



Welcome to the Cisco Collaboration Community!

Announcements Technical Briefing

July 24, 2012



Cisco Unified Communications (UC) Release 9.0 Technical Briefing

Your Presenters

- Hakim Mehwood
Product Manager
Cisco Systems, Inc.

- Dan Keller
Technical Marketing Engineer
Cisco Systems, Inc.



Agenda

- **10 minutes:** Introduction to Cisco UC Release 9.0 by Hakim Mehmood
- **75 minutes:** Cisco UC 9.0 technical details by Dan Keller
- **5 minutes:** Summary and “next step” resources by Hakim



Introducing Cisco Unified Communications Release 9.0

Hakim Mehmood
Product Manager



What We Heard from Customers



- **Users need:**
 - Consistent experience and choice of devices
 - Better options for transparent mobility
 - Simplicity



- **IT need:**
 - Easier interoperability options
 - Align capabilities with user requirements
 - Efficient and simplified management and deployment tools



- **CxO need:**
 - Reduced cost of ownership (acquisition and operation)
 - Drive better collaboration experiences in house and out
 - Protect and leverage current investments

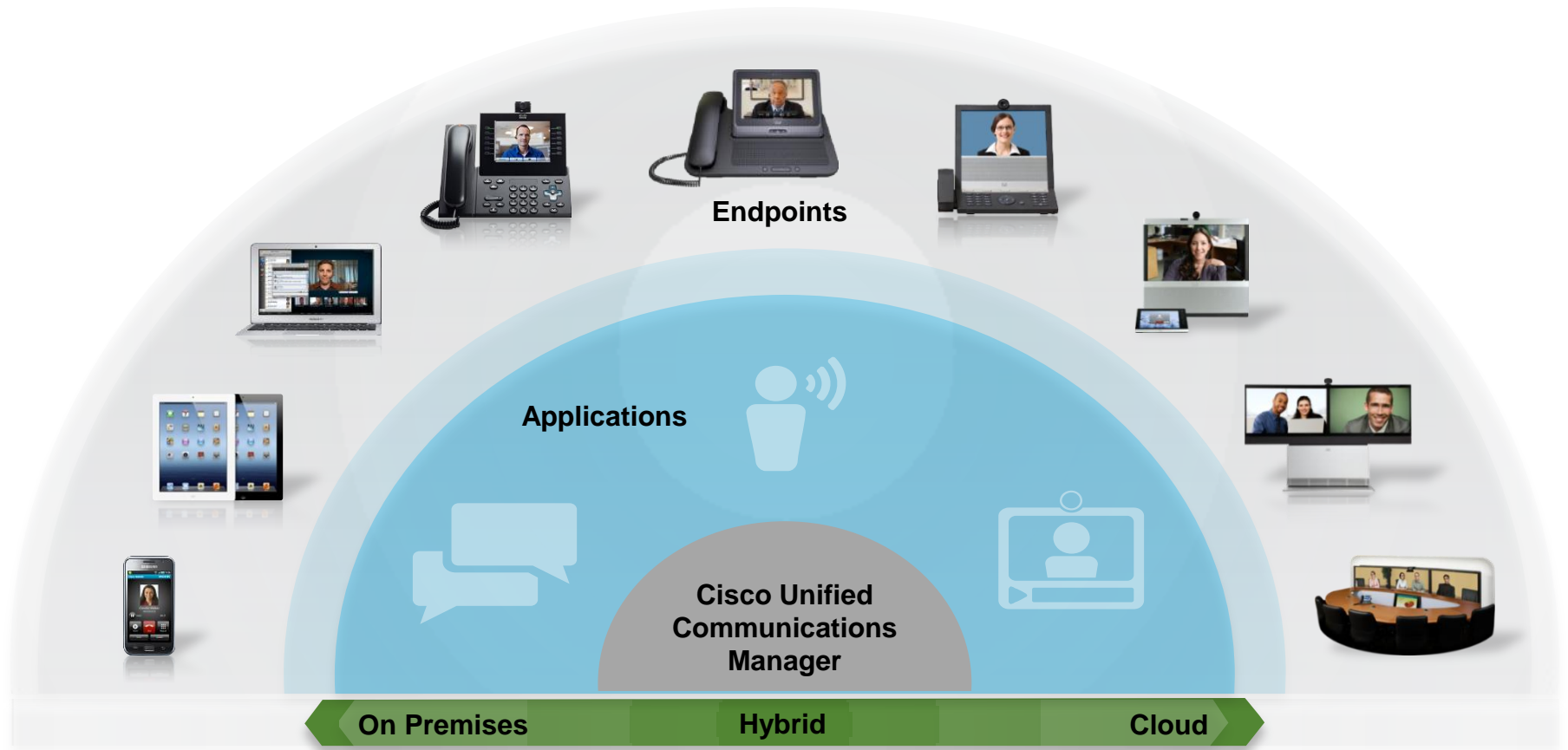
Cisco Collaboration

Comprehensive Portfolio of Applications, Solutions, and Services



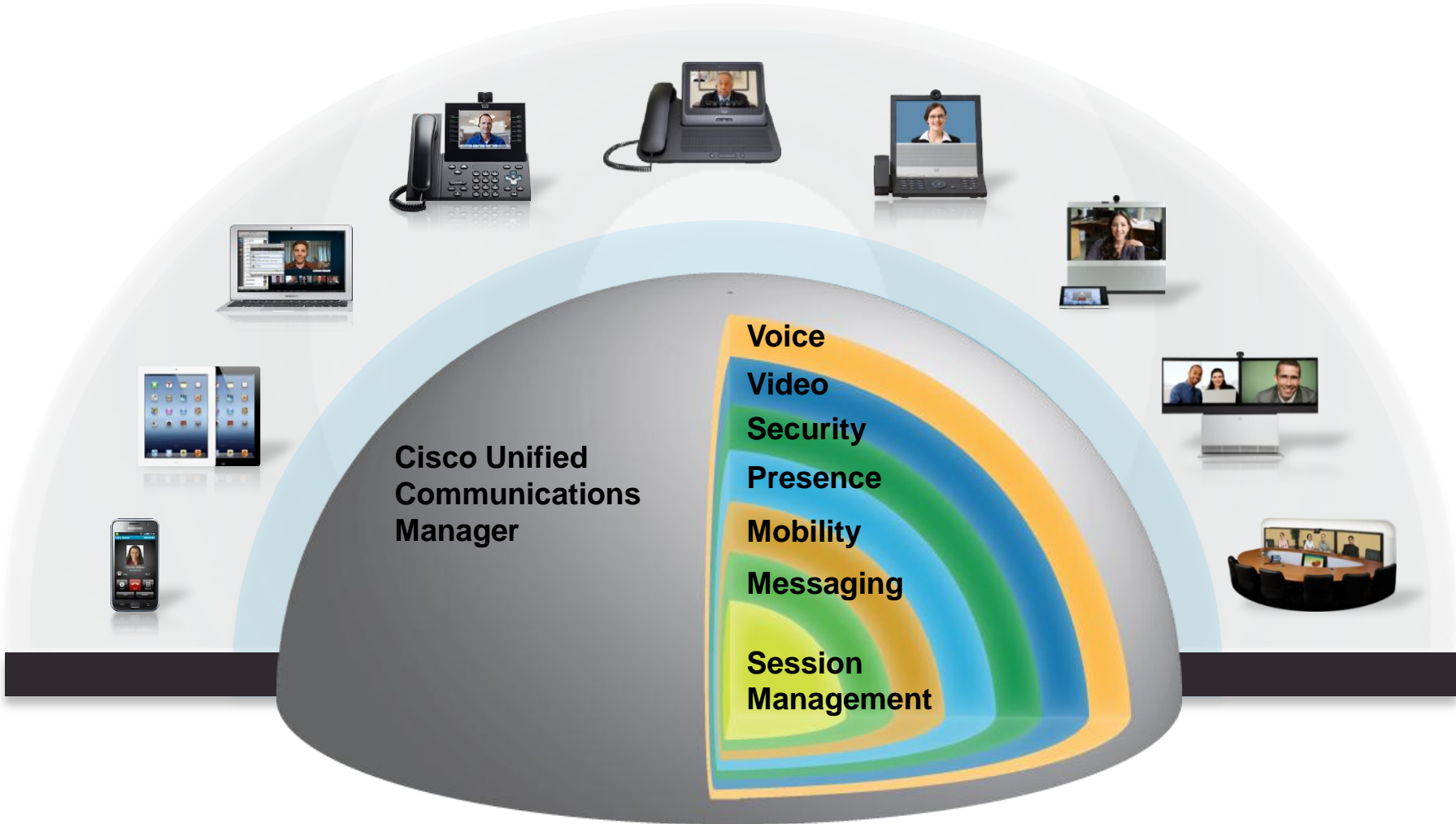
Cisco Unified Communications

The Heart of Cisco Collaboration



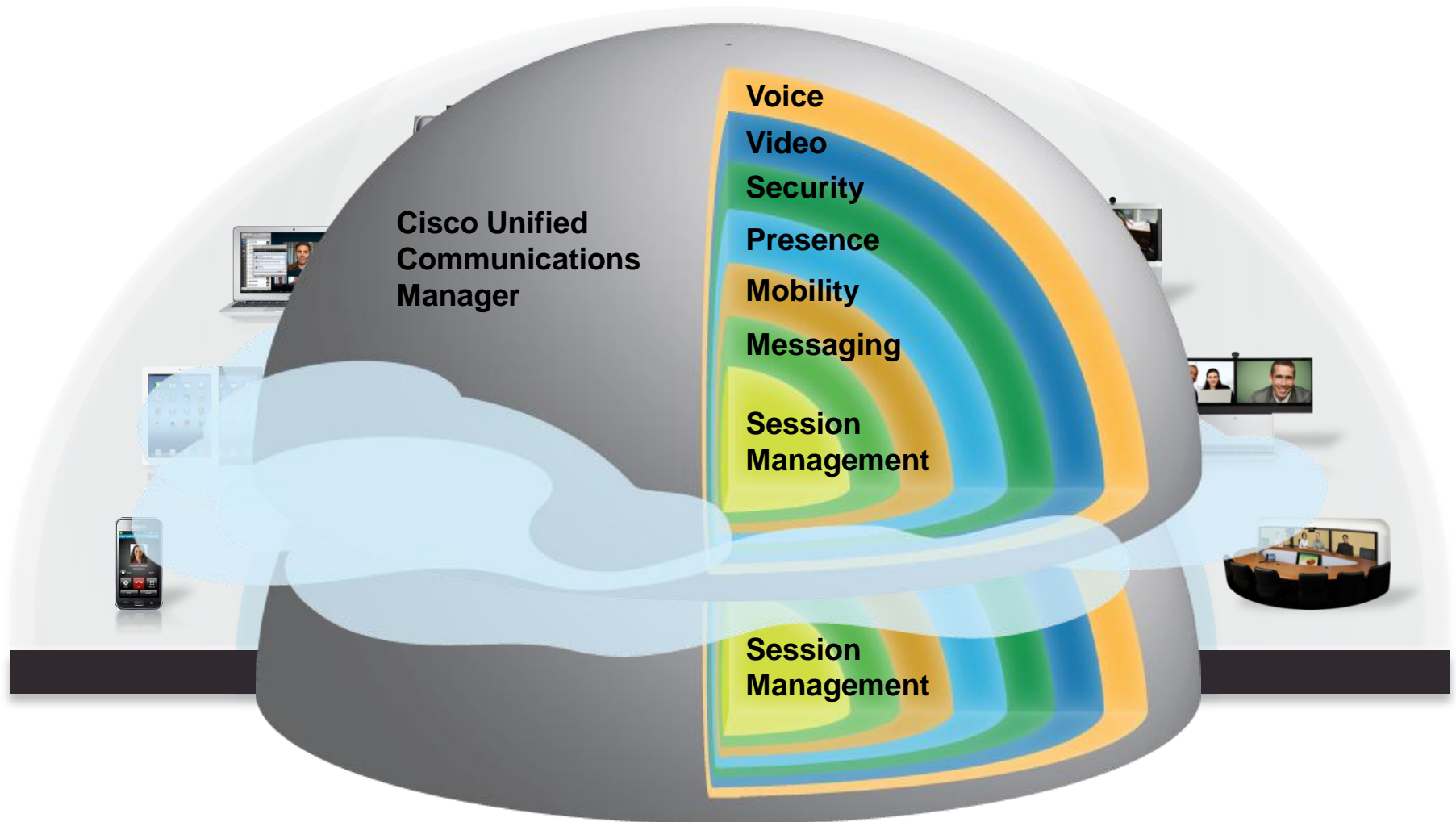
Cisco Unified Communications Manager

Uniting Applications and Endpoints



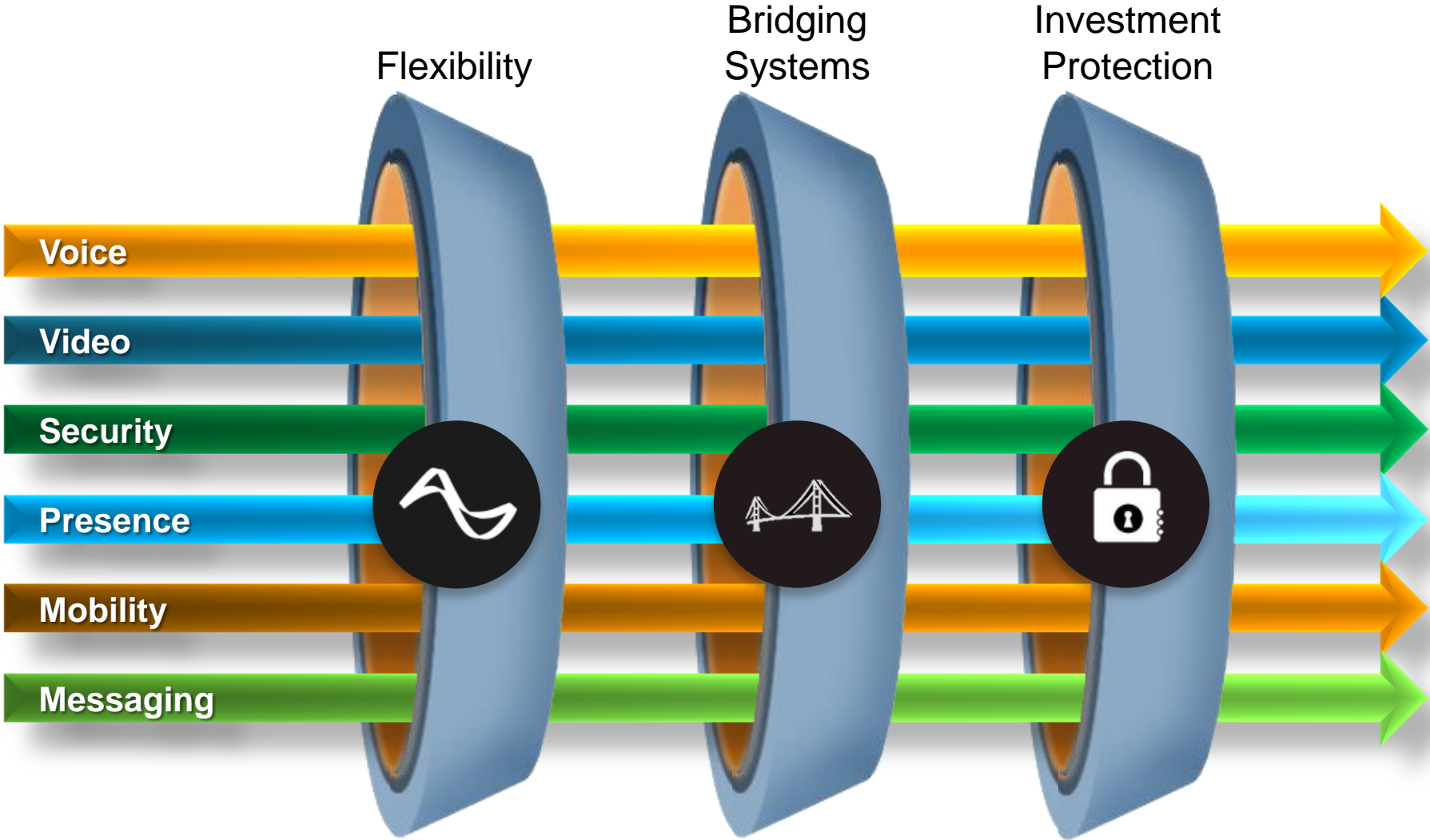
Cisco Unified Communications Manager

Available via the Cloud



Cisco Unified Communications 9.0

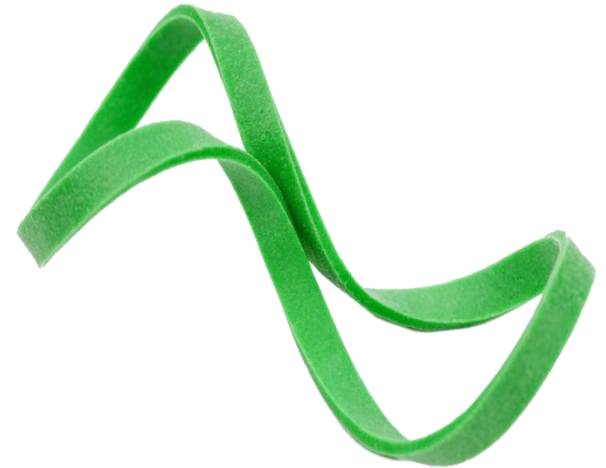
Key Benefits



Cisco Unified Communications 9.0

Flexible (Fits Your Business)

- User centric licensing & management
- Consistent experience across devices
 - Jabber feature parity
- Enhanced Mobility
 - New fixed mobile convergence options
- User account mix
 - Add locally configured and LDAP synchronized User accounts to the same cluster



Cisco Unified Communications 9.0

