



# Cisco Unified Communications

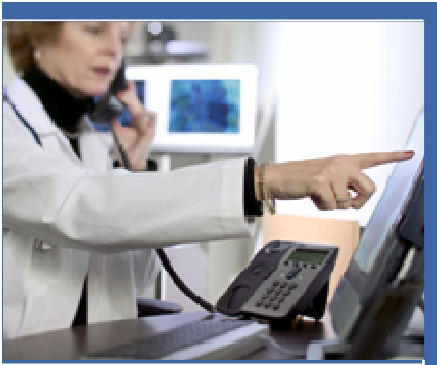
*enable smarter, more effective  
communications*



***Mohamad El Chami***  
***Advanced Technology Manager***



# Cisco UC 6.0 Agenda

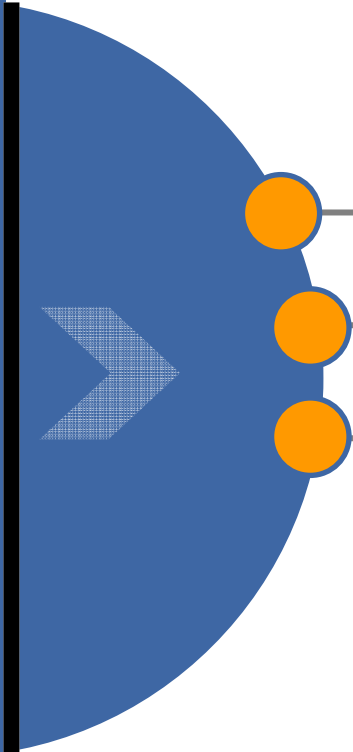


**Cisco UC Overview**

**Cisco UC System 6.0**

**What's New in Cisco UCC**

# Cisco Unified Communication Overview



**Why IP Telephony**

**Cisco Unified Communications  
Summary**

# Global Trends Driving Business Change



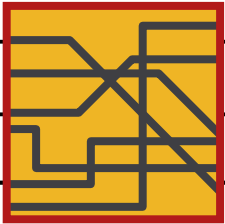
Global



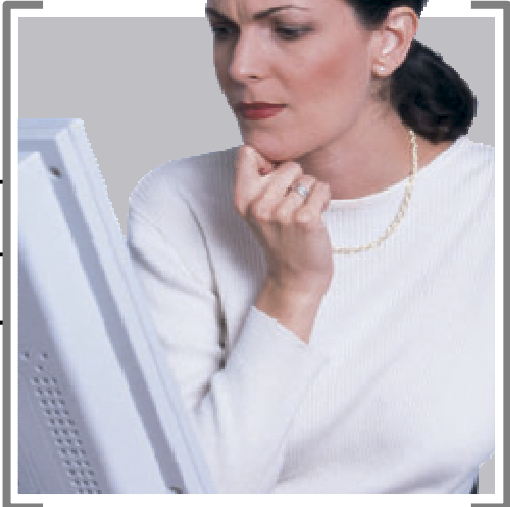
Mobile



Virtual



Communication Complexity

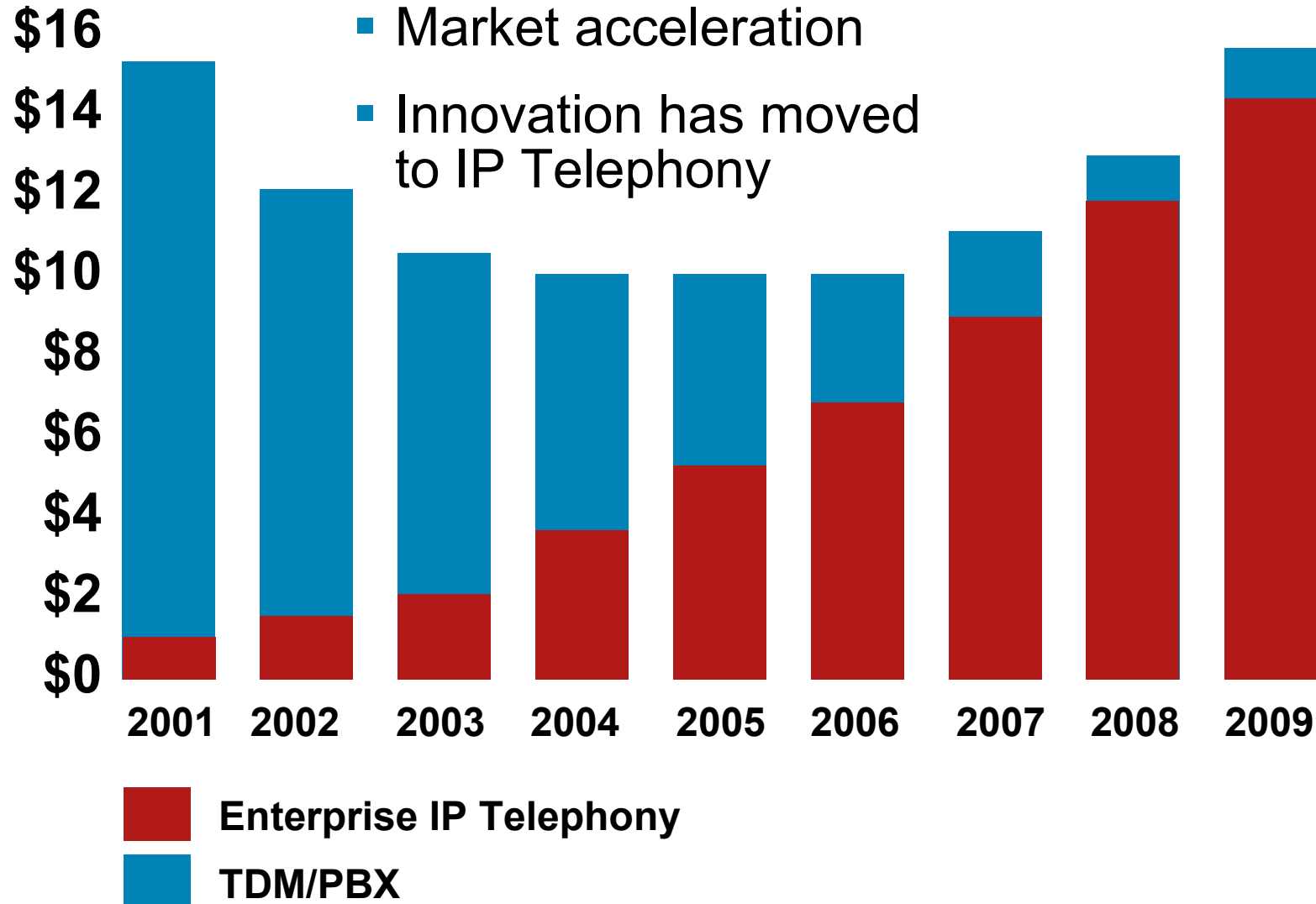


# Complexity Impacts Business Productivity

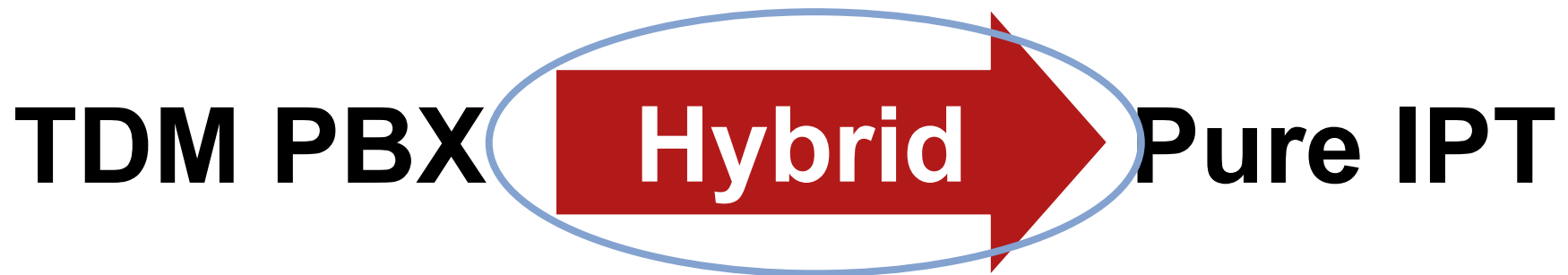


# The Marketplace Has Shifted

Total Market \$B



# Traditional Telephony Vendors Caught in the Middle of the Evolutionary Process



**5000 User PBX**



**5000 User IPT System**

# Advantages of IP Telephony

**Expanded Benefits**  
Improving Business  
Productivity

## Competitive Advantage

- Better customer service and response
- Better collaboration
- Mobility and teleworker gains
- Higher productivity
- Speed to market

## Business Resilience

- Disaster recovery
- Security

**Initial Benefits**  
Reducing Cost

## Lower Costs

- Reduce management costs
- Moves, adds, and changes
- Lower cabling costs
- Toll Bypass



# A New Generation of Empowered End Users

BusinessWeek online

## The Power of Us

Mass collaboration on the Internet is shaking up business



“The next generation of information workers will expect a highly visual, connected, contextual information workplace they can take anywhere.”

