunt pilot callers while they wait for an employee to become available

- Play Announcements & Music in Queue

- Longest call waiting distribution

- View queue information on Cisco IP Phones

- Enhanced call detail records and monitoring tools

"Thank you for calling"

"Please hold a moment"

"Your call will be answered in the order in which it was received"
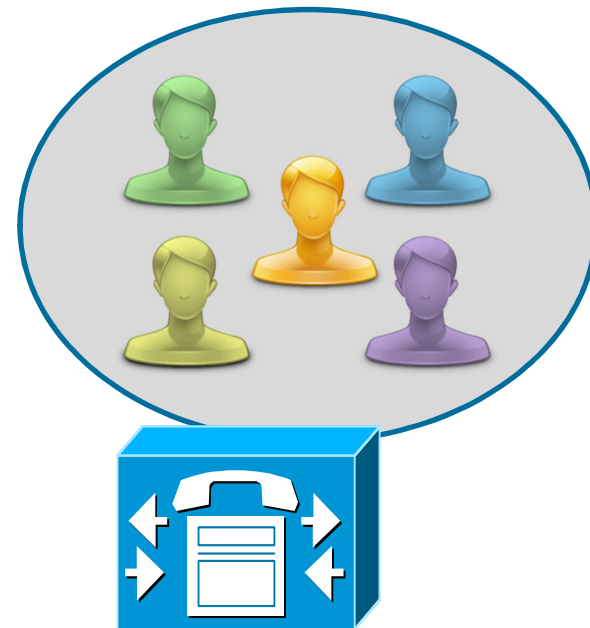
Unified CM Subscriber

Native Call Queuing

- Enables Hunt Pilot to queue callers

- Allow for redirection of calls based on different queue criteria

- Allow agents to participate in multiple queues

- Auto logout and call re-queue if agent does not answer

- Longest waiting call in all queues will be delivered first

- No 'post call' time or agent greeting options

- On phone 'Queue Status' display

Configuration

Native queuing

- Queuing options are configured for each Hunt Pilot

- Route callers to secondary numbers when maximum wait time, maximum callers in queue, and no members available conditions are met

  Secondary numbers may be a simple DN, voicemail DN, shared line DN, or another Hunt Pilot DN (with or without queuing enabled)

- Play announcements by configuring a Music on Hold Audio or Fixed Audio Source

  When music on hold is not configured queued callers will hear tone on hold.

- Add Hlog (login/logout) and Display Queue Statistics buttons to Cisco IP Phones

Native Call Queuing

Queueing
☑ Queue Calls

Network Hold MOH Source & Announcements	QueueAudioSource ▼	View Details
Maximum Number of Callers Allowed in Queue* ←	32	(1-100)
When Queue is full: ←		
◉ Disconnect the call		
○ Route the call to this destination		
Full Queue Calling Search Space	< None > ▼	
Maximum Wait Time in Queue* ←	900	(10 - 3600 seconds
When maximum wait time is met:		
◉ Disconnect the call		
○ Route the call to this destination		
Maximum Wait Time Calling Search Space	< None > ▼	
When no hunt members are logged in or registered: ←		
○ Disconnect the call		
◉ Route the call to this destination	601000	
No hunt members logged in or registered Calling Search Space	< None > ▼	

Native Call Queuing

Music On Hold Server Audio Source Information

MOH Audio Stream Number* 3

MOH Audio Source File   `SilenceAudioSource`

MOH Audio Source Name*   `QueueAudioSource`

☐ Allow Multi-casting

Announcement Settings

Initial Announcement   `Welcome Greeting Sample`   [View Details](#)

Initial Announcement Played*   `Always`

Periodic Announcement   `Wait In Queue Sample`   [View Details](#)

Periodic Announcement Interval*   `30`   (10 - 300 seconds)
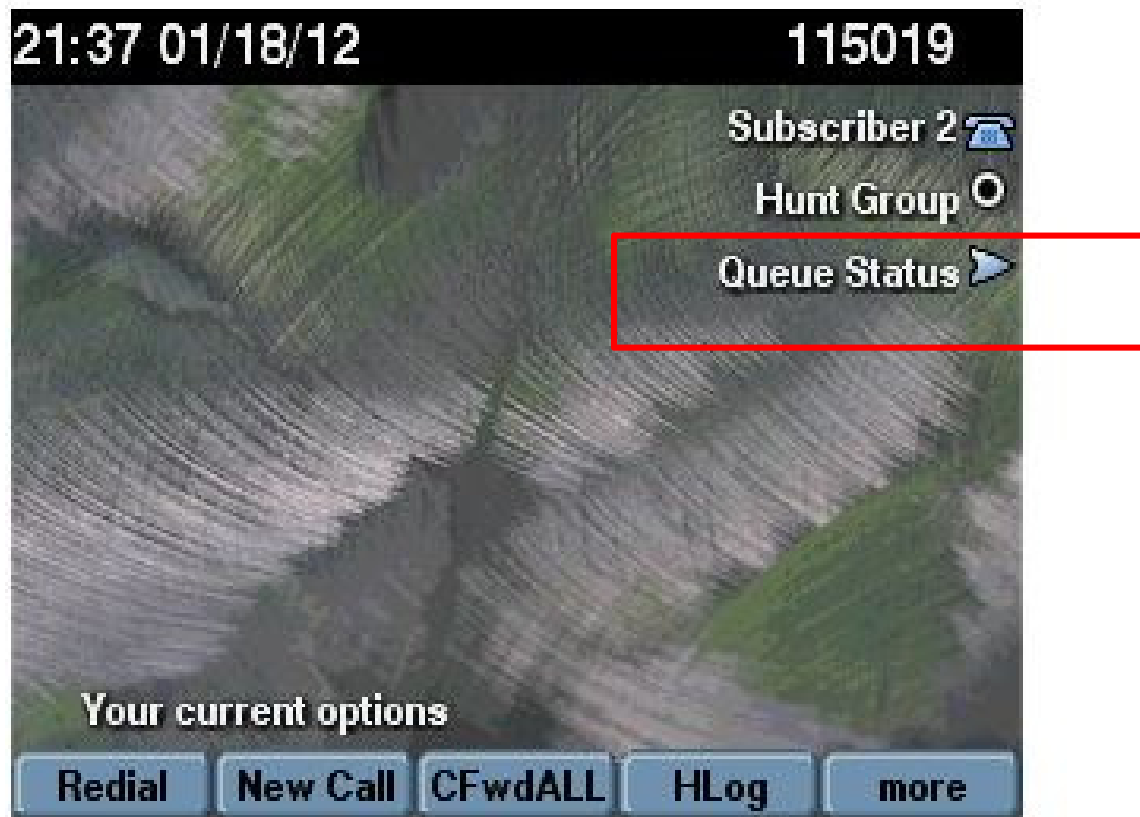
Locale Announcement*   `English United States`

