



Cisco Expo  
2007

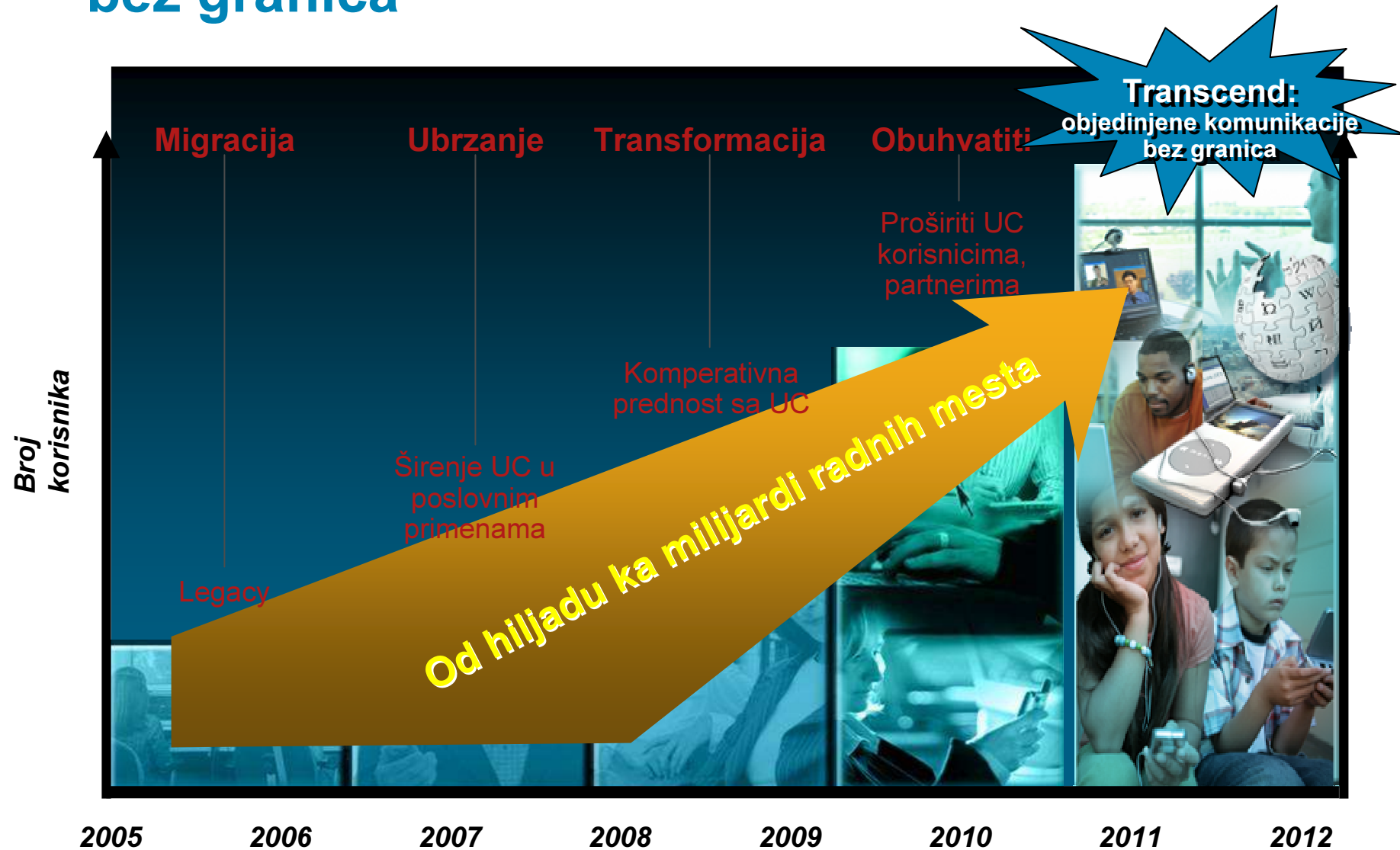
## Cisco Unified Communications novosti



**Aleksandar Vulović**

**Enable Your Network  
Empower Your Business**

# Napredovanje ka objedinjenim komunikacijama bez granica



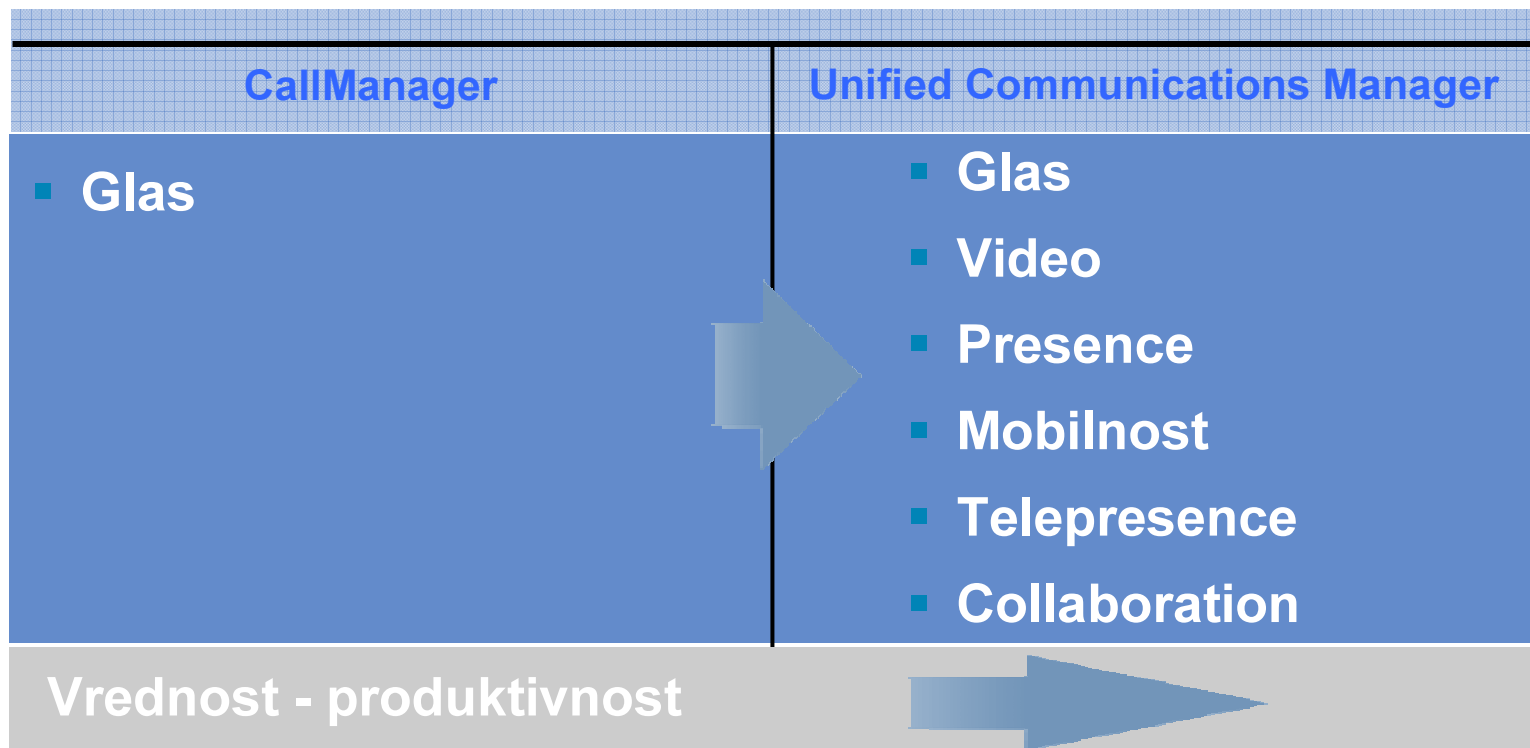
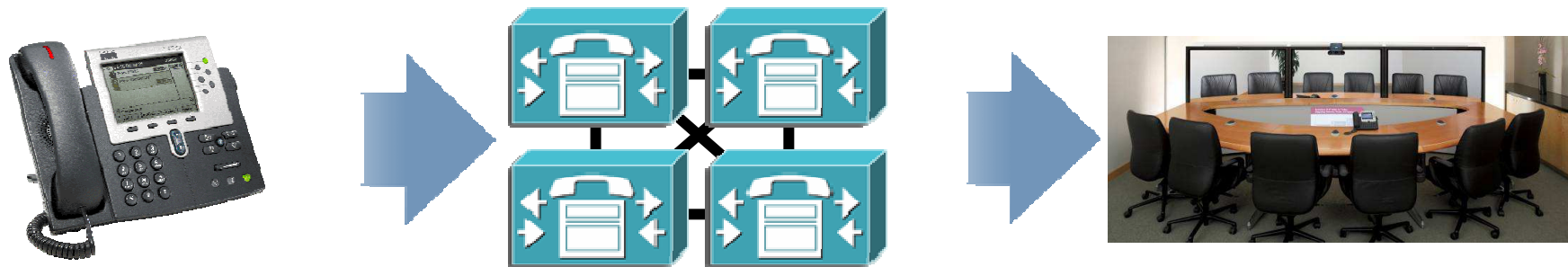
# Agenda

- Unified Communications Manager novosti
- Cisco Unified Workspace Licensing
- Telefoni
- Mobility
- MeetingPlace Express novosti
- Cisco Digital Media System
- Unified Contact Center Express novosti
- Budućnost...

