



UC in Manufacturing



Višnja Milovanović, Sistem inženjer
vmilovan@cisco.com

No two MINIs are exactly alike...
Over 10 million possible configurations



Almost \$2B in sales of a zero-inventory product (iTunes) and huge demand created with marketing and industrial design



60,000 people work in P&G Product Supply
from sourcing raw materials to delivering final
product to retail customer partners and consumers



What Do These Companies Have in Common?



P&G



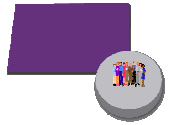
Continuous Innovation

Customer Focus

Supply Chain Excellence

COLLABORATION

Real-Time Communications Can Reduce Time to Solve Design-Related Problems



Leveraging the Program Management – Communication, Collaboration, Data (PMCCD) Platform to Speed Issue Resolution



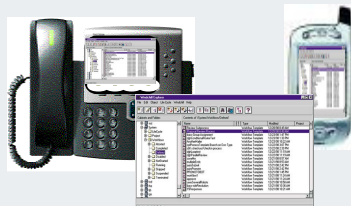
New engineering change: Fast notification to all required and need-to-know program members



Data tagged to people, processes, and product; integrated across silos throughout internal and external systems



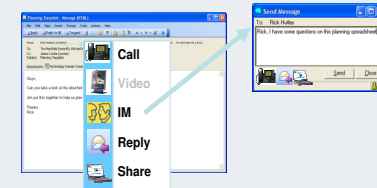
Team members are contacted regardless of location or device



Click to respond or distribute capability based on data tags and policy automation – send to team



Rich media file accompanies change notice from engineering to provide a “briefing” on the change



Click-to-query capability embedded into notification for fast inquiries and collaboration on change



PM uses Presence to Locate key staff and subject experts



Click to collaborate automatically dials staff on appropriate device



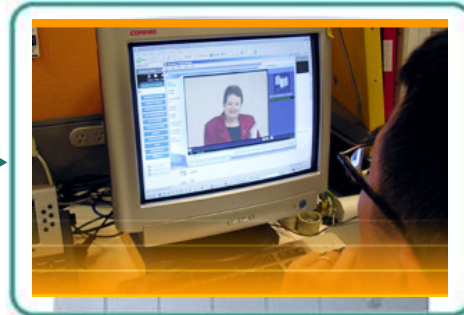
Live audio / video conference established on PM's PC within seconds

Rich Media Solutions Enable Remote Testing and Reduce Travel

Example Situation:



Lab in London had trouble with detergent test method



Technician demonstrates test method using integrated data, voice, and video



London engineers receive message with video

In a recent survey, more than 65% of manufacturing industry executives believe rich media collaboration sessions can reduce 2 or more trips per year for product development team members*



Engineers watch video on demand in lab environment on handheld using wireless network

Estimated Savings:

3 people, 2-day trip

- Hotel & Meals **\$1,200**
- Airfare **\$1,800**
- Productivity Loss **\$2,400**

Total Savings \$5,400

Source: Forrester Consulting: Unified Communications Delivers Global Benefits, Sept. 2007. Cisco Customer Business Transformation Group