Can be customer uploaded announcements

Choices:
-Always
-Only for queued Calls

Native Call Queuing

Queue Status information: Softkey, Programmable Line Key or Feature Control Policy (99xx/89xx phones)

Native Call Queuing

Shows all queues handled by the device

Serviceability for Native Queuing

- Call Detail Records have been enhanced to indicate:

    Queue flag – indicates if the call was queued

    Queue time – cumulative queue time prior to call answered

- New serviceability counters have been added to monitor queue performance; includes alarms and alerts with configurable thresholds.
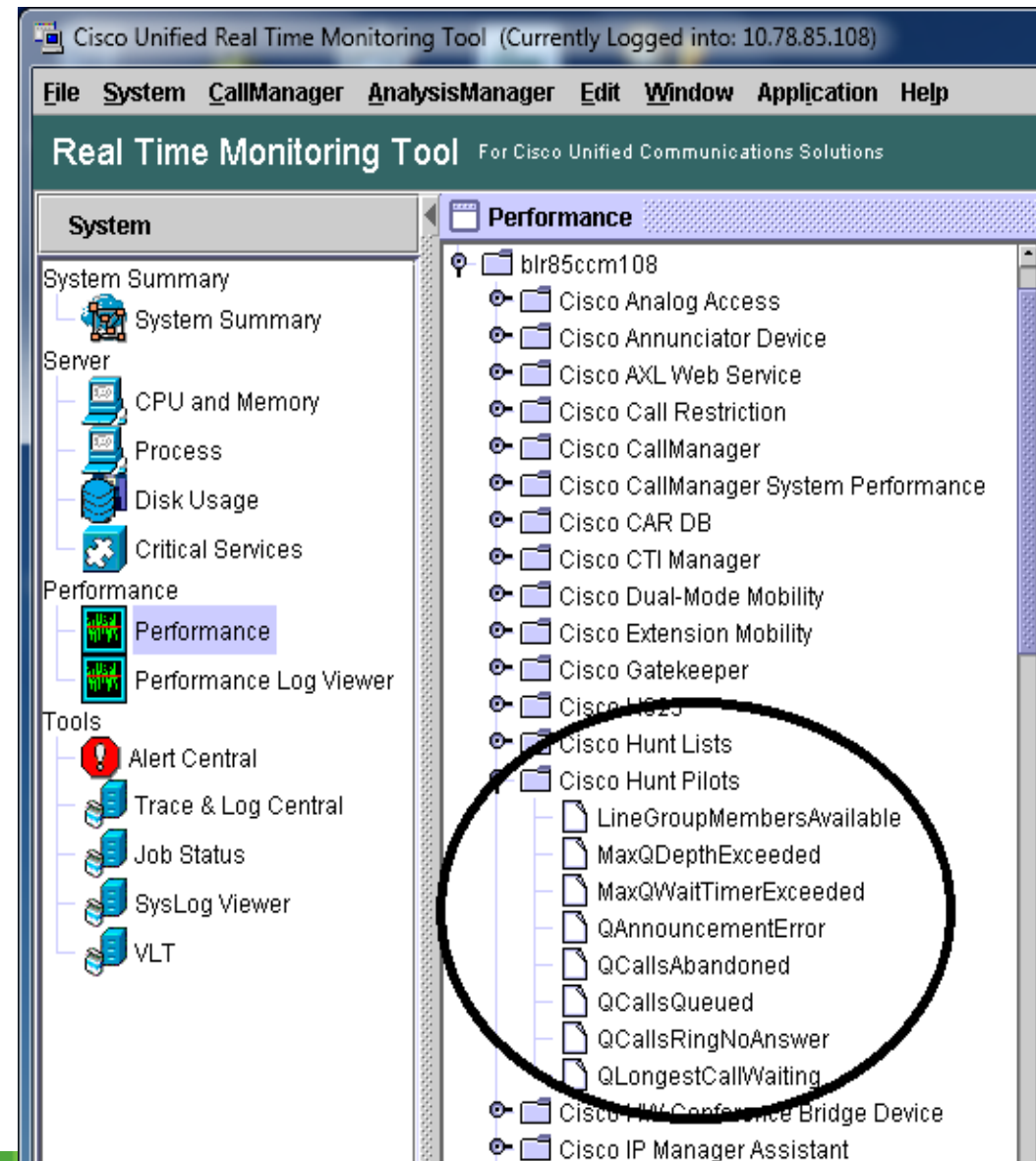
Native Call Recording

- Call recording was introduced in CUCM 6.0 release

- Secure call recording was introduced in 8.0

- CUCM 8.5 integrated with MediaSense (complete Cisco solution)

- Since call recording was a contact center features, the ability to record a call was limited to a CTI application