—Forrester

# What Businesses Really Want: A More Effective Way



# Introducing Cisco Unified Communications

Structure and Intelligence in Every Aspect of Business Communications

Business Process

Productivity

Business Transformation

Secure

Video



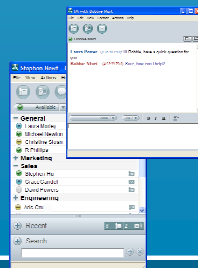
E-Mail/  
Calendar



Mobility



Conferencing and  
Collaboration



IP Network

Voice and Unified  
Messaging

End  
Points

Presence and  
Instant Messaging


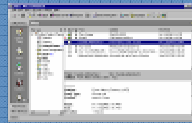

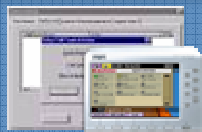










Telephony  
Services

Contact  
Center

# Comprehensive Portfolio

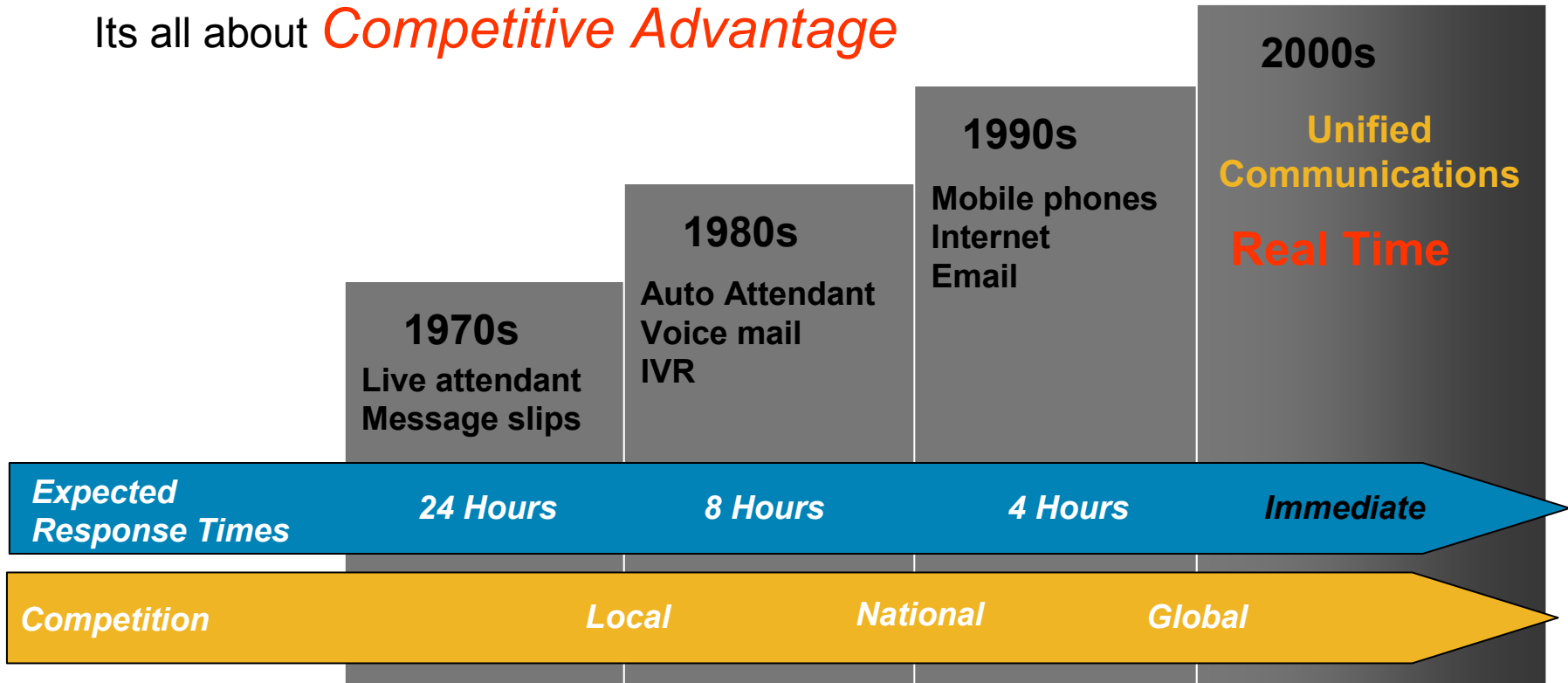
Smart, Simple, Secure Solutions for Businesses of All Sizes



<p><b>Applications</b></p>	<p>Workplace Resources</p> 	<p>Voicemail and UM</p> 	<p>Emergency Responder</p> 	<p>Customer Contact</p> 	<p>Rich Media Conferencing</p> 
<p><b>Endpoints</b></p>	<p>Cisco IP Phone</p> 	<p>Wireless Phones</p> 	<p>Video Phone</p> 	<p>IP Communicator</p> 	<p>VT Advantage</p> 
<p><b>Call Control</b></p>	<p>Hosted Call Control</p> 		<p>Unified CallManager</p> 	<p>Cisco Unified CallManager Express and Unity Express on Cisco ISR</p> 	
<p><b>Infrastructure</b></p>	<p>Intelligent Network Infrastructure: Security, Switching, Routing, QoS, Availability, Administration</p> 				

# Why is Unified Communications Important for Your Company?

Its all about *Competitive Advantage*



# Welcome the Millennials

- Largest new work force since the baby boom
- Totally connected
- Total technology blend with life
- World without edges
- Mobile, multi-cultural, multi-tasking
- Unique customer style
- Coming into the workplace today
- Is your Business ready?

Welcome to a network where there is a new way of communicating...



## **Cisco Unified Communications**

***A New Way of  
Communicating***



welcome to  
the human network.





# Cisco Unified Communications System 6.0 Overview



**Ahmed Samir**  
**Systems Engineer**  
**ahsamir@cisco.com**





# Evolving Cisco Unified Communications

- Began with the introduction of “Unified Communications”
- Cisco Unified CallManager manages a breadth of services: call processing, video, mobility, presence

## **Cisco Unified Communications Manager**

Communications suite including: Call processing, video, mobility and presence services for enterprises with 30,000+

## **Cisco Unified Communications Manager Business Edition**

Communications suite including: Call processing, mobility, presence and messaging services for the 150-500 person business

## **Cisco Unified Communications Manager Express**

Communications suite including: Call processing services for the 20-250 person business

# Cisco Unified Communications System 6.0



Enabling Mobile Employees



Solutions for Small & Medium-Sized Businesses



New Ways for Companies to Collaborate



# Mobility





# Extending Unified Communications to Mobile Employees

- Deliver ubiquitous unified communications experience through wired, wireless and cellular devices

## Wide-Area Mobility:

- Cisco Unified Mobile Communicator 
- Cisco Unified CallConnector Mobility 
- Cisco Unified Mobility

## Campus Mobility:

- Cisco Unified Wireless IP Phone 7921G (Wi-Fi 802.11a/b/g phone) 
- Third Party Phone Extensions (Dual mode) 

## Remote Worker Mobility:

- Cisco Unified Personal Communicator
- Cisco IP Communicator
- Cisco Unified Remote Agent



# Cisco Unified Mobile Communicator

- Intuitive, common user experience across different mobile handsets
- Extends unified communications to mobile phones and smartphones
  - Integrated presence-enabled directory
  - Mobile-to-desk phone call transfer
  - Single business number reach
  - Single voicemail - Office and mobile voicemail
  - visual notification and playback
  - Single call log - Office and mobile call log
  - Cisco Unified MeetingPlace conference notifications
- Support for BlackBerry, Windows Mobile, Symbian OS and BREW handsets (phased)
- Support for multiple mobile network operators



# Small and Medium-sized Business Solutions



# Cisco Unified Communications Manager Business Edition

## The Smart Choice for Medium-sized Businesses

- Key Unified Communications Applications for 100-500 Person Companies on a Single Appliance

Cisco Unified Communications Manager, Cisco Unified Mobility, and Cisco Unity Connection  
Simplified installation and management

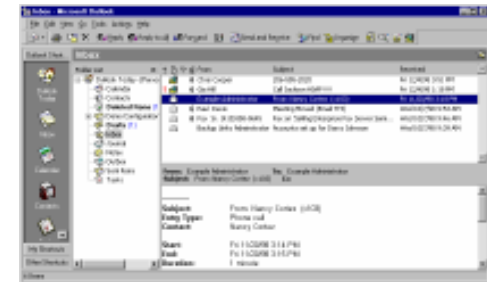
- Flexible Deployment Options for Growth

Single or multi-site centralized configurations  
Expansion and migration paths

- Foundation for More Advanced Unified Communications Capabilities

- Integrates With Entire Cisco Unified Communications System of Products

Cisco Unified MeetingPlace Express, Cisco Unified Contact Center Express, Cisco Unified IP Phones and more