# Unified Communications Manager novosti

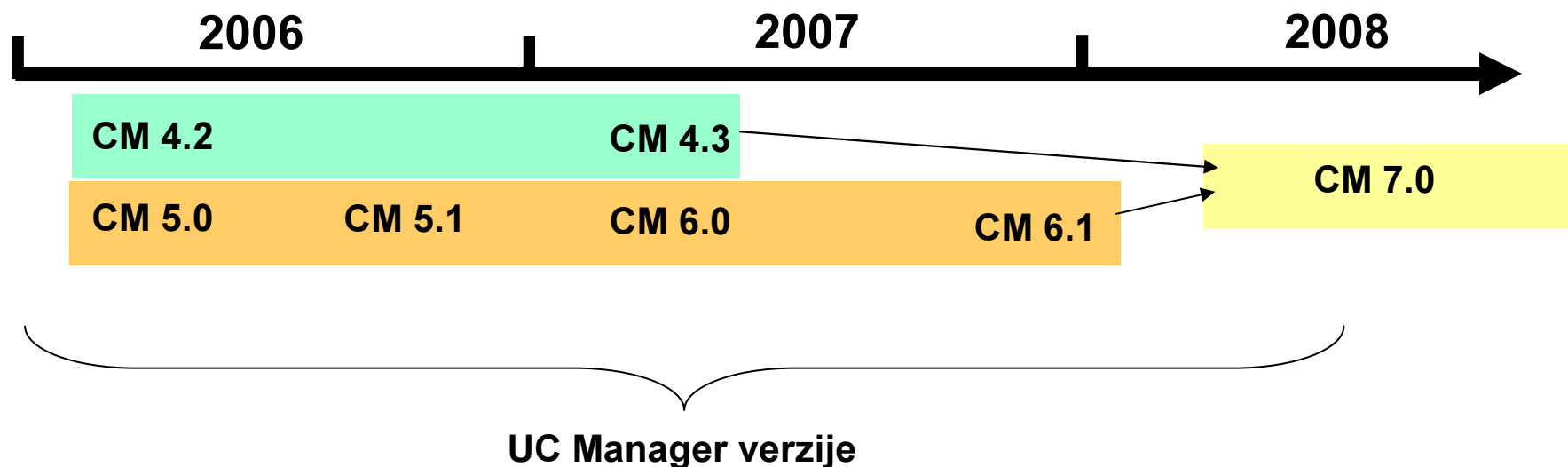


# CallManager se danas zove: Unified Communications Manager

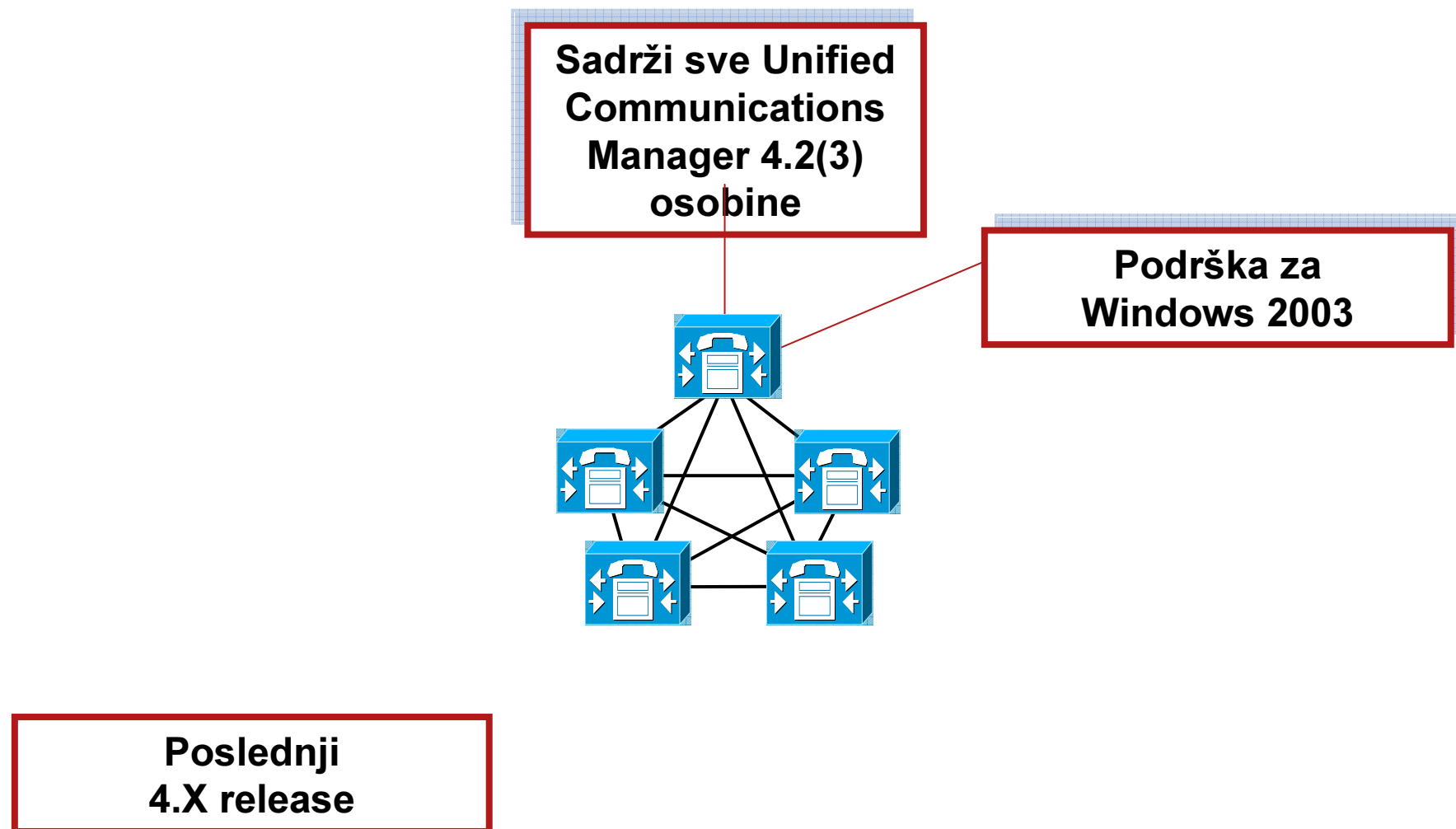


# Cisco Unified Communications Manager Roadmap

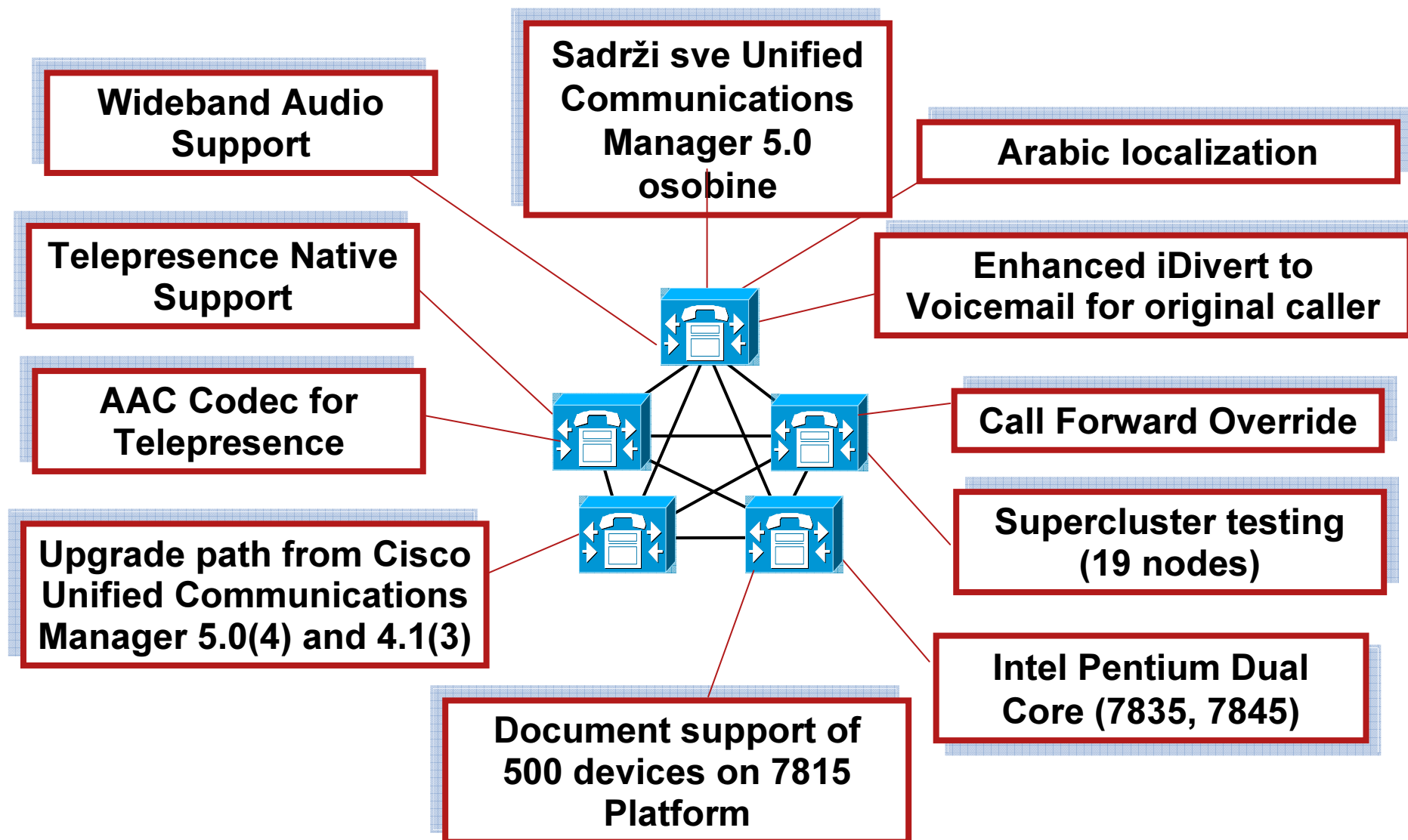
- Windows i Linux verzije CM postaju iste u CM 7.0
- Unified Communication Software Subscription  
Godišnji program da korisnici ostanu na najnovijim verzijama UC Managera



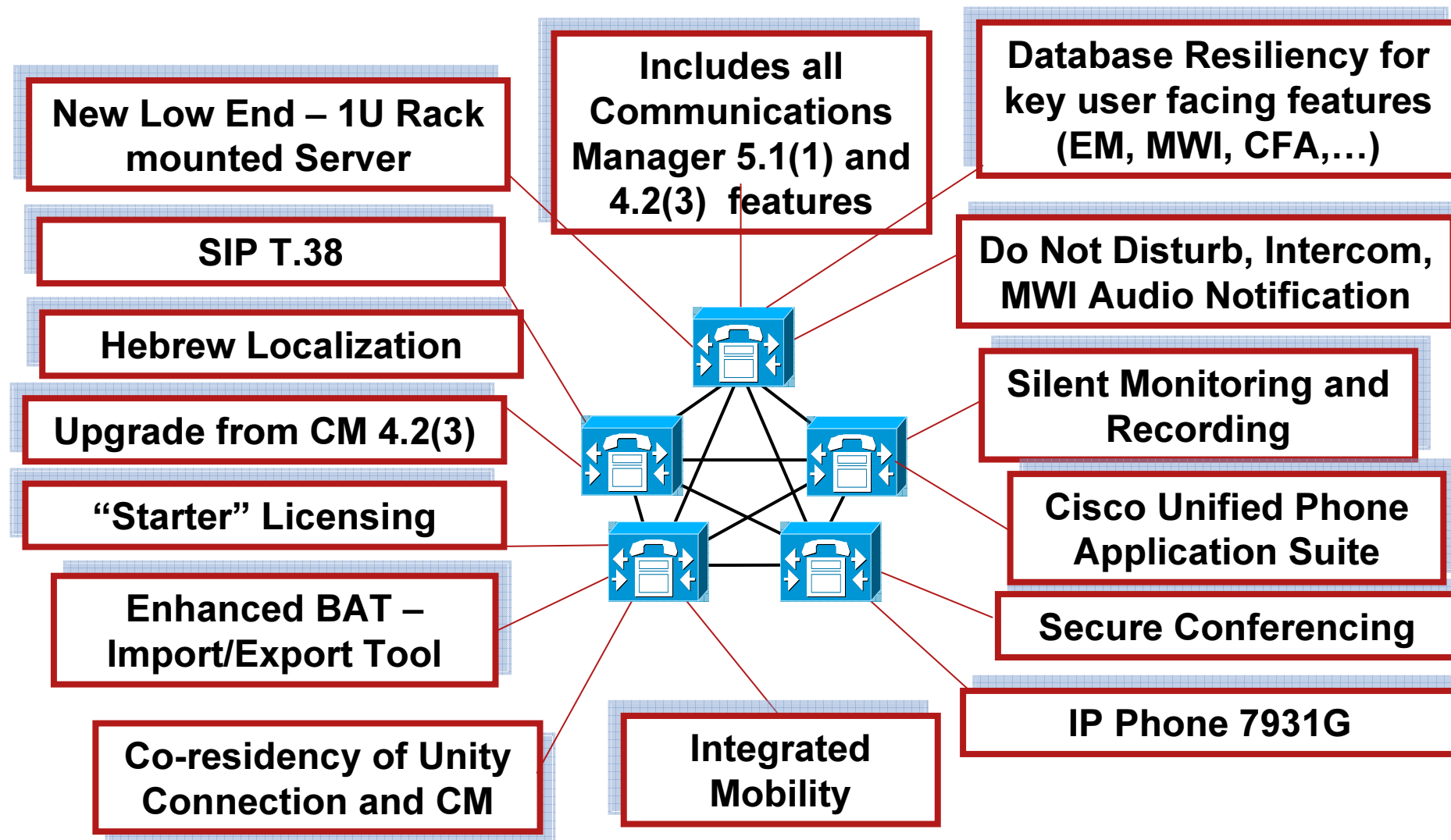
# Cisco Unified Communications Manager 4.3



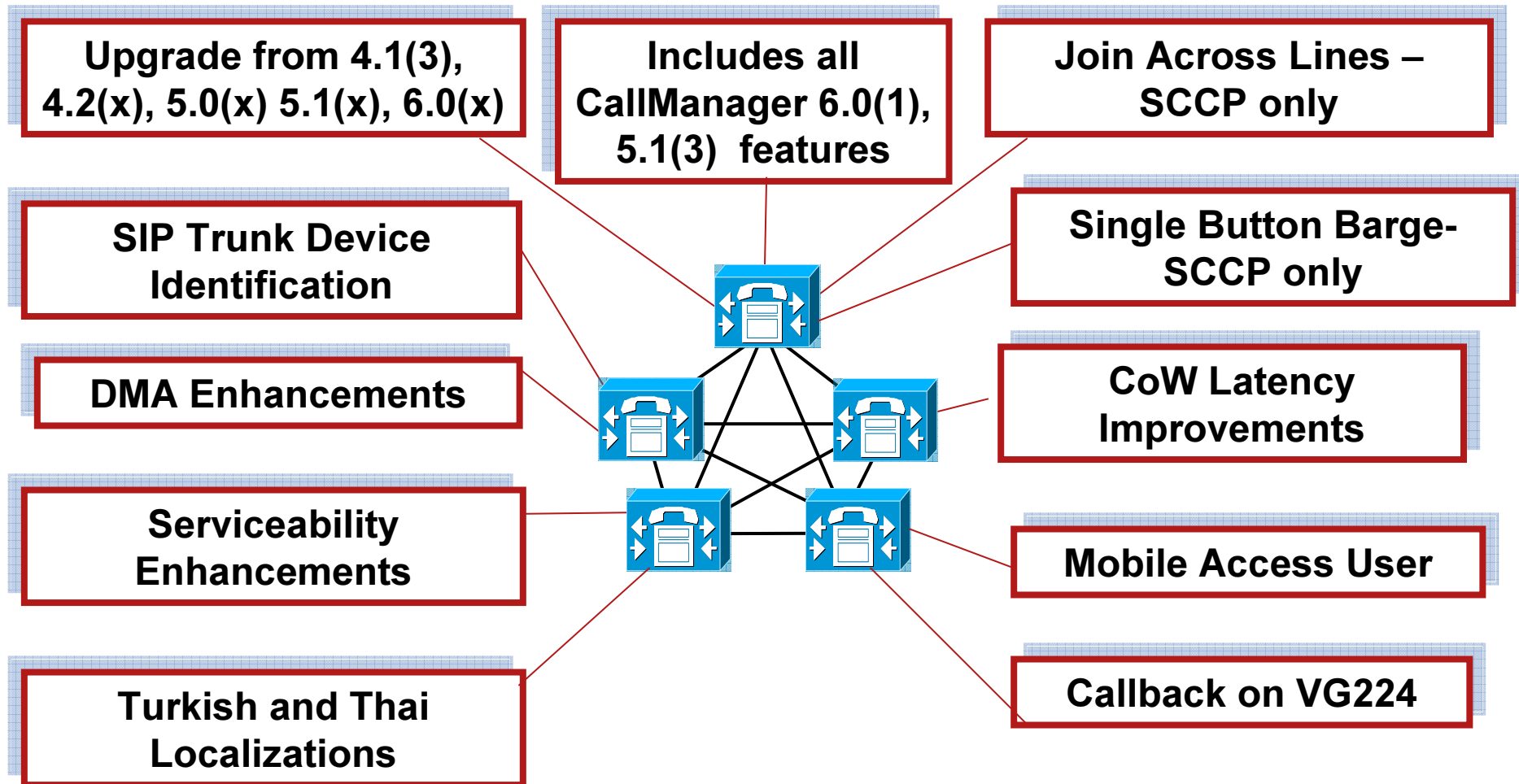
# Cisco Unified Communications Manager 5.1