Bridging Systems

- Enabling Pervasive Video
 - Expanded video endpoint support
 - Call admission control for video
 - Email style end user dialing options
 - Enhanced security
- Reach more users and systems
 - Integrated IM & Presence
 - “Easy SIP” interoperability
 - Extend & Connect





Deeper Look at Cisco Unified Communications Release 9.0

Dan Keller

Technical Marketing Engineer



Agenda

- Hunt Pilot Queuing
- URI Dialing
- Extend & Connect
- Codec Preference
- Directory Enhancements
- Native Call Record
- Local Route Group Enhancement
- Mobility Updates
- Enhanced Locations Based Call Admission Control
- Other New Features
- Enterprise License Management (ELM)
- Cisco UC Manager IM & Presence

POLLING QUESTION:

What version of Cisco Unified Communications are you currently running?

- 8.x
- 7.x
- 6.x
- 4.x
- Other
- Not using Cisco Unified Communications

For those watching this briefing replay, please take this poll on the community: <http://communities.cisco.com/polls/1712>

Hunt Pilot Queuing



Hunt Pilot Queuing

- Queue (hold) callers while they wait for an employee to become available
- Play Announcements & Music in Queue
- Longest call waiting distribution
- Login/logout of queues and view queue information on Cisco IP Phones
- Enhanced call detail records and monitoring tools
- Enhances Unified CM Hunt Group feature

“Thank you for calling”

“Please hold a moment”

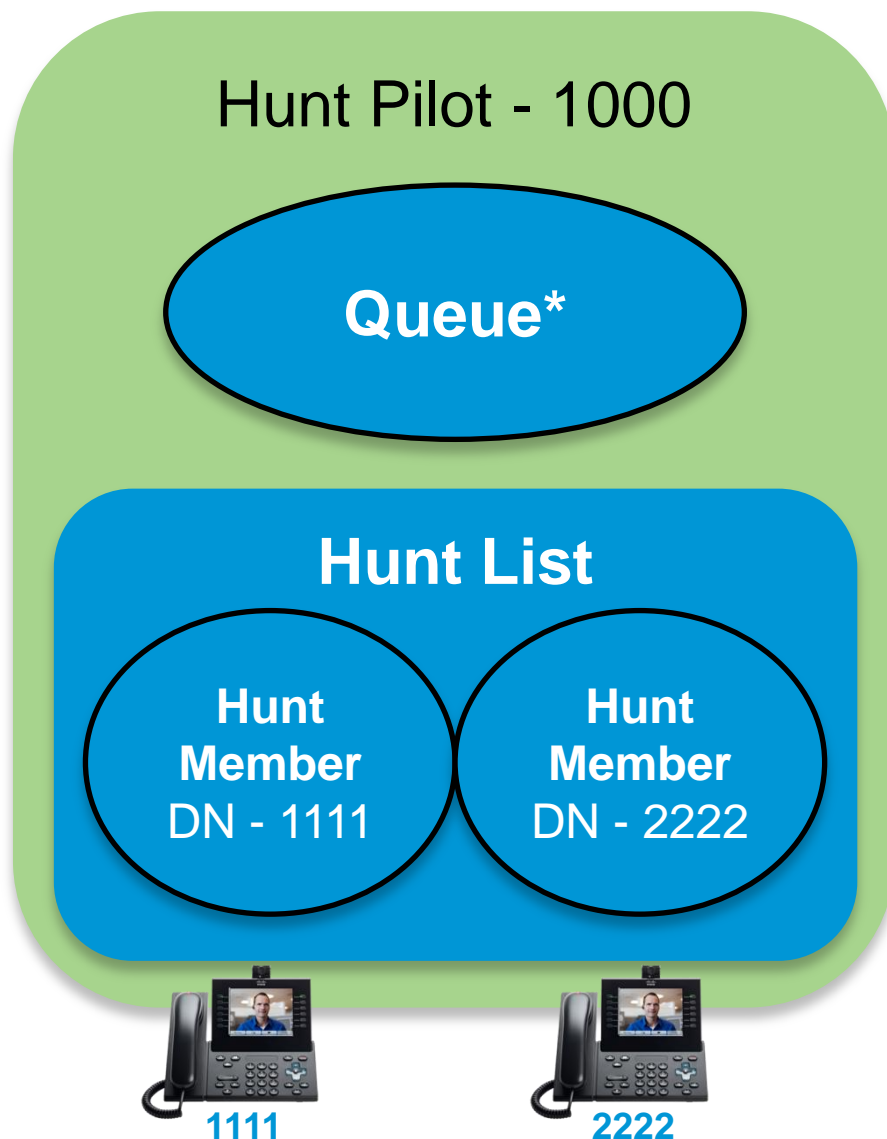
“Your call will be answered in the order in which it was received”



Unified CM

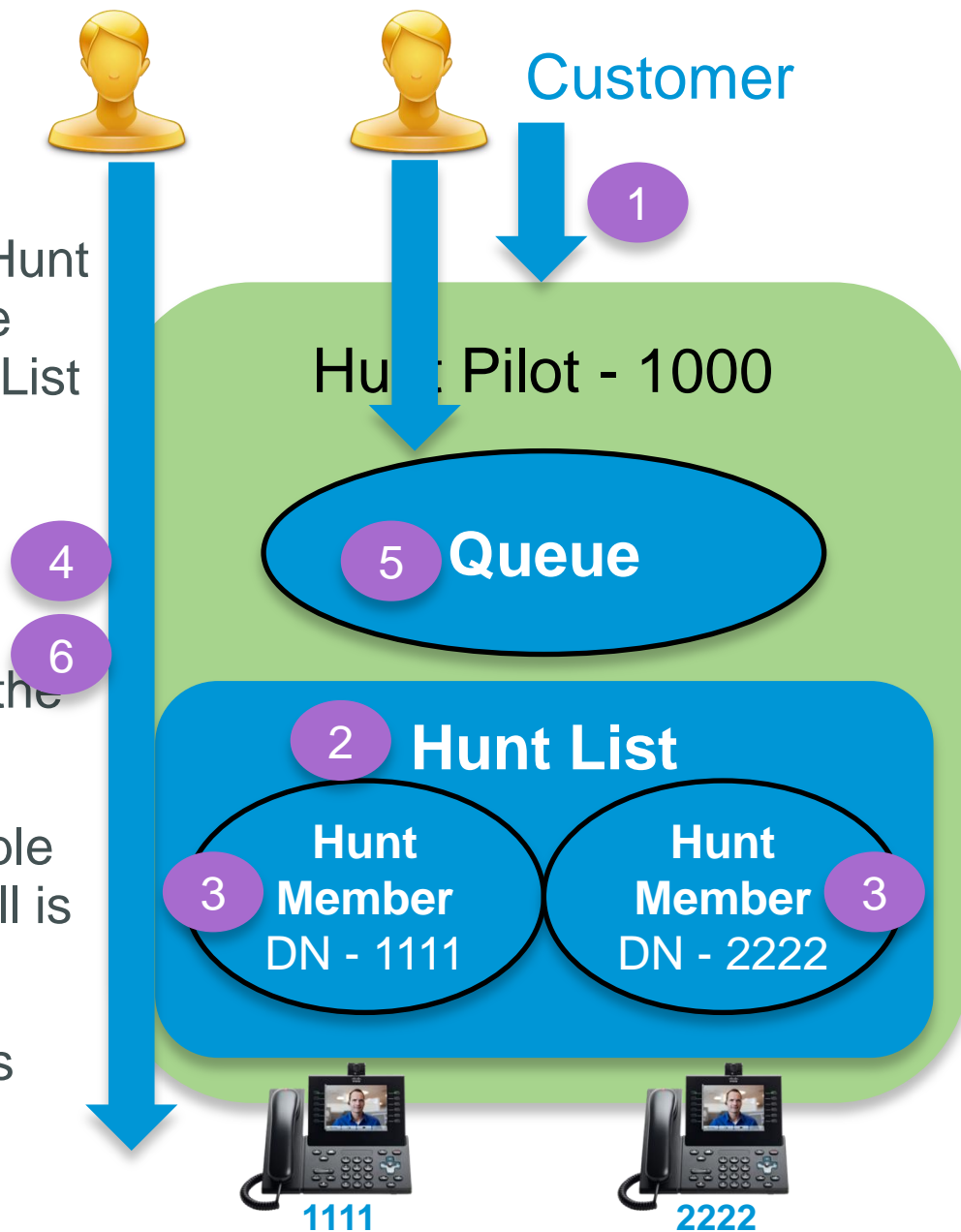
Terminology & Definitions

- **Hunt Pilot** – a special type of directory number used to distribute calls to Cisco IP Phones.
- **Queue*** – parking lot where incoming Callers wait to be connected to Hunt Members
- **Hunt List** – a logical group of one or more Hunt Members eligible to receive calls.
- **Hunt Member** – any DN eligible to receive hunt pilot calls.
- **DN** - directory number assigned to one or more Cisco IP Phones.

