



Tech Update:

Cisco IP Communications

Per Toft, Cisco Systems

ptoft@cisco.com

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Agenda

- **Cisco Unified Communications overview**
- **Cisco Unified CallManager nyheder og roadmap**
 - Cisco Unified CallManager 4.2**
 - Cisco Unified CallManager 5.0**
- **IP Endpoint update**
- **Messaging**
- **Conferencing**
- **Pricing/packaging update**
- **Cisco Unified Presense Server**
- **Cisco Unified Personal Communicator**
- **Enterprise Mobility**

Cisco Unified Communications overview



Cisco Unified Communications

Cisco Strategy: Create **Solutions** that Enable More **Effective Communications** that Directly Impact Businesses' Top **and** Bottom Line

Effective

Eliminate communications complexity and reach the right resource the first time

Collaborative

Applications that enable user-controlled productivity anywhere, anytime with any device

Open

Standards-based, Secure Systems, built into the Intelligent Information Network

Cisco Unified Communications Solution



Productivity



Business Process



Business Transformation

Collaboration

E-Mail

Calendar

Audio-Conferencing

Web Application



Security

Video Conferencing

Voice Messaging

Telephone Services

Instant Messaging

Contact Center

Cisco Voice Technology Group (VTG) Vision for an IPC System Release

To deliver an **integrated, tested, documented** suite of IPC products to the enterprise which increases sales and customer satisfaction through **easier ordering, system-wide licensing and pricing, and system-level support.**

“Columbus” provides the key first steps toward a complete system release by **expanding** on the existing “Golden Bridge” process adding some up-front system requirements definition with a focus on management, pricing, marketing and sale as one system...

March 6th launch components – WW launch for Enterprise and Commercial

Applications to Increase Business Productivity

- Cisco Unified Pers Comm v 1.0
- Dual-Mode Support for Motorola Dual-Mode Support for Nokia
- Cisco IP Phone Messenger
- Cisco Unity Express 2.3
- Cisco Unity 4.2
- Cisco IP Communicator 2.0
- IPCC Enterprise 7.1
- IPCC Enterprise Expert & Analytics
- IPCC Express 4.5
- IPCC Soft ACD Support
- IPVC 5.0
- CRM Connector 3.0
- Communications Media Module
- Cisco VT Advantage 2.0

Secure, Extensible, Open Platforms

- Line Side SIP on CCM 5.0 and CME 4.3/4.0
- Presence Server
- Enhanced SIP Trunking
- CCM 5.0
- CME 3.4/SRST 3.4
- CME 4.0/SRST 4.0
- RSVP Agent
- Enhanced Gateway security
- 7911G IP Phone
- Enhanced SIP Capability for Phones (7911G/7941G/7961G/7970G)
- GigE models (Cisco IP Phones 7941/7961G-GE)
- CTI Links for Genesys

Tools

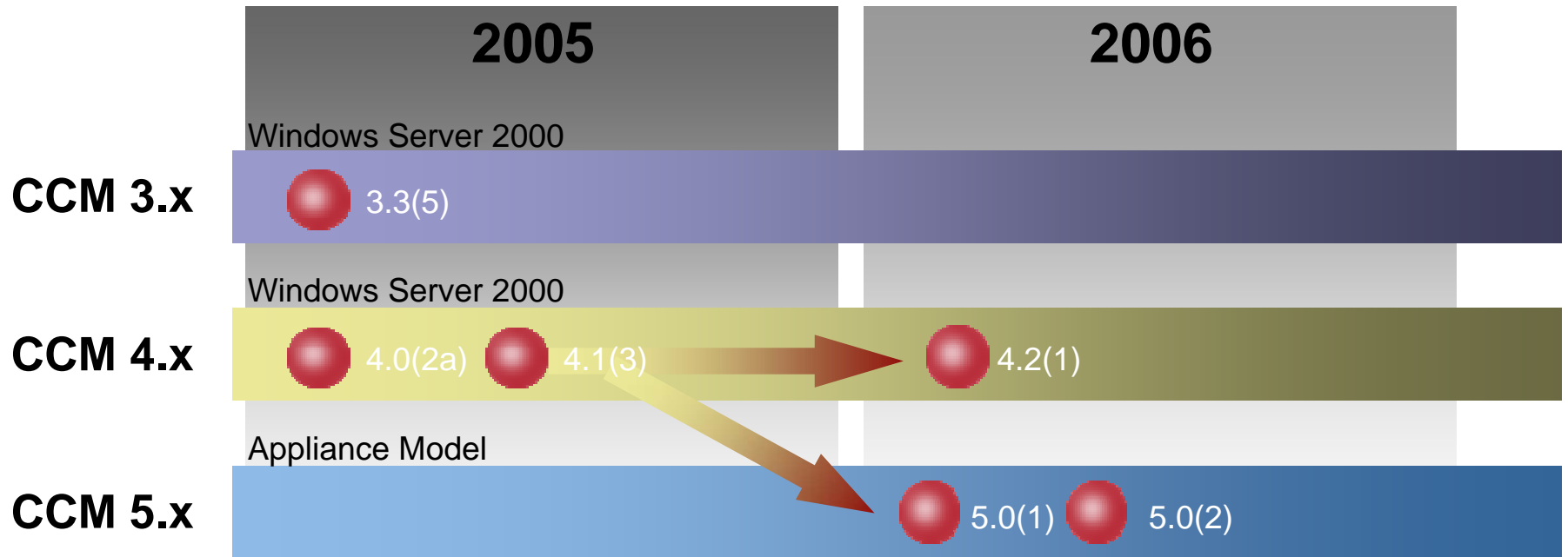
- CallManager 5.0 Appliance Model
- Integrated systems support packages
- Integrated systems pricing
- Cisco ROS – Basic
- Solutions Expert
- CiscoWorks IPC Ops Mgr 1.1
- CiscoWorks Service Monitor 1.1
- IPCC Hosted Partitioning and Provisioning Enhancements

NEW
New release of Existing



Cisco Unified CallManager

Cisco CallManager Release Strategy



-  Shipping
-  Planned



Cisco Unified CallManager 4.2

CCM 4.2 Features

- **Log in/out of Hunt Groups**
- **Call Forward on Non Registered or No Bandwidth**
- **IPMA (Assistant) on the phone**
- **Complex Passwords and password aging using Active Directory**
- **Visual Group call pick-up enhancements**
- **Intra-Cluster Device mobility improvements**
- **Directed Call Park**
- **Voice Quality Statistics (K-Factor)**
- **DOD Enhancements**
- **CiscoTSP supported on Windows 2003 Server**

Log in/out of Hunt Groups

- **Softkey (HLog) will do the Log in/out**
Dansk softkey: “*GrpLog*”
- **The phone will provide a visual status**
Status Line: “*Logget ud af søgegrupper*”
- **Log in/out of ALL Hunt Groups**
- **Device Based. ALL DNs at the same time**
- **Default State: logged in**
- **Complications in shared lines**
Logged out device will be silent but all the others will ring
- **Special tone could be played for Logged out devices**
New service parameter: “*Hunt Group Logoff Notification*”

Call Forward on Non Registered 1/2

AAR Settings			
	Voice Mail	AAR Destination Mask	AAR Group
AAR	<input type="checkbox"/>	<input type="text"/>	RajAAR ▾
<input checked="" type="radio"/> Remove this destination from the call forwarding history			
<input type="radio"/> Retain this destination from the call forwarding history			
Call Forward and Pickup Settings			
	Voice Mail	Coverage/ Destination	Calling Search Space
Forward All	<input type="checkbox"/>	<input type="text"/>	< None > ▾
Forward Busy Internal	<input type="checkbox"/>	<input type="text"/>	< None > ▾
Forward Busy External	<input type="checkbox"/>	<input type="text"/>	< None > ▾
Forward No Answer Internal	<input type="checkbox"/>	<input type="text"/>	< None > ▾
Forward No Answer External	<input type="checkbox"/>	<input type="text"/>	< None > ▾
Forward No Coverage Internal	<input type="checkbox"/>	<input type="text"/>	< None > ▾
Forward Unregistered Internal	<input type="checkbox"/>	<input type="text"/>	< None > ▾
Forward Unregistered External	<input type="checkbox"/>	<input type="text"/>	< None > ▾
Call Pickup Group		< None > ▾	(View Details)
MLPP Alternate Party Settings			

Call Forward on Non Registered 2/2

- **Og hvad kan man så lige bruge det til?**
- **Brugere på et fjernkontor mister WAN-forbindelsen:**
 - **=> Kald sendes via PSTN til en SRST telefon**
 - **=> Kald sendes til mobilen**
- **Nokia Dual Mode Phone uden Mobile Connect:**
 - **=> Kald sendes til mobilen, når man er uden for WIFI dækning**

IPMA (Assistant) on the phone

The IPMA phone service will have the following screens available to the assistant's phone.

- 1. Assistant Login screen**
- 2. Manager Status Page**
- 3. Manager Settings Page**
- 4. Assistant Settings Page**
- 5. Manager and Assistant Divert Target**

IPMA (Assistant) on the phone Manager Status

IDLE

06 57 10/10/05
Managers Asst:Online
1 [Redacted] 2000
2 Don Proctor 2001
3 Yau-Fun Choy 2002
4 Alice Siudzinski 2003
5 Vipin Kamra 2004
Manager Status Page
Select Answer Exit ImmDiv more

Configuration Menu

07 01 10/10/05 1004
[Redacted]
1 Filter: On
2 Filter Mode: Exclusive
3 Do not Disturb: Off
4 Divert Calls : On
5 Set Divert Target
Set Filter Exclusive
Select Exit

Calls

05 1004
Asst:Online
Chambers 2000
Proctor 2001
in Choy 2002
Siudzinski 2003
5 Vipin Kamra 2004
Manager Status Page
Select Answer Exit ImmDiv more

Visual Group call pick-up enhancements

- **Call Pickup allows you to answer a call that comes in on a Directory Number other than your own**
- **Call Pickup Notification enhances the existing functionality by providing alerts to members of a Pickup Group.**
- **Notification can be Audio, Visual or Both**
- **Notification Delay, Verbosity of Visual Alerts and Nature of Audio Alert will be configurable**

Intra-Cluster Device mobility improvements

- **Until CCM 4.2, when devices moves to different location other than the configured one, the old location configuration is used.**
- **Due to this, Bandwidth allocation, media resource allocation, Gateway selection (e.g. 112), Region Configuration, AAR Group etc. were done based on device's old location and thus reducing voice Quality, wrong allocation of resources etc.**
- **As of CCM 4.2 location configuration can be done based on IP address range thus opening up for true device mobility.**

Cisco CallManager 4.2 Summary

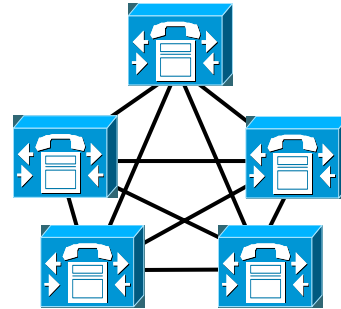
- **CCM 4.2 is based on customer requirements, primarily from EMEA**
- **Windows 2000 version**
- **Different features from CCM 5.0**
- **FCS March 2006**



Cisco Unified CallManager 5.0

Cisco CallManager 5.0 Themes

- **Appliance model**
 - Improved installation and upgrades
- **Administration Enhancements**
 - Licensing compliance
- **Expanding SIP portfolio**
 - SIP line side
 - Enhanced networking
 - Presence
- **Japanese, Chinese, and Korean Character Set Support**



Find and List Phones - Microsoft Internet Explorer provided by Cisco Systems, Inc.