# Unified Communications Manager 6.0 Features





# Intercom Overview

**Intercom functionality in Cisco Unified Communications Manager allows one touch communications between two endpoints even if the target is on an active call.**

## **Feature Availability:**

- **Cisco Unified Communication Manager 6.0**
- **8.3(1) IP Phone firmware**
- **Intercom support for different phone models is as follows**

<b>Phone Model</b>	<b>SIP</b>	<b>SCCP</b>
<b>7931</b>	<b>No</b>	<b>Yes</b>
<b>7941, 7961, 7970, 7971</b>	<b>Yes</b>	<b>Yes</b>
<b>7911, 7906, 7940, 7960</b>	<b>No</b>	<b>No</b>

# Intercom Details

- **Intercom line button initiates a whisper call (one way audio will be setup).**
- **If the intercom line has an inbound whisper state call, pressing its line button (talk back) will change the call state to connected (audio will be two way).**
- **If the intercom line has an outbound whisper call, pressing its line button will display overview mode.**
- **There cannot be more than one intercom call inbound/outbound on the phone at any given time**
- **No call features (hold, transfer, etc.) are allowed on intercom call.**

# Intercom Details

- **When destination is idle, it will use speakerphone with mute activated. User cannot deactivate mute button.**
- **When destination is offhook (busy), it will use the existing media path without interrupting its current activity. Intercom caller's voice will be mixed at the destination without sending to Intercom destination's current connected party.**
- **If a busy destination user wants to reply back to the caller, its current call will be either cleared or put on hold, before two way media can be established with intercom caller.**
- **Intercom line can be configured with a pre-defined destination (speed dial) to allow fast access or the user can dial any accessible intercom number.**

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# Do Not Disturb (DND)

- CCM 6.0 Do Not Disturb feature enables user to put their phone into Do Not Ring mode.
- User can activate/deactivate Do Not Disturb from their phones or from User pages.
- DND can also be enabled/Disabled by Administrator on a per phone basis
- Do Not Disturb is **device** based feature. If DND is activated, it would affect **all lines** for that **device**.
- When DND is active on a device, the phone will play a periodic 'reminder' tone (can be configured or disabled)

# Phone Types supporting DND

- Do Not Disturb with 'Ringer Off' feature is supported in the following phone models.
  - 7906/7911/7914/7931/7941/7961/7970/7971 SCCP/SIP
  - 7940/60 SCCP
- 79x1 and 7970 Phones support DND on a PLK
- 7940/60 SIP phones will still use their own implementation of DND which would be backward compatible
- Cisco Manager Assistant will now support CCM native DND.

# Do Not Disturb

- Once DND is enabled, all new incoming calls with normal priority will honor the DND settings for that device.
- High priority calls (CER/MLPP/User Invoked Feature) will override DND settings and will ring on the device.
- DND Option is currently limited to Ringeroff but will include CallReject in a future release.
- DND Incoming Call Alert setting determines how the incoming call alert should be presented to user with DND Ringer Off enabled. The following are the available options.
  - Disable: No Beep/Flash notification. Only Visual message “From ABC” would be displayed on the phone.
  - Beep Only: Beep tone will be played for the incoming call.
  - Flash Only: For an incoming call alert there will be flash but no tone will be played.











# What are Programmable Line Keys?

- Currently the phone's line key buttons (which are the hard buttons to the right of the display) are used to initiate, answer, or switch to a call on a particular line.
- There are also a limited number of features which can be assigned to these buttons including: Speed Dials, Extension Mobility (EM), Privacy, BLF Speed Dial, and Service URLs.
- The Programmable Line Key (PLK) **expands the list of features** which can be assigned to the line key buttons to include features which are normally controlled by Softkeys. Examples include:
  - NewCall, CallBack, EndCall, Forward All, etc.
- These features are visible at all times, so in effect you can have a “hard” NewCall key.

# Programmable Line Key Display

- The picture below shows an example of “Conference” and “Hold” assigned to line keys on a 7970.
- Programmable Line Keys icons



Feature	79x1/7970	7931
Generic Feature Key		
Mobility		
Hold		
Conference		
Transfer		



# PLK Basic Information

- The addition of Programmable Line Keys adds support for 27 features on the line buttons.
- Programmable Line Keys are supported on the following phone models (currently SCCP only):
  - 7971, 7970, 7961, 7941, 7931, 7914
- Programmable Line Keys are not supported on the 7911 and 7912 phone models since they do not have line keys.
- Programmable Line Keys are assigned to the phone via the CCM. End users cannot modify or adjust PLKs
- Operation available for PLK:
  - Redial, Hold, Transfer, Forward All, Meet Me, Conference, Park, PickUp, GPickUp, DND, MCID, ConfList, Remove LastParticipant, QRT, CallBack, Other Pickup, Video Mode, New Call, End Call, HLog, Mobility

# Call Recording

- **Two recording modes are available:**
  - **Automatic recording:** Records all calls on line appearance by CM
  - **Selective recording:** Allows supervisor to record ad-hoc. Also allows Recording server to record based on business rules and events
- **Delivers the speech (2 RTP streams) to the recording server via SIP Trunk**
  - **Allows call centers to take advantage of speech analytic technologies that look for speech patterns and behaviors which might indicate a problem during the call.**
- **Recording has no perceptible effect on**
  - The agent or customer's visual display.**
  - Any perceptible audio glitch that might tip off the agent or the customer that their call is being recorded.**
- **Supported on all 3<sup>rd</sup>-Generation phones (7911, 31, 41, 61, 70, 71)**
  - IP Communicator will be supported shortly after Communications Manager 6.**
  - Personal Communicator is being considered for a future release.**
  - Support legacy environments and remote agents being considered.**
- **For legal compliance an explicit notification, in the form of a periodic tone, can be made audible to agent, customer, or both to indicate a recording is in progress. The tone can be disabled. Recording tone overrides monitoring.**





# What's New in Cisco Unified Contact Center



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**Systems Engineer**  
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# Terminology

## Before

- IPCC Enterprise Edition
- IPCC Hosted Edition
- ICM Enterprise Edition
- ICM Hosted Edition

## Now

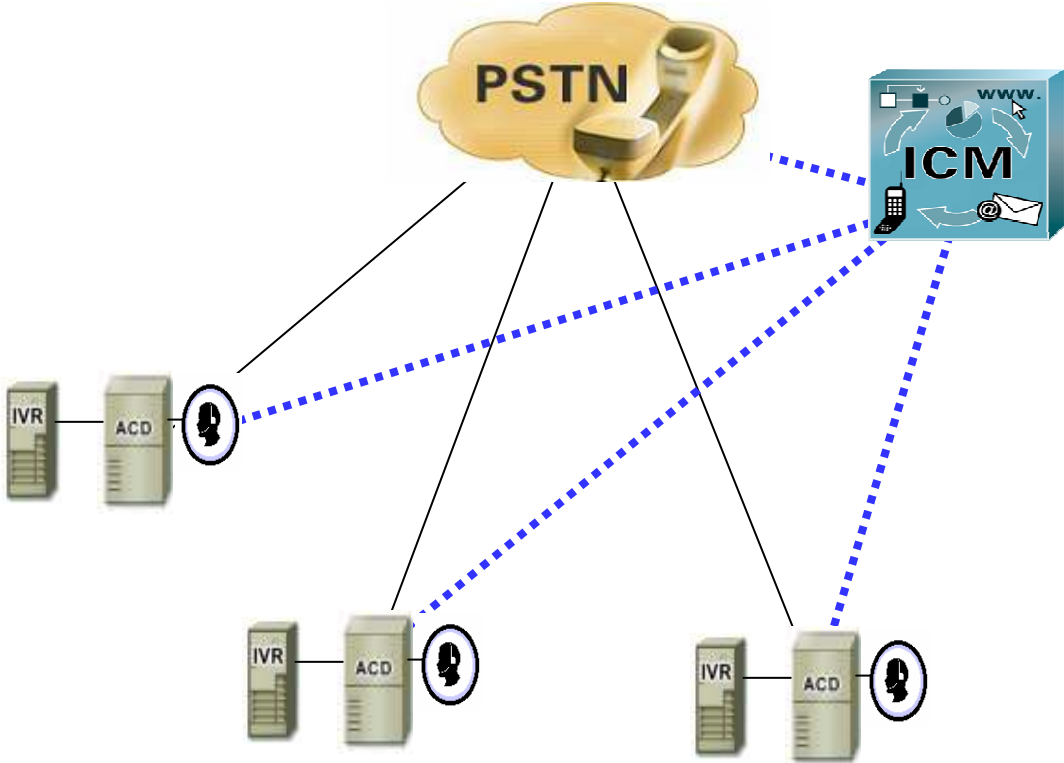
- Unified Contact Center Enterprise (CCE)
- Unified Contact Center Hosted (CCH)
- Unified ICM Enterprise (ICM E)
- Unified ICM Hosted (ICM H)