# Cisco Unified Communications Manager 6.0



# Cisco Unified Communications Manager 6.1

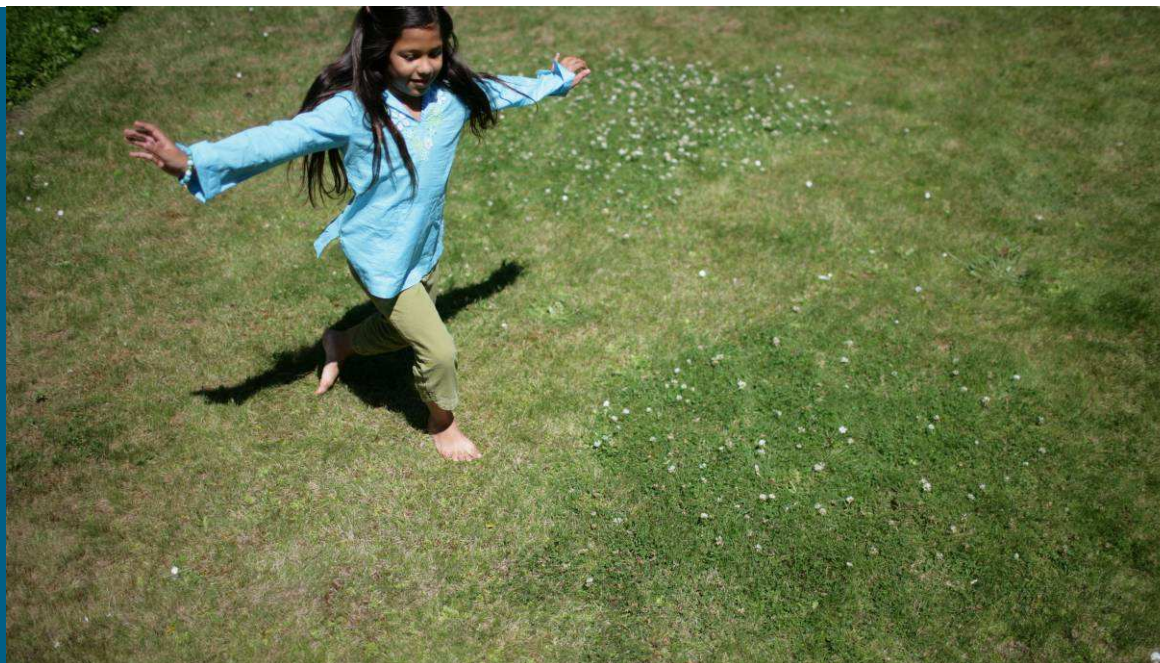


# Nagradno pitanje #1

- Koliko miliona Cisco IP telefona je u upotrebi danas?



# Cisco Unified Workspace Licensing



# Unified Workspace Licensing (CUWL)

- Obuhvata Client software + Server software + prava pristupa
- 2 verzije: Standard Edition i Professional Edition
- Svi PAK i DVD se šalju u fascikli
- Hardware se kupuje odvojeno (serveri, telefoni, kamere)

| Functionality        | Product                                                                                                 | Standard  | Professional     |
|----------------------|---------------------------------------------------------------------------------------------------------|-----------|------------------|
| Video Conferencing   | Cisco Unified MeetingPlace Express (25 CUWL=1 Port)                                                     |           | ☑                |
| Web Conferencing     | Cisco Unified MeetingPlace/MeetingPlace Express Port (25 CUWL=1 Port)                                   |           | ☑                |
| Audio Conferencing   | Cisco Unified MeetingPlace/MeetingPlace Express Port (25 CUWL=1 Port)                                   |           | ☑                |
| Smart Phone Mobility | Cisco Unified Mobile Communicator and CUMA Server                                                       |           | ☑                |
| Presence             | Cisco Unified Presence                                                                                  | ☑         | ☑                |
| Mobility Services    | Cisco Unified Communications Manager                                                                    | ☑         | ☑                |
| Unified Clients      | Cisco Unified Personal Communicator or Cisco Unified IP Communicator with Cisco Unified Video Advantage | ☑         | ☑                |
| Messaging            | Cisco Unity or Cisco Unity Connection                                                                   | ☑<br>(VM) | ☑<br>(VM/UM)     |
| Phone/Call Control   | License for Cisco IP Phones (per User)                                                                  | ☑<br>(1)  | ☑<br>(Unlimited) |

# Standard Edition – poređenje cena

- Za \$50 više nego što je IP Phone DLU+VM dobija se:
  - Presence, Unified Clients, Mobility Services i odgovarajuća prava prisustva
- **Vrednost od \$350 !**

| “Phone i Voicemail” scenario |             |
|------------------------------|-------------|
| Funkcionalnost               | Cena        |
| Messaging                    | \$65        |
| Call Control                 | \$200*      |
| A-La-Carte Price             | \$265       |
| CUWL Standard Price          | \$315       |
| <b>CUWL “Uplift”</b>         | <b>\$50</b> |

| Vrednost Unified WL Standard “Uplift” |              |
|---------------------------------------|--------------|
| Dodatna funkcionalnost                | Cena         |
| Presence                              | \$50         |
| Mobility (with Sim Ring services)     | \$100        |
| Soft Client                           | \$200        |
| A-La-Carte Price                      | \$350        |
| CUWL “Uplift”                         | \$50         |
| <b>Ušteda</b>                         | <b>\$300</b> |

\*Pretpostavka je da se koristi telefon srednjih karakteristika (4 DLU)

# Professional Edition – poređenje cena

- Za \$80 više nego što je IP Phone DLU+UM dobija se:
  - CUWL Std + AV/W Conferencing, Smart Phone Mobility i odgovarajuća prava prisustva
  - **Vrednost od \$524 !**

| “Phone i Unified Messaging” scenario |               |
|--------------------------------------|---------------|
| Funkcionalnost                       | License Price |
| Unified Messaging                    | \$135         |
| Call Control                         | \$200*        |
| A-La-Carte Price                     | \$335         |
| CUWL Pro Price                       | \$415         |
| <b>CUWL “Uplift”</b>                 | <b>\$80</b>   |

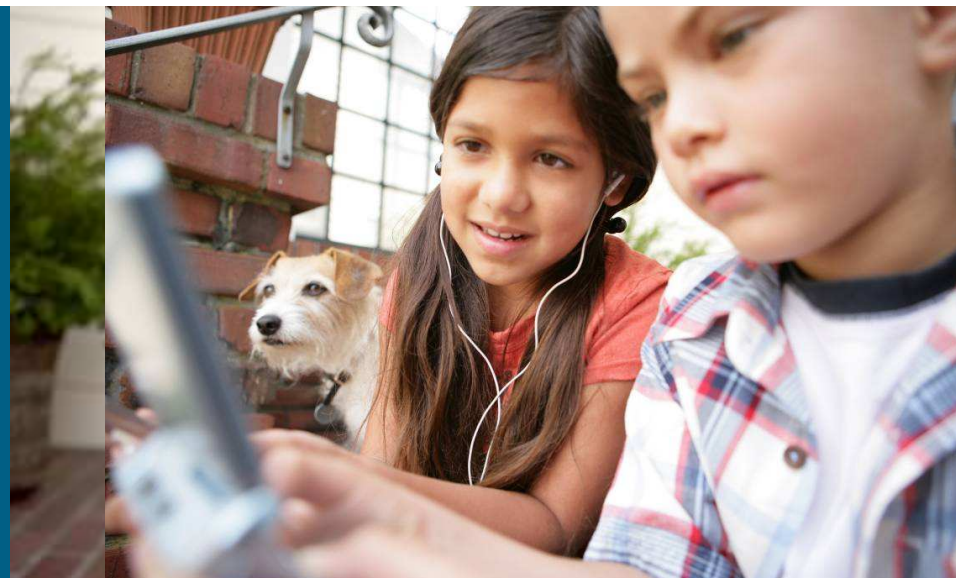
\*Pretpostavka je da se koristi telefon  
srednjih karakteristika (4 DLU)

| Vrednost Unified WL Professional “Uplift” |              |
|-------------------------------------------|--------------|
| Dodatna funkcionalnost                    | Cena         |
| Video Conferencing                        | \$36         |
| Web Conferencing                          | \$38         |
| Audio Conferencing                        | \$50         |
| Mobile Smart Phone Client                 | \$50         |
| Presence                                  | \$50         |
| Mobility (with Sim Ring services)         | \$100        |
| Soft Client                               | \$200        |
| A-La-Carte Price                          | \$524        |
| CUWL “Uplift”                             | \$80         |
| <b>Ušteda</b>                             | <b>\$444</b> |



**Cisco Expo**  
**2007**

# Telefoni



**Enable Your Network**  
**Empower Your Business**

# Razvoj Cisco IP telefona

*Više opcija  
za Data  
Throughput*

*Poboljšane  
mogućnosti  
za aplikacije*

**Doživljaj korisnika:**

- Podrška za Wideband i iLBC
- Postoje modeli sa Gigabit Ethernet portovima, veliki display u boji

## Klasični IP telefoni



## Enhanced IP Phones



## Advanced Media IP Phones



*Java-based '3rd-gen' platforms*

# G.722-64k WideBand Codec



- Prvi wideband speech codec standardizovan od strane ITU.
- G.722 wideband algoritam podržava brzine od 64, 56 and 48 kbps. Cisco implementira samo 64kbps.
- G.722 ne zahteva više bandwidth-a od G.711 (oko 85kbps u Ethernet mrežama)
- Dobro ponašanje i u okruženjima sa velikim gubicima paketa
- Ako poziv ide ka PSTN, gateway radi transcoding i u osnovi spušta audio na G.711.