Address <https://10.89.242.9:8443/ccadmin/phoneFindList.do>

Navigation CCM Administration

Cisco CallManager Administration For Cisco IP Telecommunication Solutions Logged in as: CCMAdministrator

System Call Routing Media Resources Voice Mail Device Application User Management Bulk Administration Help

Find and List Phones Related Links: [CAPF Report in File](#)

Status
8 records found

Search Options
Find Phone where Device Name begins with Find Search Within Results
(device.name begins with any)

Device Name(Line)	Description	Device Pool	Device Protocol	Status	IP Address	Copy	Copy w/Lines
SEP00036BE78991	SEP00036BE78991	Default	SIP	Registered with 10.89.242.9	10.16.20.11		
SEP0003E32A2AE	Auto 1000	Default	SCCP	Registered with 10.89.242.9	10.16.20.2		
SEP000F23F9890A	SEP000F23F9890A	Default	SCCP	Registered with 10.89.242.9	10.88.15.217		
SEP00112045E4F7	SEP00112045E4F7	Default	SIP	Unknown	Unknown		
SEP0011215A1B44	SEP0011215A1B44	Default	SCCP	Unknown	Unknown		
SEP003094C3AFF6	SEP003094C3AFF6	Default	SIP	Registered with 10.89.242.9	10.88.15.159		
SEP003094C3BDAC	Auto 1004	Default	SCCP	Registered with 10.89.242.9	10.88.15.223		
SEP003094C3D532	Auto 1002	Default	SCCP	Registered with 10.89.242.9	10.88.15.224		

Add New Select All Clear All Delete Selected Reset Selected Rows per Page 50

Cisco CallManager Appliance Model

- **Complete hardware software solution**
- **Alternative operating system**
 - Improve installation and upgrade
 - Increased security and reliability
- **Software solution**
 - Cisco Security Agent included as with Windows version
- **Interfaces provide access to system**
 - Administration via CLI and GUI
 - Third-party access is through documented APIs
- **Supported on Cisco MCS servers**
 - 7815, 7825, 7835 and 7845



Administration Enhancements

- Administration improvements
- Cisco common look and feel
- Windows Internet Explorer for access to GUI
- Licensing compliance
- Administration Improvements

Easier and quicker user add and delete

Line Improvements—Arrange lines on 7914

Copy station

Quick password reset

Scheduled provisioning (BAT)

The screenshot shows the Cisco CallManager Administration web interface in Microsoft Internet Explorer. The page title is 'Find and List Phones'. The navigation bar includes 'System', 'Call Routing', 'Media Resources', 'Voice Mail', 'Device', 'Application', 'User Management', 'Bulk Administration', and 'Help'. The main content area is titled 'Find and List Phones' and shows '8 records found'. Below this is a search options section with a dropdown for 'Device Name' and a search button. The search results are displayed in a table with columns: Device Name(Line), Description, Device Pool, Device Protocol, Status, IP Address, Copy, and Copy w/Lines. The table contains 8 rows of data, each with a checkbox and a phone icon. At the bottom of the table are buttons for 'Add New', 'Select All', 'Clear All', 'Delete Selected', and 'Reset Selected', along with a 'Rows per Page' dropdown set to 50.

Device Name(Line)	Description	Device Pool	Device Protocol	Status	IP Address	Copy	Copy w/Lines
SEP000368E78991	SEP000368E78991	Default	SIP	Registered with 10.89.242.9	10.16.20.11	[icon]	[icon]
SEP0003E32A2AE	Auto 1000	Default	SCCP	Registered with 10.89.242.9	10.16.20.2	[icon]	[icon]
SEP000F23F9890A	SEP000F23F9890A	Default	SCCP	Registered with 10.89.242.9	10.88.15.217	[icon]	[icon]
SEP00112045E4F7	SEP00112045E4F7	Default	SIP	Unknown		[icon]	[icon]
SEP0011215A1B44	SEP0011215A1B44	Default	SCCP	Unknown	Unknown	[icon]	[icon]
SEP003094C3AFF6	SEP003094C3AFF6	Default	SIP	Registered with 10.89.242.9	10.88.15.159	[icon]	[icon]
SEP003094C3BDAC	Auto 1004	Default	SCCP	Registered with 10.89.242.9	10.88.15.223	[icon]	[icon]
SEP003094C3D532	Auto 1002	Default	SCCP	Registered with 10.89.242.9	10.88.15.224	[icon]	[icon]

Licensing Compliance

- **Cisco CallManager licensing compliance for:**
 - Devices
 - Application
- **Device licenses**

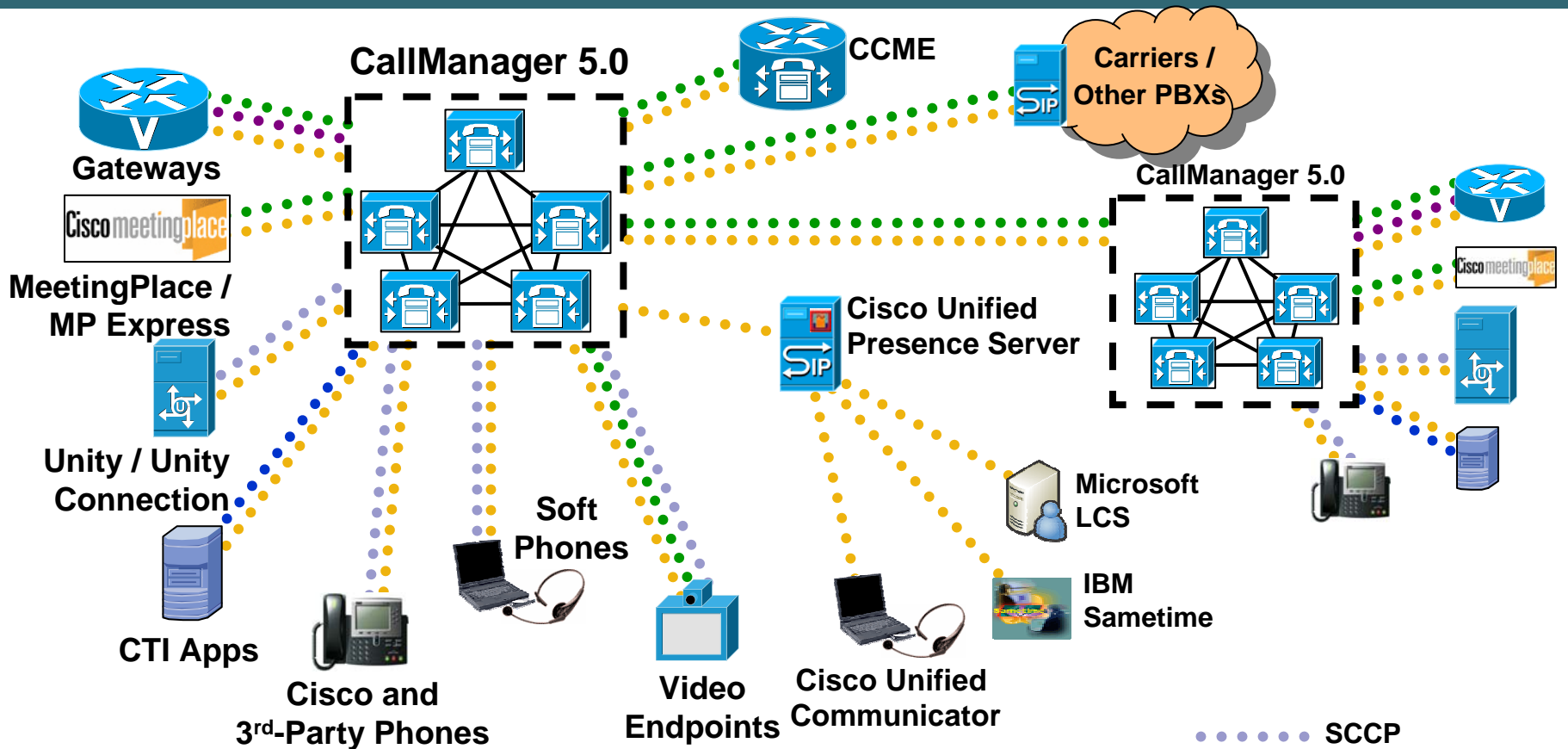
The maximum number of provisioned devices (IP phones, video devices) in CM database will be tracked and enforced

Customer will only be able to support the number of devices they have purchased licenses for
- **Application licenses**

The CM software will be tied to a server via mac address
- **Licenses will be created and distributed in accordance with Cisco FlexLM process used for Cisco Unity today**



Cisco SIP Enterprise Solution CallManager 5.0



CallManager 5.0 integrates rich, native SIP and SIMPLE support on both line-side and trunk-side interfaces (for both audio and video calls) with integrated presence on phones and applications; KPML and RFC 2833 support for DTMF; TLS and Digest Authentication for security; seamless protocol inter-working between SIP, H.323, MGCP, SCCP, TAPI/JTAPI; RSVP support for topology-aware Call Admission Control, and much more...

- ● ● ● ● SCCP
- ● ● ● ● MGCP
- ● ● ● ● H.323
- ● ● ● ● CTI
- ● ● ● ● SIP/SIMPLE/KPML

SIP Line Side Support

- **IETF standards-based**
 - RFC 3261 for basic SIP interoperability**
 - SIP RFCs for feature support**
- **Support of industry wide accepted SIP behaviors**
 - SIP registration**
 - SIP basic call**
 - SIP 'Best Practices' for core feature support**
- **Support key Cisco CallManager call control features**
 - Link into core CallManager call control**
 - Support for Core CTI based applications**
- **Support of third-party SIP phones**
 - Support—SIP standards based desktop features from third-party phone as well as core CallManager call control features (e.g. digit analysis and routing)**

Are 3rd-Party Products “Supported” with Cisco CallManager?