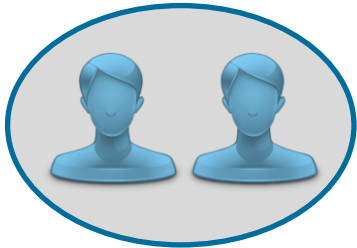


Typical Call Flow

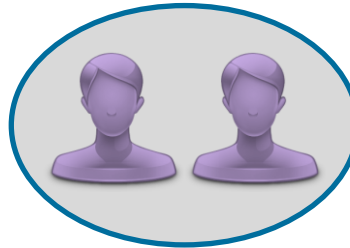
1. Customer dials Hunt Pilot
2. Unified CM determines which Hunt Members are eligible to receive the call by examining the Hunt List
3. Available Hunt Members are selected based on the hunting algorithm
4. If a Hunt Member is available, the Customer is connected
5. If no Hunt Members are available and queuing is enabled, the call is held in queue
6. When a hunt member becomes available, the Customer call is connected



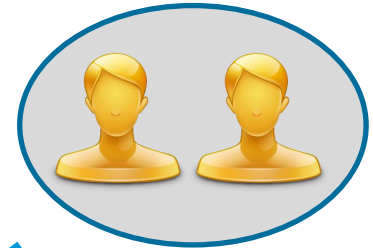
Queued Caller Selection



Hunt Pilot: 1000
Longest call waiting:
2 minutes



Hunt Pilot: 2000
Longest call waiting:
3 minutes



Hunt Pilot: 3000
Longest call waiting:
4 minutes

Longest
Caller
Waiting



- Callers are distributed to hunt members based on the longest caller waiting in queue
- When the hunt member is eligible to receive calls from multiple hunt pilot queues, the longest caller waiting across all eligible queues is routed to the hunt member first

Hunt Pilot Configuration

Queueing is enabled for each individual Hunt Pilot

Queueing

Queue Calls

Network Hold MOH Source & Announcements

Sample Audio Source



[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

4444

Full Queue Calling Search Space

SanJose



Maximum Wait Time in Queue*

900

(10 - 3600 seconds)

When maximum wait time is met:

- Disconnect the call
- Route the call to this destination

4444

Maximum Wait Time Calling Search Space

SanJose



When no hunt members are logged in or registered:

- Disconnect the call
- Route the call to this destination

4444

No hunt members logged in or registered Calling Search Space

SanJose



Initial Announcements

Can be played for all/queued calls:

Announcement Settings

Initial Announcement	Welcome Greeting Sample	View Details
Initial Announcement Played*	Always	
Periodic Announcement	Always	View Details
Periodic Announcement Interval*	300	(10 - 300 seconds)
Locale Announcement*	English United States	

Periodic announcement interval (default is 30 seconds):

Announcement Settings

Initial Announcement	Welcome Greeting Sample	View Details
Initial Announcement Played*	Only for queued calls	
Periodic Announcement	Wait In Queue Sample	View Details
Periodic Announcement Interval*	30	(10 - 300 seconds)
Locale Announcement*	English United States	

Cisco IP Phone Integration

- Control eligibility to receive Hunt Group calls using Hlog (login/logout)
- Hunt Members who do not answer hunt group calls are automatically logged out
- Queue Status displays real-time information for each Hunt Pilot based on Hunt Member configuration



Cisco Contact Center Portfolio Summary

Cisco Unified Communication Manager Queuing

- Basic solution with Hunt Groups and Queue functionality for small workgroups

Cisco Unified Contact Center Express

- All-in-one, easy to deploy and use multi-channel solution for small and medium sized contact centers

Packaged Contact Center Enterprise

- Pre-packaged contact center solution for medium and large sized enterprise contact centers

Cisco Unified Contact Center Enterprise

- Highly customizable contact center solution for largest enterprise contact centers

URI Dialing



URI Routing/Dialing

- Why

- Native dialing method in SIP based video equipment

- Extend support for SIP video endpoints registered with Communications Manager

- Unambiguous dialing from directories

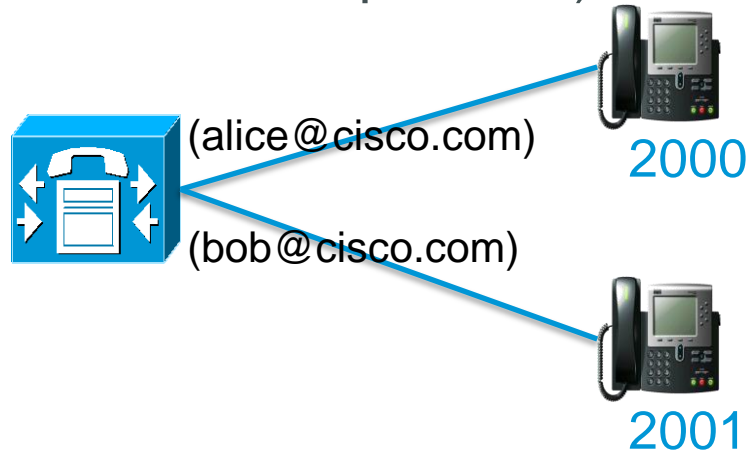
- better integration with other call controls where URI dialing is the native dialing habit (e.g. VCS)

- Enables easier B2B video call routing

URI Dialing

The Concept

- DN is aliased by alpha URI
- In CUCM all endpoints will still have a DN
- Alpha URI can be associated with DN on any device (not only SIP)
- Phones always register via the DN (do not necessarily even know that there is an associated alpha URI)



Creation of Alpha URIs

- “Directory URI” can be defined on enduser page
- if a primary DN is defined the Directory URI setting is automatically set on the DN as primary URI

End User Configuration

Save Delete Add New

Status
Status: Ready

User Information

User Status: Active LDAP Synchronized User
User ID*: jkrohn
PIN:
Confirm PIN:
Last name*: Krohn
Middle name:
First name: Johannes
Directory URI: jkrohn@home.org
Telephone Number: +4961007739764
Mail ID: jkrohn@home.org
Manager User ID:

Directory Number Associations

Primary Extension: \+4961007739764 in DN

Directory Number Configuration

Save Delete Copy Reset Apply Config Add New

Status
Status: Ready

Directory Number Information

Directory Number*: +4961007739764
Route Partition: DN
Description:

Directory URIs

Primary	URI	Partition	Edit/Remove
<input checked="" type="checkbox"/>	jkrohn@home.org	Directory URI	Edit End User
		< None >	

Add Row

Manual Creation Alpha URIs

- Up to 5 alpha URIs can be associated with any DN
- Alpha URIs can be in any partition (not necessarily the same as the DN)
- One alpha URI is marked as primary
- Primary URI is used when **blending identity** for that DN

Directory Number Information

Directory Number*	\+4961007739764
Route Partition	DN
Description	
Alerting Name	Johannes Krohn
ASCII Alerting Name	Johannes Krohn

Directory URIs

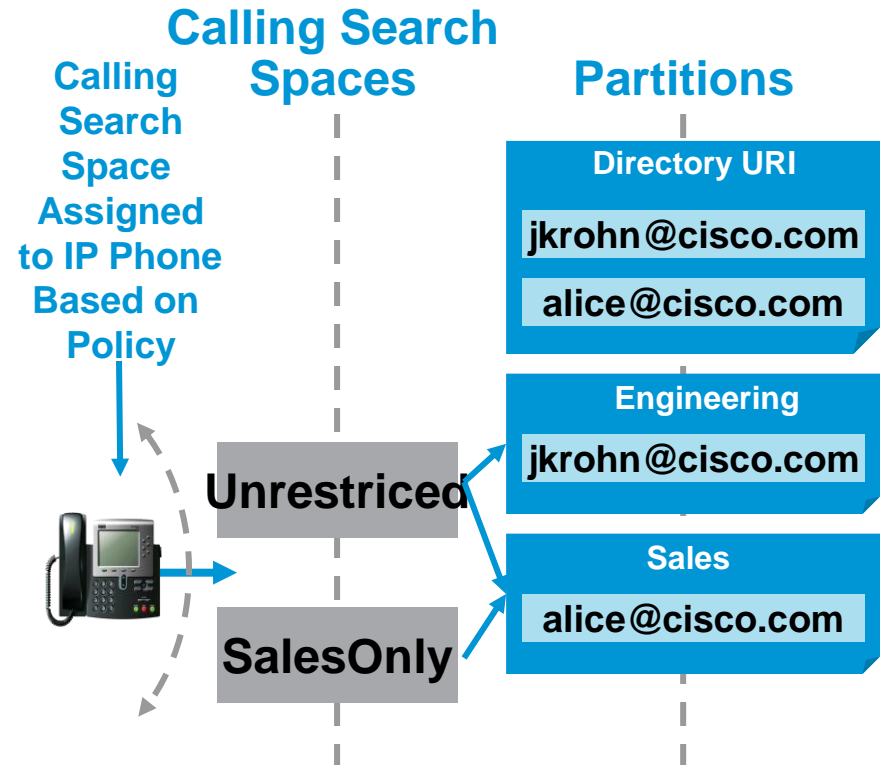
Primary	URI	Partition	Remove
<input checked="" type="radio"/>	jkrohn@home.org	DN	
<input type="radio"/>	jkrohn-1@home.org	DN	
<input type="radio"/>	jkrohn-2@home.org	DN	
<input type="radio"/>	jkrohn-3@home.org	DN	
<input type="radio"/>	jkrohn-4@home.org	DN	

Add Row

No more alpha URIs can be added (maximum reached)

Building CoS for Alpha URIs

- URI's follow standard partition/CSS assignment and resolution
- Assigned CSS for a device/line used to resolve dial string



Directory URIs

Primary	URI	Partition	Edit/Remove
<input checked="" type="checkbox"/>	jkrohn@home.org	Directory URI	Edit End User
	<input type="text" value="jkrohn@home.org"/>	<input type="text" value="Engineering"/>	<input type="button" value=""/>

Multiple Cluster Inter-cluster Lookup Service

- Replication Overview:

A URI is owned by one cluster

Each cluster replicates its URIs and route string to its neighbors.

HUB and spoke replication topology ensures a fully connected network.