- Once recording started, there was no way to stop recording

Native Call Recording
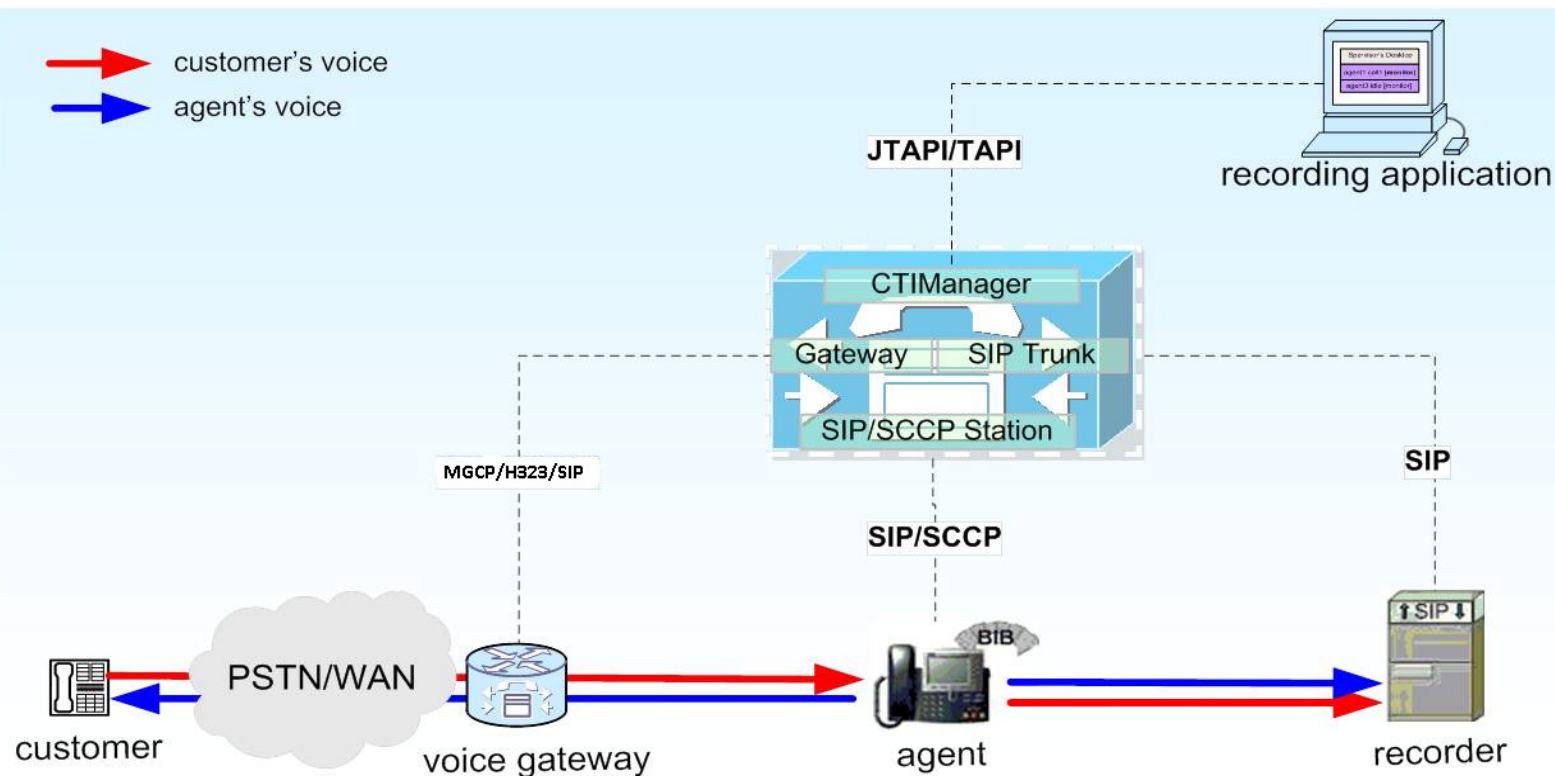
- Recording streams are forked from agent's IP phone to the recorder: agent's voice and customer's voice are sent separately.

- Recorder is configured in CallManager as a SIP trunk device.

Native Call Recording

- CUCM 9.0 provides user based call record using soft key, Programmable Line Key (PLK) or Feature Control Policy

- The record key is a toggle
  - First press starts recording
  - Second press stops recording

- Recording status displayed on the phone screen

- Recording can be started/stopped by any combination of phone or CTI control

- Must use phone Built in Bridge (BIB)

- Enable recording on the line appearance and configure tones

Native Call Recording
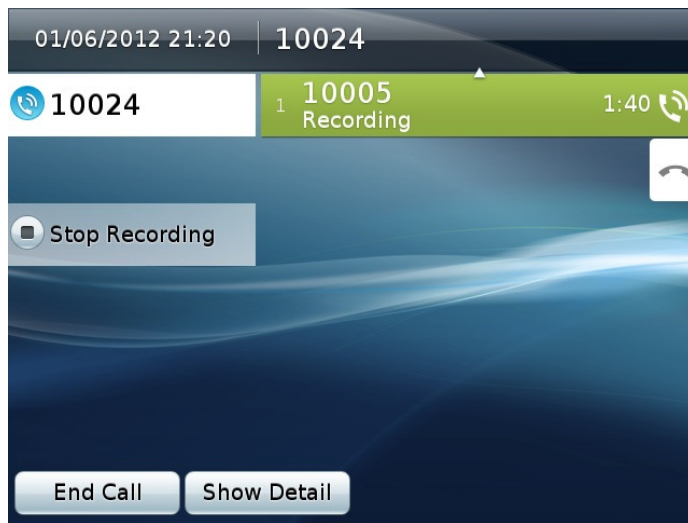
99XX:
SIP

79XX
SCCP or SIP

LDAP Enhancements

Custom User Fields

- Existing LDAP agreements sync 13 default attributes

- LDAP agreements will allow 5 Custom User fields

Standard User Fields To Be Synchronized

Cisco Unified Communications Manager User Fields	LDAP Attribute	Cisco Unified Communications Manager User Fields	LDAP Attribute
User ID	sAMAccountName	First Name	givenName
Middle Name	middleName ▼	Last Name	sn
Manager ID	manager	Department	department
Phone Number	telephoneNumber ▼	Mail ID	mail ▼
Directory URI	msRTCSIP-primaryuseraddress ▼		

Custom User Fields To Be Synchronized

Note: Custom User Field Names must be same across all synchronization agreements.