- **TDP-Approved Products: “Yes”**

 - **Interoperability testing required by external test lab**

 - **Test plan provided by Cisco**

 - **Covers any licensed value-added technology as well as basic interoperability**

 - **Cisco compatibility logo awarded upon successful test completion**

 - **Cisco TAC will provide coordinated support**

- **Generic (non-TDP) Products: “No”**

 - **Cisco provides no guarantee of interoperability**

 - **Interoperability testing outsourced to external testing lab**

 - **Little or no ongoing impact on Cisco engineering or business development**

 - **Cisco-provided test plan covers subset of CallManager-supported features (next slide)**

 - **Pass/fail test results posted on web site maintained by test lab**

 - **Cisco TAC will not troubleshoot problems that appear only with 3rd-party product**

Device Types for 3rd-Party Endpoints

Device Type	“3 rd Party Basic”	“3 rd Party Advanced”
SIP Features	Limited RFC 3261 and related RFCs	All Supported SIP Features
Signaling and Media Encryption	No	Yes
Number of DNAs	1 max	8 max
Wireless (802.11 or Dual Mode)	No	Yes
Video	No	Planned*

* ***An additional RTU fee likely will be charged for this feature***

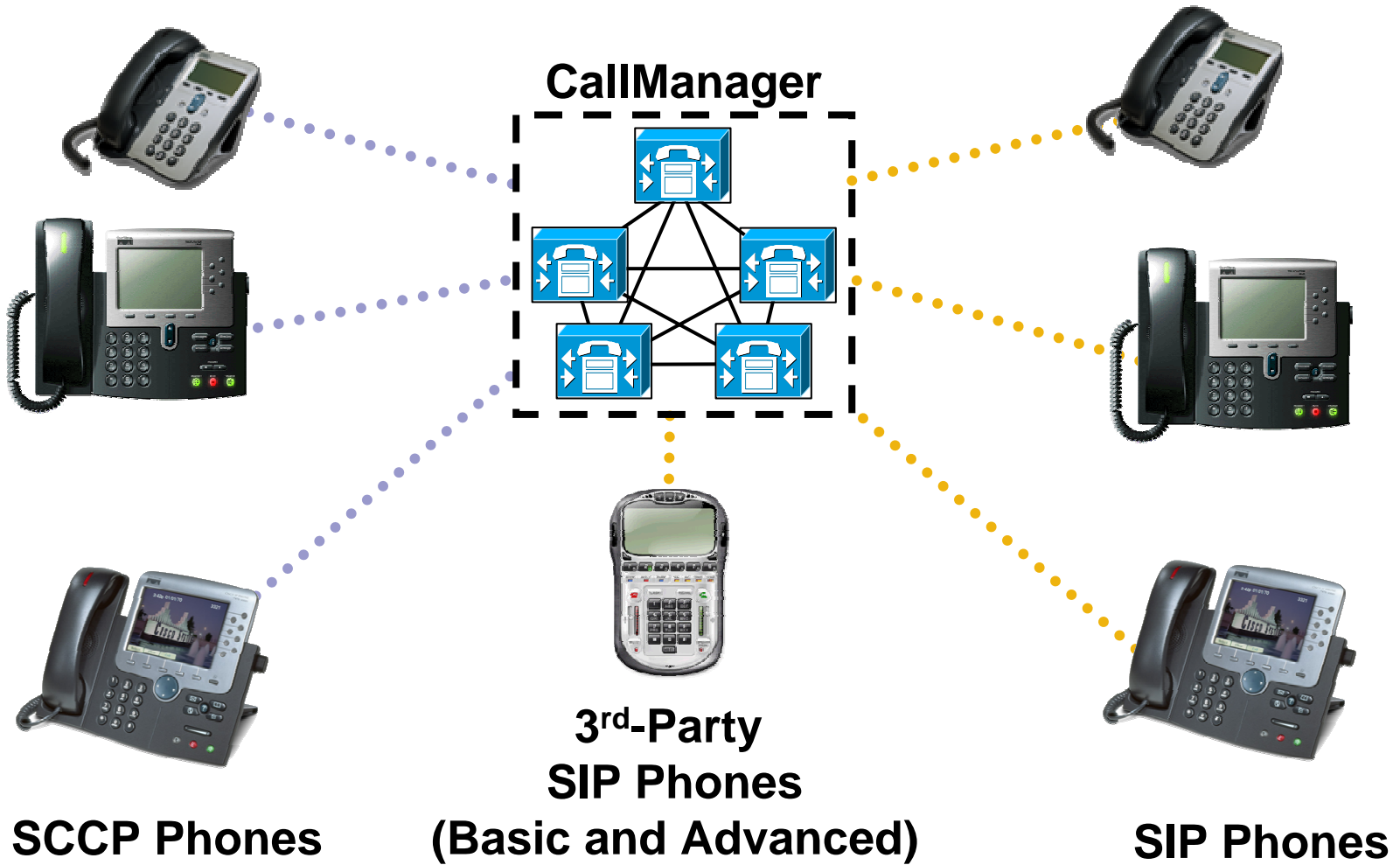
RFC based SIP Features Offered to 3rd-Party Basic Clients

For CallManager 5.0:

Call Hold and Resume
Transfer Unattended
Transfer Attended
Call Forwarding All
Call Forwarding No Answer
Call Forwarding Busy
Incoming Call Screening
Outgoing Call Screening

Multiple Calls per Line
Calling and Connected Line ID
Calling and Connected Name ID
Message Waiting Indication
Three-Way Conference Calling
Call Forking
Speed Dialing
Multiple Lines per Phone

Seamless Support for SCCP and SIP



Cisco CallManager 5.0 Presence Features (Busy Lamp Field)

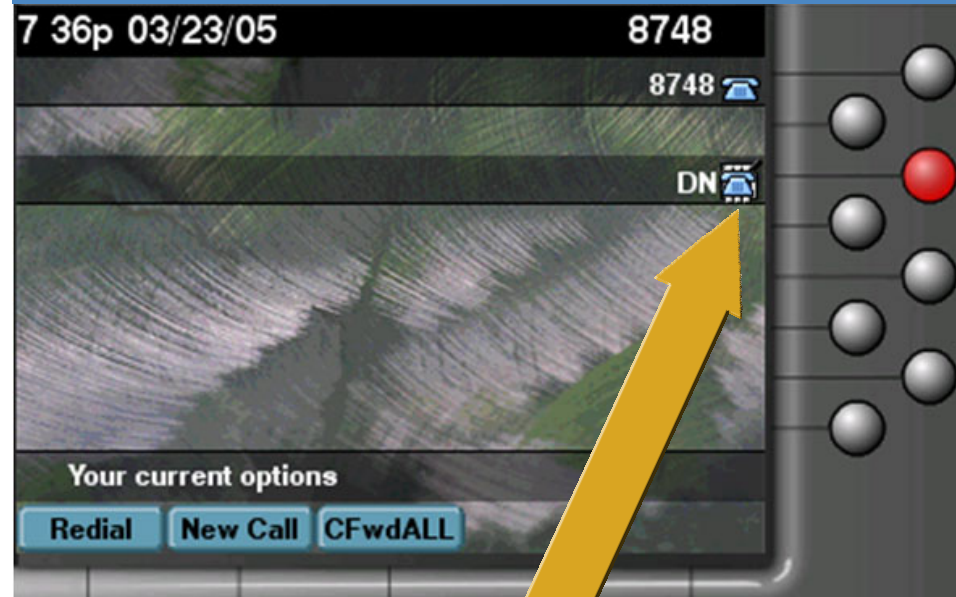
- **Speed-dial buttons**
- **Call history logs**
- **Directory**

Icon	Description	Status
	SpeedDial	Unknown
	BLF SpeedDial	Busy
	BLF SpeedDial	Idle

- **Supported on:**
 - 7911/41/61/70/71 SCCP and SIP phones
 - 7940/60 SCCP phones

Presence - Speed-Dial Buttons

- LED lamp and icon indicate busy/Idle/unknown state
- CCM groups used for restricting access, option provisioned by CCM admin
- Alerting state and call pickup not available, provided in future release



**Busy/Available
Presence Indicator**

Presence - Call History Logs and Directory

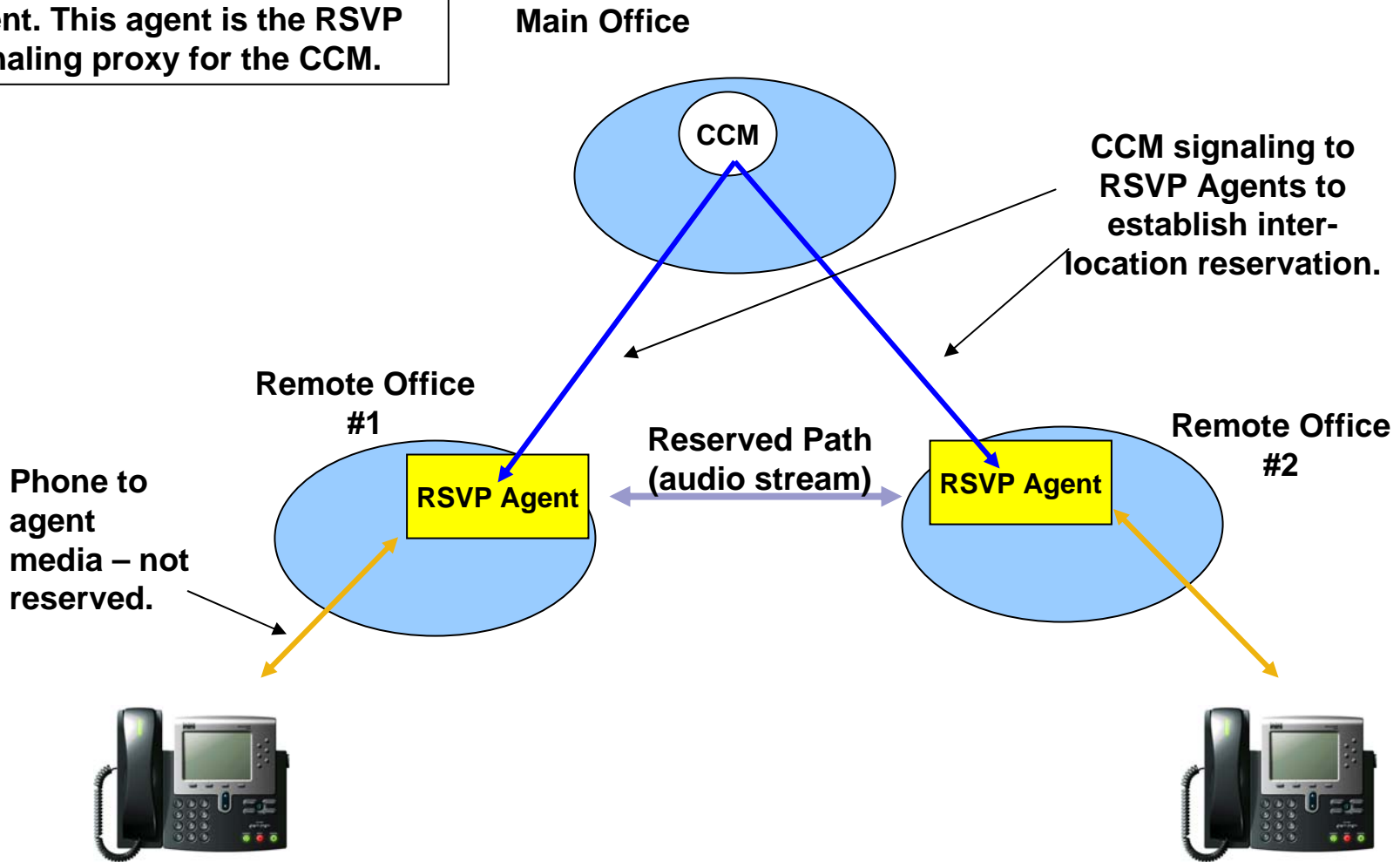
- Presence enabled call logs and directory allow users to check line state of others before placing calls
- CCM groups used for restricting access