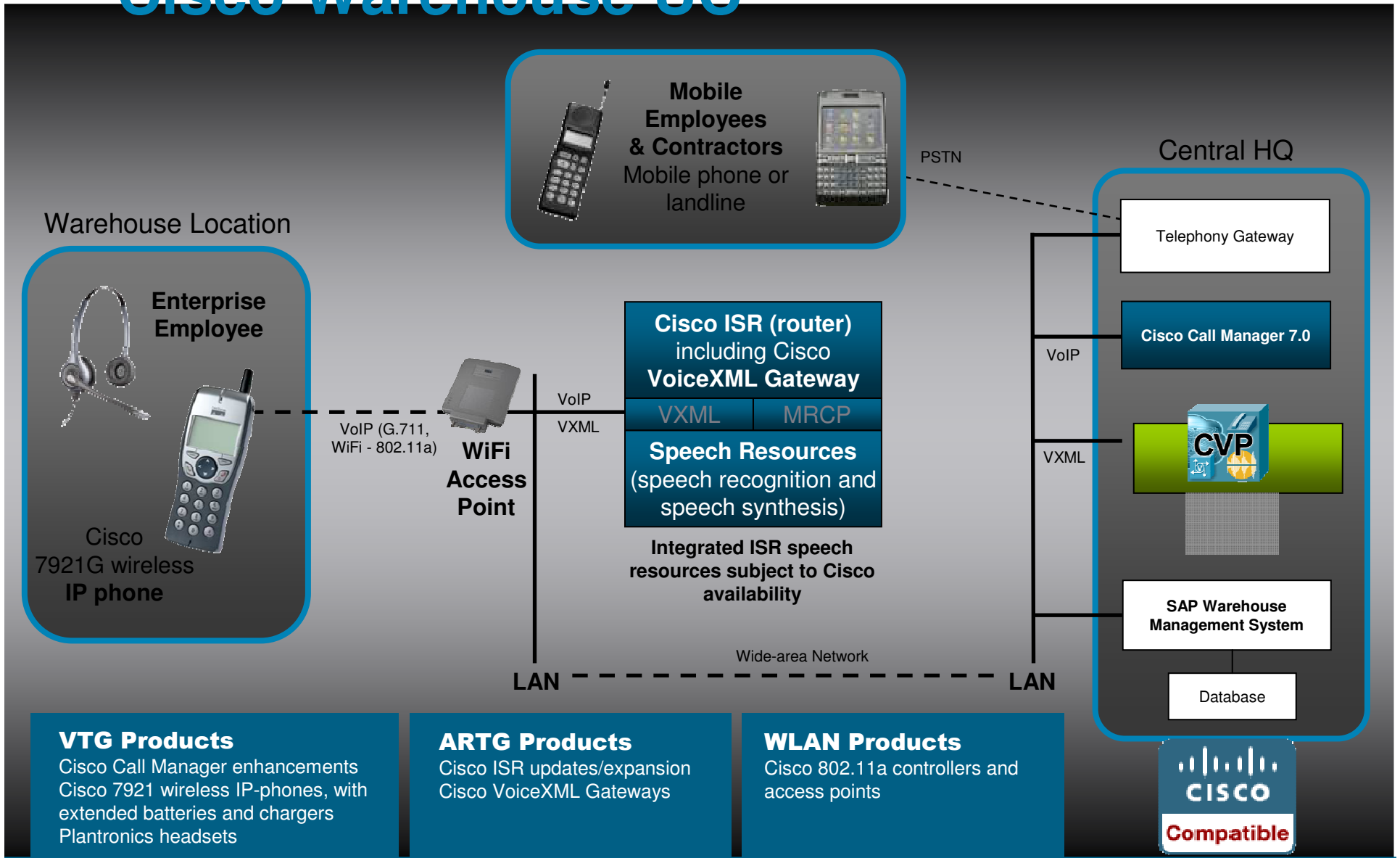


The Responsive Supply Chain

visibility Responsiveness flexibility



Cisco Warehouse UC



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 ...



UC Can Help Reduce the Response Time to Crises on Production Floor



Case Example: Lines-down situation in fabrication facility

Semiconductor Major Use Case



Problem in production line for a strategic customer causing "lines down"



Create a meeting that automatically invites and outdials key technicians and account reps



Enter the meeting through touch-screen on IP phone



Meeting Room appears on PC, bringing together all key participants within minutes



Conduct meeting with "show & tell" of production line setup

About 65% of manufacturing industry executives surveyed believe reaching experts quickly can save 1 or more hours per downtime event *

Adept Technology Case Study Improve Customer Experience and Upselling



1



- Customer needs replacement part – calls customer service

2



- Agent pulls up parts inventory and completes order on IP phone

3



- Brings up customer installed base
- Upsells customer on parts coming up on warranty

- Higher customer satisfaction
- Higher after-market sales
- Inventory/supply chain visibility extended to suppliers and partners

“... the IP inventory visibility solution turned around our business after four years of losses to sustained profits and growth.”

VP & GM, Adept

Source: Cisco® Customer Business Transformation Group

JJ Foods: Leveraging UC platform to drive greater collaboration



"New features in Cisco Unified Communications-such as presence technology, easy-to-use video phones, and SIP support-make our company more cohesive."- Rif Kiamil, IT Manager, JJ Food Service Limited

1



Employee at HQ reads customer voicemail in email in-box, wants to discuss issue with a colleague

2



Uses Presence in CUPC to find a colleague in another location available for a call

3



Colleague answers on IP phone, decides to conference in a manager

4



Manager on IP video phone helps resolve issue (call with 1st employee on CUPC is video, 2nd employee is on only for audio)

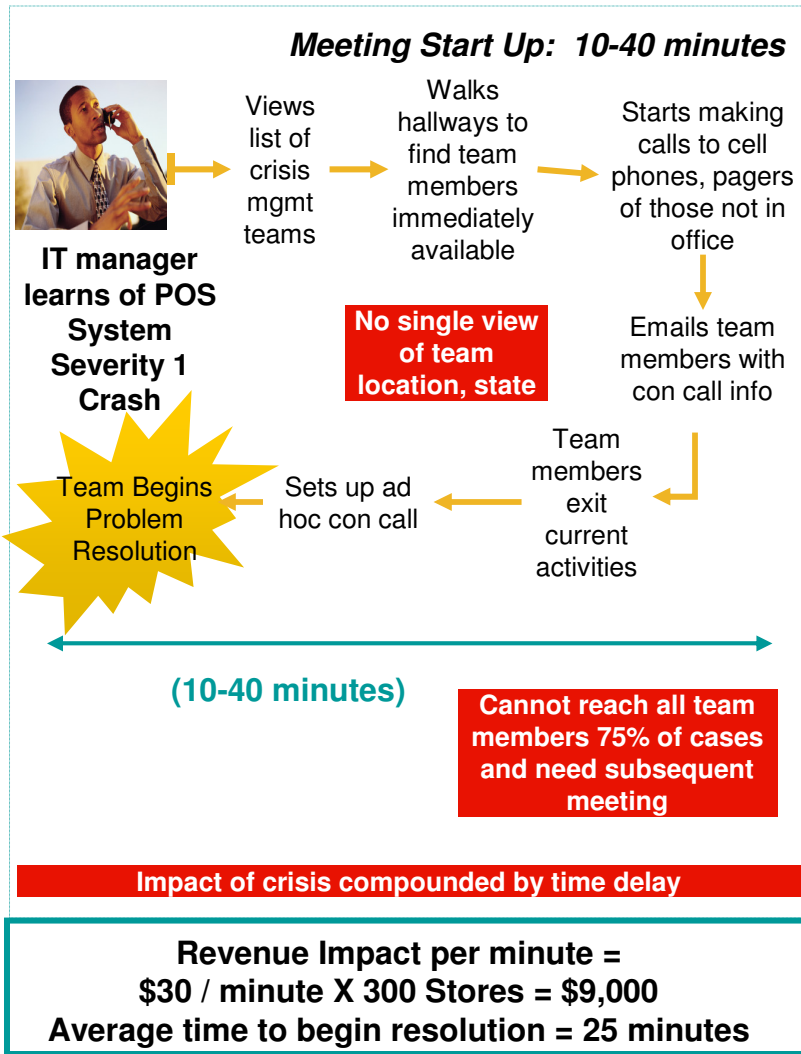
Business Value

- Rapid integration: Added 60 employees from acquired company in 1 day
- Ease of management: 2 new locations managed with same 3-man staff
- Ability to reach right employee the first time presents better image to customers
- Four-digit dialing, directory lookup, unplanned conference calling, unified messaging all save time and increase productivity