- Routing Overview:

Route string is retrieved for the URI

Route string is routed through the SIP routes to a SIP trunk

If necessary, process repeats from cluster to cluster until it gets to home cluster



john@cisco.com

1) Dials
chris@cisco.com



UCM Cluster 1
route: sjc.cisco.com

3) Route call to rtp



UCM Cluster 2
route: rtp.cisco.com

4) Route call on cluster



chris@cisco.com

Inter-cluster Lookup Service

john@cisco.com => sjc.cisco.com
chris@cisco.com => rtp.cisco.com
mike@cisco.com => sea.cisco.com

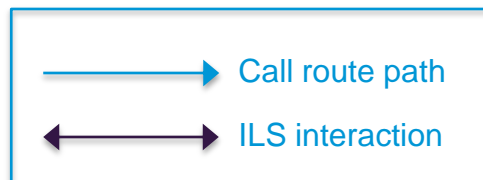
2) Lookup chris@cisco.com
Returns rtp.cisco.com



UCM Cluster 3
route: sea.cisco.com



mike@cisco.com



Extend & Connect



Cisco Extend & Connect

Common Use Cases

Cisco Jabber with 3rd-party PBX

- Customer wants to deploy Cisco Jabber as the desktop standard for IM & Presence, but has not yet decided to adopt Cisco IP Devices

Mobile Worker/Remote Agent

- Customer wants to use Jabber to make and receive calls using a home or hotel phone because the network connection does not support VOIP
- CAD agent's location does not support VOIP/Soft client

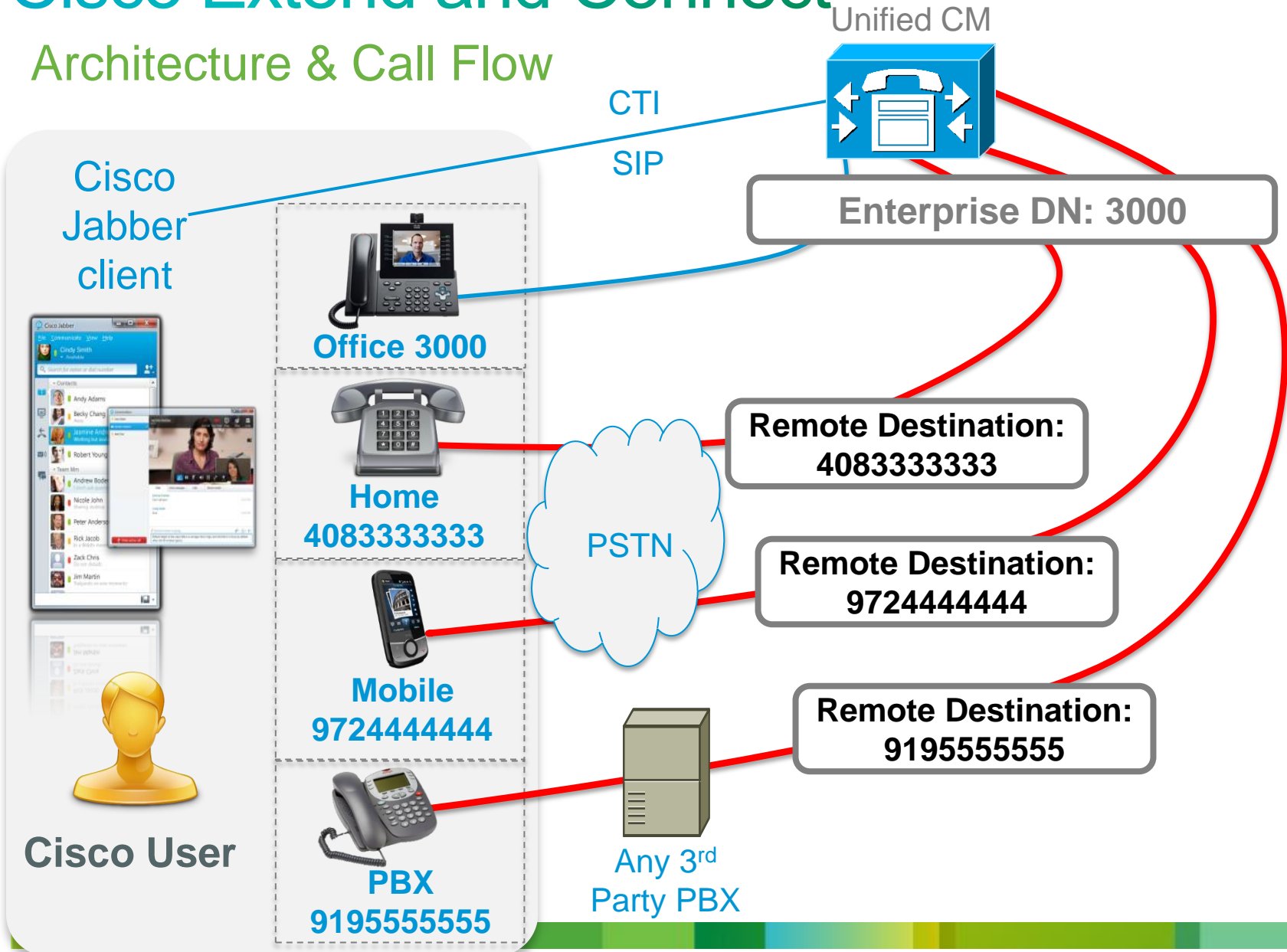
Cisco Extend & Connect

Benefits

- Standardizes call control across the Enterprise
- Centralizes applications
 - Simplifies integration points and network topology
- Centralizes licensing
- Centralizes call detail records for accounting, and billing
- Accelerates application deployment
- Preserves existing investments in legacy PBXs and devices
- Enables migration to Cisco IP Devices over time

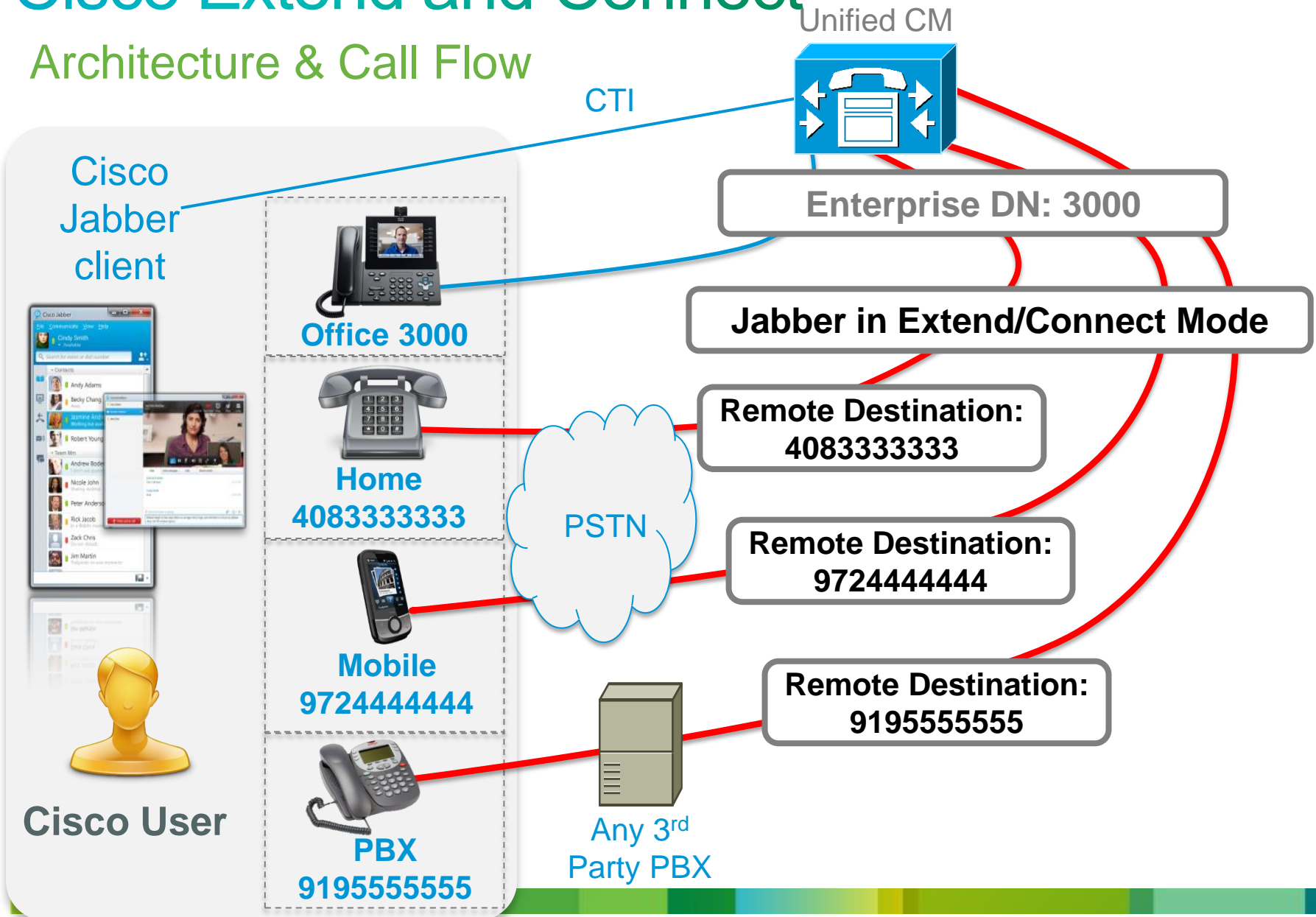
Cisco Extend and Connect

Architecture & Call Flow



Cisco Extend and Connect

Architecture & Call Flow



Cisco Extend & Connect

Supported features

- Receive Incoming enterprise calls
- MakeCall (DVO-Reverse)
- Disconnect
- Hold/Retrieve
- Redirect/Forward
- Call Forward All
- Do Not Disturb
- Consult Transfer, Conference

Codec Preference



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*

Description*

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*

Description*

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)
- Allows calls to select G.729 over G.711 for 64Kbps regions

Region Information
Name*

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
<input type="text" value="DataCenter1"/> <input type="text" value="DataCenter2"/> <input type="text" value="Default"/> <input type="text" value="Remote1"/>	<input type="text" value="Custom low loss"/>	<input type="text" value="8 kbps (G.729)"/>	<input checked="" type="radio"/> Keep Current Setting <input type="radio"/> Use System Default <input type="radio"/> None <input type="text" value=""/> kbps

Directory Enhancements



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
- 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

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

Find and List Users

+ Add New Select All Clear All Delete Selected

Status

i 6 records found

User (1 - 6 of 6) *Rows*

Find User where First name ▾ begins with ▾

<input type="checkbox"/>	User ID ^	First Name	Last Name	Department	User Status
<input type="checkbox"/>	krati		srivastav		Active Local User
<input type="checkbox"/>	ginny	ginny	weasly		Active LDAP Synchronized User
<input type="checkbox"/>	harry	harry	potter		Active Local User
<input type="checkbox"/>	hermaoinee	hermaoinee	granger		Active LDAP Synchronized User
<input type="checkbox"/>	neville	neville	longbottom		Active LDAP Synchronized User
<input type="checkbox"/>	ron	ron	weasly		Active LDAP Synchronized User

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

LDAP and Manual User Support

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

End User Configuration

Save **X** Delete **+** Add New

Status
Status: Ready

User Information

User Status: Active LDAP Synchronized User

User ID: harry

PIN: [Redacted] **Edit Credential**

Confirm PIN: [Redacted]

Last name*: potter

Middle name:

First name: harry

Directory URI:

Telephone Number:

Mail ID:

Manager User ID:

Department:

User Locale: < None >

Associated PC:

Digest Credentials: [Redacted]

Confirm Digest Credentials: [Redacted]

Convert User Account

Convert LDAP Synchronized User to Local User

Service Settings

Home Cluster

License User for Unified CM IM and Presence (Configure IM and Presence in the associated UC Service Profile)

UC Service Profile: < None > [View Details](#)

Device Information

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

LDAP and Manual User Support

End User Configuration

Save Delete Add New

- Status -

Update successful

User Information

User Status	Active Local User
User ID*	harry
PIN
Confirm PIN
Last name*	potter
Middle name	
First name	harry
Directory URI	
Telephone Number	
Mail ID	
Manager User ID	
Department	
User Locale	< None >
Associated PC	
Digest Credentials
Confirm Digest Credentials

- Service Settings -

Home Cluster

License User for Unified CM IM and Presence (Configure IM and Presence in the associated UC Service Profile)

UC Service Profile < None > [View Details](#)