Narrowband: 300–3400 Hz

Wideband: 50 – 7000 Hz

Govor: 20 – 14000 Hz

Ljudsko uho: 20 – 20000 Hz

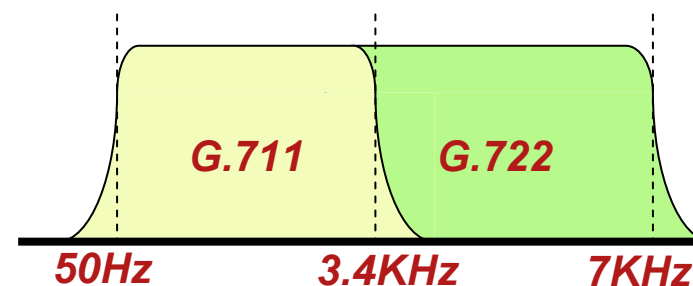
# Bolji doživljaj korisnika

*Veliki (5"+) 16-bit TFT display u boji na 3 nova modela telefona*



*Bolja navigacija*

*Veći audio opseg – isti bandwidth 64K*



*Wideband spikerfon i slušalica za optimalni kvalitet glasa*



# Osnovne osobine po modelu



**7975G**

**Wideband  
(G.722) & iLBC**

**TFT Color  
display (touch)**

**KEM  
support**

**GigE  
ports**

**Nav  
button**



**7965G**

**Wideband  
(G.722) & iLBC**

**TFT Color  
display**

**KEM  
support**

**GigE  
ports**

**Nav  
button**



**7945G**

**Wideband  
(G.722) & iLBC**

**TFT Color  
display**

**GigE  
ports**

**Nav  
button**



**7962G**

**Wideband  
(G.722) & iLBC**

**Hi-Res  
grayscale**

**KEM  
support**



**7942G**

**Wideband  
(G.722) & iLBC**

**Hi-Res  
grayscale**

**Aplikacije**

# Cisco Unified IP Phone 7931G

## 24 telefonska tastera

- Display (192 x 64 pixels)
- Do 24 lokala / telef. broja
- Tasteri u boji
- Programabilni tasteri
- Bolja podrška za XML i integraciju telefona
- IEEE 802.3af PoE i lokalno napajanje
- 10/100BaseT, dva Ethernet porta
- “Hold”, “redial”, “transfer” taster
- Message Waiting Indicator
- Hands-free speakerphone
- SCCP podrška samo u CM 6.0



# Cisco Unified IP Conference Station 7937G

## Wideband audio konferencijska stanica

- Odličan kvalitet glasa i mikrofona
- Jednostavnije povezivanje kablova i administracija
- LCD ekran sa 4 tastera
- Podrška za eksterni Microphone Kit i podrška za “grudni mikrofoni”



# Cisco SIP telefon 3911

## SIP telefon za SMB i Enterprise korisnike

- SIP telefon za jednu liniju, pristupačna cena!
- Half-duplex speaker phone
- Jedan 10/100 Ethernet port
- Fiksni tasteri za redial, transfer, conference hold, line select, mute, speakerphone i pristup voicemail-u
- Display sa 2 linije, 24 karaktera, taster za biranje menija
- Podrška za Cisco Unified Communications Manager i Cisco Unified Communications Manager Express (2 Device License Units)



# Cisco Unified Wireless IP telefon 7921G

- Dual-band 802.11abg radio
- Kolor display visoke rezolucije
- Speakerphone na telefonu i Desktop Charger-u
- Posebni tasteri za Push-to-talk, Volume control i Mute
- Baterija: 12 sati priče ili 100 sati u standby modu
- Diversity antena
- XML
- WPA2 i AES
- TSPEC i WMM
- Podrška od CM 4.1 i CME 4.1



## Nagradno pitanje #2



- Koji član porodice Simpson šalje email koji “prolazi” kroz Cisco ruter?



# Mobility



# Mobility

- **Cisco Unified Mobility** – Mobile Connect, Mobile Voice Access, Enterprise Feature Access
- **Dual-mode Phone** – Nokia Intellisync Call Connect
- **Cisco Unified Mobile Communicator** – Cisco Unified Mobile Communicator client i Cisco Unified Mobility Advantage server 3.0

# Cisco Unified Mobility

## Mobility servisi integrisani u CM6.0:

- “Single number reach” funkcionalnost
- Unified Communications Manager funkcije pristupačne sa mobilne mreže
- MobilityManager je sada deo Unified Communications Manager-a
  - Ne zahteva se poseban server
  - Svaki CM korisnik je spreman za Mobility
  - MM administracija je sada deo CM administracije
  - Bulk Provisioning

# Dual-Mode telefon

Nokia Intellisync Call Connect 1.0: Software/Hardware zahtevi

Hardware i software podržan sa Nokia Intellisync Call Connect 1.0 dual-mode:

- Telefoni: **Nokia E60, E61, E61i i E65**
- Firmware telefona: **Nokia PR3** (3.0633.XX.XX)
- Communications Manager: **4.1(3), 4.2, and 5.X**
- Communications Manager Express: **3.4, 4.0, and 4.1**



Nokia E60



Nokia E61



Nokia E61i



Nokia E65

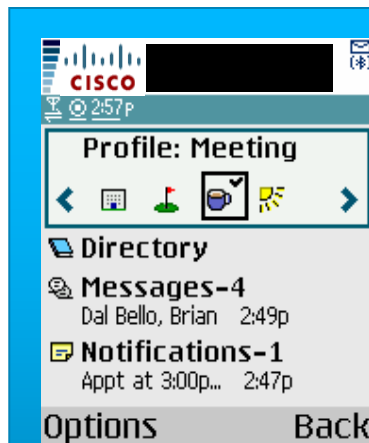
# Dual-Mode Phone

## Nokia Intellisync Call Connect 1.1

Nokia Intellisync Call Connect aplikacija verzije 1.1 od oktobra 2007.

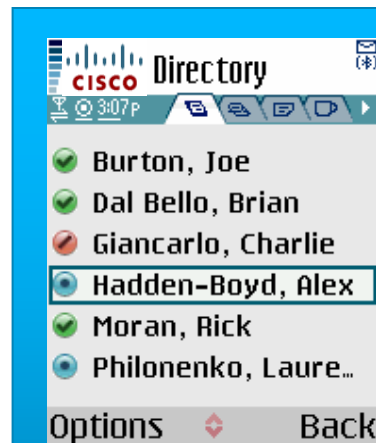
- **Podrška za CM 6.X**
- Još uvek samo SCCP klijent
- I dalje podrška za Nokia E60, E61, E61i i E65
- Promene u korisničkom interfejsu
- Podrška za nov tip telefona: Nokia E51
- Manuelni hand-off:
  - **Hand-out** samo sa WLAN na GSM
  - Ne postoji hand-in
  - Podržano samo na E51 telefonu

# Cisco Unified Mobile Communicator



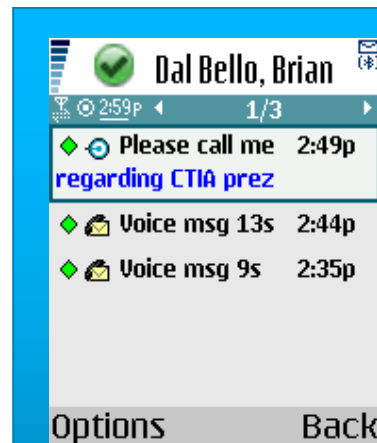
## Cisco Unified Mobile Communicator

- Klijent je dostupan na različitim telefonima:
- Symbian, Blackbary, Windows Mobile
- Obezbedjuju se MeetingPlace notifikacije kroz Outlook



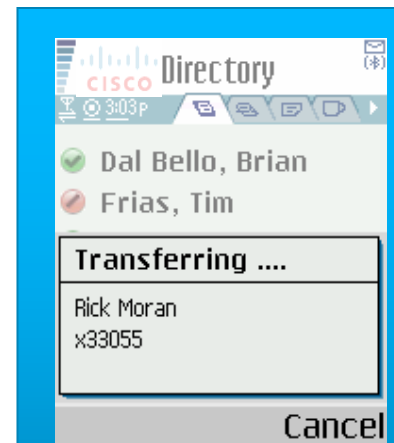
## Presence-enabled Enterprise Directory

- Obezbedjuje presence status
- Isti doživljaj korisnika kao sa Cisco Unified Personal Communicator



## Vizuelna identifikacija Unity Voice-Mail

- Poredi se Caller ID Directory da se prikaže ime
- Obezbedjuje Presence informaciju onoga ko je pozvao
- Preslušavanje određene poruke



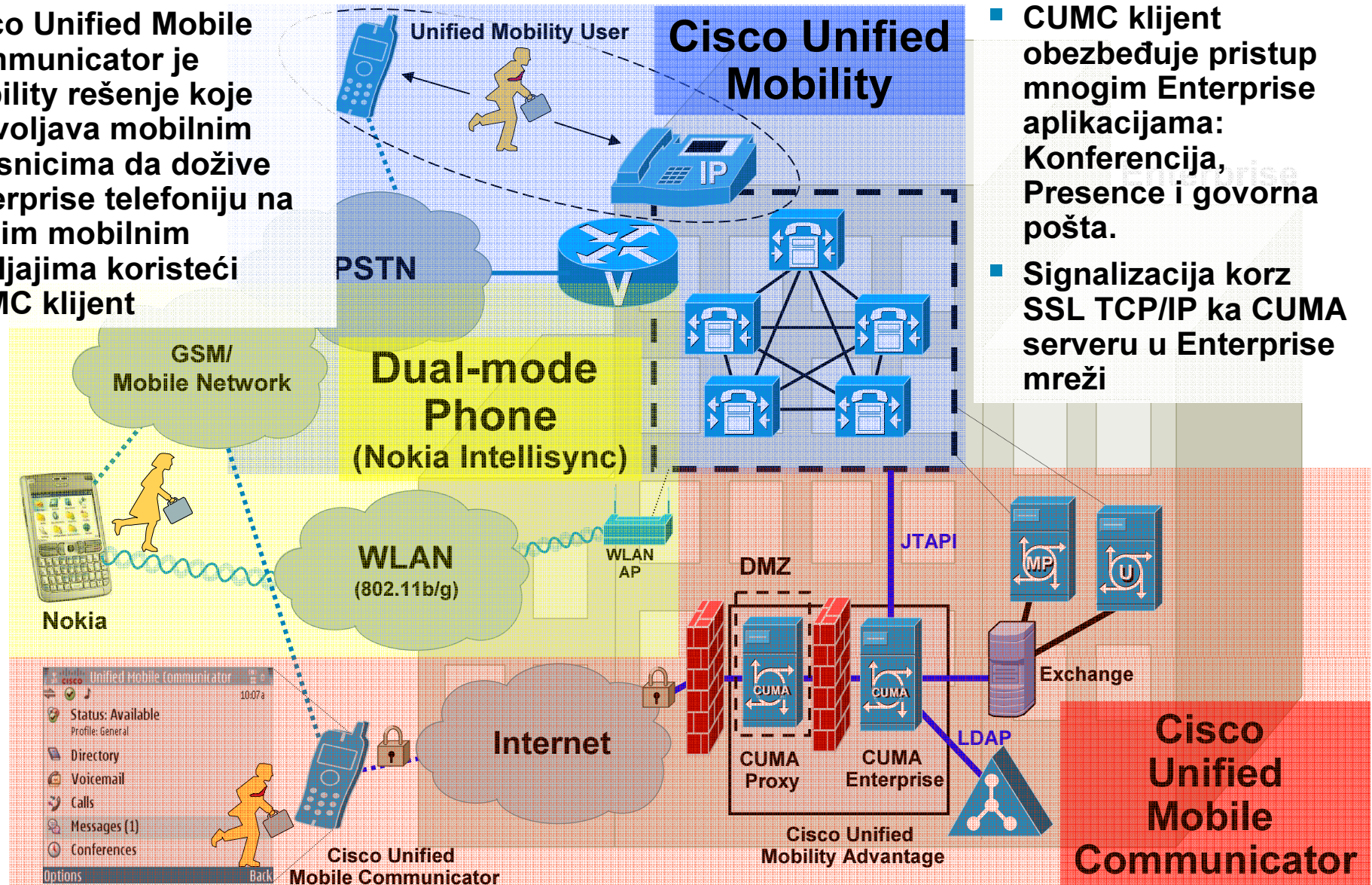
## Unified CallManager Call Control

- Click to call – routiranje poziva kroz Cisco Unified CommunicationsManager da se iskoristi Least Cost Routing
- Transfer
- Conference