**Busy/Idle/Unknown
Presence Indicator**

CCM RSVP Agent

Edge router contains an RSVP Agent. This agent is the RSVP signaling proxy for the CCM.



Cisco CallManager 5.0 Summary

- The appliance model is in addition to the Windows platform—**Choices for customers and partners**
- Cisco CallManager 5.0 provides:
 - Appliance model—**Easier to install and upgrade—**
Lower cost for partners
 - Enhanced administration—**Less time to administer**
 - SIP Line Side Support—Choice for customers that desire a **standards-based solution**; Opens up the possibility for custom application development—Value added services
 - Other enhancements – BLF and Chinese, Japanese and Korean character set support**



Cisco IP Endpoint Update

Continuous Development In Endpoints

Executive

**Cisco Unified IP Phone
7970G/7971G-GE**



Video

**Cisco Unified IP Phone
7985G**
**Cisco Unified Video
Advantage**



Manager

**Cisco Unified IP Phone
7960G/7961G/7961G-GE**

Business

**Cisco Unified IP Phone
7940G/7941G/7941G-GE**



Mobility

Cisco IP Communicator
**Cisco Unified Wireless
IP Phone 7920**



Basic

**Cisco Unified IP Phones
7905G*/7912G*/7911G**
**Cisco Unified IP Phone
7902G***

Analog

Cisco ATA 186/188*
**Cisco VG248 Analog
Phone Gateway**



* Announced EoS

Newest Additions to the Cisco Unified IP Phone Portfolio

List Price

Existing Portfolio of Best-Selling IP Phones

Manager



Cisco Unified IP Phone 7960G

Business



Cisco Unified IP Phone 7940G

Basic



Cisco Unified IP Phone 7912G

Additional Enhanced IP Phones

Executive



Cisco Unified IP Phone 7970G

Enhanced Manager



Cisco Unified IP Phone 7961G

Enhanced Business



Cisco Unified IP Phone 7941G

Enhanced General Purpose



Cisco Unified IP Phone 7911G

Enhanced Power and Data Throughput Options

Enhanced Applications Capability

Unicode Support for Asian Localization

Features

High Resolution Phone Display

Cisco IP Phones 7960G, 7940G



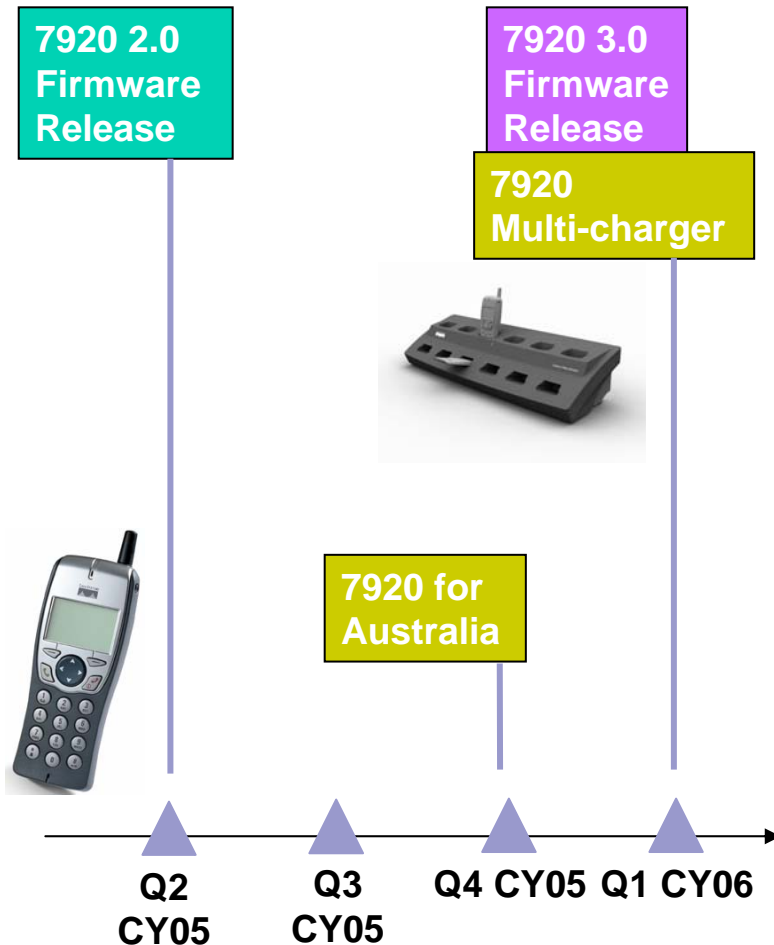
Cisco IP Phone 7970G



Cisco IP Phones 7961G, 7941G



Cisco Wireless IP Phone 7920 “Roadmap”



Cisco Wireless IP Phone 7920 for Australia

- Meets Australia Telephony specs: AS/ACIF:S004, AS/ACIF:S040

Multi-phone and battery charger

- Charges 6 phones and 6 batteries simultaneously
- Desk and wall-mount

v3.0 firmware release

- EAP-FAST
- Improved battery life
- French, German, Italian, Spanish, Portuguese, Japanese, Chinese, Korean, Swedish, Danish, Norwegian, Finnish, Dutch
- CM4.2, CM5.0, CME3.3

Messaging: Improving Employee Productivity and Customer Satisfaction



Messaging Choices

Product	Users	Messaging Type	Platform	TDM PBX Integr.	Net-working	Redun-dancy
Cisco Unity Express	Less than 250	Voice Mail and Integrated Messaging	Router Based	No	Yes	No
Cisco Unity Connection	Up to 1500	Voice Mail and Integrated Messaging	Server Based	Yes	No	No
Cisco Unity	7,500 per server	Voice Mail, Integrated Messaging and Unified Messaging	Server Based	Yes	Yes	Yes



Cisco Unity

Premier, Enterprise-Class Messaging Platform for Multi-Site Deployments

- Provides voicemail, unified messaging and integrated messaging options
- Ideal for multi-site, networked deployments
- Scales to support 96 ports and 7500 users per server, networked to support up to 250,000 users
- Powerful capabilities to ease migration to IP communications
- Useful features to facilitate Octel and Nortel EOL system replacement
- Global solution with support for over 30 languages
- Combine Cisco Unity 4.X and Cisco Unity Express deployments—A powerful option for large, distributed Enterprise customers



Cisco Unity Connection

Simple, Easy-to-Install Voicemail System for Single Sites

- **Supports up to 72 ports, 1,500 users on single server**
- **Integrated messaging to receive voicemail in email clients**
- **Installs in ~one hour**
- **Multiple language support**
 - Australian English, European French, French Canadian, German, Japanese, UK English, and US English**
- **Powerful voice user interface**
 - Speech navigation for voicemail browsing**
 - Speech-enabled directory dialing**
 - Text-to-speech technology**
- **Personal call transfer rules**
 - Based on: time-of-day, caller ID, calendar**
 - Forward calls to single number or series of numbers**
 - Select which calls to accept in real time**

Cisco Unity Express

- Autoattendant and voice-mail system for the small and medium offices and distributed enterprise locations
- Supports Cisco Unified CallManager or Cisco Unified CallManager Express deployment scenarios
- Modular Choice of Network Module or Advanced Integration Module for complete flexibility
- Supported on broad range of Cisco routers—industry leading Cisco 2800 and 3800 series and widely deployed 2600XM and 3700 series
- 12 to 250 mailboxes, 6 to 16 ports
- VPIM Networking with Cisco Unity Express or Cisco Unity
- Localized for global deployments—13 languages
- SNMP agent for remote monitoring, data collection and trap management



Key Benefits:

- **Cost-effective**—Specifically designed for the SMB or branch office
- **Application integration**—Fewer devices to manage
- **Intuitive user interface**—Uses same menu and prompts as Cisco Unity
- **Investment protection**—Increase mailbox capacity via simple software upgrade
- **Broad range of configurations and scale**
- **Feature velocity**—High feature velocity to meet market and customer needs quickly