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

Native Call Record



Native Call Recording

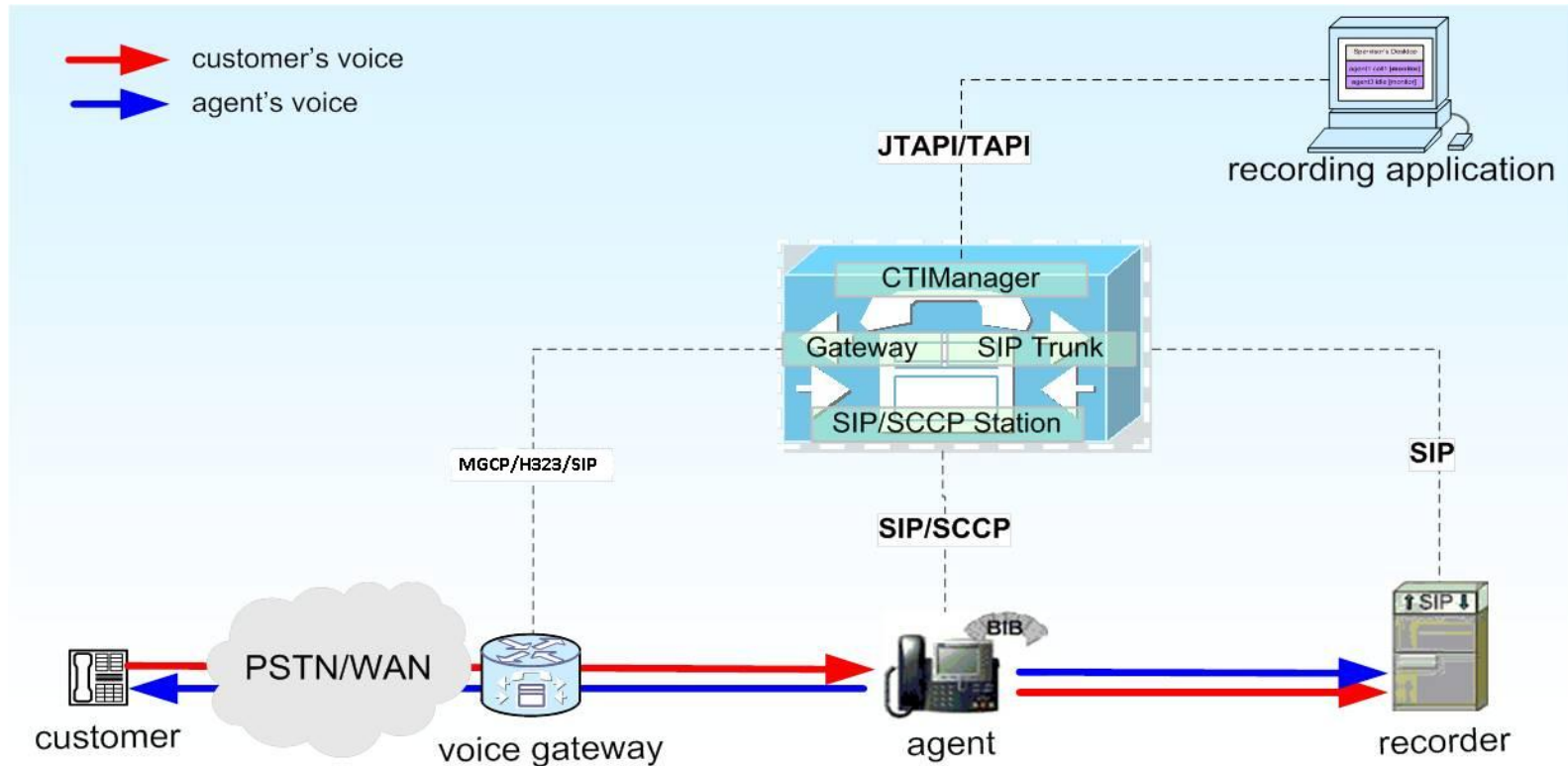
- Call recording was introduced in CUCM 6.0 release
- Secure call recording was introduced in 8.0
- CUCM 8.5 integrated with MediaSense (complete Cisco solution)

- 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

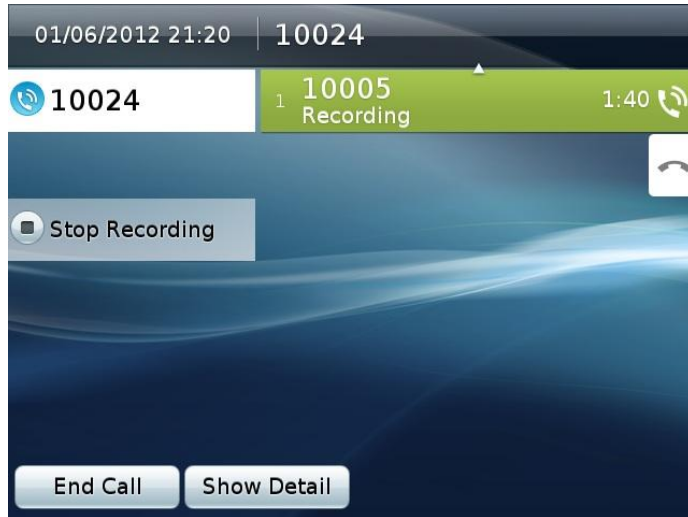
- CUCM 9.0 provides user based call record using soft key, Programmable Line Key (PLK) or Feature Control Policy
- The record key is a toggle
 - First press starts recording
 - Second press stops recording
- Recording status displayed on the phone screen
- Recording can be started/stopped by any combination of phone or CTI control
- Must use phone Built in Bridge (BIB)
- Enable recording on the line appearance and configure tones

Native Call Recording



- 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



99XX:
SIP



79XX
SCCP or SIP

Local Route Group Enhancement



POLLING QUESTION:

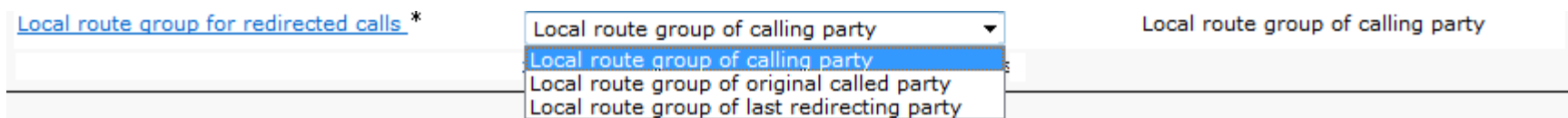
Are you using LRG to route calls?

- Yes, most call routing occurs using LRG
- Yes, a few of my route patterns route using LRG
- No
- No, LRG is too limiting for my deployment
- I do not understand LRG enough to deploy

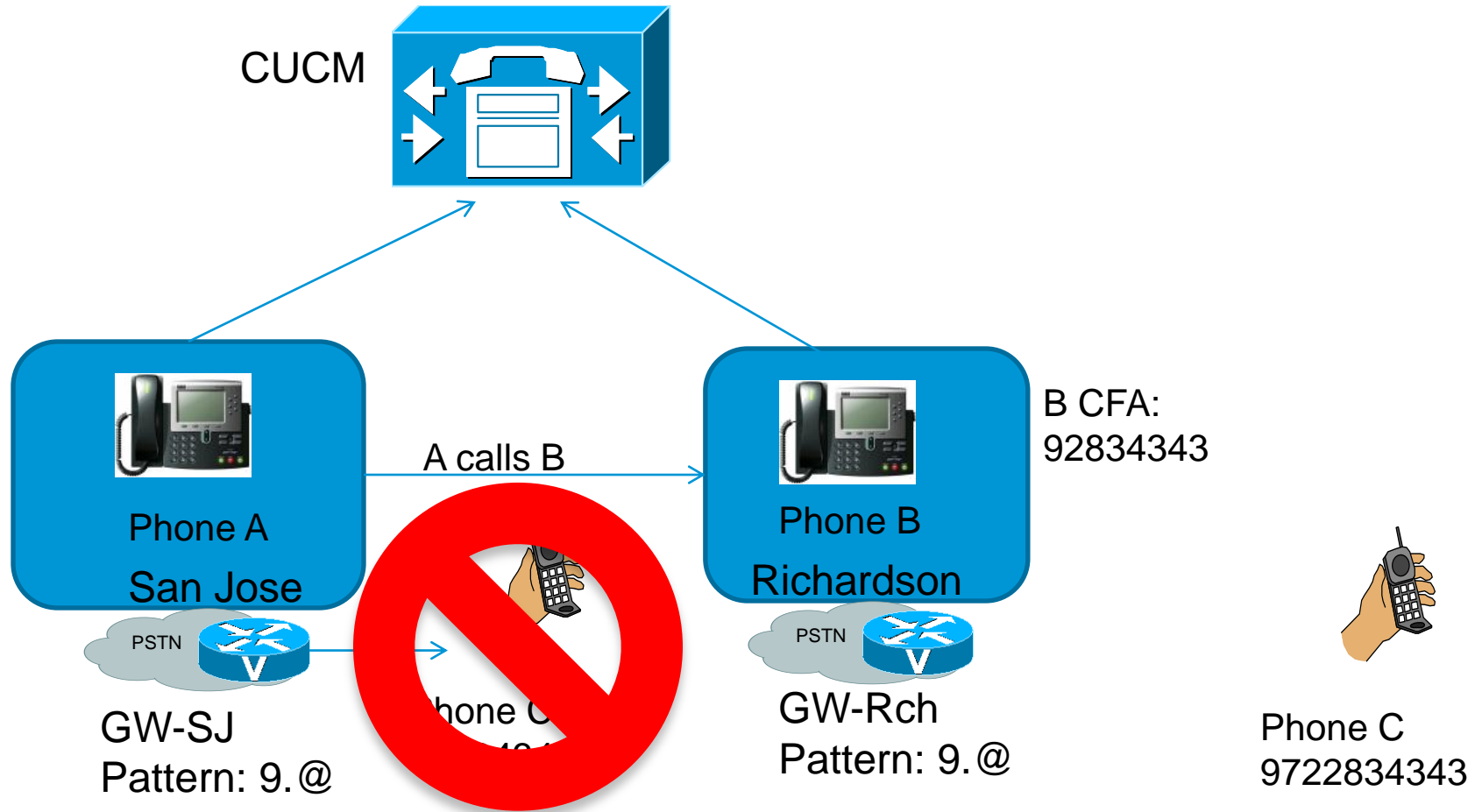
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Local Route Group Enhancement

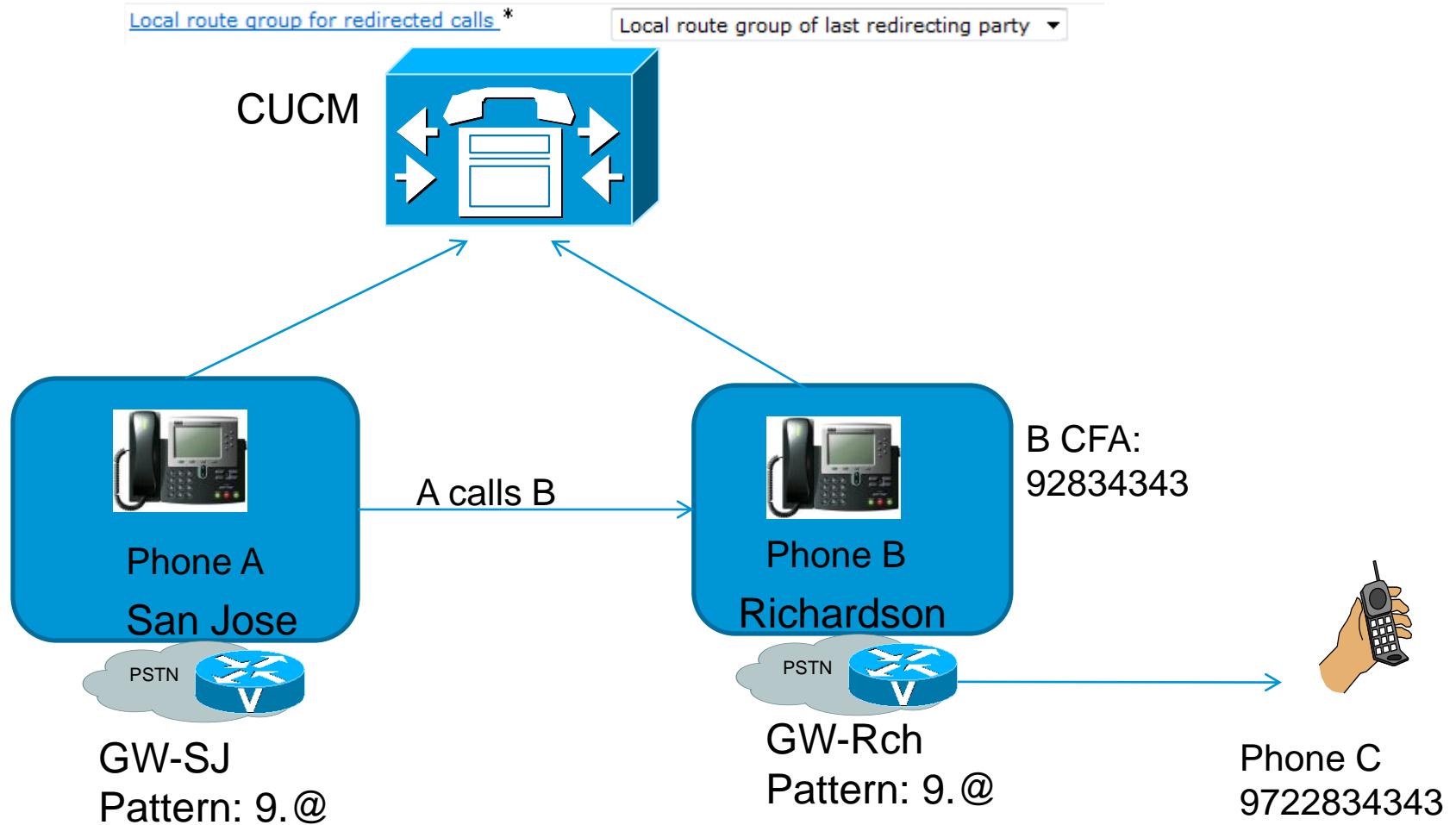
- If a customer is using LRG, forwarding operations are forwarded based upon the **calling party's** LRG
- For **Call Forward All**, users set their forward destination based on their dialing habits
- Issue: The calling party's dialing rules does not always match the called party's dialing rules
- System wide setting...not device/site specific