# Cisco Unified Mobile Communicator

## CUMC 3.0: Arhitektura

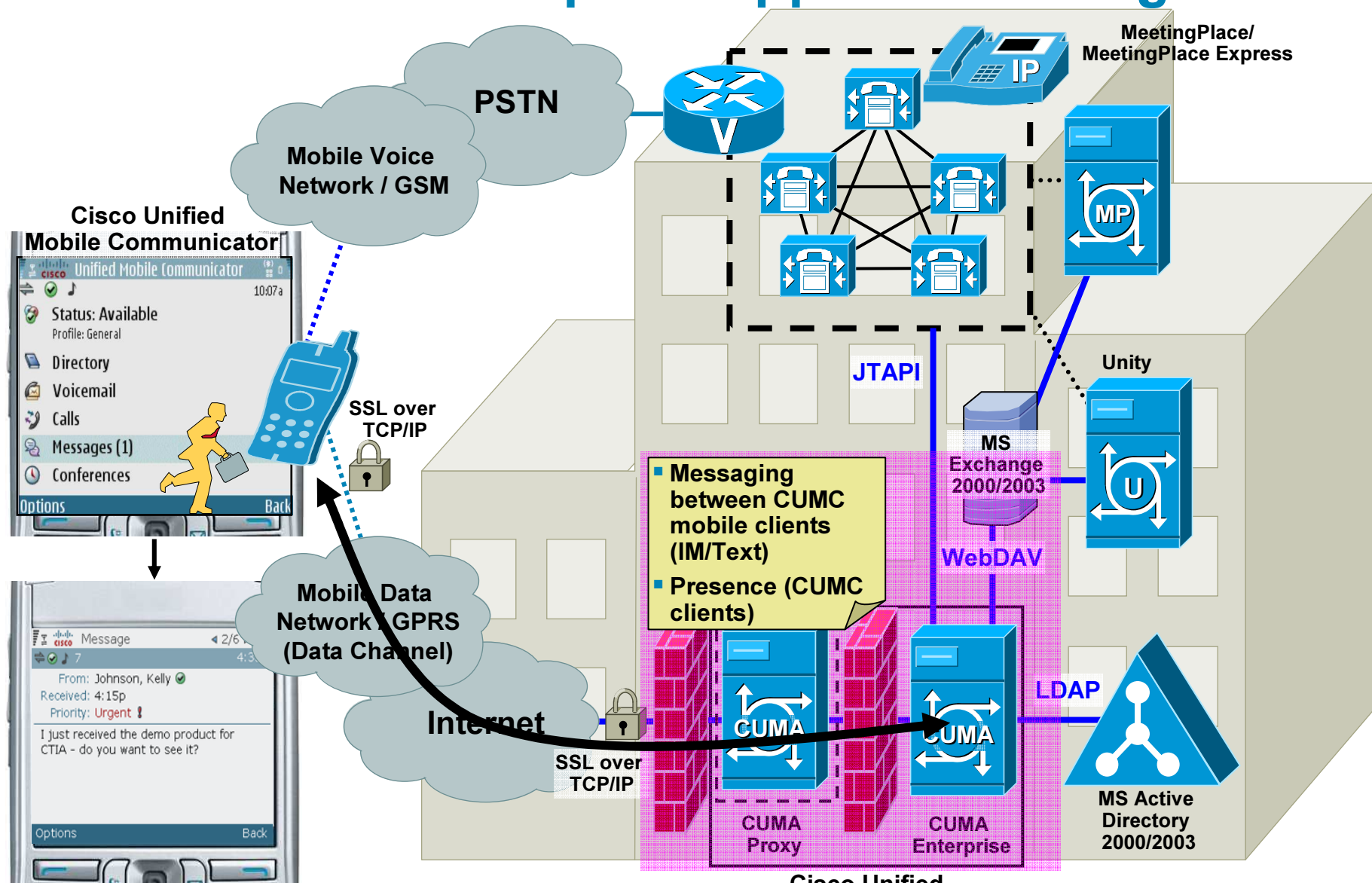
Cisco Unified Mobile Communicator je Mobility rešenje koje dozvoljava mobilnim korisnicima da dožive Enterprise telefoniju na svojim mobilnim uređajima koristeći CUMC klijent



- CUMC klijent obezbeđuje pristup mnogim Enterprise aplikacijama: Konferencija, Presence i govorna pošta.
- Signalizacija kroz SSL TCP/IP ka CUMA serveru u Enterprise mreži