# ICM as a Migration Platform

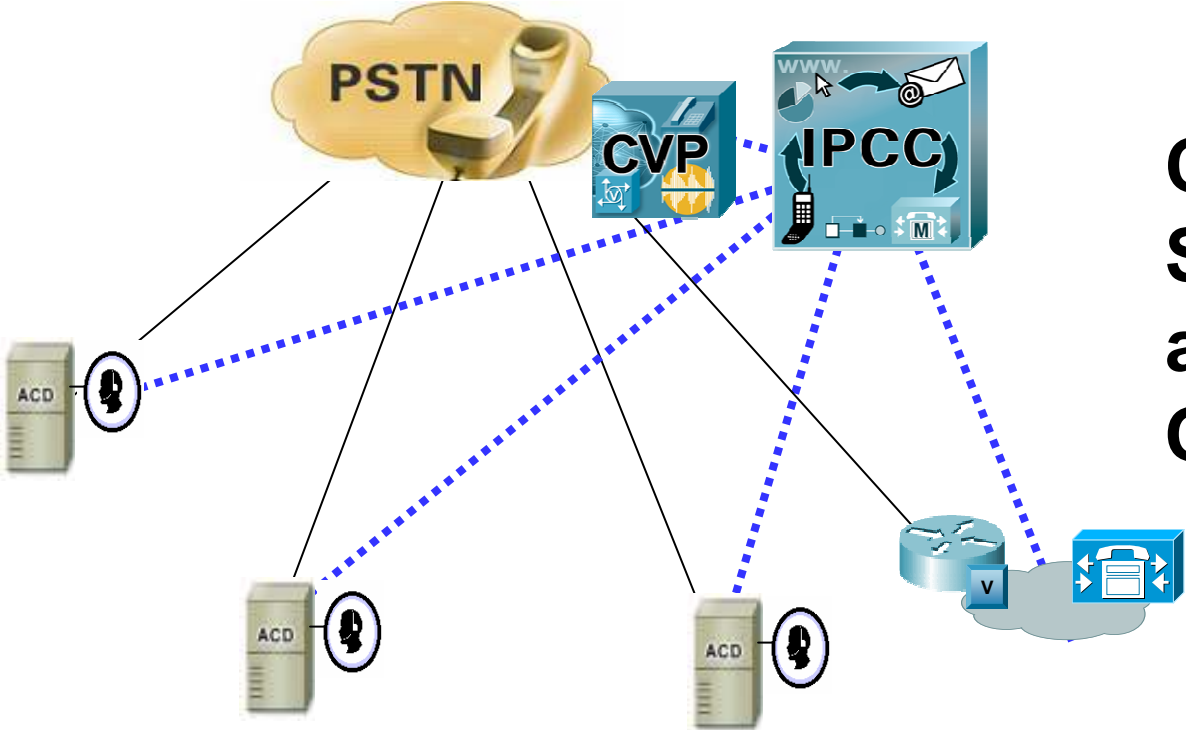


# Networked Virtual Contact Center



**Typical ICM  
Deployment**

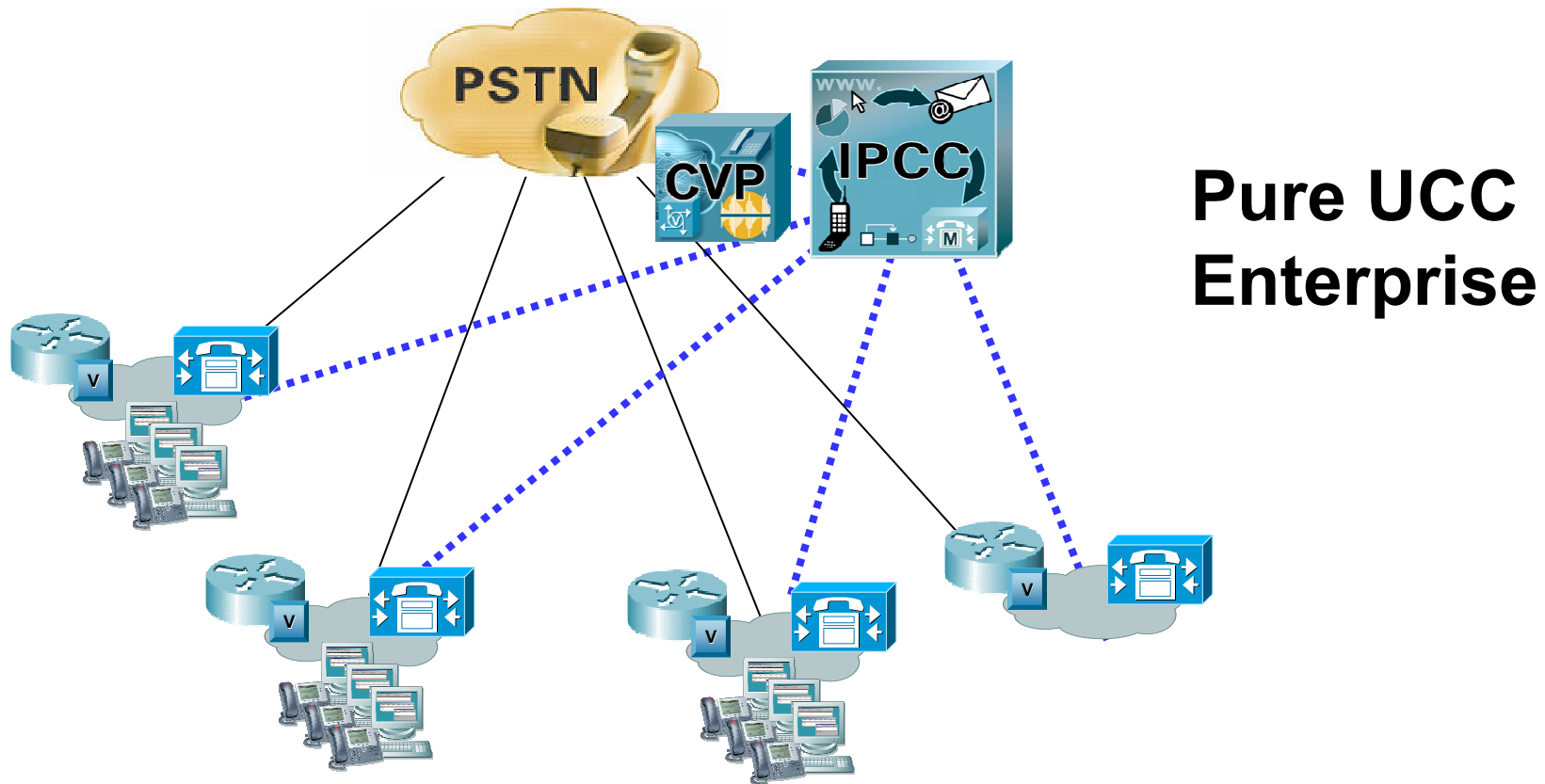
# Enterprise Contact Center (Hybrid TDM/IP Contact Center)



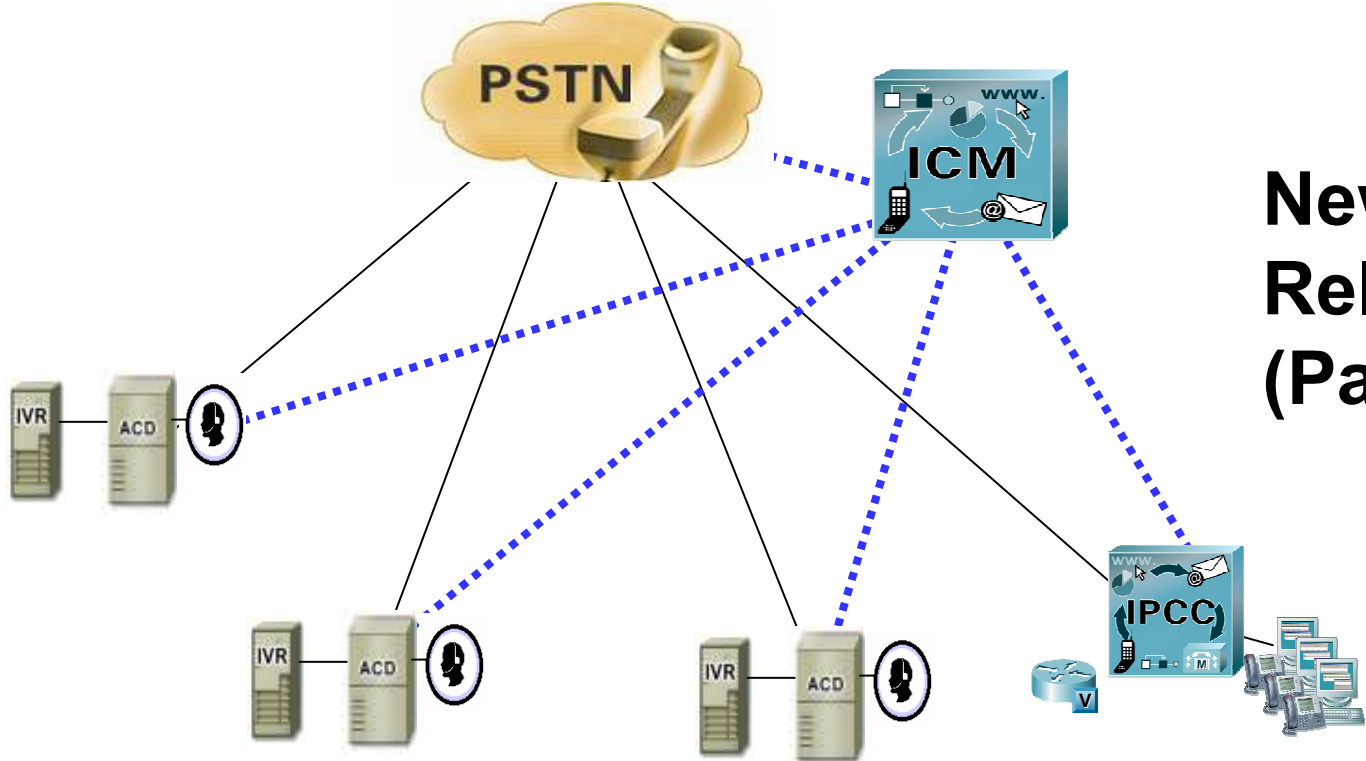
**CVP for  
Self-Service  
and Central  
Queuing**