Local Route Group Enhancement



Local Route Group Enhancement



Mobility Updates



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

Single Number Reach Voicemail

The Problem:

When a call is extended to a SNR destination, CUCM cannot determine if the call was answered by the user or VM

Based on “Answer Too Soon”

Time based mechanism is unreliable and requires tweaking for each service provider

Solution

CUCM 9.0 introduces a new parameter called “Single Number Reach Voicemail Policy”

Can be either Timer Controlled or User Controlled

Timer Controlled uses existing “Answer Too Soon” timer

User Controlled requires the user to send a signal (DTMF) to accept the call

Single Number Reach Voicemail

Clusterwide Parameters (System - Mobility Single Number Reach Voicemail)

Policy * Timer Control ▾

User Control Delayed Announcement Timer *

User Control Confirmed Answer Indication Timer *

- Delayed Announcement Timer: How long to wait to play message
- Confirmed Answer Indication Timer: How long to wait for DTMF

Remote Destination Information

Name

Destination Number*

Single Number Reach Voicemail Policy* Use System Default ▾

Answer Too Soon Timer* Use System Default

Answer Too Late Timer* Timer Control

Delay Before Ringing Timer*

Remote Destination Profile* RDP-dakeller ▾

Mobile Phone

Enable Mobile Connect

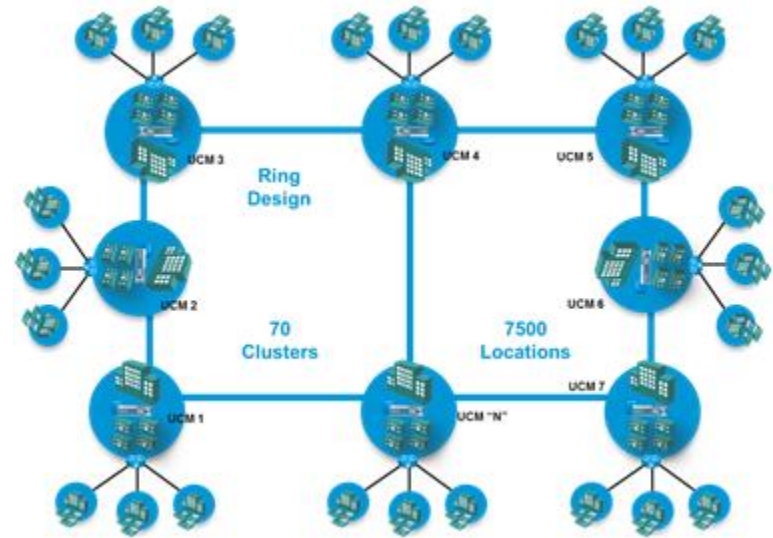
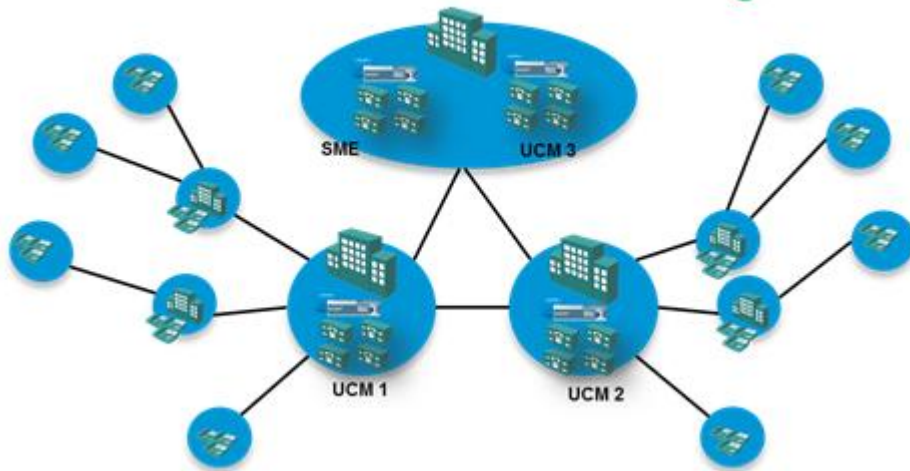
Enhanced Locations Based Call Admission Control



Enhanced Locations Based CAC

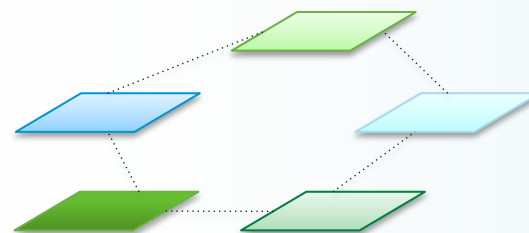
- CUCM 9.0 enables the following features:
 - Efficient bandwidth management for clusters that share physical sites
 - Allow administrator to model complex topologies including multi hop WAN
 - Multiple CUCM clusters can share end to end BW deductions
 - Support for intra-location bandwidth limits

Multi-Cluster SME Design

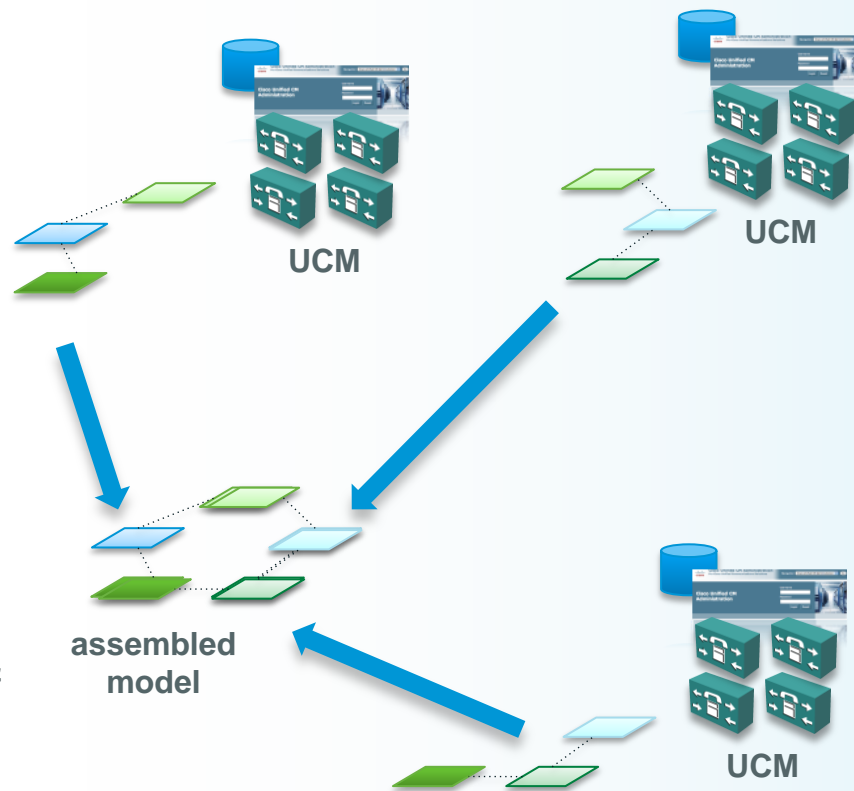


Topology Discovery

- Graphs require all clusters and call agents to have a global model of network topology in order to compute the path from source to destination
- Architecture will support
 - Manual configuration of full graph in each cluster
 - Consultation to a centrally-configured Location Bandwidth Manager (LBM)
 - Topology assembly
- With topology assembly, call agents replicate their local view of the topology and immediate neighbors
- Receiving call agents assemble all learned pieces into a complete view of the network model



ACTUAL

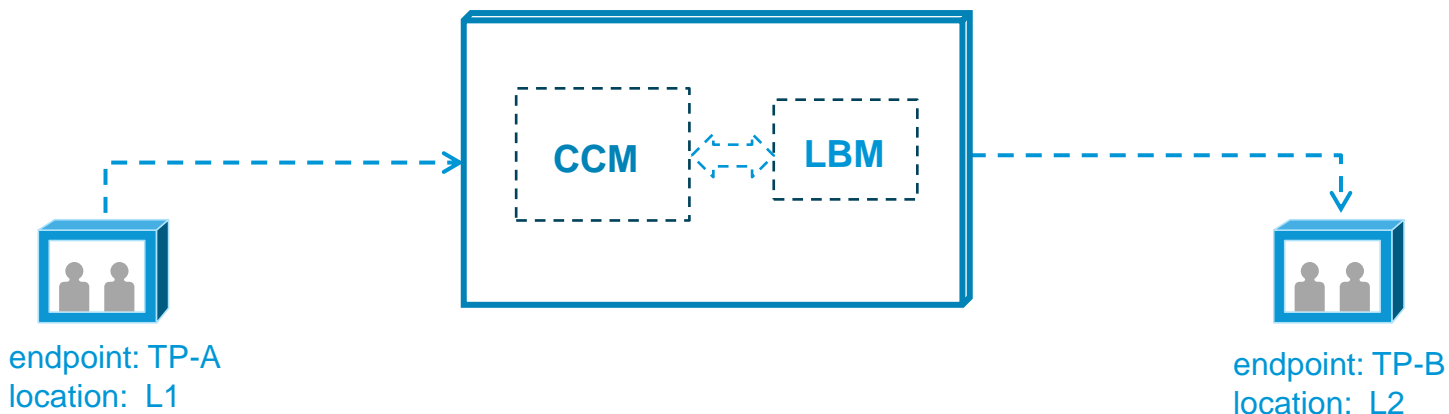


MODELS

Immersive Video Bandwidth



Location	L1	Edge	L1 – L2	Location	L2
audioBW		audioBW		audioBW	
videoBW		videoBW		videoBW	
immersiveBW	- 4M	immersiveBW	- 4M	immersiveBW	- 4M



Other New Features



Secure EMCC

- EMCC now supports authenticated/encrypted phones
- Same base EMCC configuration as 8.x
- Each CUCM must export/import Tomcat/TFTP/**CAPF** certs

Bulk Certificate Export

Export Close

Status

Status: Ready

Export Certificate Type

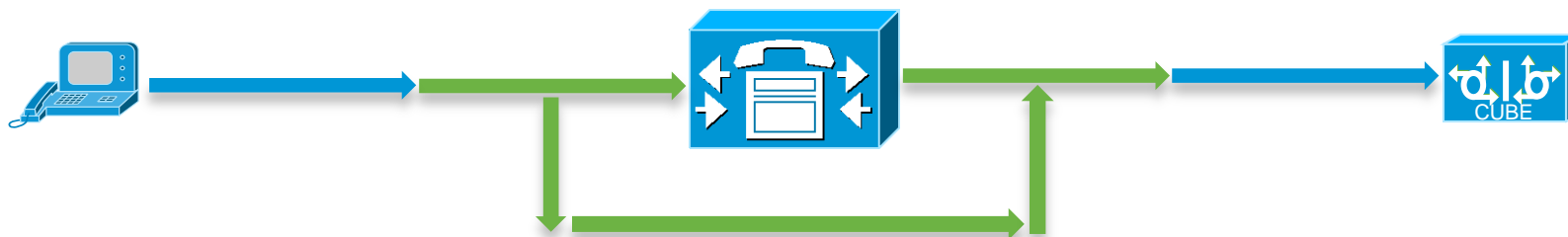
Certificate Type* Tomcat Tomcat Tftp **Capf** All

*- indicates required item.