**Rich-Media Conferencing:
Makes Remote Meetings as Natural
and Effective as Face-to-Face
Interactions**

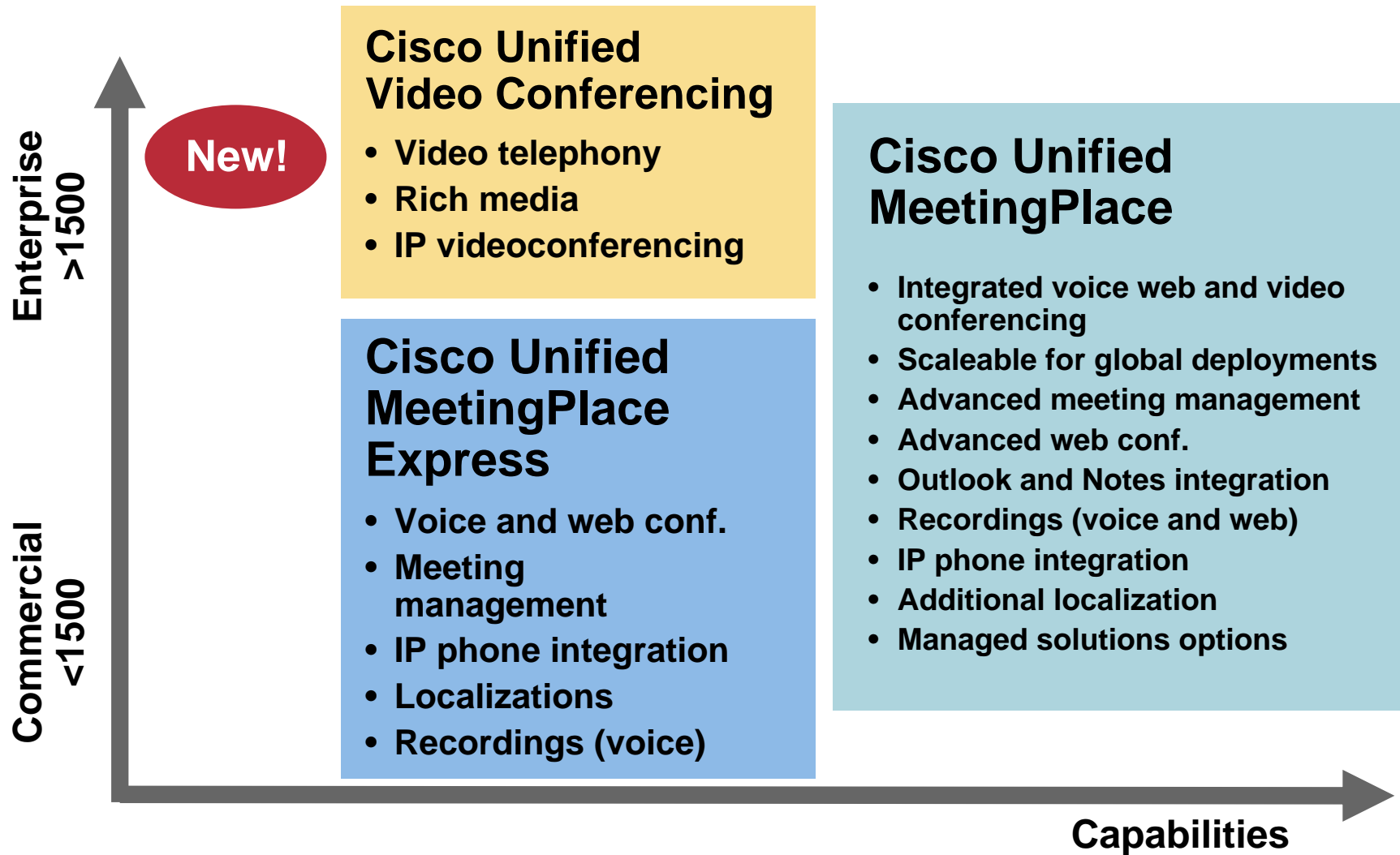


Cisco Conferencing Solutions Improve Productivity and Reduce Costs

- **Personal productivity—saving time**
 - Simple to setup, attend and manage virtual meetings**
 - Effective conferencing—whenever and wherever**
- **Streamline business processes**
 - Accelerate projects, speed decisions**
 - Improve sales and support effectiveness**
- **Further improve return on investment**
 - Significant percentage of IP Communications TCO reduction**



Cisco Conferencing Solutions



Cisco Unified MeetingPlace

Fully Integrated Voice, Web and Video Conferencing

- Fully **integrated** with Outlook, Notes, email, directory services, IP phones
- **Accelerate** projects, speed decisions and sales support
- Deployed **on-network** for cost savings, application integration and security
- Scalable to **thousands** of concurrent users

The screenshot displays the Cisco MeetingPlace interface. On the left, a control panel shows meeting details: Meeting ID: 247262, Sharing: Marlo DeLeon, and Speaking: Darin Dunlap (415-555-1234). Below this, a list of attendees is shown: Darin Dunlap (415-555-1234), David Morrison, Marlo DeLeon, and Mike Fratelli. In the center, a bar chart displays data for four quarters (1st Qtr, 2nd Qtr, 3rd Qtr, 4th Qtr) with values ranging from 10 to 60. On the right, a video window shows four participants in a grid layout. A large grey arrow points from the meeting control panel towards the video window, indicating the flow of information or control.

Who's Sharing

Who's Speaking

Who's Attending

How Attending

Movable, Sizable Video Window

Cisco Unified MeetingPlace Express

Voice and Web Conferencing Solution

- **Simple, powerful functionality**

Extensive voice conferencing capabilities

Control meetings and share content from Web

Simple setup and attend from Web and phone

- **Simple to deploy and manage**

Single-server, Linux-based software

Install in ~one hour

- **Ideal for mid-sized organizations**

20-120 concurrent users

- **Additional language support H2CY06**

New!



Cisco Unified CallManager Express with Cisco Unity Express Meet-Me Multicast Conferencing Capability

- **Increase business productivity with Meet-Me voice conferencing**

Supports 20 to 96 Users

Accessible

- **Protect investments while reducing costs**

Uses existing technology in unique configuration to deliver high density Meet-Me conferencing

Reduces multi-party conferencing costs



Cisco Unified Videoconferencing

- **Full Suite of Video Conferencing Options**

- Cisco IOS Gatekeeper/IP-IP Gateway

- Cisco Unified Videoconferencing MCU 3540

- Cisco Unified Videoconferencing MCU 3511

- Cisco Unified Videoconferencing 3521, 3526 Gateways

- Cisco Unified Video Advantage

- Cisco Unified IP Phone 7985G

- Cover small to large group conferencing needs

- **Applications**

- Face-to-face ad-hoc meetings

- Team meetings

- Distance learning

- Customer service—video agents

- Telemedicine—remote consultation

- Human resources—remote interviews

- “Virtual” experts

**Multi-Function Modular or
Single-Function Compact**

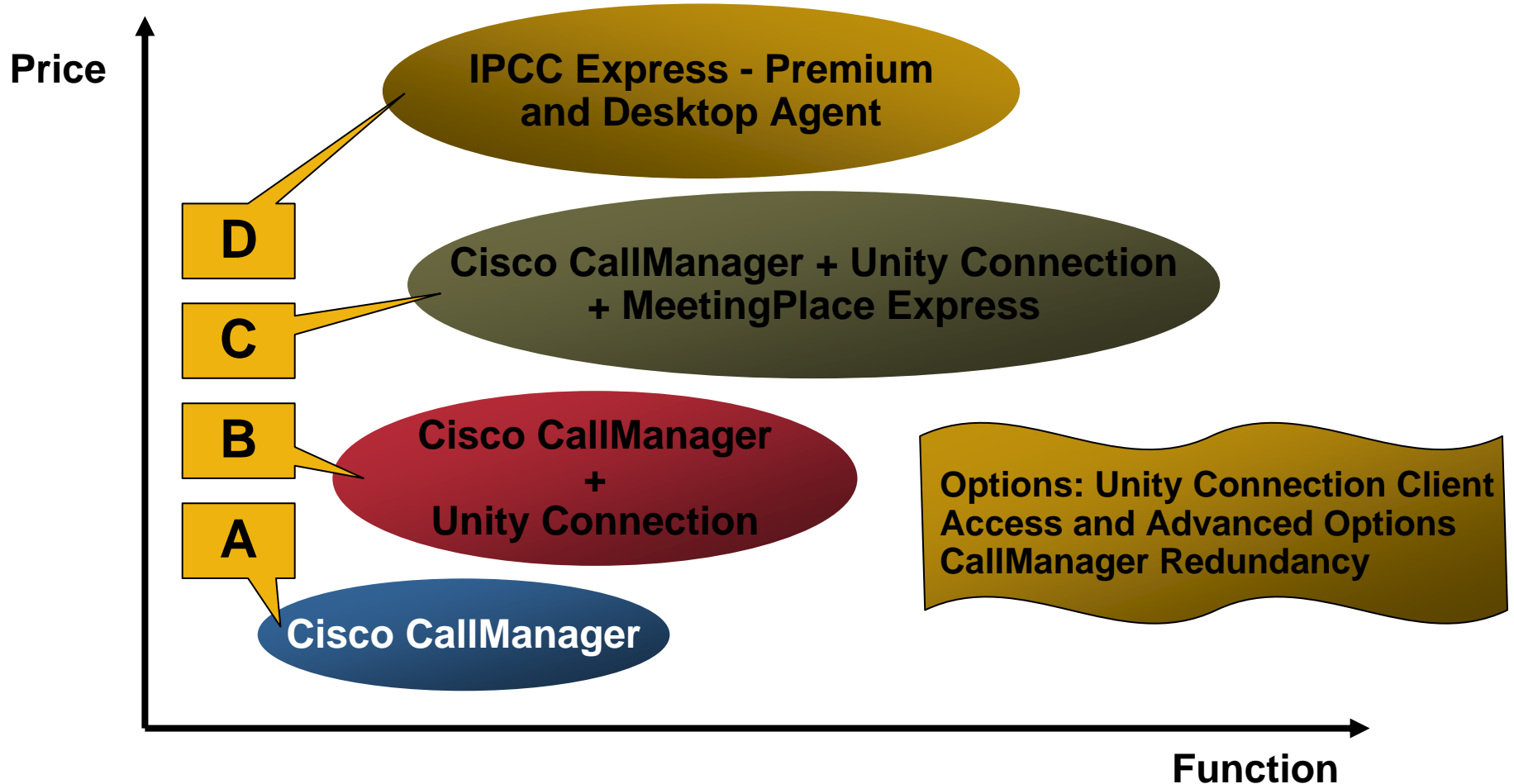


Pricing and Ordering updates for CallManager 5.0 and later



Solution Application Packages

Sold Separately:
CER, Mobile Connect
IPC Operations Manager



Example of a simple 200 Users configuration

Application Solution Bundle C

- **One SKU, Quantity 200 Users**
- **Includes**
 - 200 Cisco CallManager seats
 - 200 Cisco Unity Connection seats
 - 200 Cisco Meeting Place Express seats (20 voice and 6 web ports)
- **Bundle Discounted**
- **Then pick: Phones, Devices Licences, Servers (recommended) , Routers and Gateways (recommended)**
- **Benefit: Reduced number of Application SKUs**

A la carte

- **Pick the elements just like today:**
 - Cisco CallManager Application
 - Unity Connection Application
 - MeetingPlace Express Application
 - Servers for each
 - IP Phones & Device Licences
 - Gateways
 - Routers
- **Pick each separately**
- **More Application SKUs**
- **Not Solution Focused**

Example of a complex user configuration

Combined Solution Bundles

- **Customer Requirements:**
 - 100 Conference Rooms
 - 300 General Workers
 - 600 Knowledge Workers
- **Translates to:**
 - 100 Bundle A
 - 300 Bundle B
 - 600 Bundle C
- **Includes:**
 - 1,000 CallManager User seats
 - 900 Cisco Unity Connection seats
 - 600 Cisco MeetingPlace Express seats
- **Then order Servers, Phones, Device Licenses, Gateways**

A la carte

- **Pick the elements just like today:**
 - Cisco CallManager Application
 - Unity Connection Application
 - MeetingPlace Express Application
 - Servers for each
 - IP Phones & Device Licences
 - Gateways
 - Routers
- **Pick each separately**
- **More Application SKUs**
- **Not Solution Focused**

Solution Bundle Ordering Quantity

	Seat Quantity		Increments	
	Min	Max	Direct	2-tier
Bundle A	50	1500	1	10, 50
Bundle B	50	1500	1	10, 50
Bundle C	200	1500	1	10, 50
Bundle D	10	332	1	1, 10, 25, 50

Note: To convert from Solution Bundles to Traditional, must reach maximum first

License File Specifics – “Units”

CallManager tracks the number of units required by each device

Each device type corresponds to a fixed number of units.