Custom User Field Name	LDAP Attribute		
OfficeLocation	OfficeLocal	⊞	⊟
TieLinePrefix	tieline	⊞	⊟
		⊞	⊟

Custom User Fields

- Custom User Fields are common across all sync agreements

- Custom User Fields updated on 1 agreement are synched across all agreements

- Attribute will be validated at save time
    - Error message thrown when saving and the attribute does not exist

LDAP and Manual User support

- ## Prior to CUCM 9.0

  - Enabling LDAP sync would prohibit adding local users

  - End user to be used by CUCM must be defined on AD and synched

  - Extra users could trigger extra CAL's on the MS AD

- ## CUCM 9.0

  - Administrator can have both LDAP sync users and locally defined users

  - Ability to modify local users and roles assigned to LDAP users

  - Deleting LDAP synch will mark users synced for deletion (garbage collection)

  - Administrator can convert an LDAP user to a local user

LDAP and Manual User Support

User status field is used to differentiate between the Local user and LDAP Synchronized users.

LDAP and Manual User Support

To convert LDAP synchronized user to the local user. Check the box Convert User Account and Save changes.

LDAP and Manual User Support

After a user is converted to local CUCM user all the fields become editable.

Simultaneous Ring

CUCM 7.0 introduced the parameter "Reroute Remote Destination Calls to Enterprise Number"

Calls direct to cell would ignore time of day settings and call the cell

Calls would be anchor on the enterprise phone….but the line would not ring

Added "Ring All Shared Lines" service parameter

Boolean Setting

True – all lines (including other remote destinations) ring

False – only the dialed number (remote destination) rings

Default and existing behavior is False

Pause in Speed Dial

- Users can configure speed dials with FAC, CMC and post connect DTMF

- Comma accepted in speed dial as delimiter and pause

- Feature allows two methods of configuration:

  Method 1: Using comma as a pause and also as a delimiter

  Method 2: Dialstring/FAC/CMC/Post connect digits with no commas

Method 1: Comma Delimiter for Pause

-Comma used to delineate dial string, FAC, CMC, and post connect digits

-For post connect digits, commas insert a 2 second delay

-Commas may be duplicated to create longer delays

-Preferred method for non-CUPC devices

Method 2: No Comma

-All digits to be used for dial string, FAC, CMC and post call digits entered as one string

-Once a digit string has been matched, CUCM moves on to next digit string

-Can be used on SCCP and SIP phones, but required for CUPC

Pause in Speed Dial Examples

- 914085551212,,,,123456

  Will dial 914085551212, after connect, wait 8 seconds to dial 123456

- 90114455612323#,2244

  FAC for International Calls. Will dial 90114455612323# with FAC of 2244

- 914085551212,6534,5656,,,9933

  Will dial 91408551212, with a FAC of 6534 and CMC of 5656, wait 6 seconds, the dial the DTMF digits 9933

- 914085551212**6534**5656**9933**

  Will dial 914085551212 with a FAC of 6534 and CMC of 5656, then immediately after connect, dial 9933

Pause in Speed Dial

- New Service Parameter allows configuration of interdigit delay

Pause In Speed Dial InterDigit Interval * | 60

- If the speed dial FAC or CMC is wrong
  - Method 1: Call disconnects and an error is displayed
  - Method 2: phone displays an error and allows the user to manually enter the information

- Dial string is truncated in the calls history list (only dialed number)

- Feature may not work with CUPC client and variable length/overlapping dialplans (no comma delineation)

- This feature is not supported SRST

Codec Preference

- Pre CUCM 9.0
  - Administrator could only eliminate codecs (based on Maximum Audio BitRate)
  - Could not prioritize G.711alaw over G.711ulaw, or G.729 codecs

- CUCM 9.0
  - System default codec preference same as earlier versions
  - Allow administrator to deterministically specify codec order
  - Allow codec selection based on received offer
  - Custom Codec list applied globally or on a GW/Trunk Level
  - Can be applied to: SIP, MGCP, SCCP, H323 and EMCC

Code Preference

Audio Codec Preference List Information

Name* Factory Default low loss

Description* Low Loss Codec List

Codecs in List*
```
AMR-WB (7k-24k)
AMR (5k-13k)
MP4A-LATM 128k
AAC-LD (MP4A Generic)
MP4A-LATM 64k
MP4A-LATM 56k
L16 256k
MP4A-LATM 48k
G.722 64k
ISAC 32k
MP4A-LATM 32k
G.722.1 32k
G.722 56k
G.722.1 24k
G.722 48k
MP4A-LATM 24k
G.711 U-Law 64k
G.711 A-Law 64k      ◄──────
G.711 U-Law 56k
G.711 A-Law 56k
ILBC 16k
G.728 16k
GSM Enhanced Full Rate 13k
GSM Full Rate 13k
G.729b 8k
G.729ab 8k
G.729 8k
G.729a 8k
GSM Half Rate 6k
G.723.1 7k
```

Audio Codec Preference List Information

Name* Custom low loss

Description* Customer Low Loss Codec List

Codecs in List*
```
G.722 64k
G.711 U-Law 64k
G.711 A-Law 64k
AMR-WB (7k-24k)
AMR (5k-13k)
MP4A-LATM 128k
AAC-LD (MP4A Generic)
MP4A-LATM 64k
MP4A-LATM 56k
L16 256k
MP4A-LATM 48k
ISAC 32k
MP4A-LATM 32k
G.722.1 32k
G.722 56k
G.722.1 24k
G.722 48k
MP4A-LATM 24k
G.711 U-Law 56k
G.711 A-Law 56k
ILBC 16k
G.728 16k
GSM Enhanced Full Rate 13k
GSM Full Rate 13k
G.729b 8k
G.729ab 8k      ◄──────
G.729 8k
G.729a 8k
GSM Half Rate 6k
G.723.1 7k
```

Codec Preference

- Codecs preference still choose by Regions

- For SIP Devices/Trunk, can specify "Accept Codec Preference in received Offer" (for DO and EO)

- Can change codec selection for EMCC logged in devices

Region Information
Name* DataCenter2

Region Relationships

Region	Audio Codec Preference List	Maximum Audio Bit Rate	Maximum Session Bit Rate for Video Calls
DataCenter1	Custom low loss	64 kbps (G.722, G.711)	384
Remote1	Custom low loss	8 kbps (G.729)	384
NOTE: Regions not displayed	Use System Default	Use System Default	Use System Default