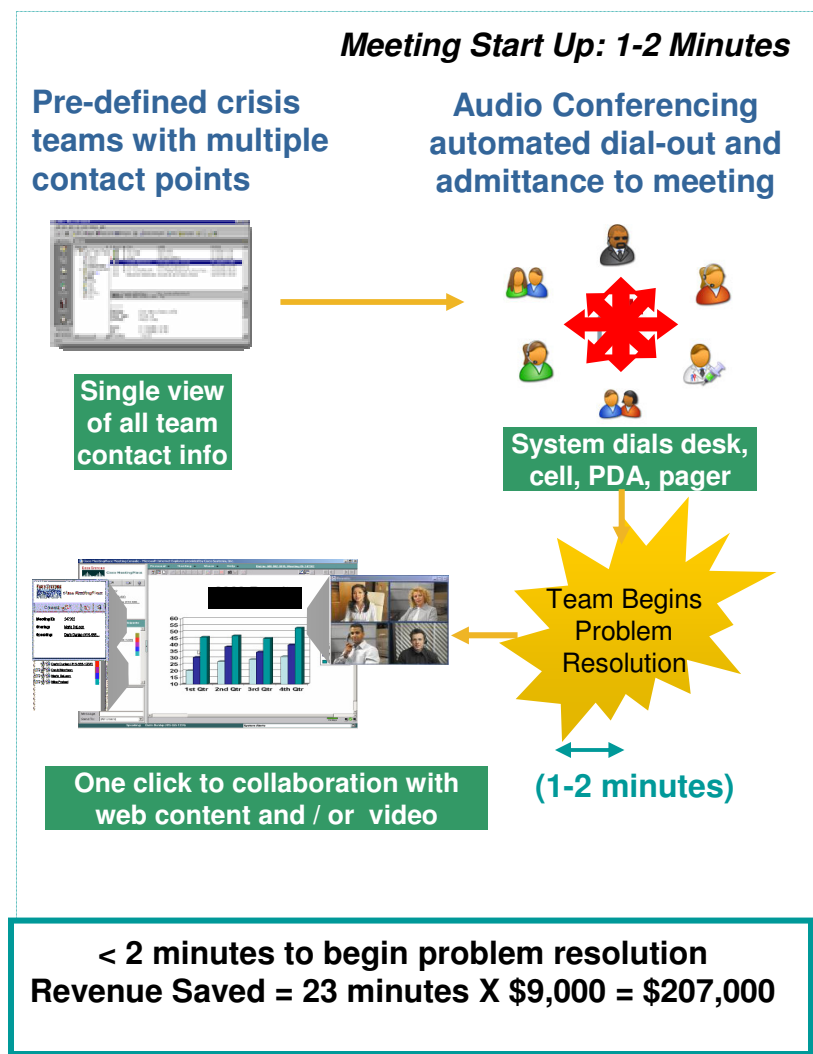
Retail -- Crisis Management

POS System Down at Lunchtime in 300 Locations

As is...

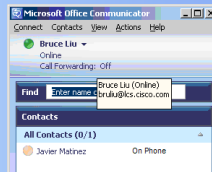


...With Unified Communications

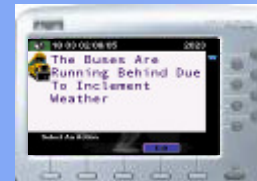


Cisco Unified Communications System

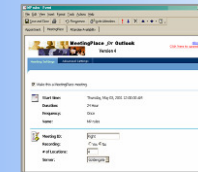
3RD Party Applications



Microsoft outlook



Vertical apps.