How are SIP Transparency and Normalization Enhanced in UCM 9.0?

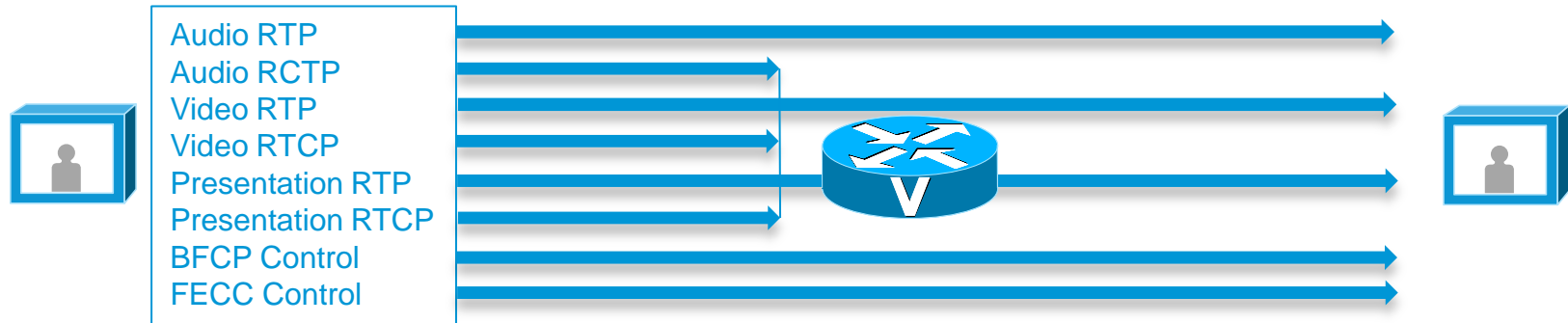


SIP Normalization scripts may be configured for SIP line devices for inbound or outbound normalization

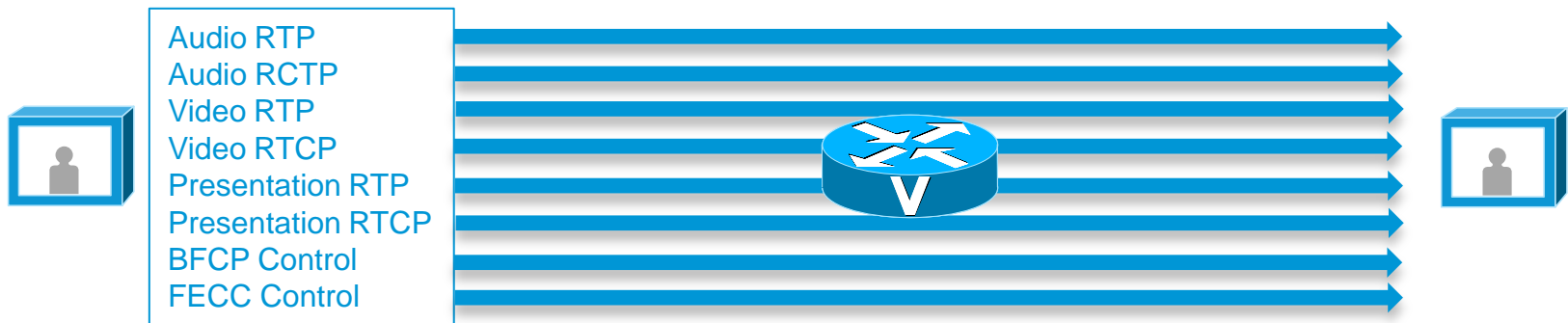


SIP Transparency may be configured for any combination of SIP line and SIP trunk devices

RTCP and BFCP Transparency

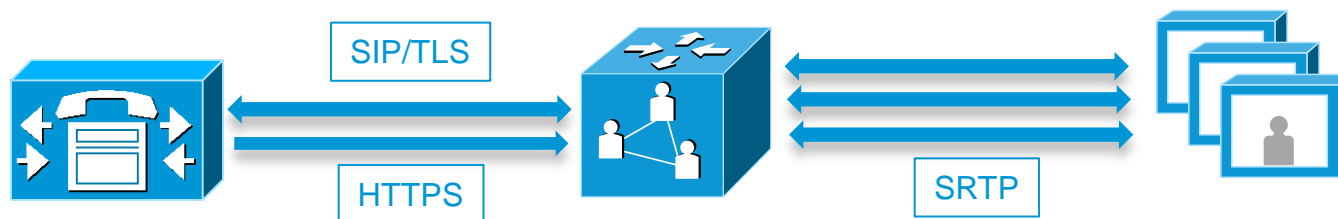


UCM 9.0 explicitly opens additional MTP ports to allow additional media and control data to flow through



UCM 9.0 preferentially selects RTCP-capable MTPs and RSVP agents, which also allow RTCP to flow through

Secure Video Conferencing



Configuration for Secure Video Conferencing:

- Configure MCU to use Encryption, including SIP/TLS and SRTP
- Import Unified CM certificates into MCU trust store
- Configure Unified CM to use SIP/TLS, SRTP and HTTPS with MCU
- Import MCU certificate into Unified CM trust store

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

New User Pages

The screenshot displays the Cisco Unified Communications Manager User Options interface. The browser address bar shows the URL `https://rcdn6-vm63-223/ucmuser/main`. The navigation menu includes Home, Contacts, Directory, Line Settings, Phone Settings, and Services. The main content area is divided into two sections:

Currently Selected Phone and Line

Select a Phone: SEP111111111111
Select a Number: 1111
Model: Cisco 7965
MAC Address: 111111111111

General Settings

Forward all calls on line 1111

Phone Button Configurations

Button #	Button Type	Assignment
1	Line	1111
2	Line	1112
3	Speed Dial1	<input type="text"/>
4	Speed Dial2	<input type="text"/>
5	Speed Dial3	<input type="text"/>
6	Speed Dial4	<input type="text"/>

Buttons: Save, Reset

E911 Teleworker and Off-Premise Users

Simplify CER w/ Intrado remote user location entry

Provide 'agreement' and 'disclaimer' regarding 911 for remote users

Upon registration, user must accept the terms of use and select their current location

User does not accept terms of use, admin can block all calls on phone

Support for 99xx/89xx, 79xx, CUPC

Allows easy selection of previously defined locations

Provides link to define new locations to add to a user's list

Only applies to off-prem users with CER and Intrado

Trace Enhancements

Pre-9.0, CUCM would create 2 sets of trace files:

- SDI
- SDL

SDI is the application output from each process

SDL is process to process communications

No way to tie a specific process event to the application output

CUCM 9.0 has consolidated the SDI into SDL trace files

Consolidation allows for better grouping of SDL signal to application output.

Allows for reduction of common/repeated information

Shows multithreading of events as they are occurring

Allows Cisco to better correlate events between nodes for easier call tracking

POLLING QUESTION: I want to upgrade my Cisco UC Manager to 9.0 ...

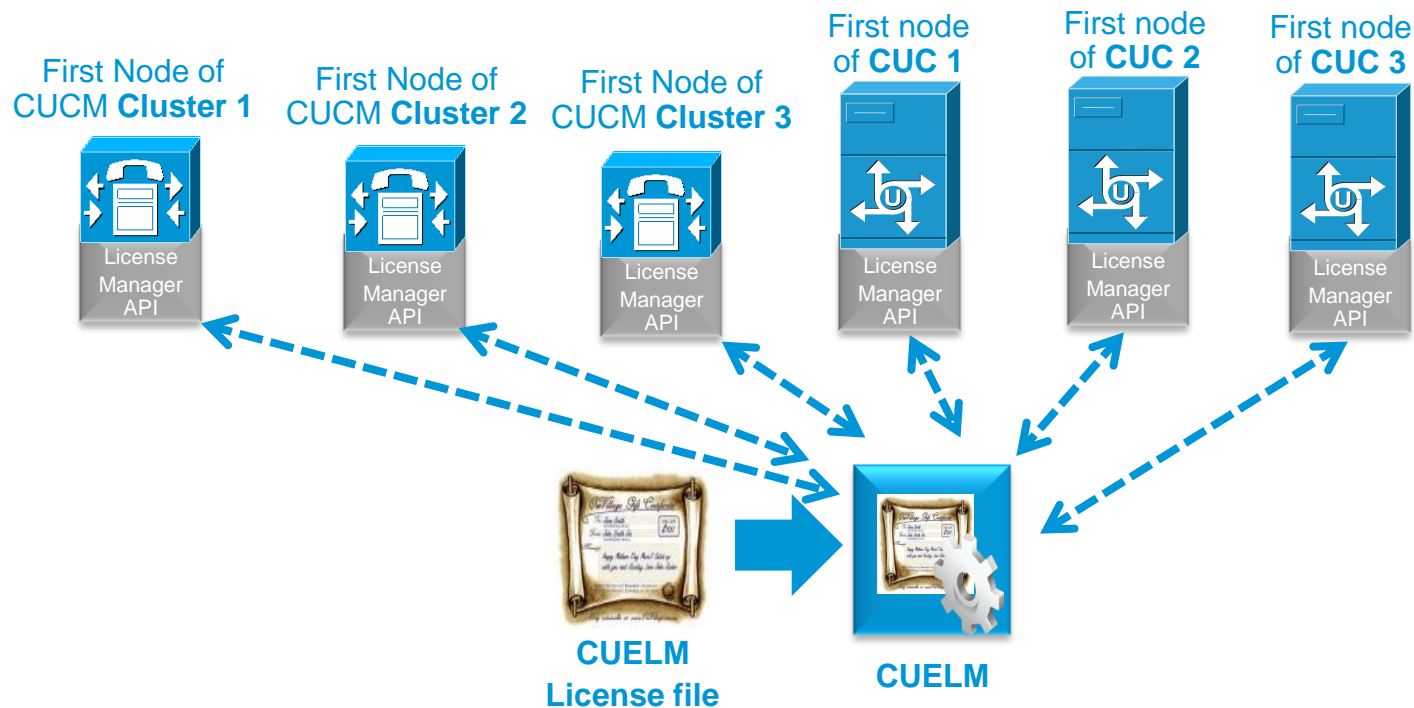
- Within 3 months to get the new features
- In the next 3-6 months to get the new features
- After the first Maintenance Release is released
- In 6-12 months because there are no compelling features

For those watching this briefing replay, please take this poll on the community: <http://communities.cisco.com/polls/1714>

Enterprise Licensing Manager (ELM)



Cisco Unified Enterprise License Architecture 9.0



- CUELM provides for centralized license management and pooling
- Minimize re-hosting and eliminates dependency license versions
- Manual license file upload onto CUELM
- License Manager API added to CUCM 9.0 and CUC 9.0 to interact with CUELM

Enterprise License Manager Dashboard

The screenshot shows the Cisco Enterprise License Manager Dashboard in a Mozilla Firefox browser. The browser's address bar displays the URL `bldr-ccm36/elm-admin/Faces/main.xhtml`. The dashboard header includes the Cisco logo and the text "Cisco Unified Communications Enterprise License Manager". A navigation menu on the left lists sections: Monitoring (Dashboard, License Usage), License Management (Licenses, Add or Upgrade Licenses), Inventory (Product Instances), and Administration.