Modify Relationship to other Regions

Regions	Audio Codec Preference List	Maximum Audio Bit Rate	Maximum Session Bit Rate for Video Calls
DataCenter1 DataCenter2 Default Remote1	Custom low loss	8 kbps (G.729)	◉ Keep Current Setting ○ Use System Default ○ None ○ ___ kbps

Codec Preference - Caveats

- A common Codec Preference List must be the same on all clusters when using the following features:
  - Extension Mobility Cross Cluster
  - H323 Inter Cluster Trunks

- Biggest challenge will be unexpected codec
  - Check "Accept Audio Codec Preferences in Received Offer" settings
  - Check at Device level and system level

- When using non-pass through MTP, codec negotiated hop-by-hop

Cisco Unified Communications Manager IM and Presence Service Overview for 9.0

Cisco Unified Communications Manager IM and Presence Service

Goals:

- **Easier to sell/order IM/ presence**
  - **Common Websites, Briefing Materials, Ordering Guides, SKUs, etc**

- **Easier to deploy IM/ presence**
  - **Common Install, Upgrade, Licensing Methodology**

- **Easier to administer IM/Presence**
  - **Common user and client administration**

- **Easier support**
  - **Common Documentation , UCSS ordering, TAC support , etc**

Removing the Customer Challenges:
Focus for CUP – CUCM Integration

- **Common Marketing**
  - Collateral
  - Ordering

- **Reduce Customer OPEX**
  - Installation
  - Administration
    - End User
    - Device
  - Licensing
  - Serviceability
  - Security

- **Common Support**
  - Documentation
  - TAC

  - End User Value
    - Integrated view of V/V/IM/P
    - Showcase features

Cisco Unified Presence – Product Growth

UC 9.0

•CUP originally designed for long term CUCM integration
• CUP software delivered with CUCM 1.x/ 6.x

Release 8.x   Jan 11 (8.5)

•XCP technology / XMPP
•Enterprise Grade IM
•Group Chat
•Persistent Chat
•IM History
•Policy / Compliance
•Inter-domain Federations
•OCS/LCS/Lync
•IBM
•AOL/Googletalk
•Multiple Clients
•XMPP
•SIP/SIMPLE
•JabberWerx / XMPP APIs
•Intra-domain Fed with MSFT (8.6)

Release 1.0

•Built on Linux app with VOS
•CUCM based licensing
•Presence Engine
•SIP/SIMPLE
•IP Phone Integrations
•MSFT RCC

Release 6.0

•Intercluster
•Scale
•Rules
•Calendar busy/idle
•CVP support
•IBM plug-in

Release 7.0

•6 Node cluster
•Inter-domain Fed with MSFT
•Mobility Integration
•SOAP / REST
•Clustering Over WAN
•Evaluation license

CUCM IM and Presence Service

CUP is an Industry Leading IM and Presence Product

Ordering and Licensing

- Ordering

    Single Set of Customer facing Documentation

    Single Ordering Process

    Single set of SKUs

- Licensing

    *** IM/P **included** as part of core UCL (User Connect Licensing) and CUWL (Cisco Unified Workspace Licensing) ***

Migration & Support Plan

- Support CUCM 7.x / 8.x direct migration to 9.0

    Provides ability to deploy CUCM with voice, video, IM , presence

- Support CUP 8.x IM Only direct migration to 9.0

    Provides ability to deploy CUCM with voice, video, IM , presence

- Support CUCM 7.x / 8.x and CUP 8.x direct migration to 9.0

    Provides ability to deploy CUCM with voice, video, IM , presence

- Earlier versions of CUCM or CUCM / CUP deployments will have perform a multi-step upgrade migration

Large Enterprise Migration / Backwards Compatibility
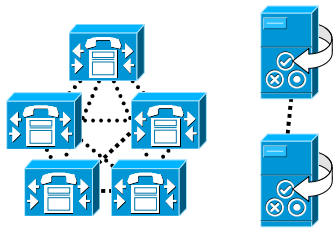
CUCM 8.0 Cluster
with adjunct CUP 8.0

CUCM 8.0 Cluster
with adjunct CUP 8.0
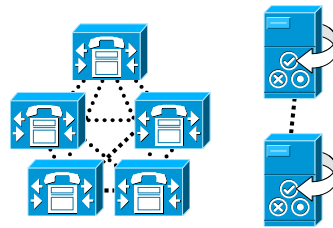
CUCM 8.0 Cluster
with adjunct CUP 8.0
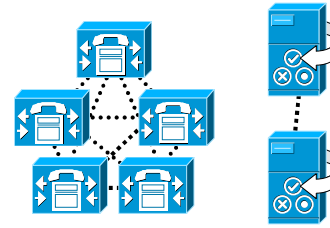
**Phased Migration
E.g. upgrade 1 cluster at a time to 9.0**

8.x / 9.0 interoperability

**9.0 deployment works
with legacy CUCM 8.0
and CUP 8.0 for V/V and
IM/P**
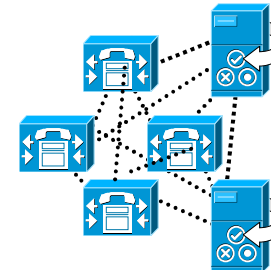
9.0 Deployment
Voice/Video/IM/Presence

- Intra-cluster upgrade in sync
- Inter-cluster can be a slow roll

CUCM IM and Presence

- Solution release 9.0, CUCM and CUP will start integration to be one product

- Includes common release and upgrade process

- Centralize administration

- Simplify licensing, now included as part of CUCM user licensing

- Deprecating IP Phone Messenger (IPPM) and CUPC 7.0

CUCM IM and Presence

- Through CUCM IM and Presence administration screens, configure UC Services for clients

- UC Services that can be defined:

  Voice Mail, Visual Voice Mail, Conferencing, Directory, IM and Presence, CTI

- UC Services are used to build a UC Service Profile

- UC Service Profiles assigned to users

  licensing for the feature handled at the user level

  Home cluster specified in the user page

CUCM IM and Presence

- CUCM 9.0 UC Service Profiles
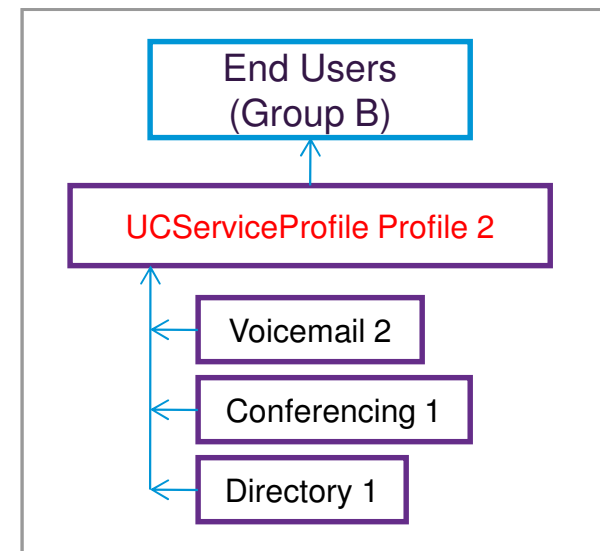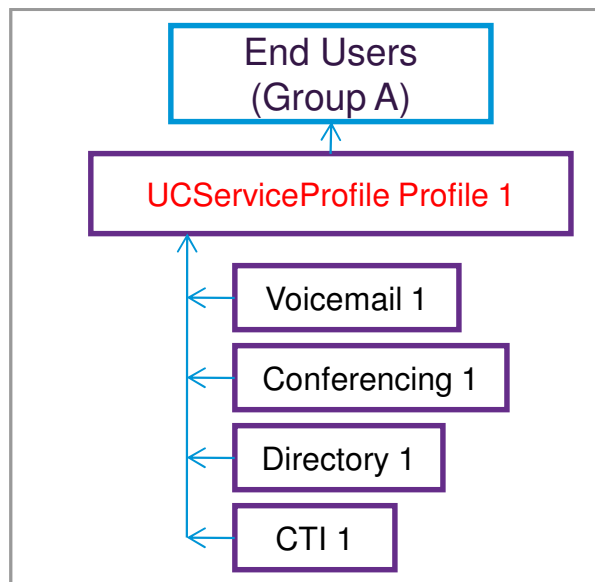
CUCM IM and Presence

- Why do we need a 'Home Cluster' setting?

- Make client/server discovery simpler

- New service called User Discovery Service (UDS)

- UDS queries other servers to find a user's home cluster
  1. Client configuration points to a centralized TFTP server
  2. If not a local user, UDS queries other servers looking for a 'home' cluster
  3. UDS returns URL for users home cluster
  4. Client queries home cluster for configuration (which includes UC services)
  5. Client registers with home cluster for call control
  6. Client registers with other UC services

CUCM IM and Presence

Service Discovery
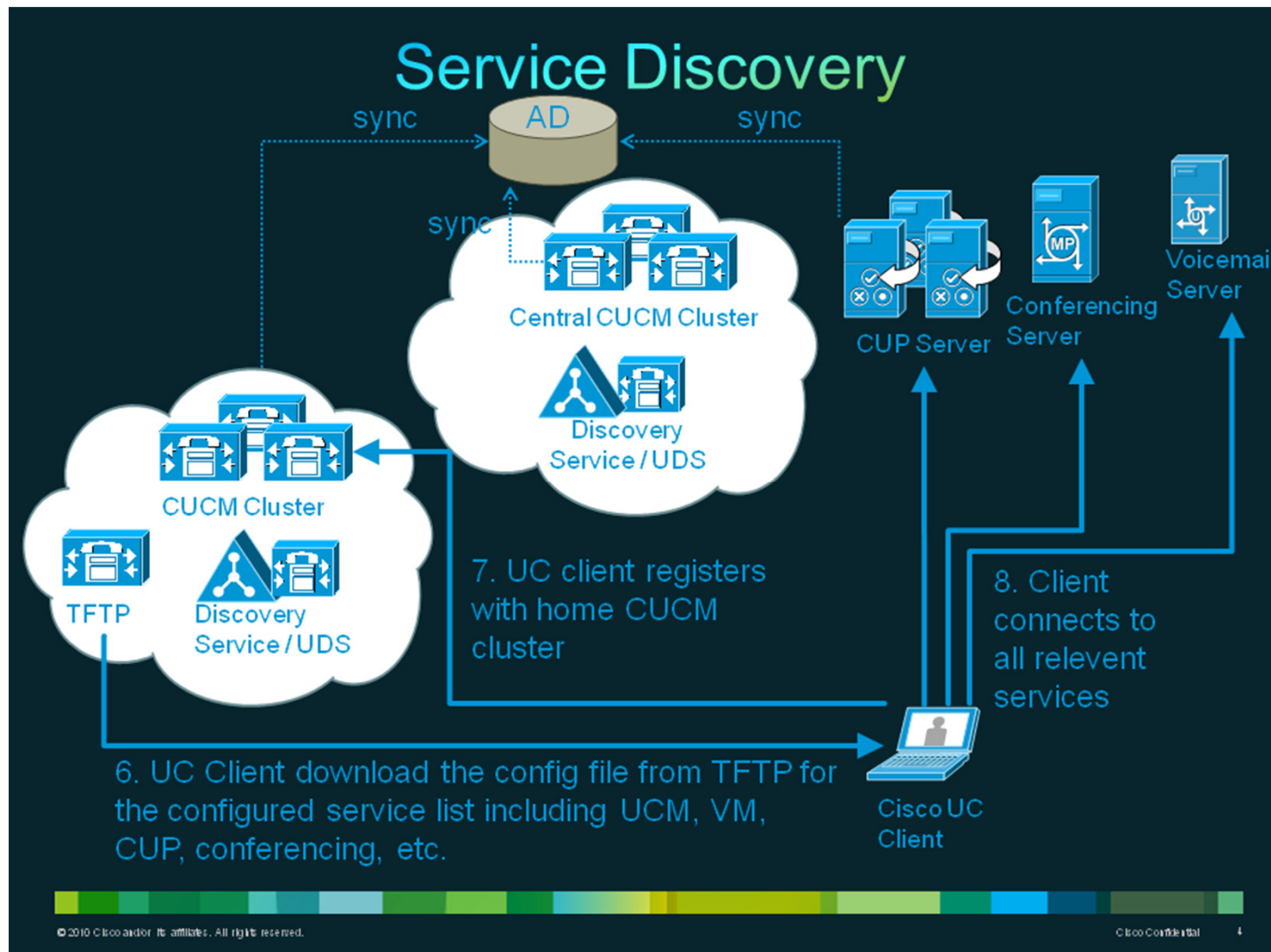
CUCM IM and Presence

- When migrating to CUCM 9.0, existing service profiles and configuration in CUP will be migrated