IBM Lotus Notes

Applications



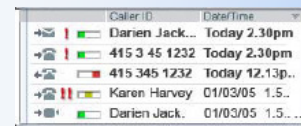
Mobility Manager



Unity Unified Messaging



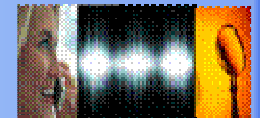
Unified Meeting Place conferencing



Unified Presence Server



Unified Personal Communicator



Unified Contact Centre

Endpoints



Unified IP phones

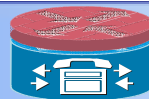


Unified IP Communicator



Nokia Dual-Mode

Media Control



Cisco Unified Communications Manager Express



Cisco Unified Communications Manager



Cisco Unified Application Environment



Cisco IPICS

Infrastructure



Routing



Switching



Availability



Management



QoS

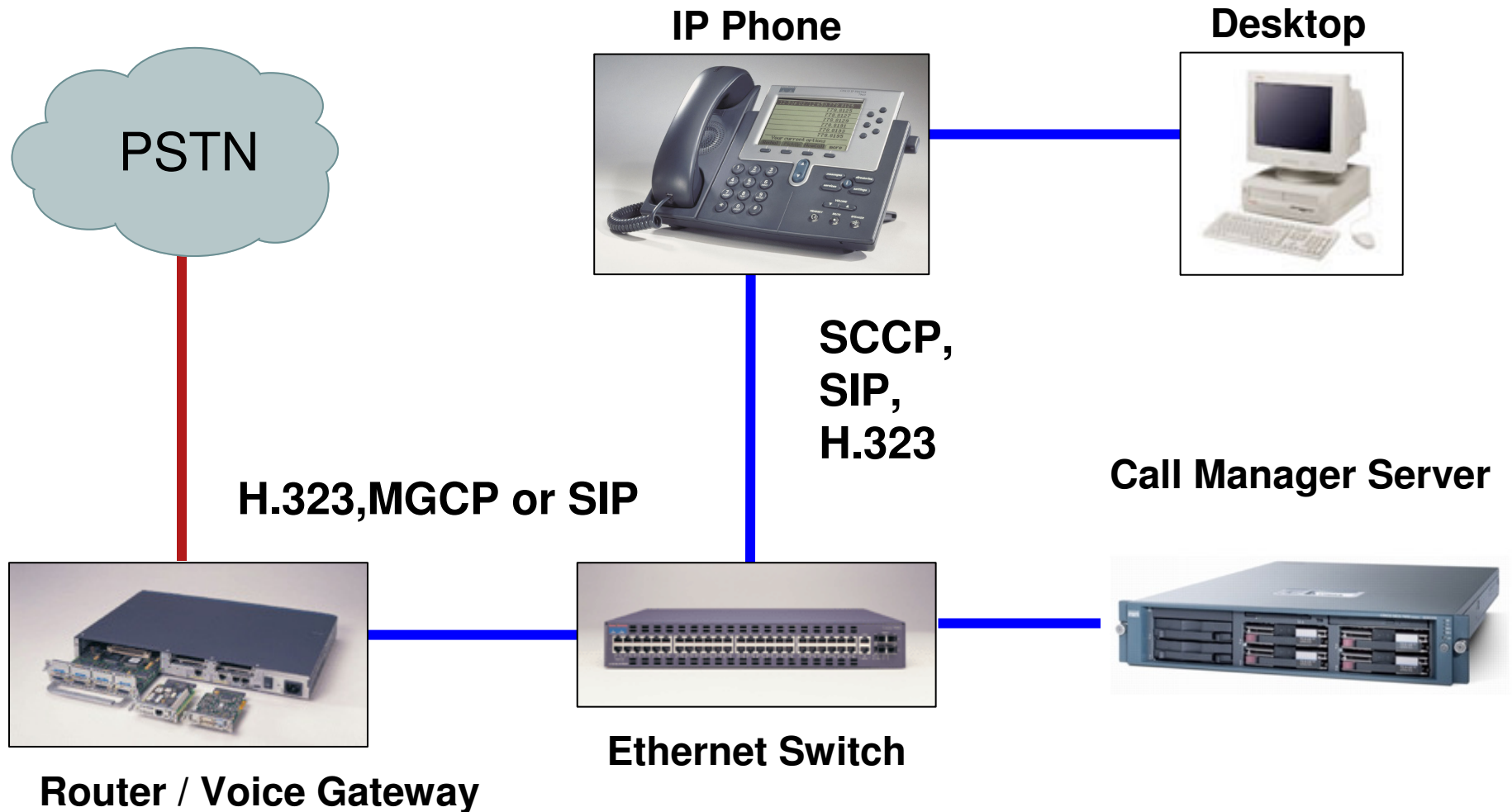


Security

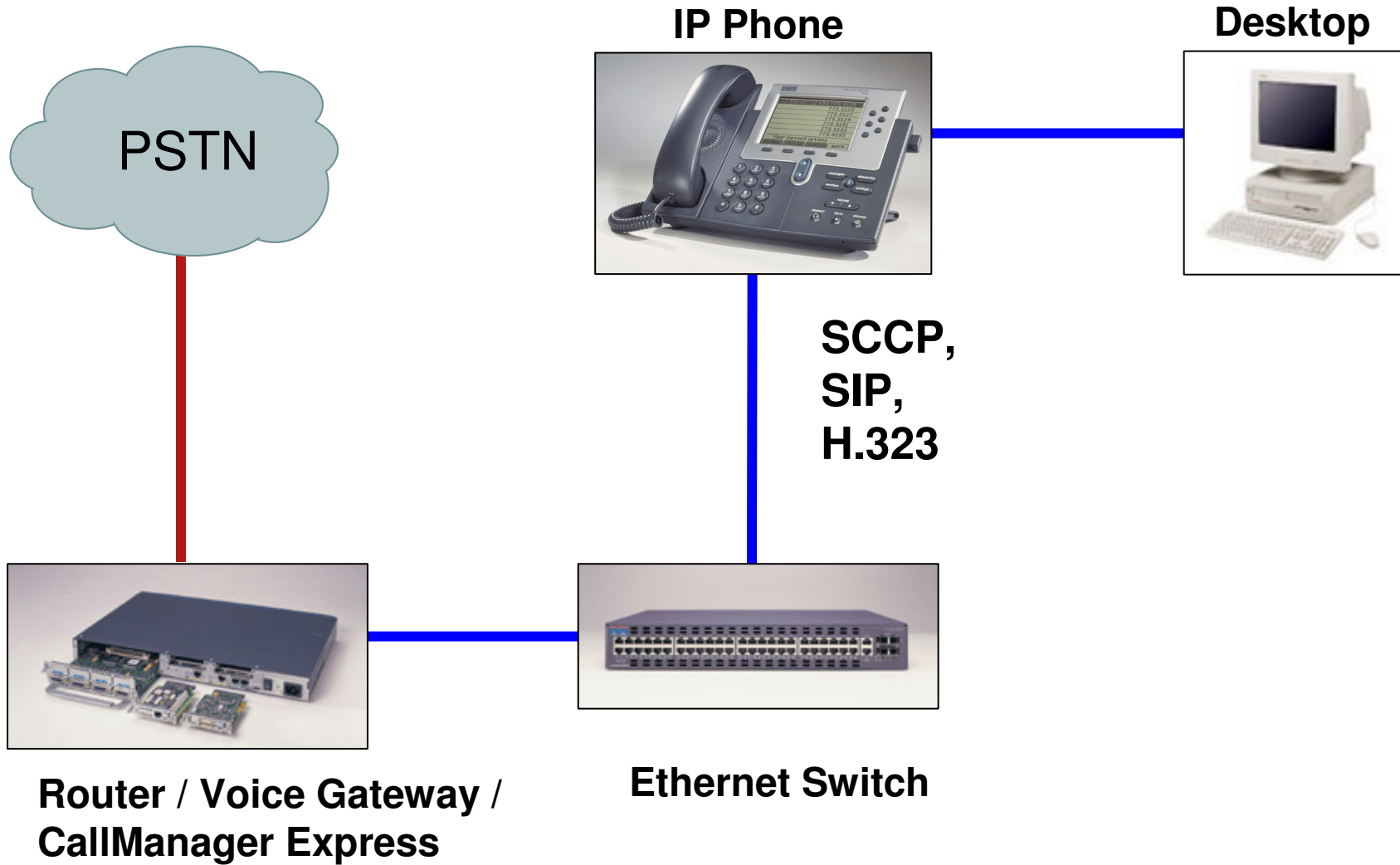


Administration