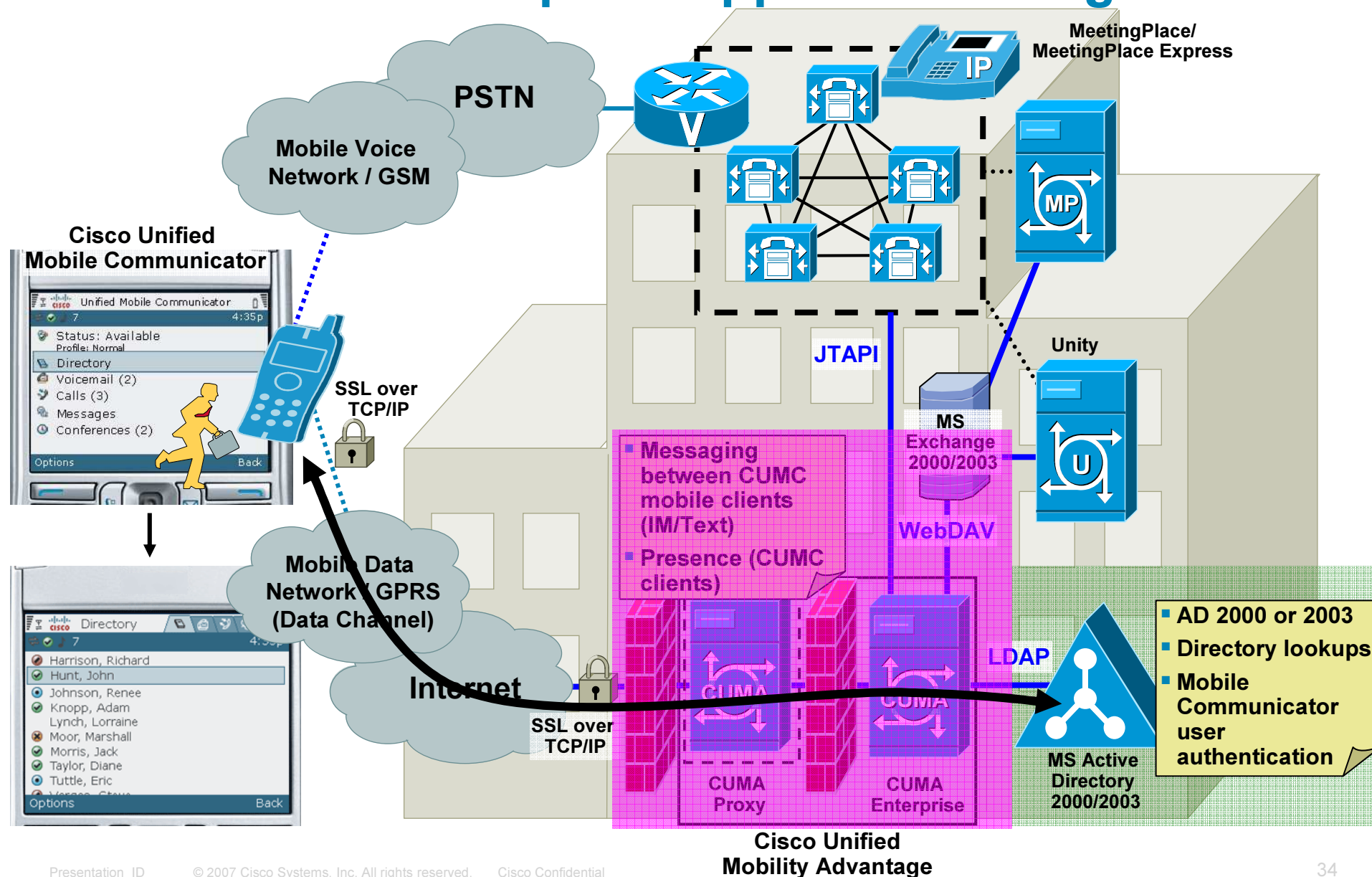
# Cisco Unified Mobile Communicator

## CUMC 3.0: Enterprise Application Integration



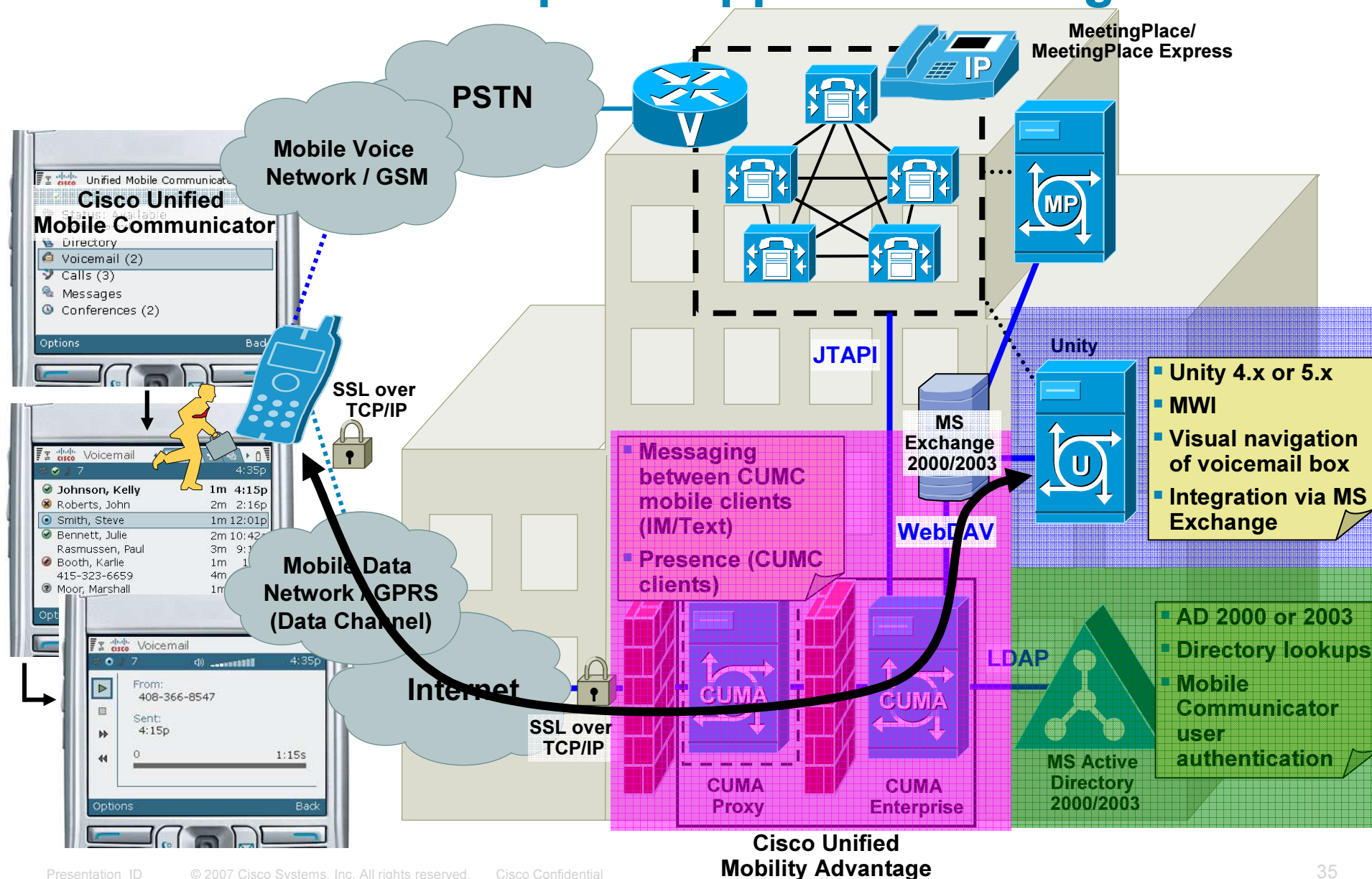
# Cisco Unified Mobile Communicator

## CUMC 3.0: Enterprise Application Integration



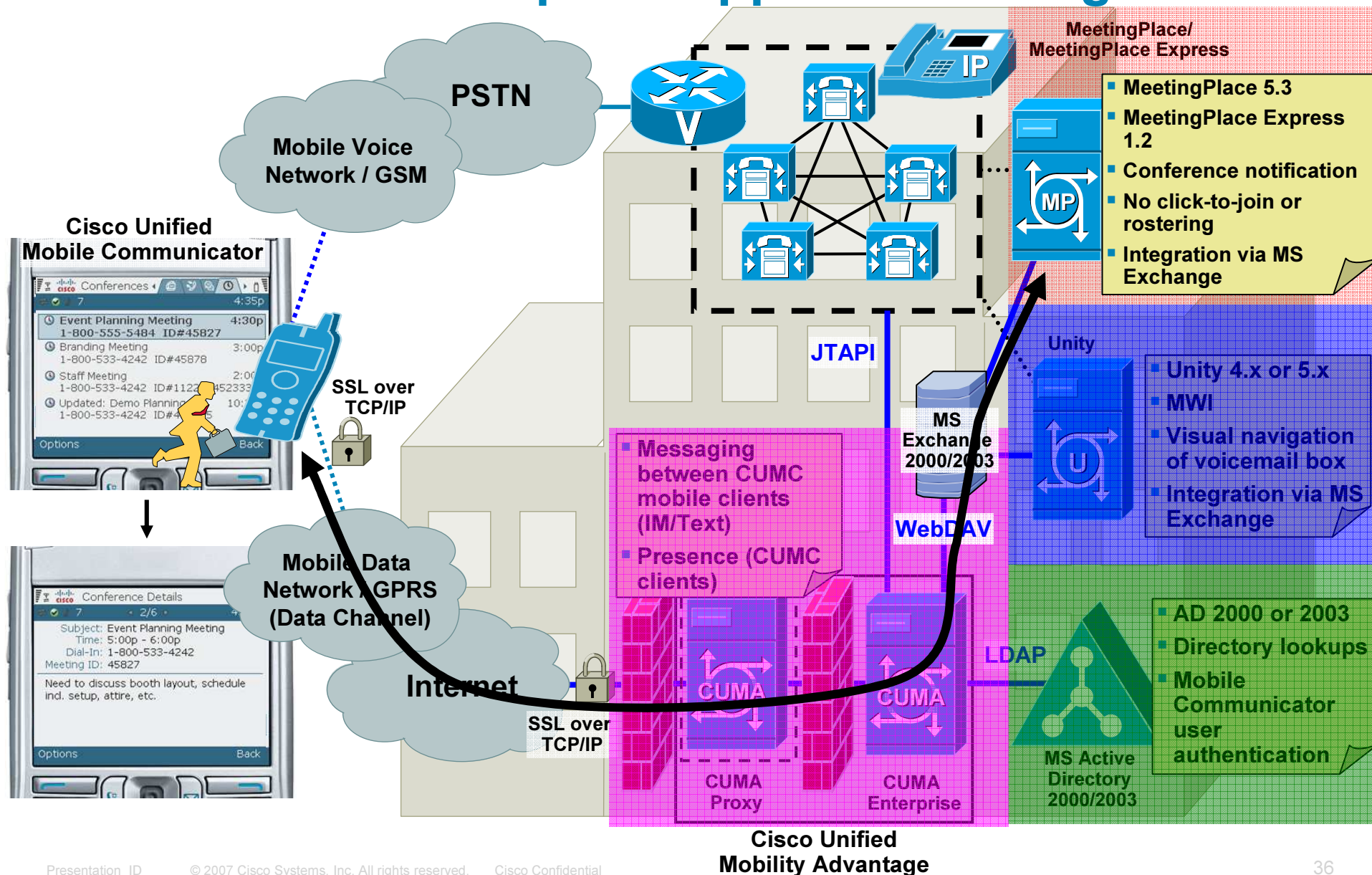
# Cisco Unified Mobile Communicator

## CUMC 3.0: Enterprise Application Integration

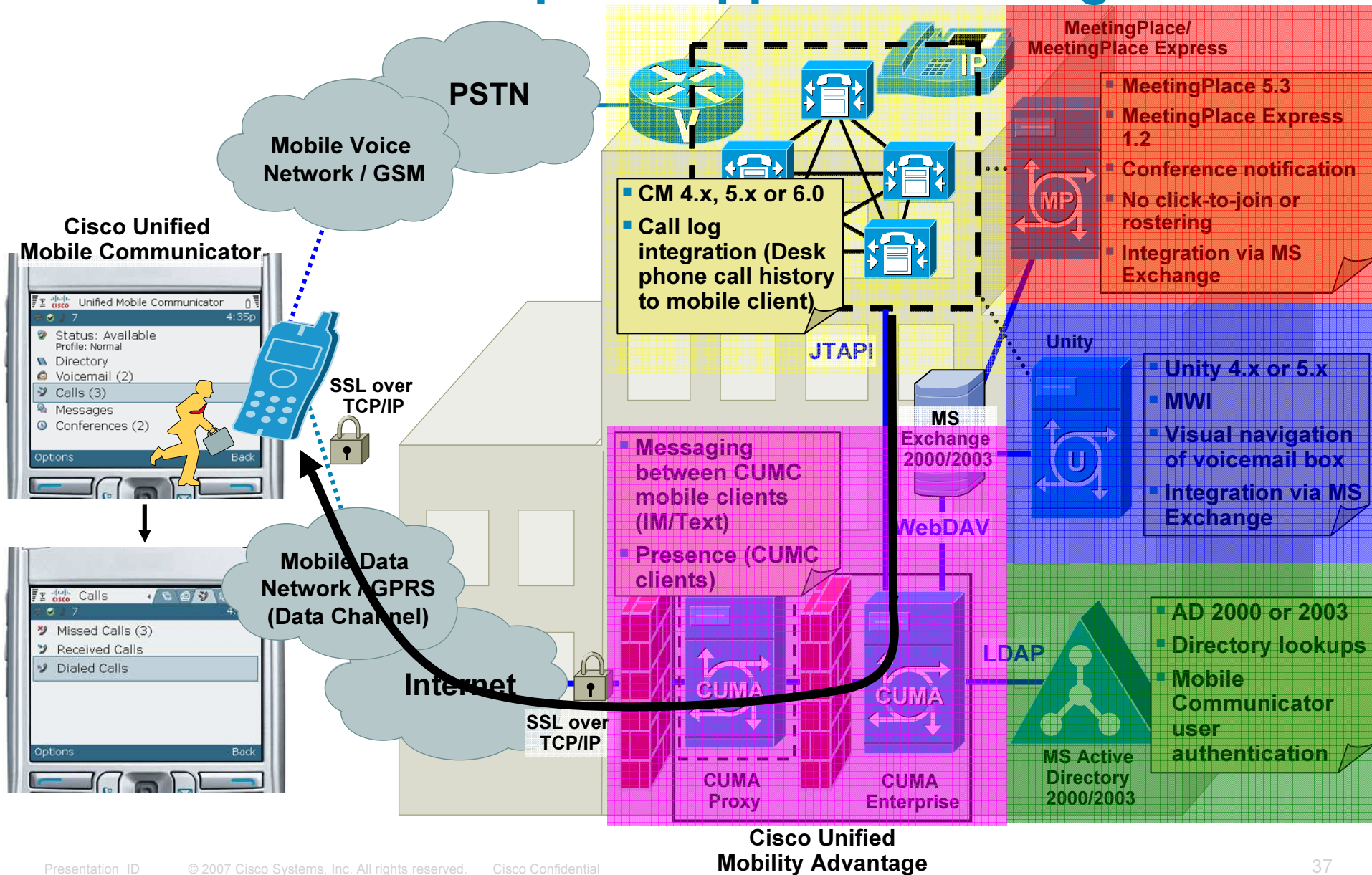


# Cisco Unified Mobile Communicator

## CUMC 3.0: Enterprise Application Integration



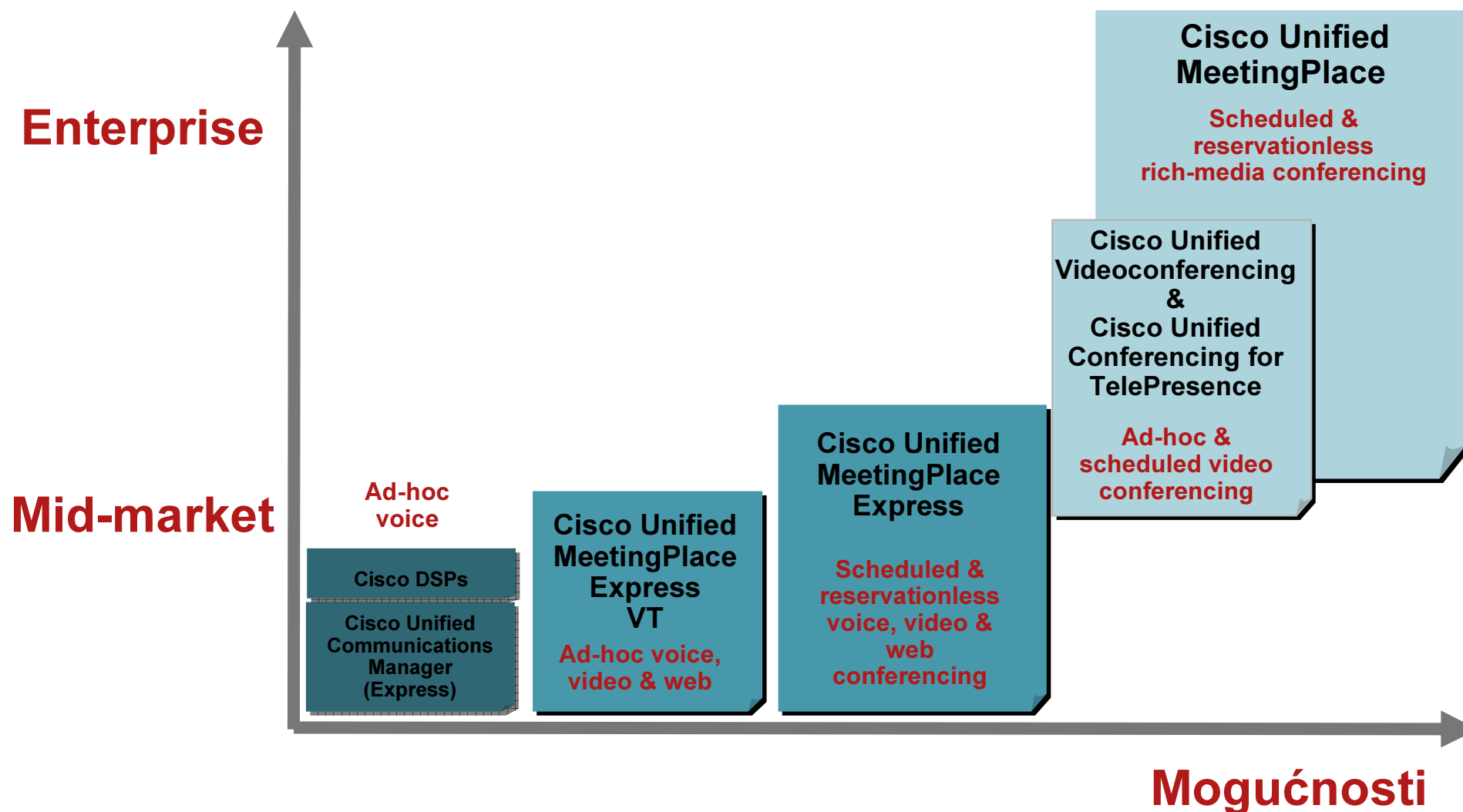
# Cisco Unified Mobile Communicator CUMC 3.0: Enterprise Application Integration



# MeetingPlace Express novosti



# Cisco rešenja za konferencije



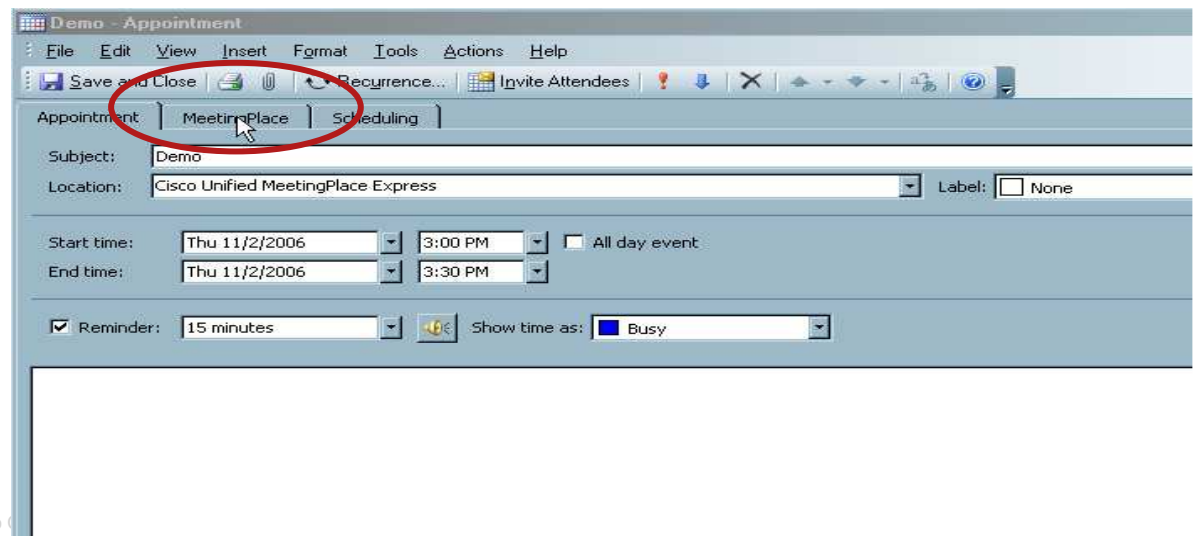
# MeetingPlace Express novosti

- Korisnici mogu da zakazuju, menjaju i otkazuju sastanke kroz Microsoft Outlook kalendar
- Microsoft Outlook notifikacije se mogu slati bez obzira da li su sastanci zakazani kroz Outlook kalendar ili MeetingPlace Express web interfejs
- Kada se sastanak prihvati, informacije o sastanku i click-to-attend link su dostupni u Microsoft Outlook kalendaru
- MPE 2.0:

-podrška za Scheduled/reservationless **video** konferencije!