# Enterprise Contact Center (Pure UCC Enterprise)

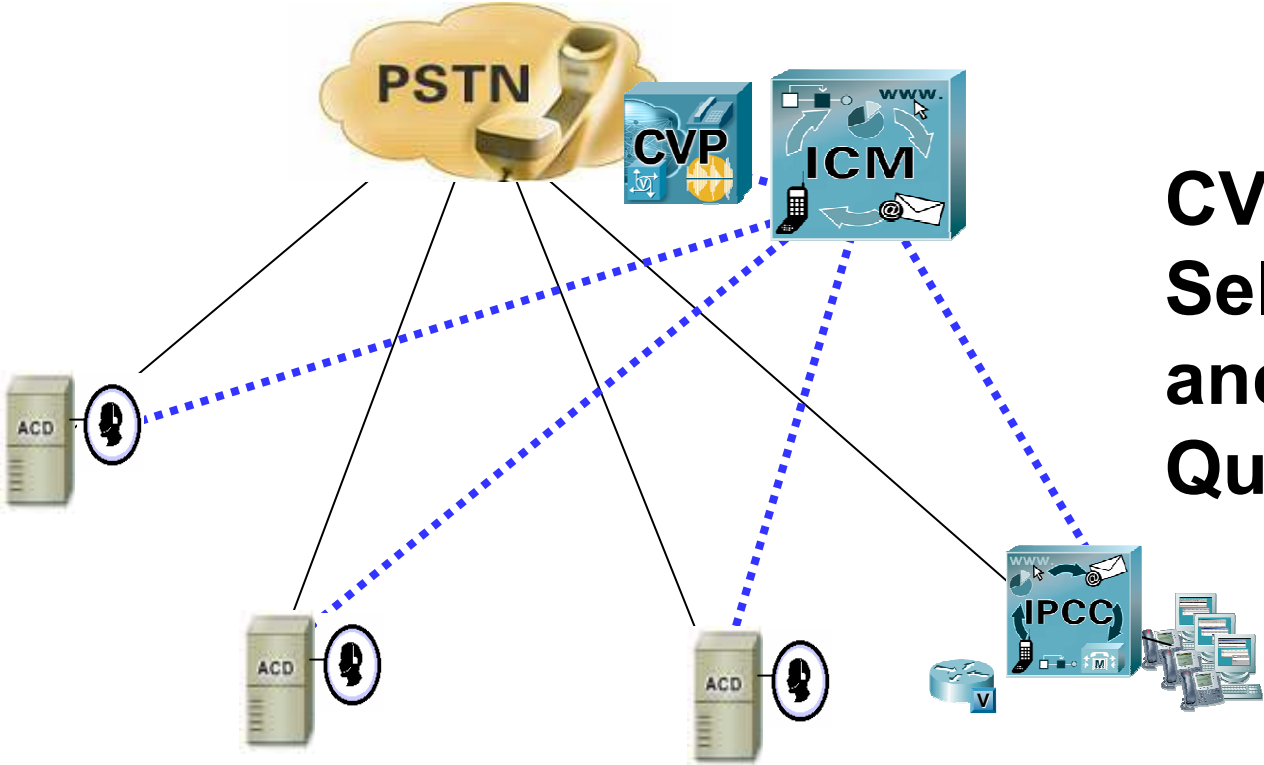


# Federated Contact Center



**New in  
Release 7.0  
(Parent-Child)**

# Federated Contact Center



**CVP for  
Self-Service  
and Central  
Queuing**

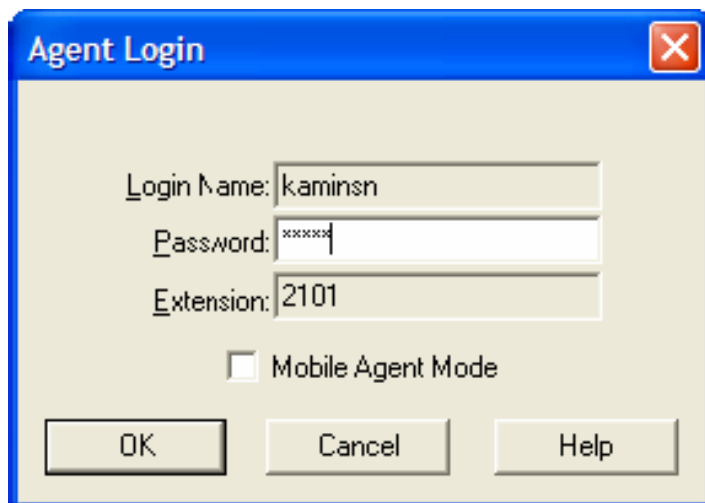
# Cisco Unified Mobile Agent



# Cisco Unified Mobile Agent

- Agent can use **any** direct dial phone
- Agent enters **phone number at login**
- **Supervisor desktops** indicate agents are mobile, and display phone number
- “Nailed Up” or Call-by-Call delivery
- Phone calls remain under **CCE/CallManager control**
- **SPAN Silent Monitoring** is supported with CTI OS and CAD
- **Centralized recording** possible
- Supported by CTI OS, CAD, and CAD BE
- **Design Considerations**
  - Reduced PG Capacity
  - Requires two gateway ports per active call

# Cisco Unified Mobile Agent: Login



Agent Login

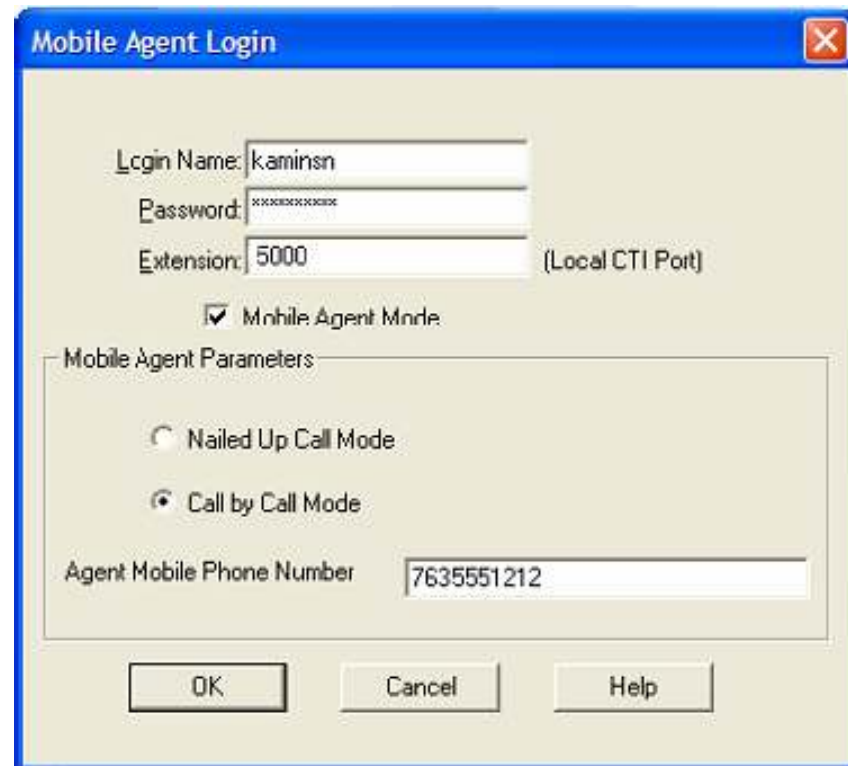
Login Name: kaminsn

Password: \*\*\*\*\*

Extension: 2101

Mobile Agent Mode

OK Cancel Help



Mobile Agent Login

Login Name: kaminsn

Password: \*\*\*\*\*

Extension: 5000 (Local CTI Port)