Cisco IP Telephony – Basic Components

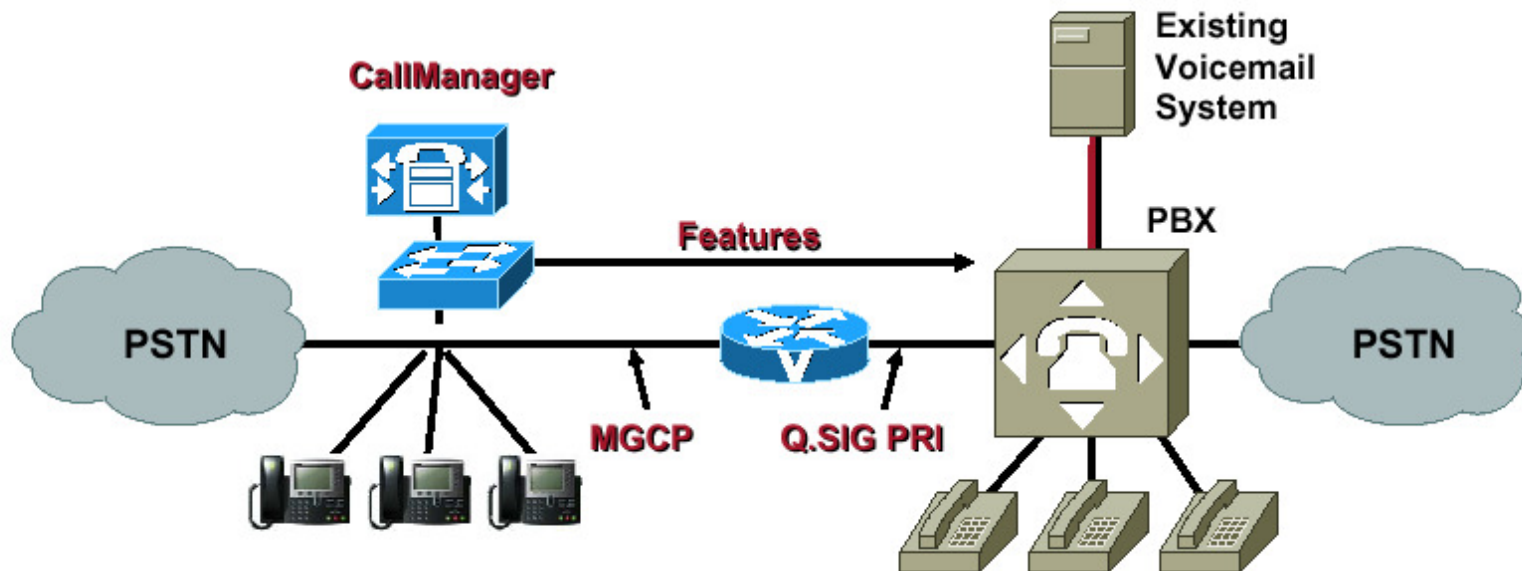


Cisco IP Telephony – Basic Components

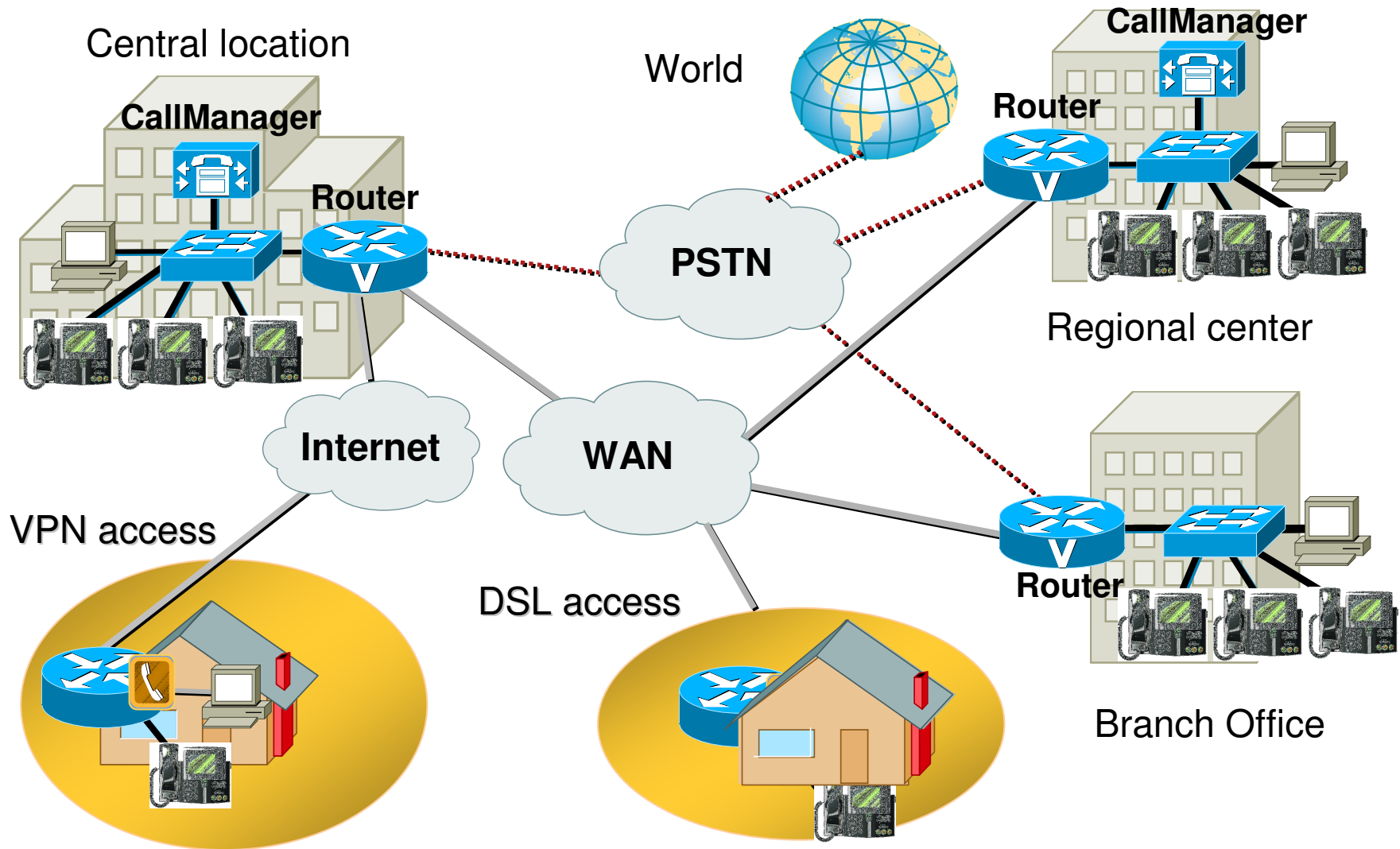


QSIG Protocol

- **Inter-PBX network features in stub or tandem environments**
 - ID services, diversion, forwarding, transfer, conference, call back/camp-on, ...
- **Ability to share common voicemail between PBXs**