- Units are perpetual
- Device Independent

Device	Units
7902	1
ATA 186, 7905/10/11/12	2
7935/36	3
IP Communicator	3
7920/4x/6x	4
797x	5
7985	7
3 rd Party SIP – Basic	3
3 rd Party SIP – Advanced	6
CTI Port	0
VT Advantage	1

Benefits

- **Easier to order solutions**
- **Simple configuration tool – Solution Expert**
- **Provide a solution to the customer, not individual products**
- **Per seat solution pricing – pay as you go**
- **Add additional options to the solution**



Cisco Unified Presence Server

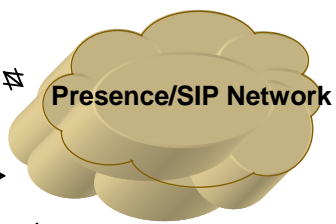
Cisco IP Phone Messenger

Cisco Unified Presence Server : Middleware for Presence Services and Unified Communications

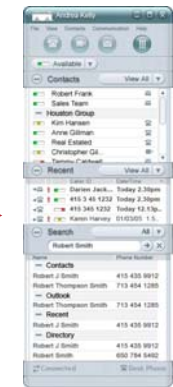


Microsoft

IBM



SIP/SIMPLE
CSTA



Cisco Unified Personal Communicator

Wireless Services



Cisco Unified Presence Server Capabilities

- **Provides User-based Presence capabilities leveraging dynamicsoft Presence technology**
- **Provides SIP Proxy functionality for routing of SIP messages through the enterprise**
- **Provides the infrastructure for the Cisco Unified Personal Communicator**
- **Provides Core Applications (e.g., IPPM, CTI Gateway)**
- **Supports Rich Presence services for both Cisco enterprise products and customer enterprise desktop applications**

Cisco Unified Presence Server: IP Phone Messenger

- **Unified Personal Communicator users see other user's IP phone's on/off hook states**
- **Users can send or reply to messages from their IP Phones using predefined templates or composing text messages**
- **Users can call back IM senders by hitting 1 button.**
- **Implements presence enabled contact list on the phone**
- **Will also integrate with other IM clients and presence sources beyond UPS 1.0**



Cisco Unified Presence Server : IP Phone Messenger

With IP Phone Messenger the User can:

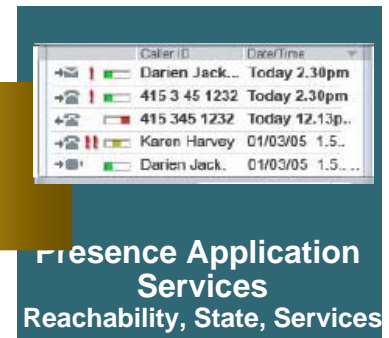
- **Manual setting of user status to: Available, Away, Do not Disturb or Logged Off**
- **Configurable contact list shows their presence status based on phone activity and PC activity if using Unified Personal Communicator ; up to 100 contacts can be configured per user.**
- **Receive instant messages displayed on phone text display with audible indication and flashing of phone's message waiting indicator light**
- **One button call back to IM originator**
- **View and clear previously received Instant Messages**
- **Pre-configured messages to compose or reply to instant messages**
- **Supports management of contact list, IM history, and personal settings from IP phone interface**

Cisco Unified Presence Server: Cisco Unified Personal Communicator

Powerful productivity tools in a single, easy-to-use desktop software application

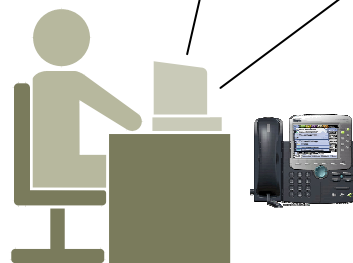


- Adaptive User Interface
- Presence-enabled
- Call, Collaborate, Escalate
- Desktop Video Calling

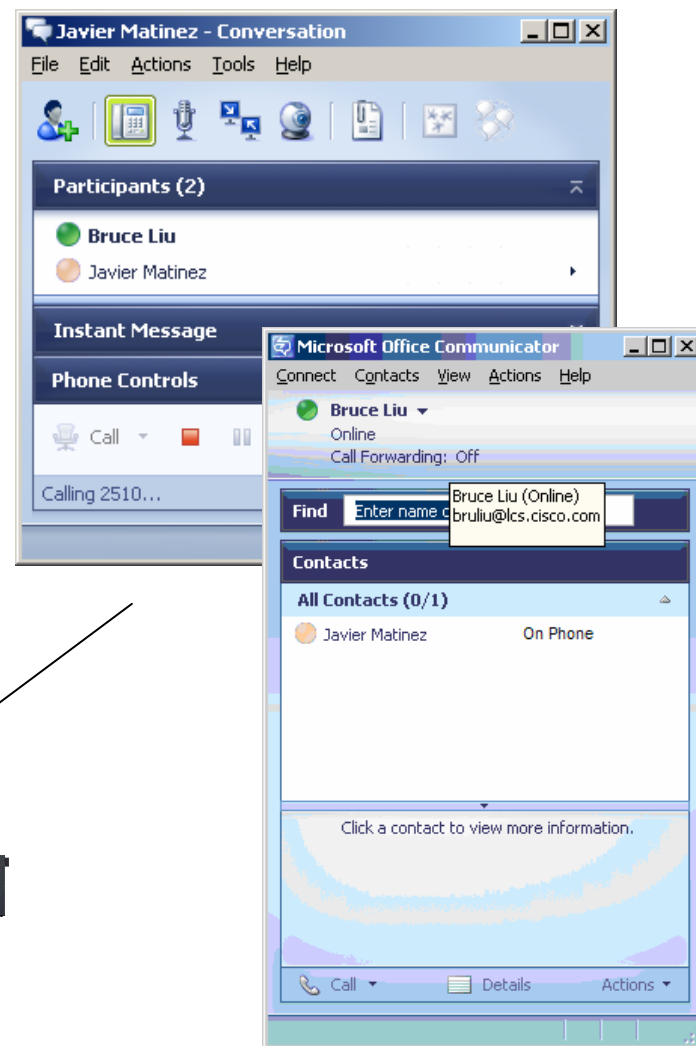


Cisco Unified Presence Server: LCS 2005 and MOC integration

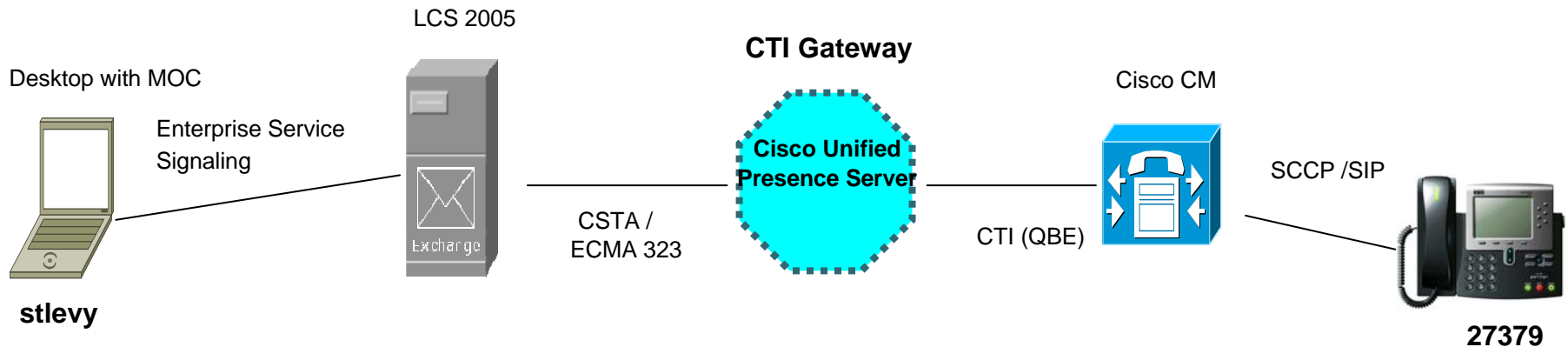
- Implements CSTA to CTI bridge to integrate with existing LCS 2005 interfaces
- Provides click-to-dial, phone hook status reporting and general phone control from MOC client
- Will migrate over time to a pure SIP solution for better scalability



MS Office Communicator
user with Cisco IP Phone



Cisco Unified Presence Server: CTI Gateway



CTI Gateway Functionality:

- **CSTA Interface to Microsoft LCS 2005**
- **CTI Interface to CallManager**
- **Linkage of Microsoft Office Communicator and CallManager endpoint for a specific user**
- **Support monitoring of CallManager endpoint activity via Microsoft Office Communicator**

Support call establishment and call modification for CallManager endpoints via Microsoft Office Communicator : Make call, Answer call, Clear connection, Deflect, Hold, Retrieve, Consultation, Single step transfer, Transfer, Conference call, Alternate, Reconnect, Generate digits, Set/Get forwarding Set/Get DND

Cisco Unified Presence Server : Administration Interfaces Summary

The following Administration Interfaces are supported for the Cisco Unified Presence Server :

- **System Administrator GUI**

Allows for provisioning of system data and default end user data e.g. Proxy routes, Method event routing, Backend gateway for Presence, Access Control Lists, sys admin for apps (IPPM, CTI Gateway, Unified Personal Communicator), etc