Mobile Agent Mode

Mobile Agent Parameters

Nailed Up Call Mode

Call by Call Mode

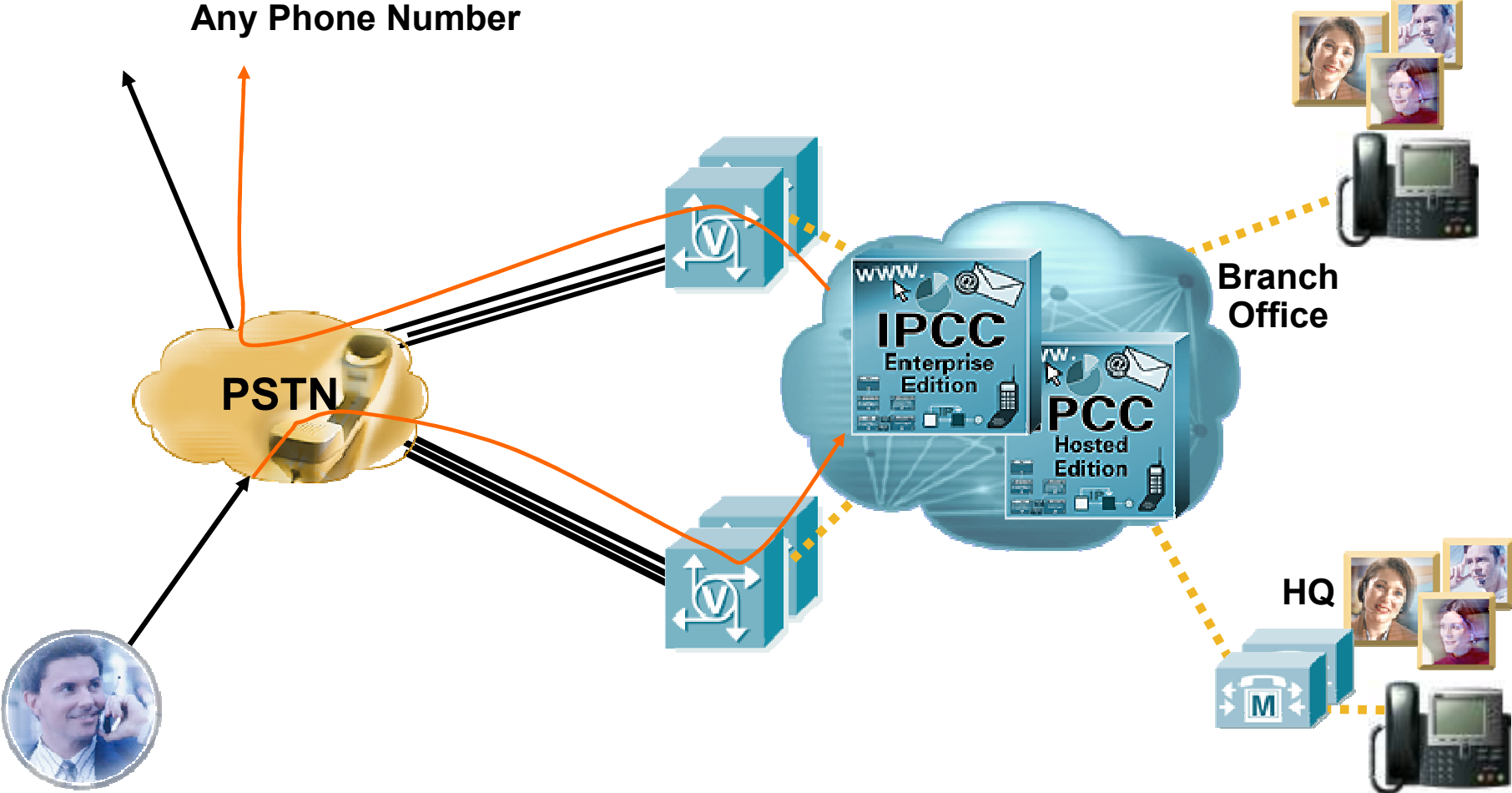
Agent Mobile Phone Number 7635551212

OK Cancel Help

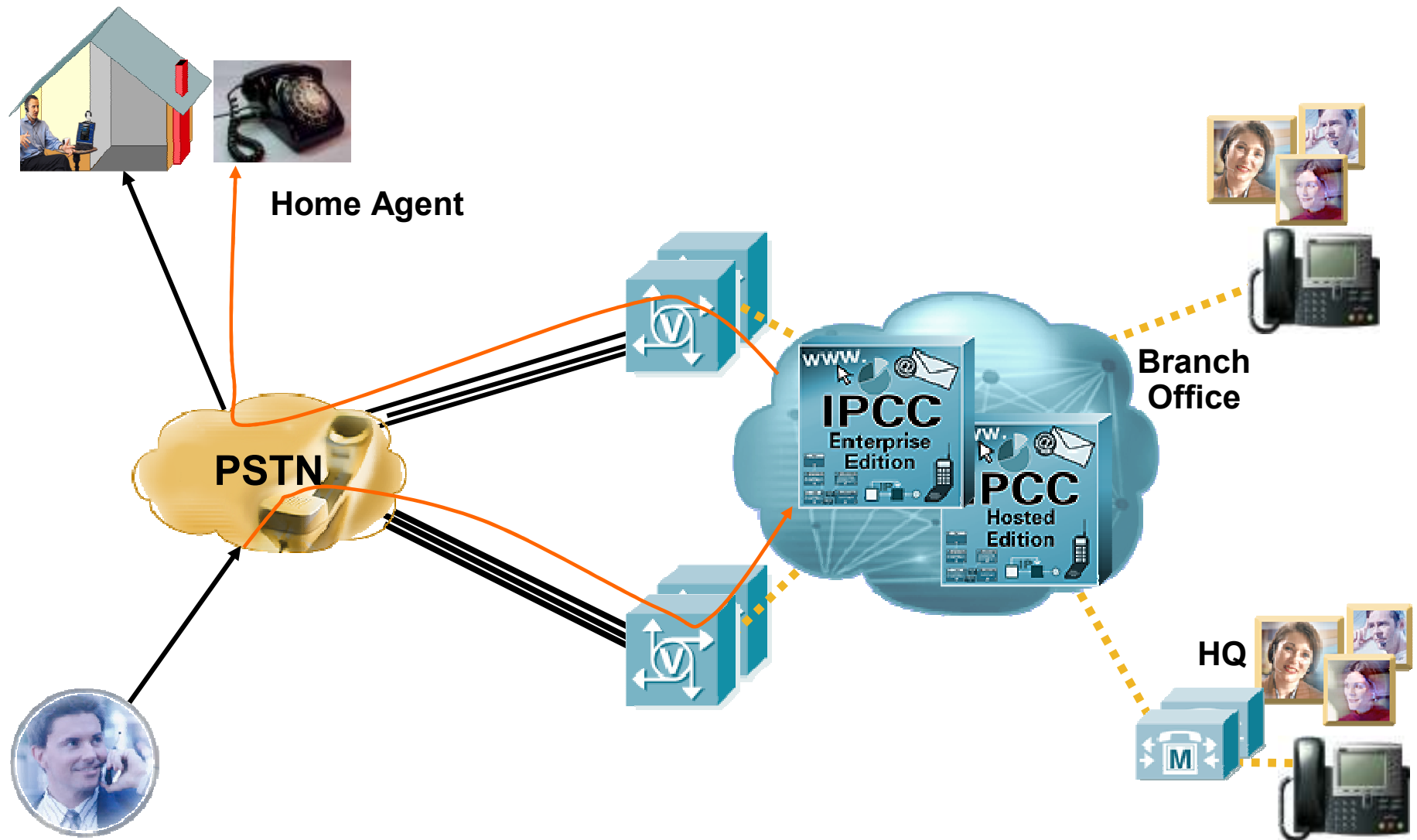
# Cisco Unified Mobile Agent

Any networked connected computer

Any Phone Number

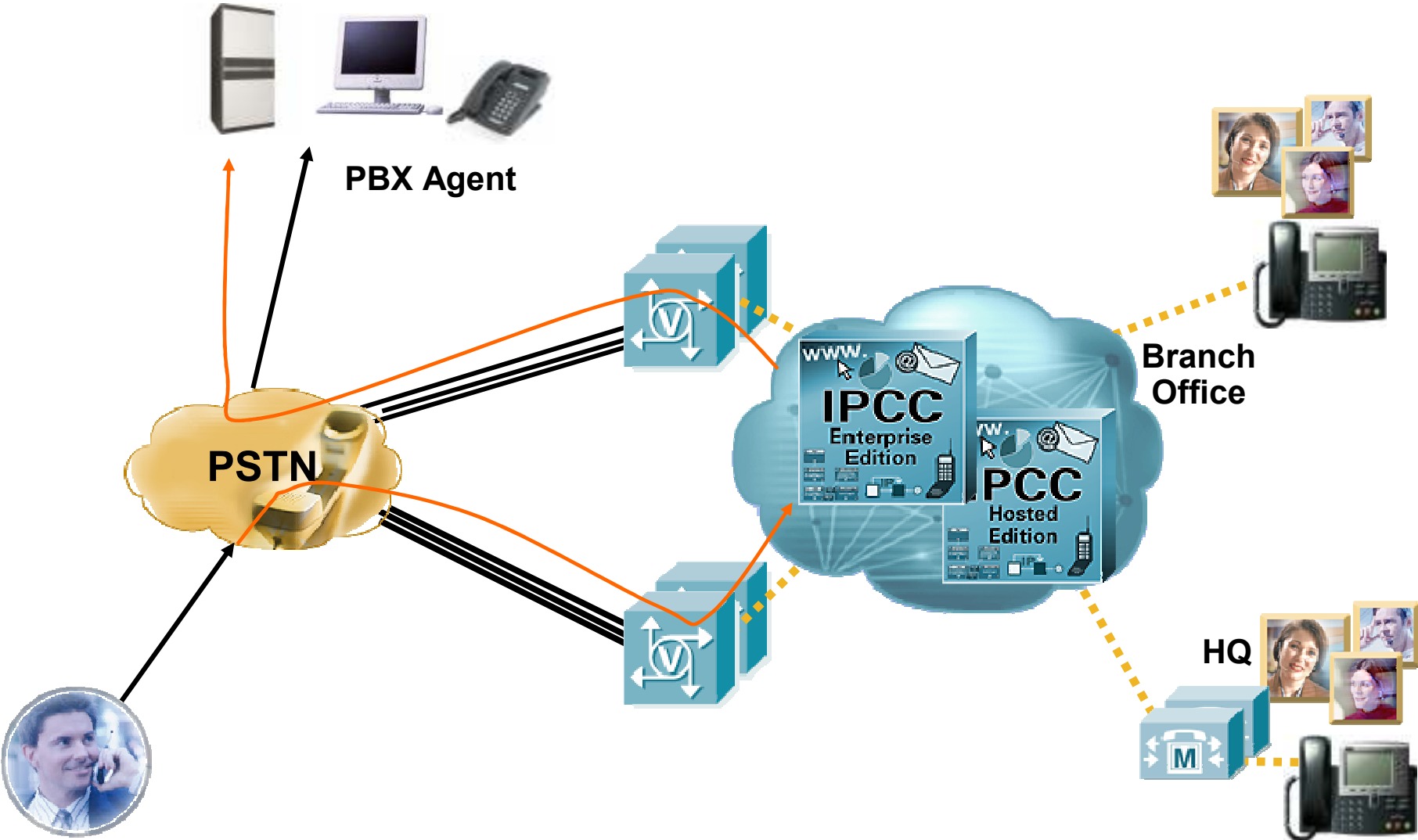


# Work At Home

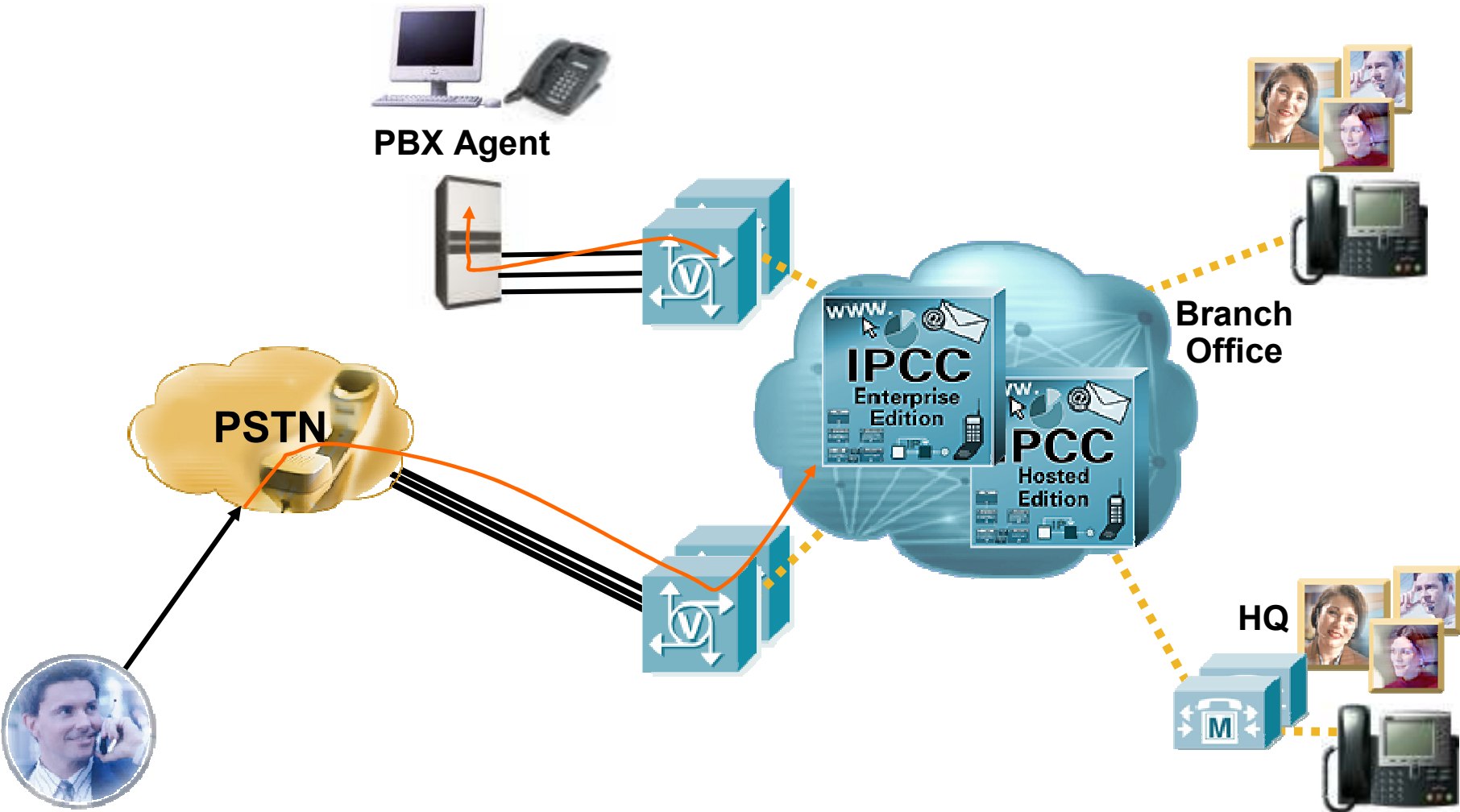




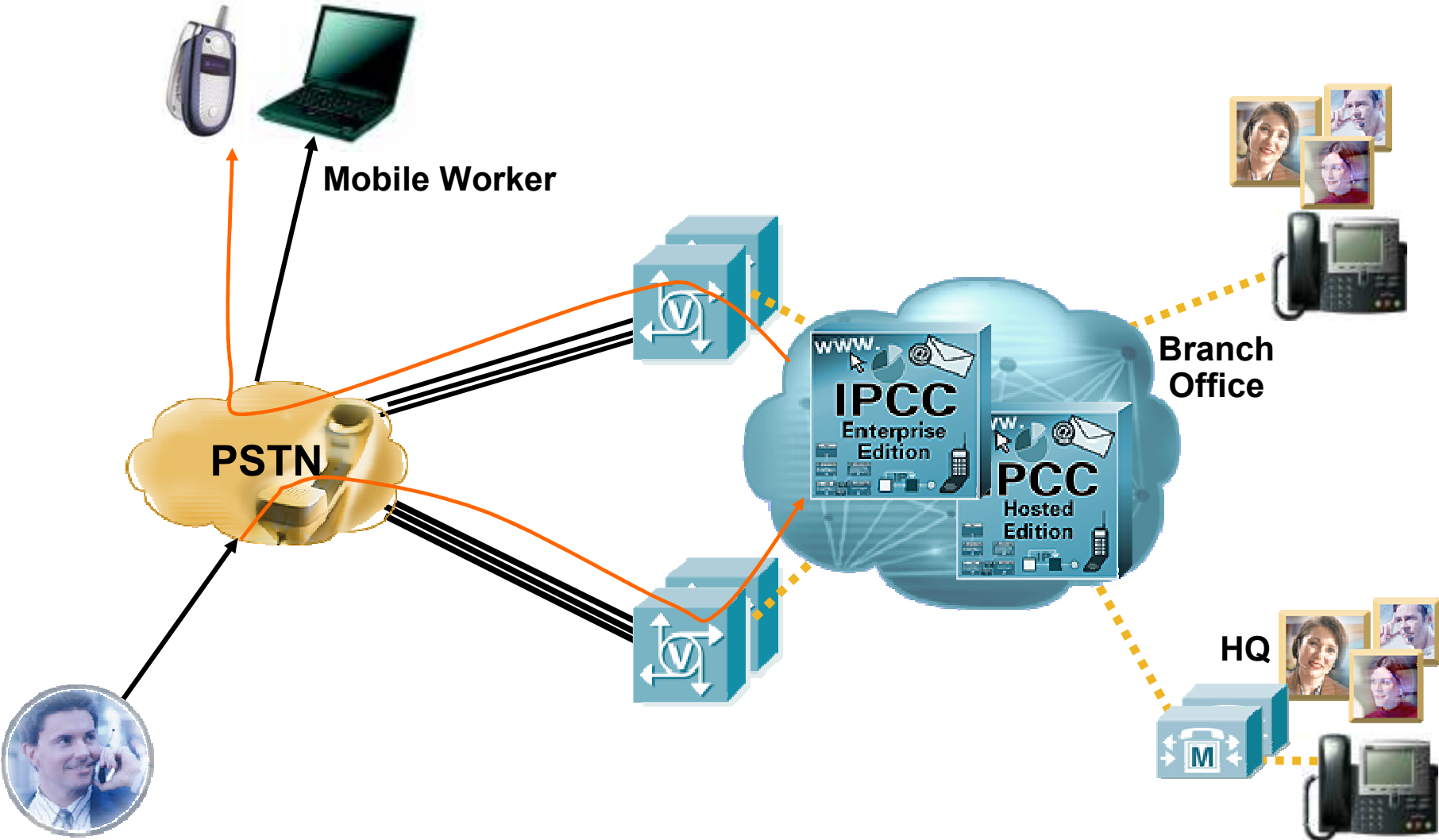
# Remote PBX Agent



# Central PBX Agent



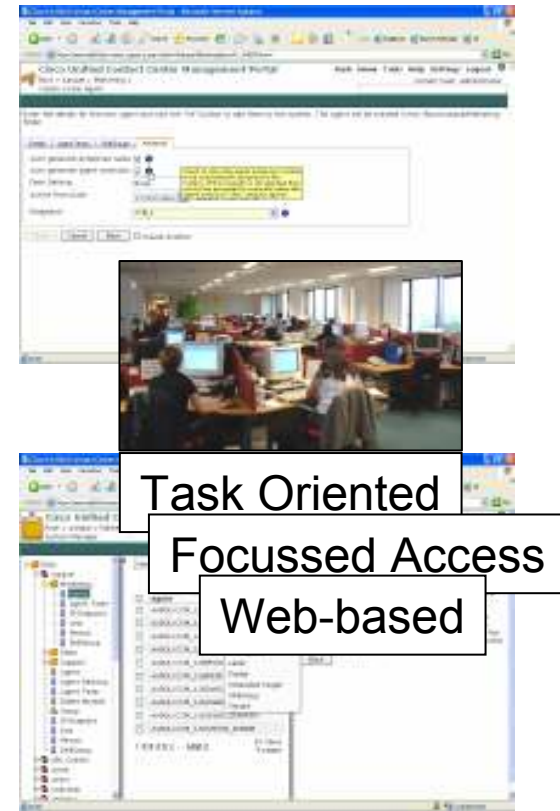
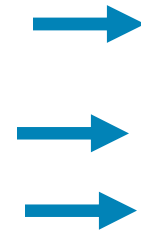
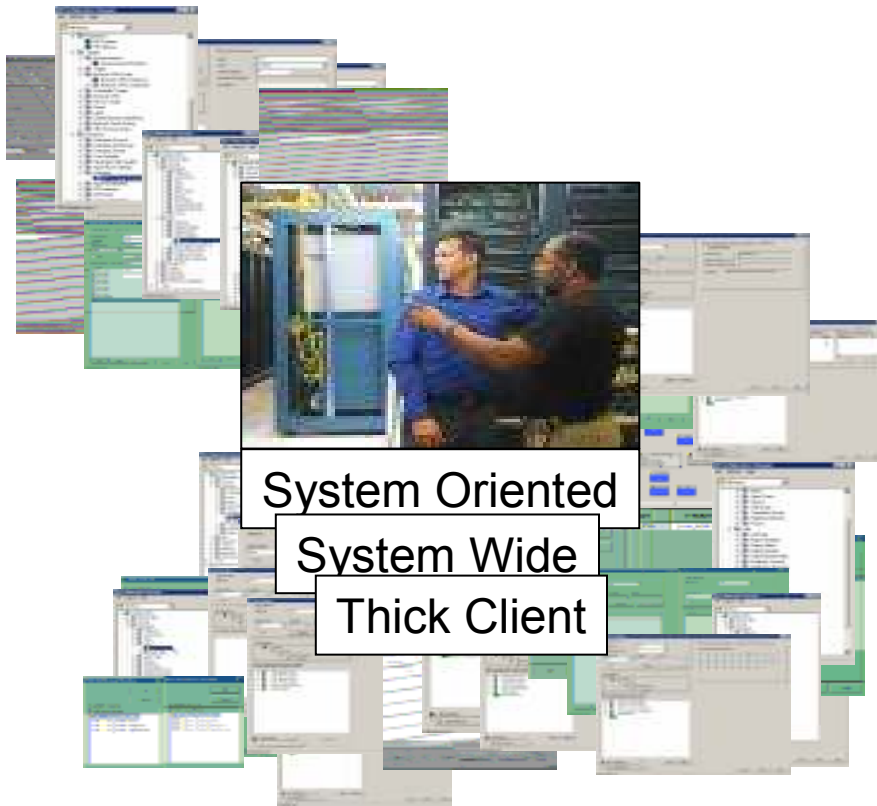
# Mobile Worker and Disaster Recovery



# Cisco Unified Management Portal



# Contact Center Management Portal – Before and After



# Overview

- **Simplifies** Contact Center Operations
  - Unified provisioning of IPCC and CallManager
- Web-based **Unified** User Interface
- **Partitioned** System Supporting Multiple Business Units
- **Hierarchical** Administration
- **Audit Tracking** of Configuration Changes
- System **Metrics** and **Measures**
- Available with **CCE and CCH**, Release 7.1

# Packaging/Pricing

- Portal priced per Agent

- Hosted

Portal is Included with each CCH Agent License Purchased

Existing CCH Agents can be upgraded for use of the Management Portal

- Enterprise

Additional license required for use of Management Portal

# Multi-channel Update





# New Multi-channel Products Overview

## *Cisco Unified Email Interaction Manager* and *Cisco Unified Web Interaction Manager*

- are new products to address multi-channel requirements
- have a common agent interface for both email and Web collaboration