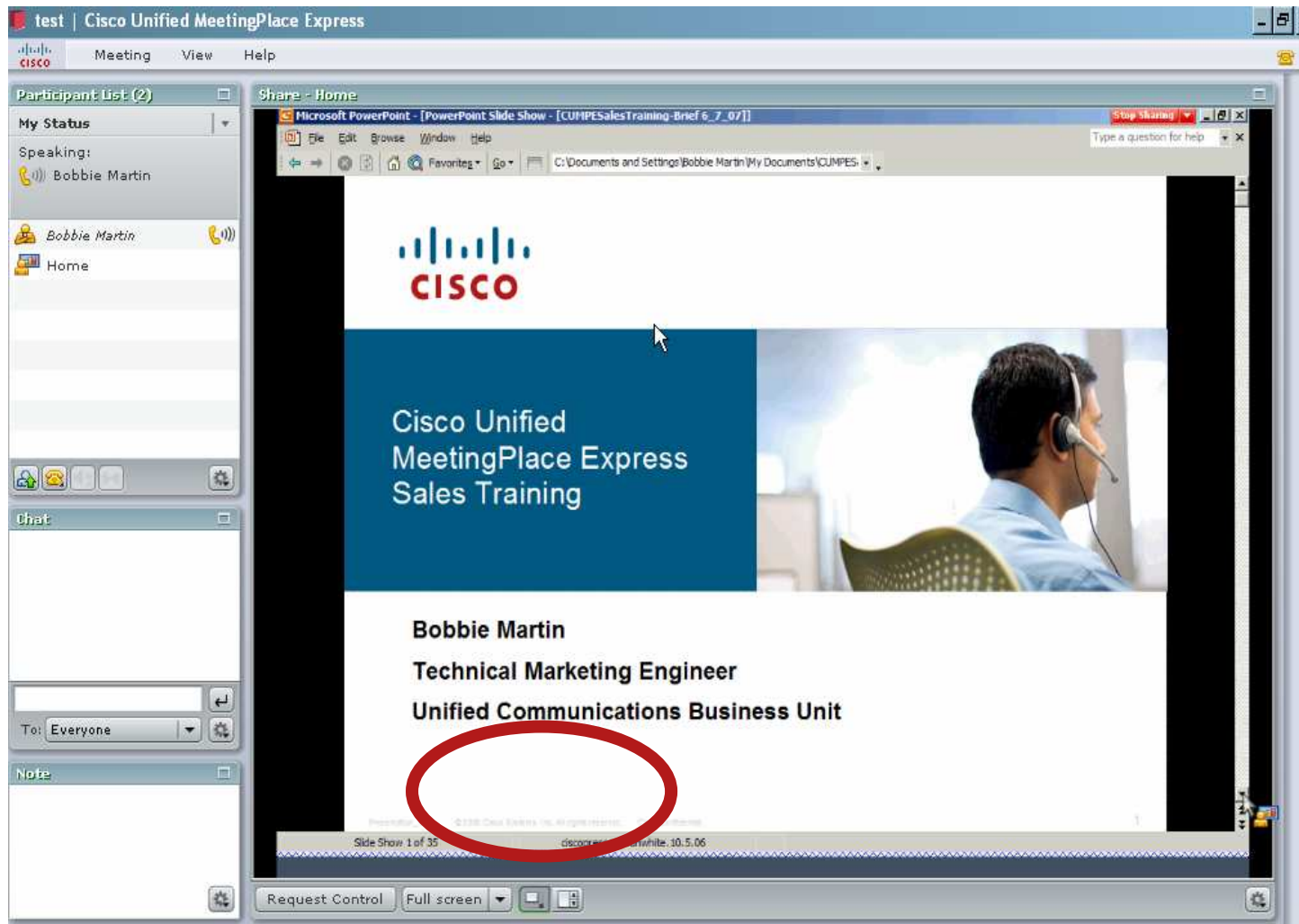
- g.729A Codec

- Podrška za Windows Vista  
i Outlook 2007



# MeetingPlace Express 2.0.2

## - Remote Control



# MPE 2.0.2 lokalizovan na srpski jezik- beta verzija



## Cisco Unified MeetingPlace Express

*Dobrodošli, Aleksandar Vulovic*

[Prisustvuj](#) | [Zakaži](#) | [Pronađi](#) | [Rezervisani sastanak](#)

[Korisnički profil](#) | [Odjavite se](#) | [Pomoć](#)

### Rezervisani sastanak



Sastanak još nije počeo.

ID sastanka: 22222  
Organizator: Aleksandar Vulovic  
Dodaj u listu javno dostupnih sastanaka: Privatni sastanak  
Jezik: Srpski  
Tip sastanka: Audio/video + web sastanak  
Video tip: Default : H.263 : 64 - 384 kbps

**0 učesnik(a)** čeka.

[\(Ažuriraj status sastanka\)](#)

☒ Pozovi br. mog telefona/video telefona

☒ Uđi na web konferenciju

[Uđi na sastanak](#)

[Neka sastanak počne bez mene](#)

Novi korisnici, molimo [testirajte Vaš browser](#) da biste proverili da li možete učestvovati u web konferencijama

# Cisco Digital Media System



# Digital Media System— dve komponente

## Cisco Digital Media System

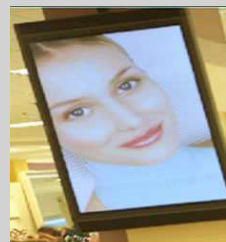


## Desktop Video



- Aplikacija za pronos uživo: slike i VOD na desktop računara
- Primeri upotrebe: interna komunikacija, trening, ili marketing ka spoljnim korisnicima

## Digital Signage



- Aplikacija za prenos uživo videa, glasa i grafičkog sadržaja na “digital signage”
- Primeri upotrebe: reklamiranje ka korisnicima u radnjama/ filijalama, training, interna komunikacija
- Maloprodaja, filijale banaka, vlada, obrazovanje, transport i sl.

# Cisco Digital Media System

## Media Creation



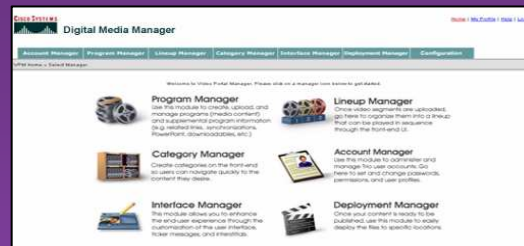
Digital Media Encoder 1000



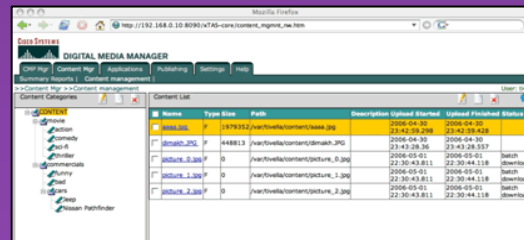
Digital Media Encoder 2000

## Media Management

### Digital Media Manager

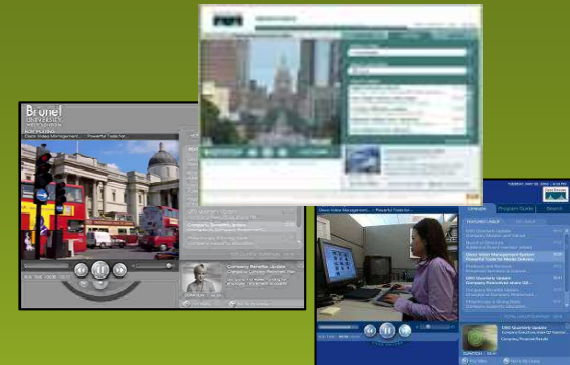


### Video Portal Module



Digital Signage Module

## Media Access



Cisco Video Portal



Cisco Digital Media Player

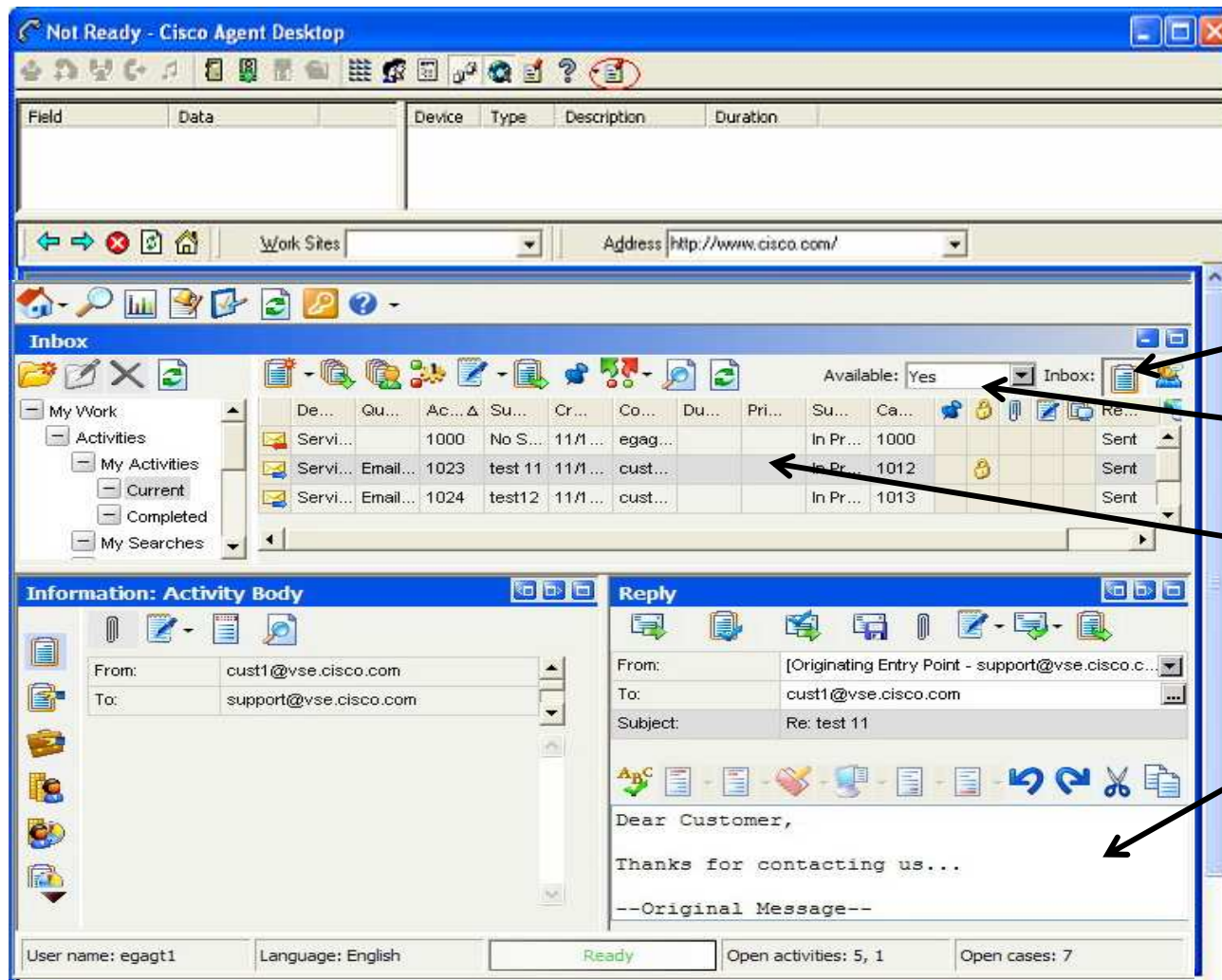
# Unified Contact Center Express novosti



## Multichannel – glas, email,web/chat

- Email Interaction Manager (EIM) upravljanje email-ovima
- Web Interaction Manager (WIM) obezbeđuje Chat and Web kolaboraciju
- Nudi se kao opcija za UCCX 5.0(1), Premium licenca je neophodna
- Dostupno samo u UCCX implementacijama sa Unified Communications Manager
- UCCX ne podržava univerzalni red za čekanje ( voice, web i email)