- **End User GUI**

Allows for provisioning of end user specific data for services e.g. Contact Lists, Canned Responses, Presence Rules (black / white lists), etc

- **Bulk Administration Tool (BAT) for creation of large number of end users**

Cisco Unified Presence Server: Database Synchron Agent

- **Use a comparable IDS Database schema to CallManager**
- **Collect data from CallManager so the customer does not need to re-provision core user data**
 - **Certain provisioned data is ported from CallManager Database using AXL/SOAP interface**

User Identity, User Device, Numbering Plan, Dial Rules, etc
 - **Listens to changes to the CallManager data and updates the Cisco Unified Presence Server database accordingly to keep in synch**



Cisco Unified Personal Communicator

The Console

- **Create Groups of Contacts**
- **Integrated Corporate and Local Directory Search**
 - LDAP v3
 - Microsoft Outlook 2003
 - Apple Address Book
- **Click to Call**
- **Sort, View Play Voice Messages**
 - Cisco Unity Connection 1.1
- **Set & View Preferred Method of Contact**
- **Communication Logs of Incoming and Outgoing Calls**
- **Windows and Macintosh client**



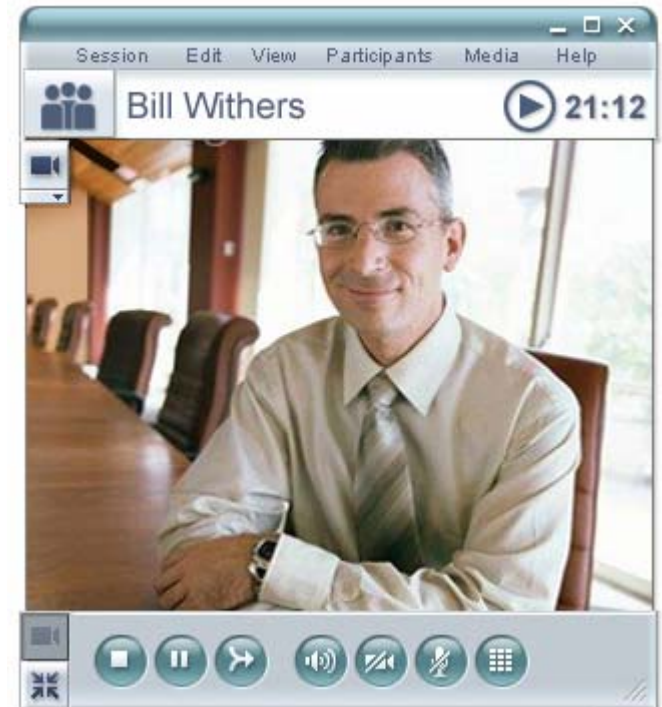
Voice

- **Voice Conferencing via CallManager**
- **Integrated softphone and/or associated physical phone (CTI)**
- **Supported audio codecs: G.729a, G.711u/a**
- **Call control functionality for both audio and video calls: Hang up, Hold, Merge, Open Dialpad**
- **RFC 3261 support for SIP**



Video Telephony

- **CUPC is a CallManager 5 video endpoint**
 - Video capabilities enabled in softphone mode in R1
- **Ad-hoc video conferencing**
- **H.263 video**
- **Video Formats – CIF, QCIF – up to 30 FPS**



Presence and Web Conferencing

- **Presence**

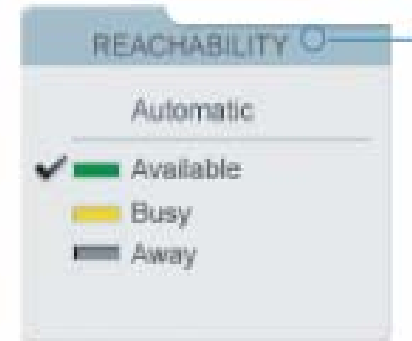
- View presence of other CUPC and CUPS users**

- “Busy” when off-hook**

- Presence communicated via SIP/SIMPLE RPID version 0.7**

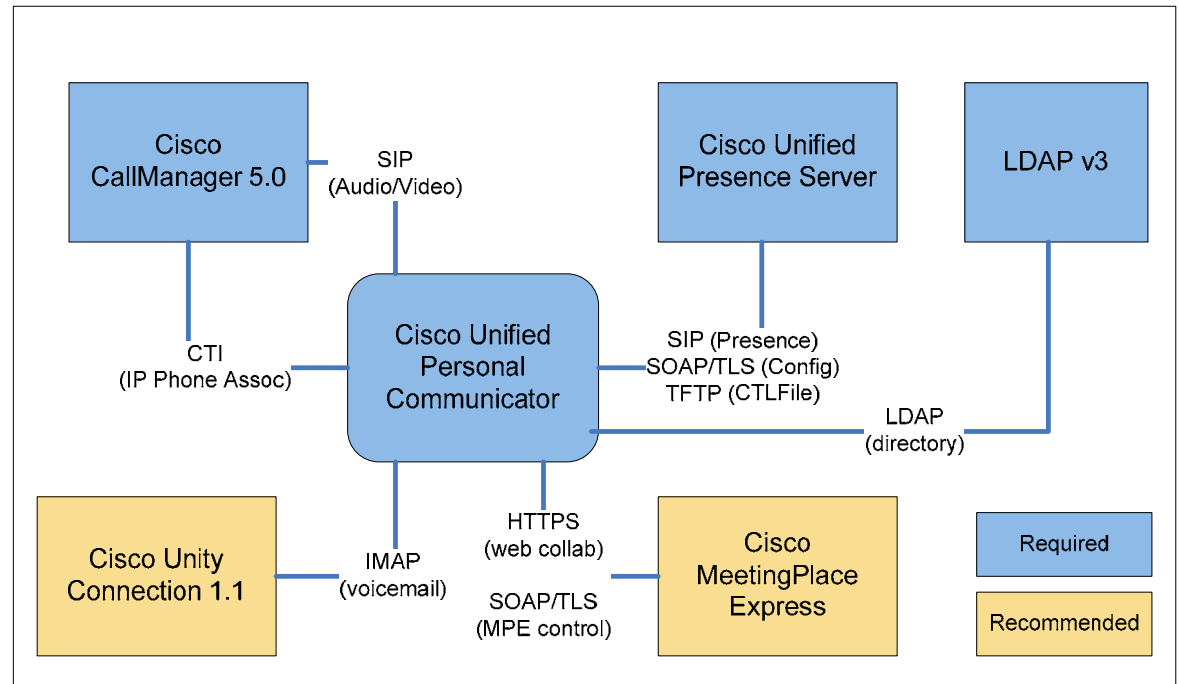
- **MeetingPlace Express Web Conferencing Escalation**

- Click to join ad-hoc web conferencing**



Servers Supported in Release 1

- **Cisco Unified Presence Server**
 - Required
 - User Provisioning
 - Licensing
 - Presence
- **CallManager 5**
 - Required
 - Voice, Video, SIP
- **LDAP v3 compliant server**
 - Required
- **Unity Connection 1.1**
 - Recommended
 - Voicemail browsing
- **MeetingPlace Express**
 - Recommended
 - Ad-Hoc Web Conferencing



Cisco Unified Personal Communicator Flash demo



http://www.cisco.com/cdc_content_elements/flash/cisco_uni_comm_3tab_web/flash.html

Cisco Mobility Solutions



Inside the Enterprise Mobility

Cisco Unified Communications Mobility Solutions

- **Cisco Unified CallManager extension mobility**
- **Cisco IP Communicator**
- **Cisco Unified Personal Communicator**
- **Cisco Unified MeetingPlace conference and collaboration**
- **Cisco Unity Voice Messaging**
- **Cisco Unified Wireless IP Phone 7920**



Mobility Outside the Enterprise

Continuous Productivity All the Way to Your Destination

- **Mobile Connect**
- **Dual-mode wireless/cellular handset**



Cisco Mobile Connect

- **Extends desktop IP phone to existing cellular handsets**

Allows voice call continuity inside and outside office up to four external clients

Preserves enterprise call coverage services

- **Flexible administration options**

Provisioning allows for full administrator control or flexible user self administration (Web/TUI)

- **Supported on Cisco Unified CallManager 4.x and 5.0**



Nokia Dual Mode Solutions for Enterprise

- **Nokia is developing an SCCP client on their dual-mode Nokia E-series devices**

Available Fall, 2006

- **User manually selects network**

In WLAN, operates as an IP Phone with Cisco Unified CallManager feature access

In public GSM network, operates as an GSM cellular phone with features offered defined by the GSM carrier

- **Couple with Cisco Mobile Connect application to provide flexible enterprise forwarding/screen services**

**Available
Fall '06**



E60



E61



E70



Enterprise Mobility: *Cisco Unified MobilityManager and Mobile Connect Solution Overview*

Cisco Unified MobilityManager and Mobile Connect

- **Cisco Unified MobilityManager**

Cisco Unified MobilityManager is the application server software that will deliver *Mobile Connect*, *Mobile Voice Access*, and other mobility services