- have access to a shared customer history archive
- share a common knowledge base
- Basic and Advanced packages to fit more cost/complexity models
- will integrate with:
  - Cisco Unified ICM Enterprise and Hosted
  - Cisco Unified Contact Center Express, Enterprise and Hosted

# How does Cisco Unified Email Interaction Management Work?

When a customer email or Web form inquiry is received, Unified EIM:

- Can send an **automatically generated acknowledgement**, based on the date and time it was received, its subject, or the customer's profile
- **Analyzes the content of the email**, generates a list of suggested responses, and automatically sends the best response ...
- ... or if the system determines an agent response is required, **routes the email to the best resource to handle it**
- Quickly facilitates agent responses by **suggesting templates** for responses and enables agents to drag and drop the best response into the reply
- Can use power of ICM and Contact Center Enterprise for routing and reporting. **Universal Queuing** with Contact Center Enterprise.

# How does Cisco Unified Web Interaction Management Work?

When a customer requests live help from the web, Unified WIM can provide for a voice callback\* or text chat along with co-browsing

- Information gathered on web site can be used to ensure **routing to the right agent**
- Once connected, agent and customer can lead one another to web pages and **fill forms collaboratively** while discussing issue via **text chat or voice**
- Integrated Knowledge base allows agents to respond quickly and effectively
- Agent may work on **multiple chat sessions** at the same time