- CUCM IM and Presence uses Templates and Layouts to speed up user creation

- BAT/AXL have been updated for CUCM/CUCM IM and Presence

Pre 9.0 Solution Deployment

CUPC / Aries

3rd party XMPP clients

- Current:
  - Leverages CUCM for general User Config & Licensing.
  - Separate CUP Install and CUP / CUPC Admin and Serviceability.

"CUCM"

Application Layer

Voice	Video

Mobility	IME	CTI

Line / Trunk

Platform Layer

CUCM Install & Platform

User & Device Admin & Serviceability

IDS
CUCM Config Data

CUCM User Data

VOS Platform

"CUP/IM"

Application Layer

Presence	IM/Chat/CUPC	Federations

Policy	Jabber	Web

UC Integrations Layer

Telephony	Calendar	GeoLoc

Platform Layer

CUP Install & Platform

CUP/CUPC specific Admin & Serviceability

IDS
CUP/CUPC User Data

CUCM User Data

VOS Platform

Server Farm

Soln Strengths / Pros

Feature Strength (IM, Devices, Web, Fed)

VOS based and CUCM aligned

Optimised Performance /Scale

Optimised Test Matrix and effort

Lower Box count than OCS/Lync

No Mandatory CUCM upgrade for IM/Presence

Customer Feedback/ Cons

More Integrated Sale

Separate order / install for each media

End to end User Configuration is inefficient

Some Separation of Admin/Serviceability interfaces (although Common Look & Feel and CUCM based).