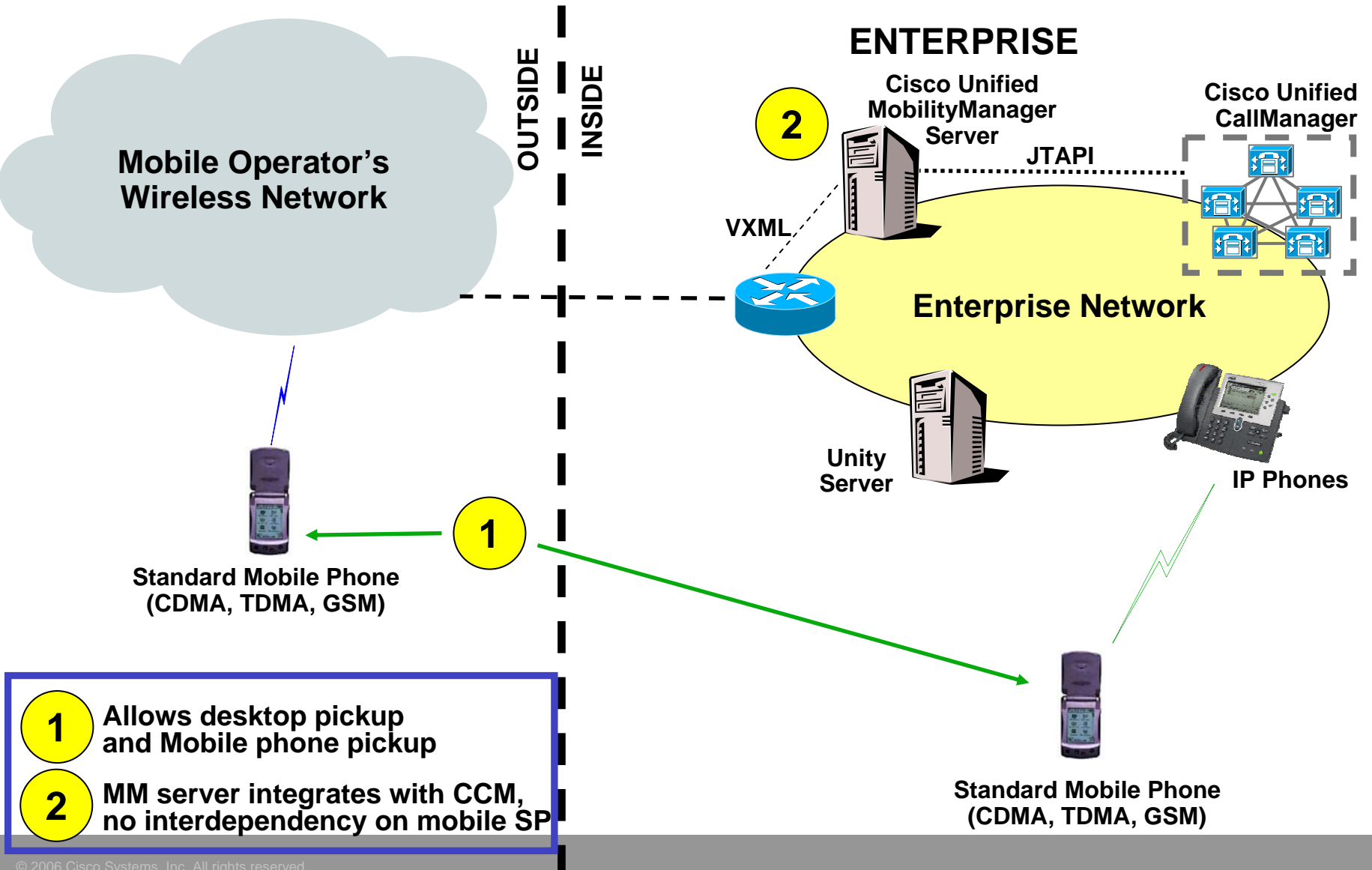
Cisco Unified MobilityManager runs on the all the MCS-78xx server with Rel 1.2

- ***Mobile Connect (MC)***

Mobile Connect is the end-user mobility service that delivers the single number, single voicemail box, device mobility functionality



IPC Mobility Architecture: Cisco Unified MobilityManager running Mobile Connect



Mobile Connect - Solution Benefits

- **Mobile Connect solution benefits:**

- Increase responsiveness for mobile workers**

- Improve mobile workers' ability to manage voice communications when out of the office**

- Gain access to enterprise IPC network resources when mobile**

- **Mobile Connect enterprise IT/Telecom benefits:**

- Adds mobility functionality to Cisco Unified CallManager installation**

- Leverages PSTN voice gateways and VoIP WAN resources to manage voice traffic and costs**

- Provides secure system administration and end-user access**

Mobile Connect - What customer problems are we solving?

- **Callers have to try multiple numbers to reach a mobile worker**
Feature: Single business number reach
- **Mobile workers must check two voice mail boxes (cell and enterprise)**
Feature: Single voice mail box
- **Mobile workers do not want to be reached for all business calls**
Feature: Allowed/Blocked call filters
- **Mobile workers must interrupt conversations when changing locations**
Feature: Desktop pickup and Cell phone pickup
- **Cellular users cannot access the IPT network resources (i.e. WAN and voice gateways)**
Feature: Mobile Voice Access

Mobile Connect - Feature Highlights

- **Simultaneous ring**
- **Multiple remote destinations (up to 4 – mobile, home, etc.)**
- **Single enterprise voice mail**
- **Desktop call pickup**
- **Mobile phone call pickup**
- **Mobile Voice Access**
- **Remote on/off**
- **Allowed/Blocked call filters**
- **Caller ID (given service provider support)**
- **System admin controllable user profile access**
- **Web-based admin for system admin and end-user**
- **No changes required with mobile phone or mobile cellular service provider**
- **Cisco Unified CallManager 4.x and 5.x compatible**

Cisco Unified MobilityManager System Administration

Cisco MobilityManager Administration For Cisco IP Telecommunication Solutions

System ▾ User ▾ Serviceability ▾ Export ▾ Help ▾



Cisco MobilityManager Administration

System version: 1.1.0.1-21
Administration version: 1.1.0.1-21

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This product contains cryptographic features and is subject to United States and local country laws governing import, export, products does not imply third-party authority to import, export, distribute or use encryption. Importers, exporters, distributor U.S. and local country laws. By using this product you agree to comply with applicable laws and regulations. If you are unable product immediately.

A summary of U.S. laws governing Cisco cryptographic products may be found at: <http://www.cisco.com/wwl/export/crypto/>
If you require further assistance please contact us by sending email to export@cisco.com.

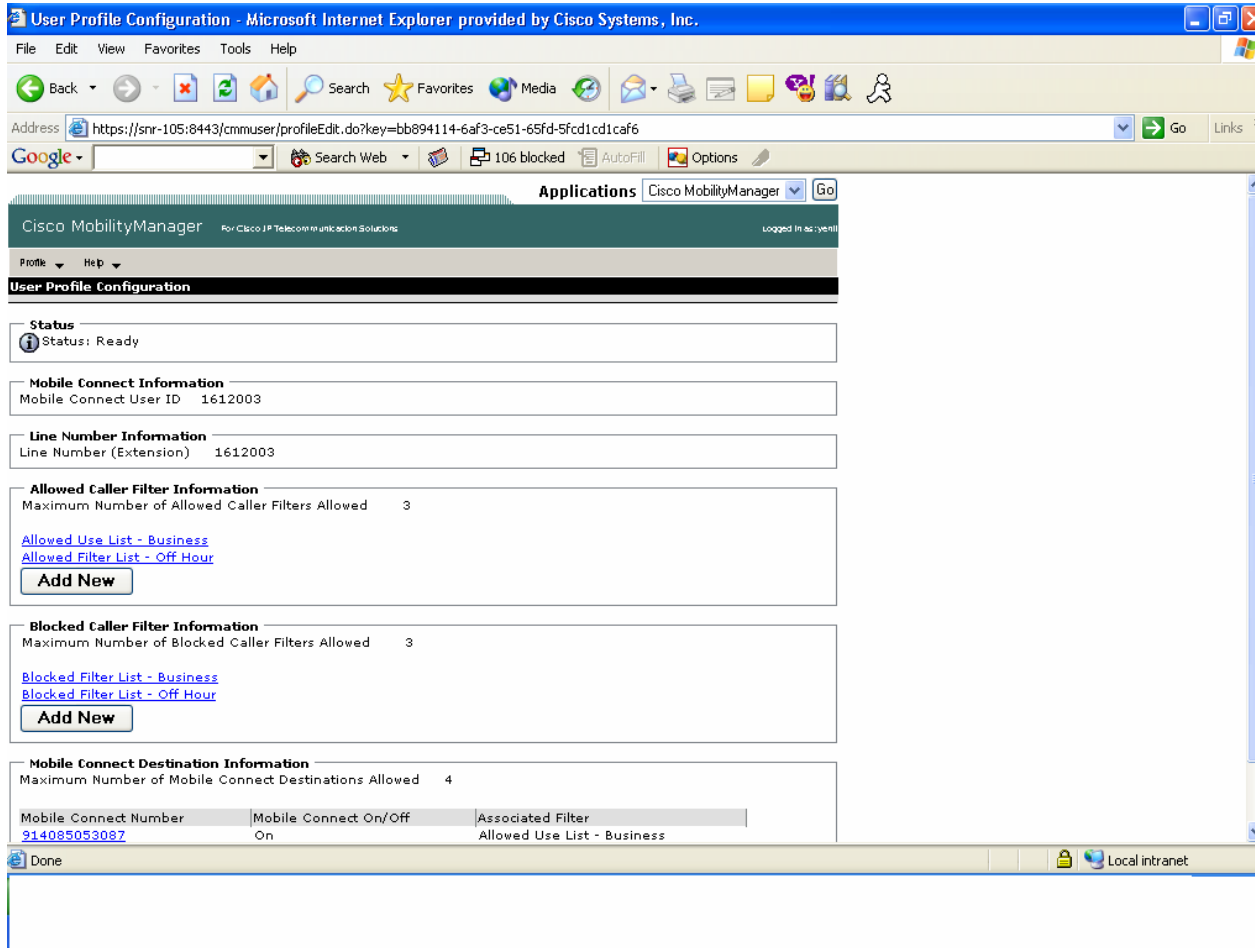
- Data Synchronization
- Backup and Restore
- Administrator Password Management
- Directory User Settings

**Configure Through
MobilityManager Administration
Web Page**

<http://<Mobility Server>:8080/cmmadmin>

Default login: CMMAdmin/ciscocisco

Cisco Unified MobilityManager User Administration



- Same login as Cisco Unified CallManager account
- Web-based
- System admin controlled
- End-user flexibility

Cisco Unified MobilityManager Call filters

The screenshot shows the Cisco MobilityManager web interface for configuring call filters. The browser window title is "Filter Configuration - Microsoft Internet Explorer provided by Cisco Systems, Inc.". The address bar shows the URL: <https://snr-105:8443/cmmuser/filterEdit.do?key=bb894114-6af3-ce51-65fd-5fcd1cd1caf6>. The page content includes:

- Applications:** Cisco MobilityManager
- Profile:** Help
- Filter Configuration:** Back to User Profile
- Status:** Status: Ready
- Allowed Caller Filter Information:**
 - Filter Name: Allowed Use List - Business
 - Allowed Number:
 - Buttons: add, replace, delete
 - Allowed Number List:
 - 161*
 - 408*
 - 510xxxxxx
- Buttons:** Save, Delete

- Allowed calls
- Blocked calls
- Multiple filter per user
- One active filter per user

Mobile Connect Product Components

- **Customer installed Linux appliance server (using same appliance model used for Cisco Unified CallManager 5.x)**
- **MCS-78xx support**
 - MCS-7815, -7825, -7835 and -7845**
- **Standard JTAPI interface to Cisco Unified CallManager 4.x and up**
 - Supports CallManager 4.02a/later and 5.0**
- **IBM IDS database for Mobile Connect users and administration (same as Cisco Unified CallManager 5.x)**
- **Cisco Unified MobilityManager server and Mobile Connect user license required**

Q and A



CISCO SYSTEMS