- Can use power of ICM and Contact Center Enterprise for routing and reporting. **Universal Queuing** with Contact Center Enterprise.



# Availability

	Unified Contact Center Enterprise and Unified Intelligent Contact Management
<b>Release 1</b> Planned FCS – Q1 CY 2007	<b>Stand-alone email routing and Web collaboration</b> for use with Enterprise 7.1(x) and ICM 7.1(x) only <ul style="list-style-type: none"> <li>▪ No routing integration with Enterprise or ICM</li> </ul>
<b>Release 2</b> Planned FCS – Q2 CY 2007	<b>Integrated Email</b> for Enterprise 7.1(x) and ICM 7.1(x) <ul style="list-style-type: none"> <li>• Enterprise includes universal queuing capabilities</li> <li>• ICM includes routing via ICM – no universal queuing</li> </ul>
<b>Release 3</b> Planned FCS – Q4 CY 2007	<b>Integrated Web collaboration</b> for Enterprise 7.1(x) and ICM 7.1(x) <ul style="list-style-type: none"> <li>▪ Enterprise includes universal queuing capabilities</li> <li>▪ ICM includes routing via ICM – no universal queuing</li> </ul>

**FCS = First Customer Shipment; availability subject to development programs and trials meeting quality criteria**

# Installed Base migration

- These are new products

Current products will go End-Of-Life per published schedule

EOL Notice 5055	
End of Sale:	Sep 30, 2007
End of Software Maintenance:	Sep 30, 2008
Last day of support:	Sep 30, 2010

Migration tools will be provided to ease transition for customers that wish to implement the new products

- Existing Email/Web Collaboration Option customers with support contracts

Will need to purchase new product

Receive significant discount