# Agent Desktop: E-mails Handling



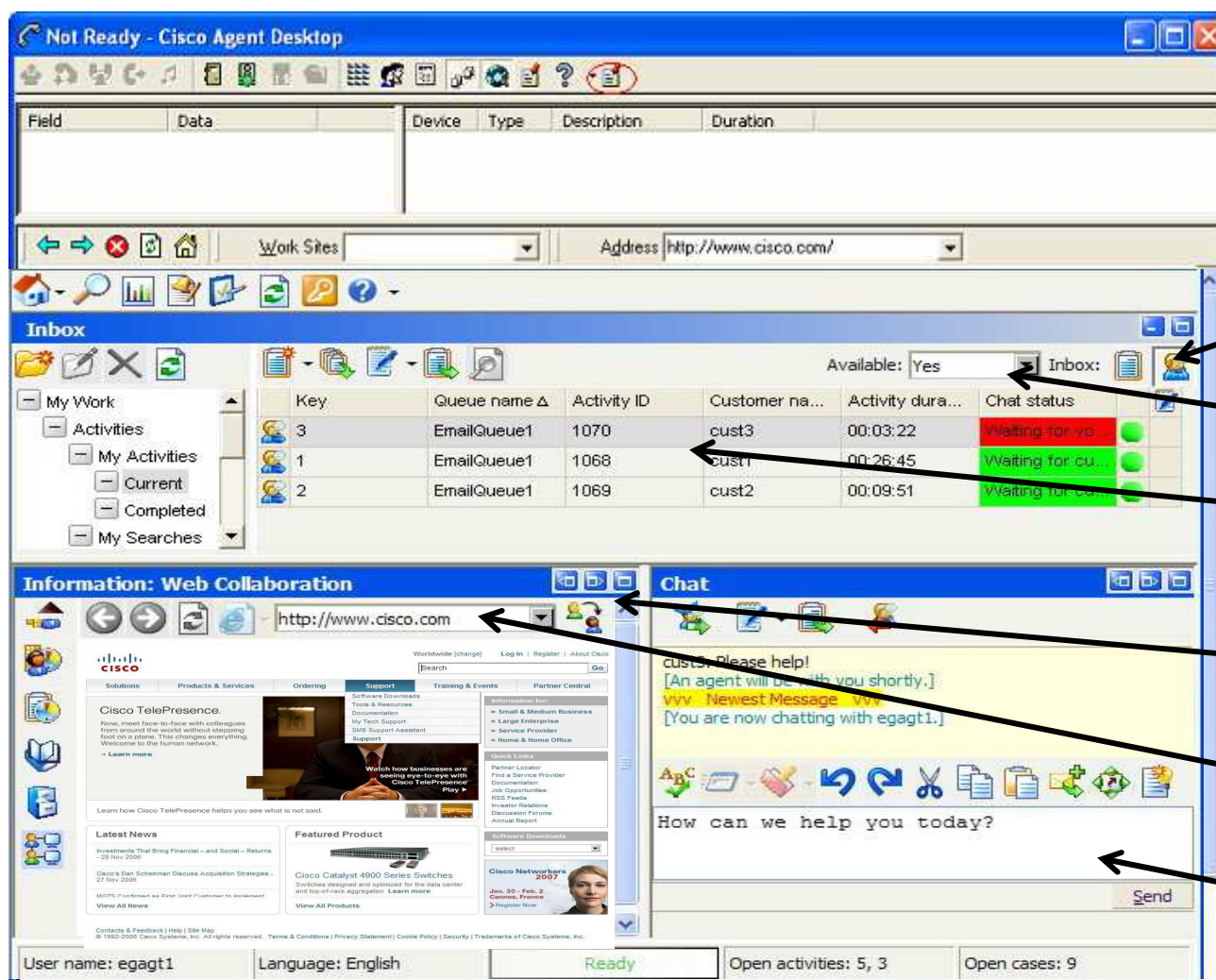
Izbor E-mail

Agentov status da odgovara na email

Spisak e-mailova

Prozor za odgovor

# Agent Desktop: Chat i Web kolaboracija



Izbor Chat/Web

Agentov status za chat

Spisak chat sesija

web collaboration push button

web collaboration prozor

Chat prozor

# Jedna priča...



# Outbound Dialer

- Novo u UCCX 5.0
- Pored primanja korisničkih poziva, agent može da učestvuje i u “outbound” kampanjama kada se korisnici zovu
- *Preview dialing* – agent se odabira za određeni poziv, na ekranu mu se prikazuju informacije o korisniku, agent prihvata poziv, poziv se upućuje ka korisniku
- Novi izveštaji za “outbound” kampanje se dodaju u historical i realtime izveštaje
- Zahteva se posebna licenca, pored premium licence
  - Outbound licenca kontroliše ukupan broj outbound poziva koji se mogu ostvariti

# Ako vaš prošlonedeljni izveštaj izgleda ovako...

| Name                | Monday               | Tuesday            | Wednesday          |
|---------------------|----------------------|--------------------|--------------------|
| Adam Wong           | xxx                  | 9:00 AM - 3:00 PM  | 12:00 PM - 6:00 PM |
| Amber Koenig        | 9:00 AM - 3:00 PM    | 9:00 AM - 3:00 PM  | 9:00 AM - 3:00 PM  |
| Berta Alvarez       | No phones → training |                    | 12:00 PM - 6:00 PM |
| Brianna Marsole     | 12:00 PM - 6:00 PM   | 9:00 AM - 3:00 PM  | 9:00 AM - 3:00 PM  |
| Caterina Gorzekova  | 9:00 AM - 3:00 PM    | 12:00 PM - 6:00 PM | 6:00 AM - 12:00 PM |
| Darren Thomas       | 10:30 AM - 3:00 PM   | 6:00 AM - 12:00 PM | 9:00 AM - 3:00 PM  |
| DeWayne Jackson     | 12:00 PM - 6:00 PM   |                    | 12:00 PM - 6:00 PM |
| Ismerelda Sanchez   | 9:00 AM              | 3:00 PM            |                    |
| Ivonne Baez         |                      | 3:00 PM            |                    |
| Jennifer Harris-Lee | 6:00 AM              | 2:00 PM            | 6:00 AM - 12:00 PM |
| Juan Rodriguez      | 9:00 AM              | 1:00 PM            | 12:00 PM - 6:00 PM |
| Maria Johnson       |                      |                    |                    |
| Nicholi Supressia   | 6:00 AM - 1:00 PM    | 10:00 PM           | 6:00 AM - 12:00 PM |
| Rosario Valdez      | training             | training           | training           |
| Terisita Banderado  | 9:00 AM - 3:00 PM    | xxx                | xxx                |

Visit from corporate today!!

No phones → training

Sick

Sick

10:30 AM - 3:00 PM

9:30 AM - 2:30 PM

1:00 PM

can you work on Tuesday or switch shifts with me? I need to take my history final at 3pm. Thanks! Joan

NO more time off requests for Mon.!

***Možda vam jednostavno treba "Workforce Management"***

# Ako vaši agenti često odgovaraju na pozive ovako...



*Možda vam jednostavno treba "Quality Management"*

# Workforce & Quality Management

## ■ Workforce Management

- Sofisticirani alat za predviđanje količine i distribuciju poziva ka kontakt centru
- Najbolji mogući raspored radne snage da bi se ostvario cilj, vodeći računa o obučenost i dostupnost agenata
- Integrisan kao deo UCCX

## ■ Quality Management

- Snimanje glasa i agentovih “Screens”
- Kriterijum za ocenivanje koji se može kreirati po raznim parametrima
- Povećava efikasnost i produktivnost kontakt centra
- Integrisan kao deo UCCX



## Nagradno pitanje #3

- Cisco IP telefoni se u Srbiji koriste u:

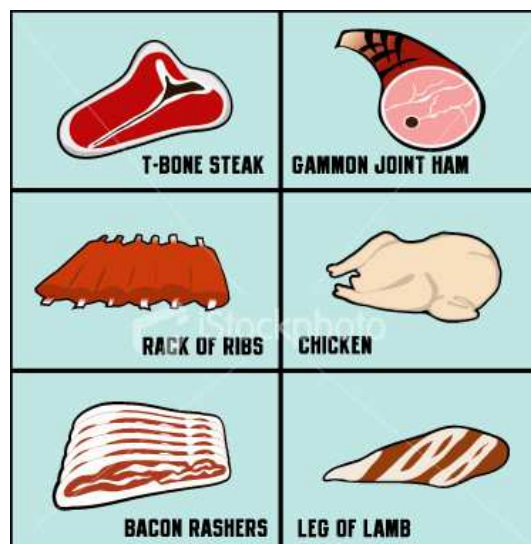
b) Zatvorima



a) Pekarama



c) Mesarama



Budućnost...



# Veća integracija sa mrežom

## Aplikacija – “Pronađi eksperta”

### Primer za aerodrom:

- Pristup aplikaciji kroz XML telefonski servis na telefonu
- Izaberemo željenu lokaciju, npr. “gate 3”
- Prikaz mape eksperata koji nose wireless 802.11 IP telefon
- Korisnik može da izabere određenog eksperta sa mape ili da klikne na “Najbliži”
- Upućujemo poziv na ekspertov wireless IP telefon 7921

*Isti princip može da se primeni i u zdravstvu, maloprodaji, proizvodnji ...*

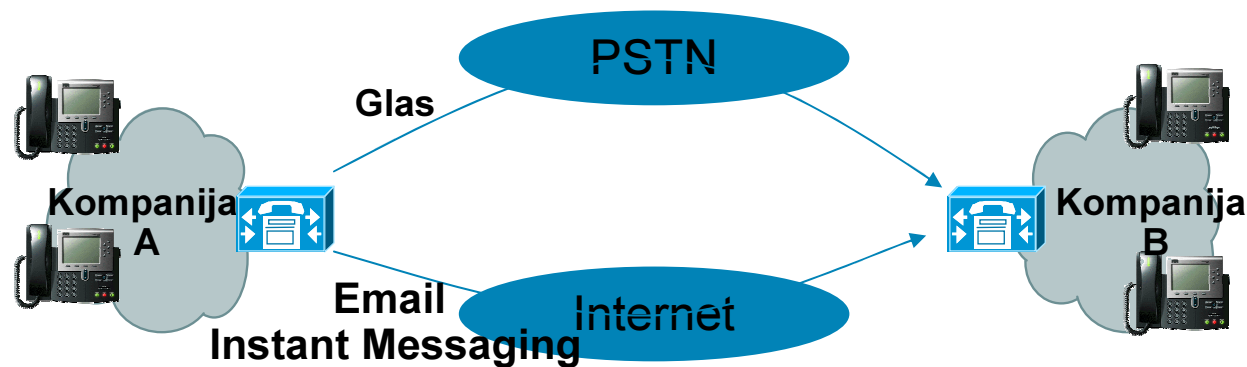


# Unified Communications Mashup

Network-  
Centric

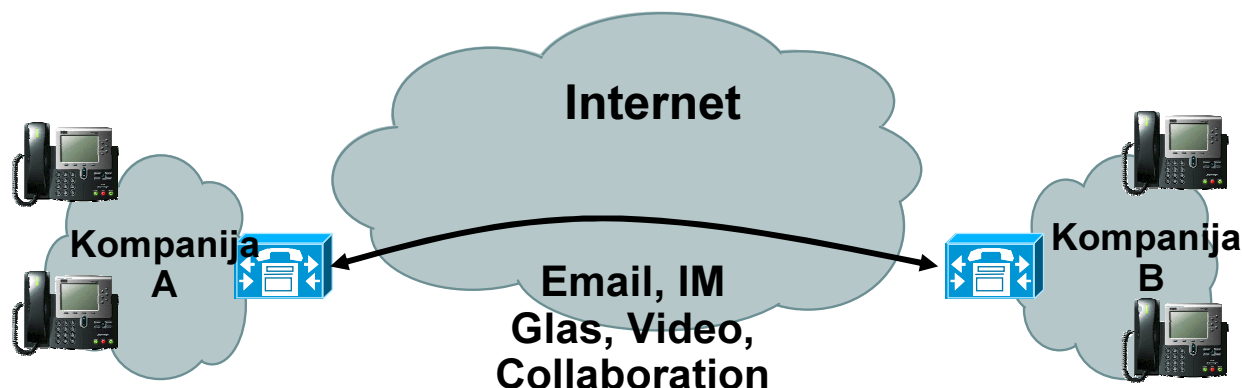


# Business-to-Business komunikacija danas



- Glas se u potpunosti prenosi preko javne telefonske mreže – osnovne funkcionalnosti (caller ID, basic narrowband voice)
- Email između kompanija
- IM & video kroz Yahoo, Skype, Google....
- Prednosti IP mreže se ne koriste van kompanije

# Ciscova vizija i strategija za budućnost



- Glas, video, IM, email i group collaboration sve preko IP
- Ostvariti vezu ka drugim kompanijama u svetu koristeći postojeće telefonske brojeve, telefone i čak infrastrukturu
- Zaštićen prenos preko interneta
- Kvalitet zagarantovan uz PSTN kao backup opciju
- Jednostavno za korišćenje – kao email
- Ogromna ušteda zaobilaznjem javne telefonske mreže
- Enterprise komunikacija između različitih kompanija – wideband, video, itd.

# Dosledno, jednostavno, efikasno

Doživljaj  
korisnika



“ Ako samo slušate zahteve vaših korisnika, možete da zadovoljite njihove potrebe, ali ih nikada ne možete iznenaditi.”

Satoru Iwata  
Predsednik, Nintendo



Ne zaboravite da se prijavite na Cisco  
Networkers 2008!

<http://www.cisco.com/web/europe/cisco-networkers/2008/index.html>