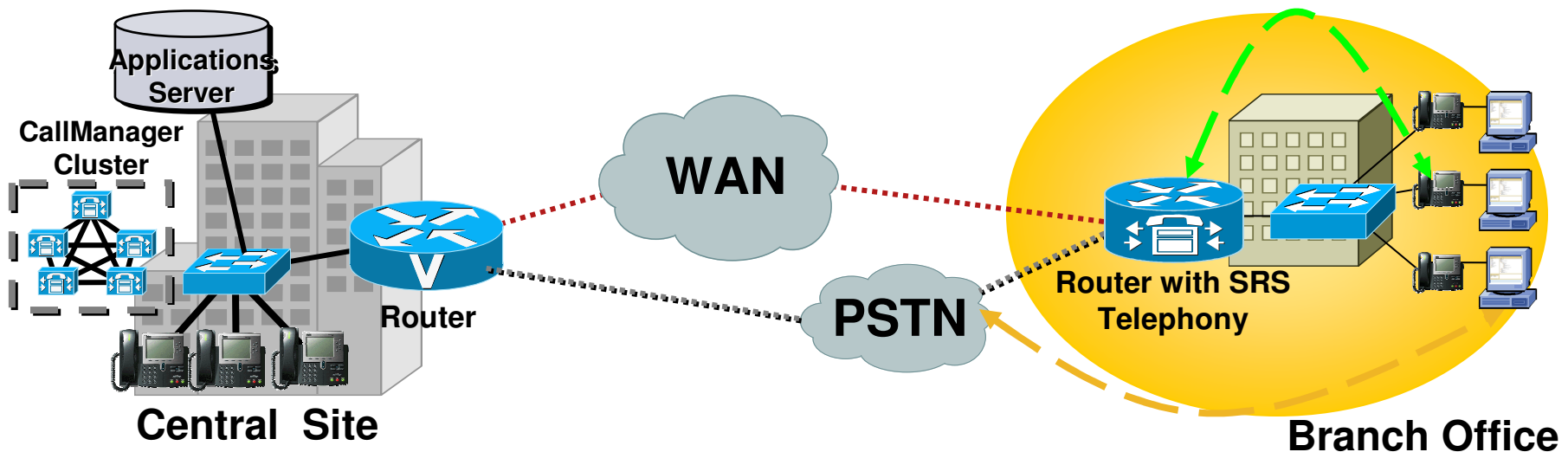


Cisco IP Telephony End-to-end

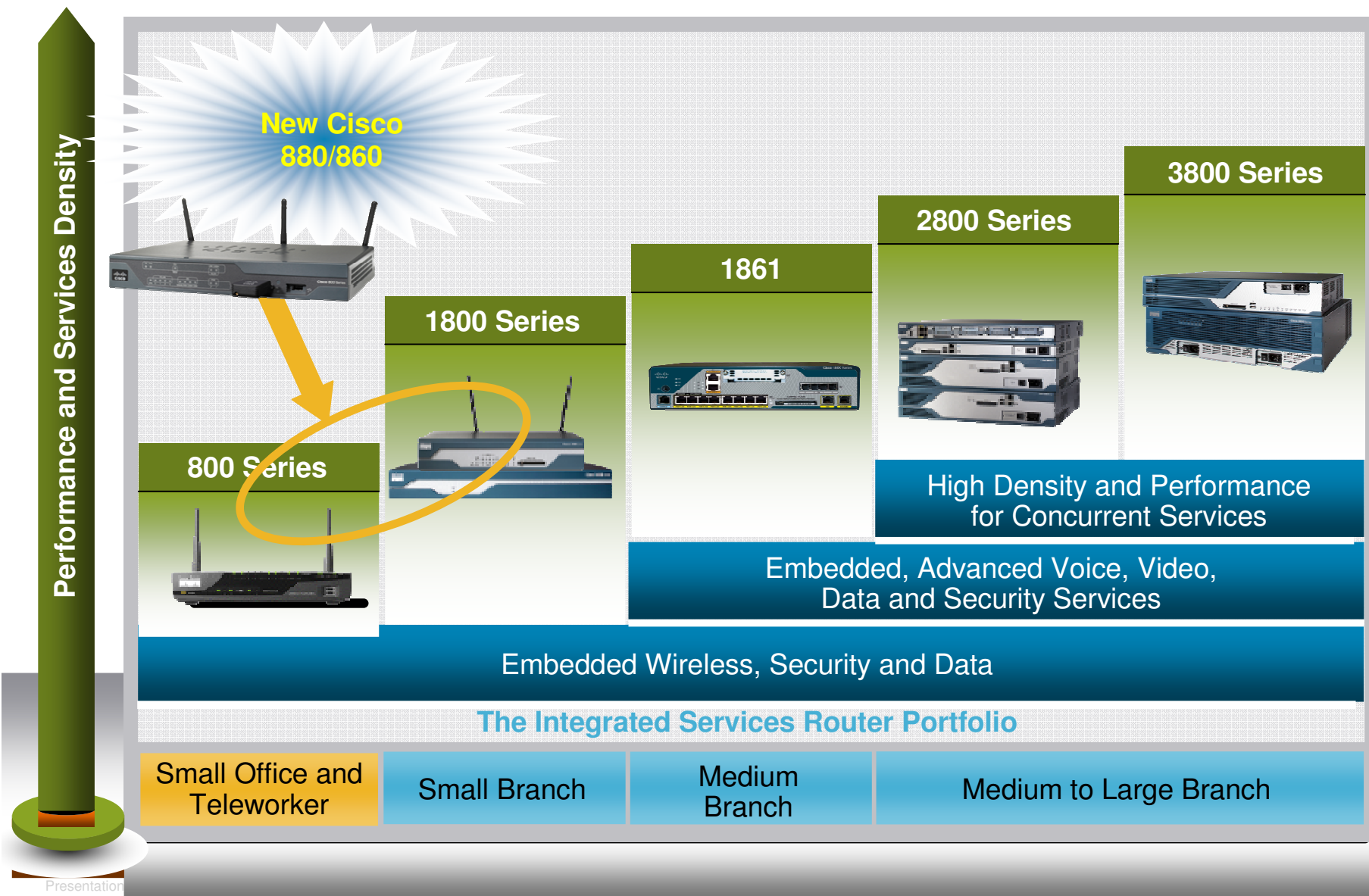


Survivable Remote Site Telephony

- SRST provides redundancy in the case of WAN failure
- Ideal for enterprise customers utilizing Centralized Cisco CallManager Deployment for IP telephony at their branch offices
- Provides near feature parity with Cisco Call Manager
- Configure it and forget it! SRST inherits its configuration from Cisco Call Manager and requires no configuration or intervention in the event of a WAN failure
- Supported across all Voice platforms, up to 720 Phones per Router



Cisco Integrated Services Router Portfolio



Cisco 880 SRST Integrated Services Router

New



For Small Branch, Enterprise Teleworker or Remote Call Center Agent

- Desktop form factor
- WAN Interfaces: FE, VDSL2*, G.SHDSL
- PSTN Fallback: BRI, FXO
- Voice Ports: Four FXS
- Four-port FE Managed Switch with PoE
- Voice Protocols: H.323, SIP, MGCP, SCCP
- Software: Advanced IP Services

*Future

- **Adds Voice with Survivability Features**
Best-in-class integration of data and toll-quality analog/digital voice services for Enterprise Teleworker
- **WAN/LAN Technologies**
Fast Ethernet, G.SHDSL, VDSL2*
802.11n WLAN and Unified Management
- **Comprehensive security**
IPsec VPN acceleration: DMVPN, GET VPN, Easy VPN
Firewall, IPS, Content Filtering, SSL-VPN,
- **Comprehensive Routing and QoS**
- **Ease of Management**
Cisco Configuration Professional
CiscoWorks
Unified Wireless Management