The main content area is titled "Monitoring > Dashboard" and "Dashboard". It contains four panels:

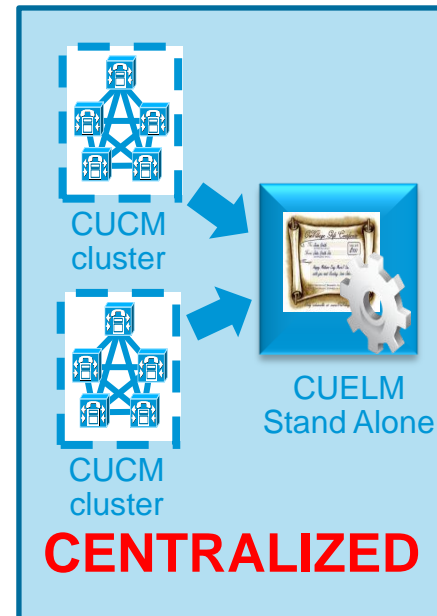
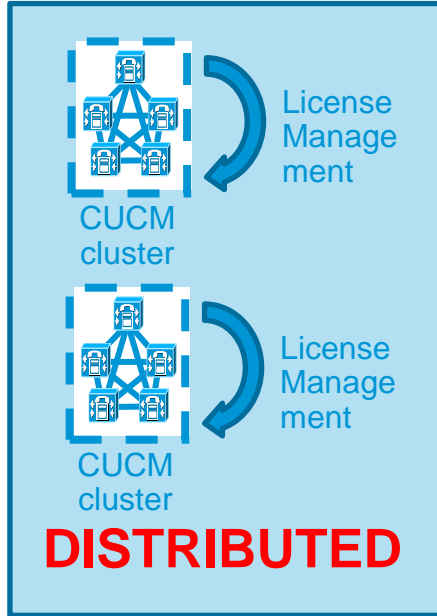
- Overview**:
 - Product Instances: 2
 - Last License Update: --
 - Last Synchronization: 2012-Feb-06 00:13:13
- License Usage**:

Type	Required
CUWL Premium (9.0) - Unified CM	100
Advanced (9.0) - Unified CM	50
Basic (9.0) - Unified CM	70
Essential (9.0) - Unified CM	50
Telepresence Room (9.0) - Unified CM	50
CUWL Premium Messaging (9.0) - Unity Connection	0
SpeechView Pro (9.0) - Unity Connection	0
- License Alerts**:

Type	Status
No data available	
- Synchronization Failures**:

Name	Failure Reason	Last Success
No data available		

License Migration Models with CUELM



- CUCM or 8.X or earlier is a distributed license management model
- CUCM 9 and later provides for both distributed and centralized license management model of which centralized license model provides the following benefits:
 - License pooling: Mobility of users and reduce TCO
 - Future electronic license model: Reduce TCO
 - Central license management: Reduce TCO

CUCM IM and Presence



POLLING QUESTION: Have you deployed CUP?

- Yes
- No
- I want CUPC client, but not the CUP server
- No, the licensing model and configuration is too complex

For those watching this briefing replay, please take this poll on the community: <http://communities.cisco.com/polls/1715>

Cisco UC Manager (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

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

Digest Credentials

Confirm Digest Credentials

Service Settings

Home Cluster

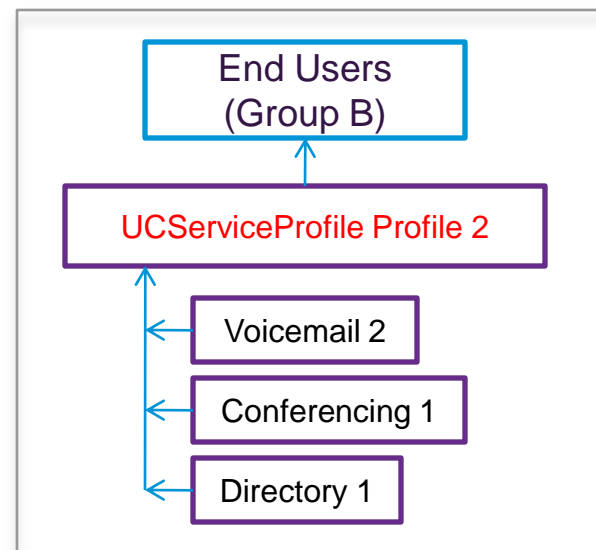
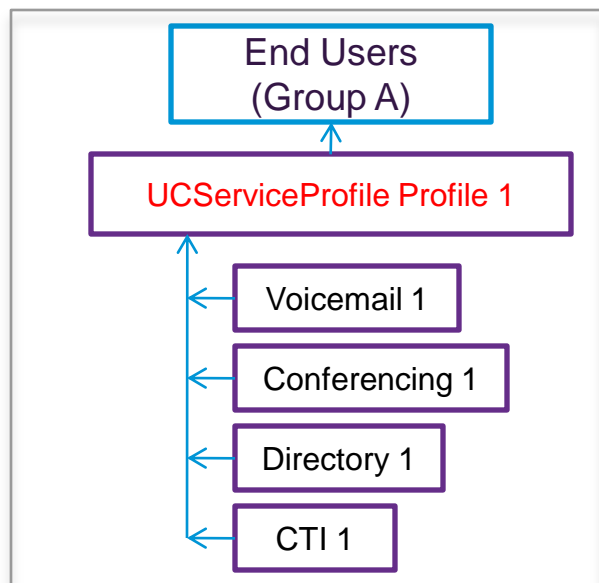
License User for Unified CM IM and Presence (Configure IM and Presence in the associated UC Service Profile)

UC Service Profile [View Details](#)

Device Information

CUCM IM and Presence

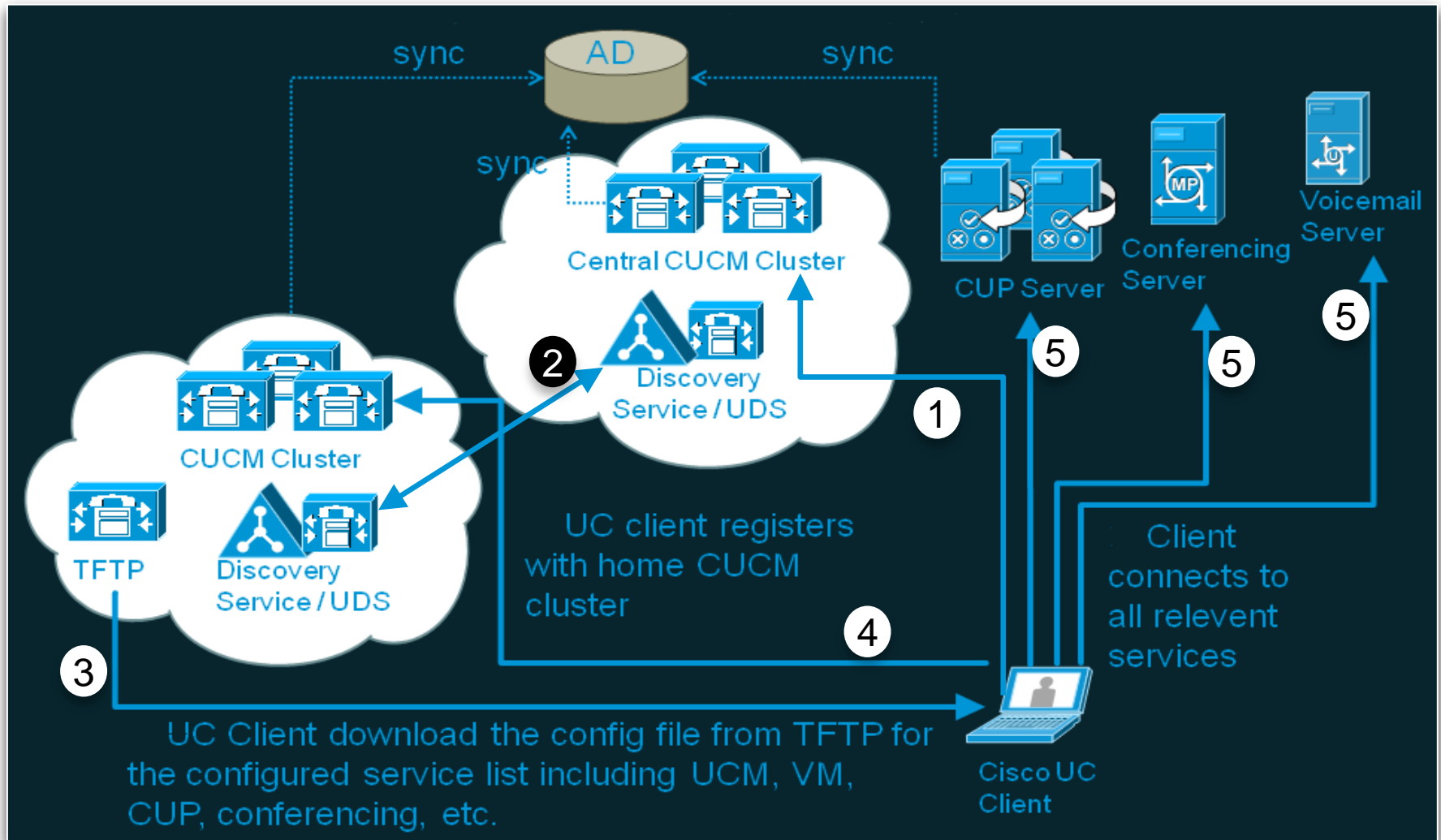
- CUCM 9.0 UC Service Profiles



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

Service Discovery Architecture



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

Cisco Unified Communications 9.0

Delivering on Customer's Need



- For Users:
 - Transparent mobility
 - Consistent Jabber experience (including video)
 - Simple, self-service administration tools



- IT need:
 - Easy-SIP interoperability
 - User-centric licensing
 - Efficient license management



- CxO need:
 - Unified platform for multiple collaboration workloads
 - Native assisted-service options
 - Built-in capability for enterprise-grade video

Next Steps

How did we do? Please complete the evaluation as you exit

Visit the Cisco Collaboration Community:

- Comprehensive “next steps” document (replay, presentation, resources. Q&A will be posted shortly)

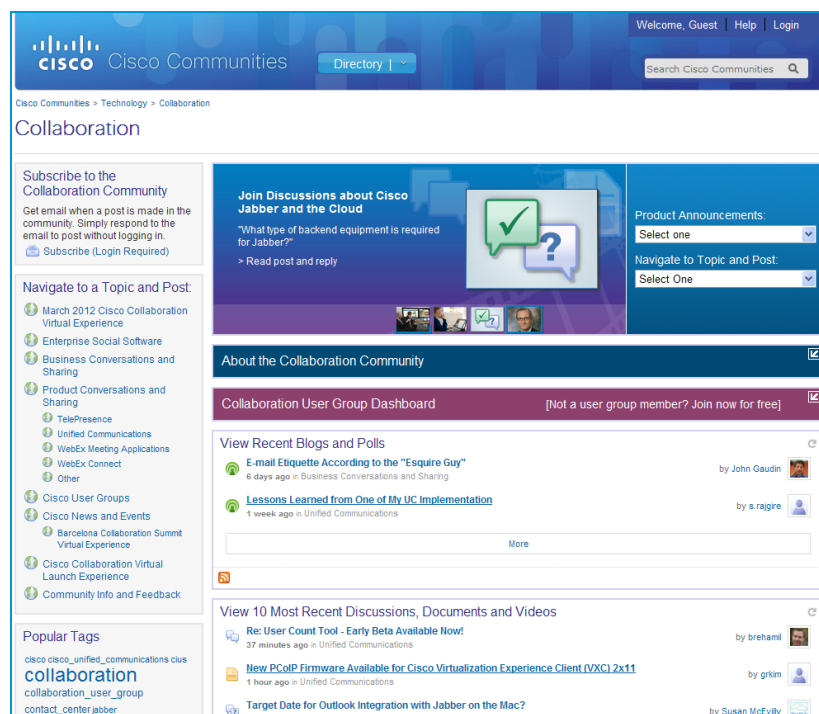
<http://communities.cisco.com/docs/DOC-30505>

- By August 24, we will post a recorded presentation to address:

Enhanced Locations Based Call Admission Control
CUP integration w/ Cisco UC Manager
IM and Presence Server

What else do you want to learn more about? Post your requests to:

<http://communities.cisco.com/docs/DOC-30505>



The screenshot displays the Cisco Communities website interface. At the top, there is a navigation bar with the Cisco logo, 'Cisco Communities', a 'Directory' dropdown, and a search box. Below the navigation bar, the page is titled 'Collaboration'. The main content area is divided into several sections: 'Subscribe to the Collaboration Community' (with a 'Subscribe (Login Required)' button), 'Join Discussions about Cisco Jabber and the Cloud' (with a 'Read post and reply' link), and 'Product Announcements' (with a 'Select one' dropdown). A sidebar on the left provides navigation options under 'Navigate to a Topic and Post', including 'March 2012 Cisco Collaboration Virtual Experience', 'Enterprise Social Software', 'Business Conversations and Sharing', 'Product Conversations and Sharing', 'Cisco User Groups', 'Cisco News and Events', 'Cisco Collaboration Virtual Launch Experience', and 'Community Info and Feedback'. Below the sidebar, there are 'Popular Tags' for 'collaboration', 'collaboration_user_group', and 'contact_center_jabber'. The main content area also features 'View Recent Blogs and Polls' (with a 'More' link) and 'View 10 Most Recent Discussions, Documents and Videos' (with a 'More' link).

Thank you.