CUCM-CUP - Release 9.0 Integration

CUPC / Aries/Cius

3rd party XMPP clients

CUCM *(Voice/Video)*

Application Layer

| Voice/Video | Mobility | CTI |

Platform Layer

UC User Admin

Telephony User & Device Admin

Telephony Feature Admin

Publisher

CUCM
CUCM
CUCM
CUCM

Subscriber
Subscriber
Subscriber
Subscriber

Common Release Install & Upgrade

CUCM *(IM and Presence)*

Application Layer

| UC Presence | IM/Text Chat |

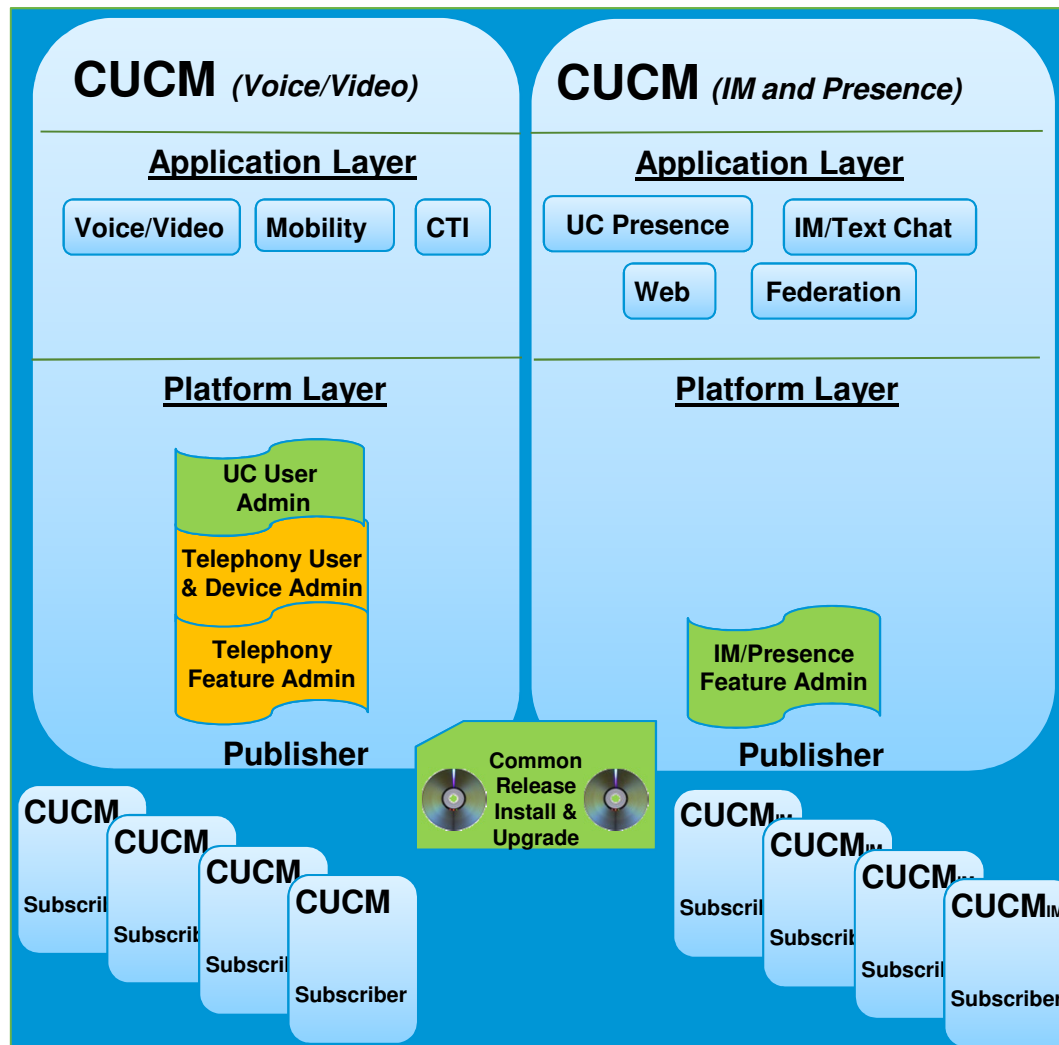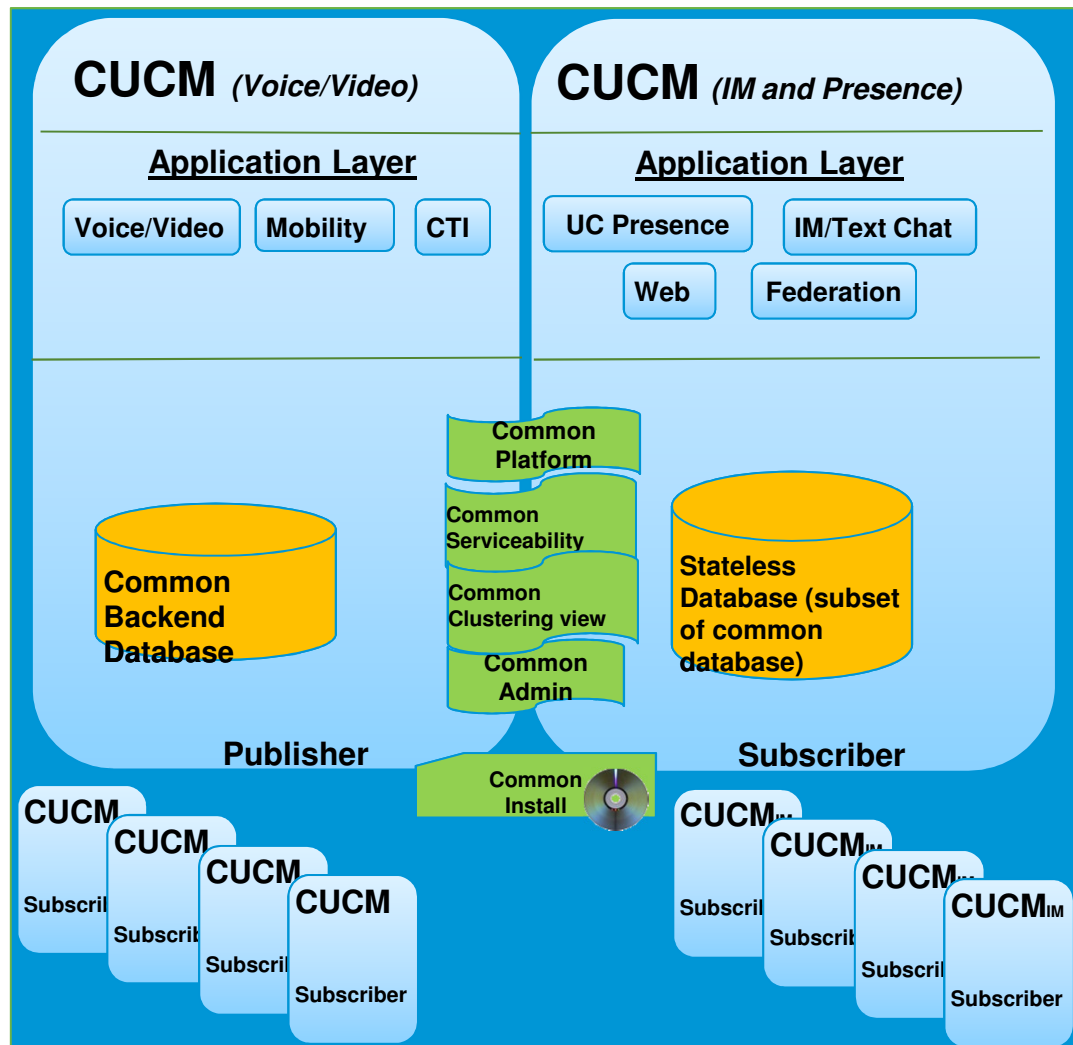| Web | Federation |

Platform Layer

IM/Presence Feature Admin

Publisher

CUCM_{IM}
CUCM_{IM}
CUCM_{IM}
CUCM_{IM}

Subscriber
Subscriber
Subscriber
Subscriber

Core Content

- **Rebrand** CUP to "CUCM IM and Presence"

- •****Common Release Install & Upgrade Process**
  - From 9.0 CUCM and CUCM IM&P nodes must be upgraded simultaneously to a common joint release.

- **Admin Centralization and Simplification**:
  - Move all UC User and UC Service Config data currently in CUP to CUCM
  - This data (e.g. LDAP profile, Vmail Profile, Webex Profile, CTI profile) will be centrally configured in CUCM and centrally accessible via CUCM AXL interface (no longer CUP)
  - Simplify greatly UC User Config in CUCM (reduced workflow, fewer screens)
  - Provide Auto-Service discovery mechanism to access this data => significant Admin overhead reduction

- **Licensing Simplification**: Presence User based licensing only (no CUCM IM&P server license or Cisco Jabber client License)

CUCM-CUP - Release Final Integration

Cisco Jabber/Cius

3rd party XMPP clients

CUCM *(Voice/Video)*

Application Layer

Voice/Video | Mobility | CTI

CUCM *(IM and Presence)*

Application Layer

UC Presence | IM/Text Chat

Web | Federation

Common Platform

Common Serviceability

Common Clustering view

Common Admin

Common Backend Database

Stateless Database (subset of common database)

Publisher

Subscriber

Common Install

CUCM

Subscriber

CUCM

Subscriber

CUCM

Subscriber

CUCM

Subscriber

CUCM IM

Subscriber

CUCM IM

Subscriber

CUCM IM

Subscriber

CUCM IM

Subscriber

Core Content

- **Common Install**

  Single ISO with options to choose the role of a server

- **Common Cluster**

  - IM and Presence Nodes are roles of CUCM subscriber nodes

- **Common Serviceability**

  Seamless serviceability for entire cluster

- **Common Administration**:

  Single Administrative GUI

Thank you.