IP Phones & Services



Cisco Endpoints

Executive

Cisco Unified IP Phone
7975G / 7971G-GE



Manager

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

Business

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



Multibutton

Cisco Unified IP Phone
7931G

Basic

Cisco Unified IP Phone 7906G /
7911G



Video

Cisco Unified IP Phone
7985G

**Cisco Unified Video
Advantage**

**Cisco Unified
Personal Communicator**

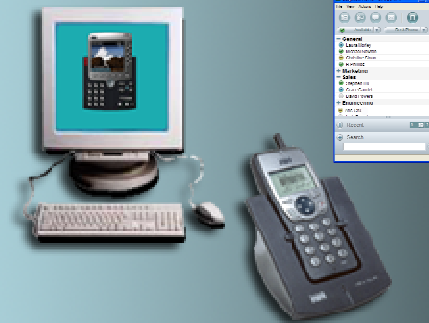


Mobility

Cisco IP Communicator

**Cisco Unified Wireless
IP Phone 7921/7925**

**Cisco Unified
Personal Communicator**



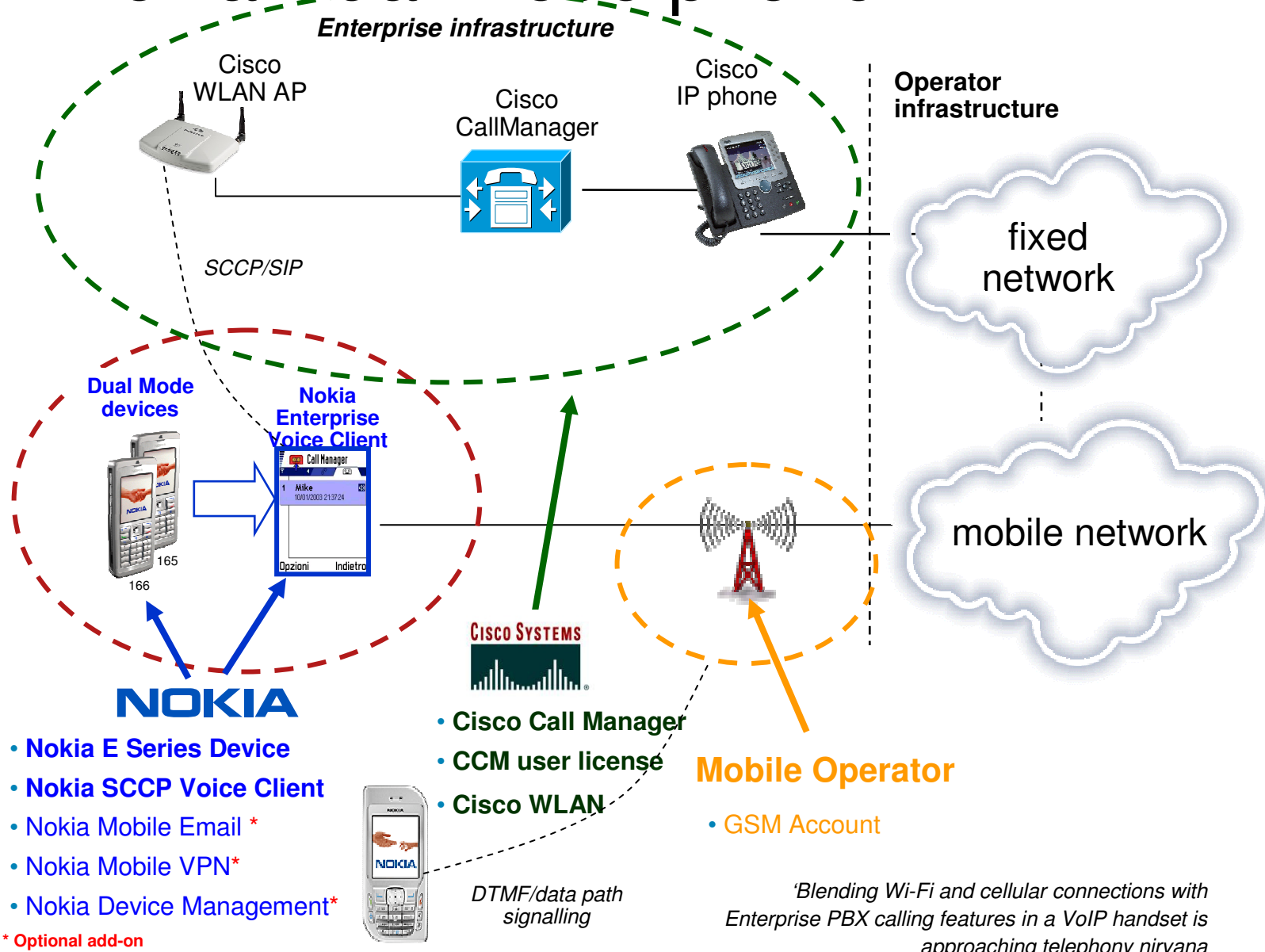
Analog

Cisco ATA 186

**Cisco VG202/204/VG224/VG248
Analog Phone Gateway**



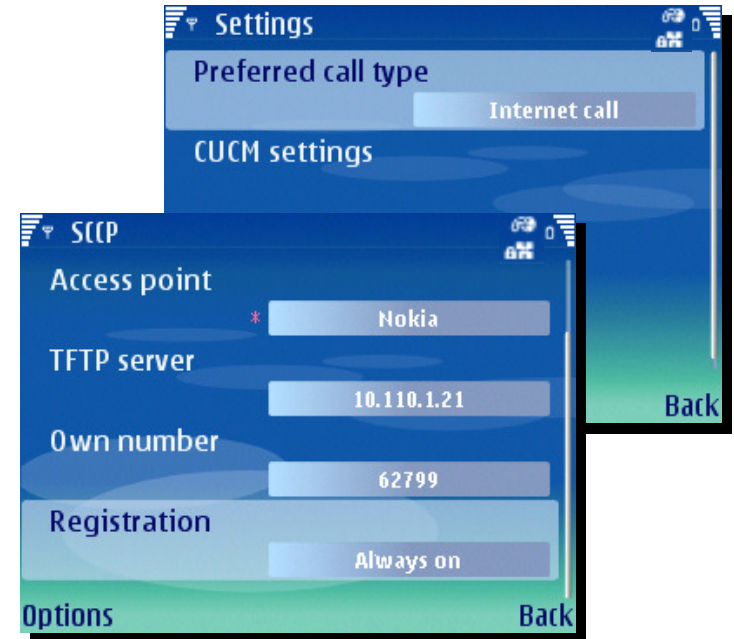
Nokia Dual Mode phone



'Blending Wi-Fi and cellular connections with Enterprise PBX calling features in a VoIP handset is approaching telephony nirvana
NETWORK WORLD

Nokia Dual-Mode Phone

- **Nokia Intellisync Call Connect**
- **Phone handsets: Nokia E60, E61, E61i, E65, E51, E66 and E71**
- **SCCP-only Client**
- **Switch to cellular: supported on E51, E66 and E71**
- **Nokia Mobile VPN**



Nokia E60



Nokia E61



Nokia E61i



Nokia E65

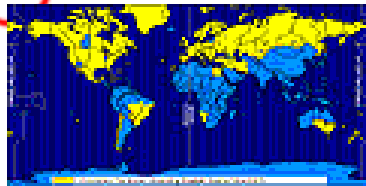


Nokia E66



Nokia E71

Cisco IP Phone Services Examples



World Clock

Meeting Room Scheduler



Yellow Pages Lookup



Weather

| | | | |
|----------------|-------------|-------------|-------------|
| 19:18 07/20/00 | | 9728111026 | |
| Tue. | Wed. | Thu. | Fri. |
| | | | |
| 83 F | 84 F | 90 F | 92 F |
| 28 C | 28 C | 32 C | 33 C |
| Update | | Exit | |

Stock Tracker



Flight Status



Transit Schedules

Joining the Live Broadcast

- After the demo has been started, users can join the Subscription by selecting the **Live Broadcast** from the menu. Thus becoming participants and starting to receive audio and images
- Users can leave the Broadcast at any time by pressing the **Exit** button.



Cisco Systems



CISCO IP PHONE
7941 SERIES

15:52 27/01/09

2335

Vreme u Novom Sadu

Dobitno: 27. 01. 2009. u 14:00

Temperatura: 6 °C

Pritisak: 994 mb

Rel. vlažnost: 90%

Brzina vetra: 4 m/s

Gore/Dole - zelena tipka

Osveži

Povratak

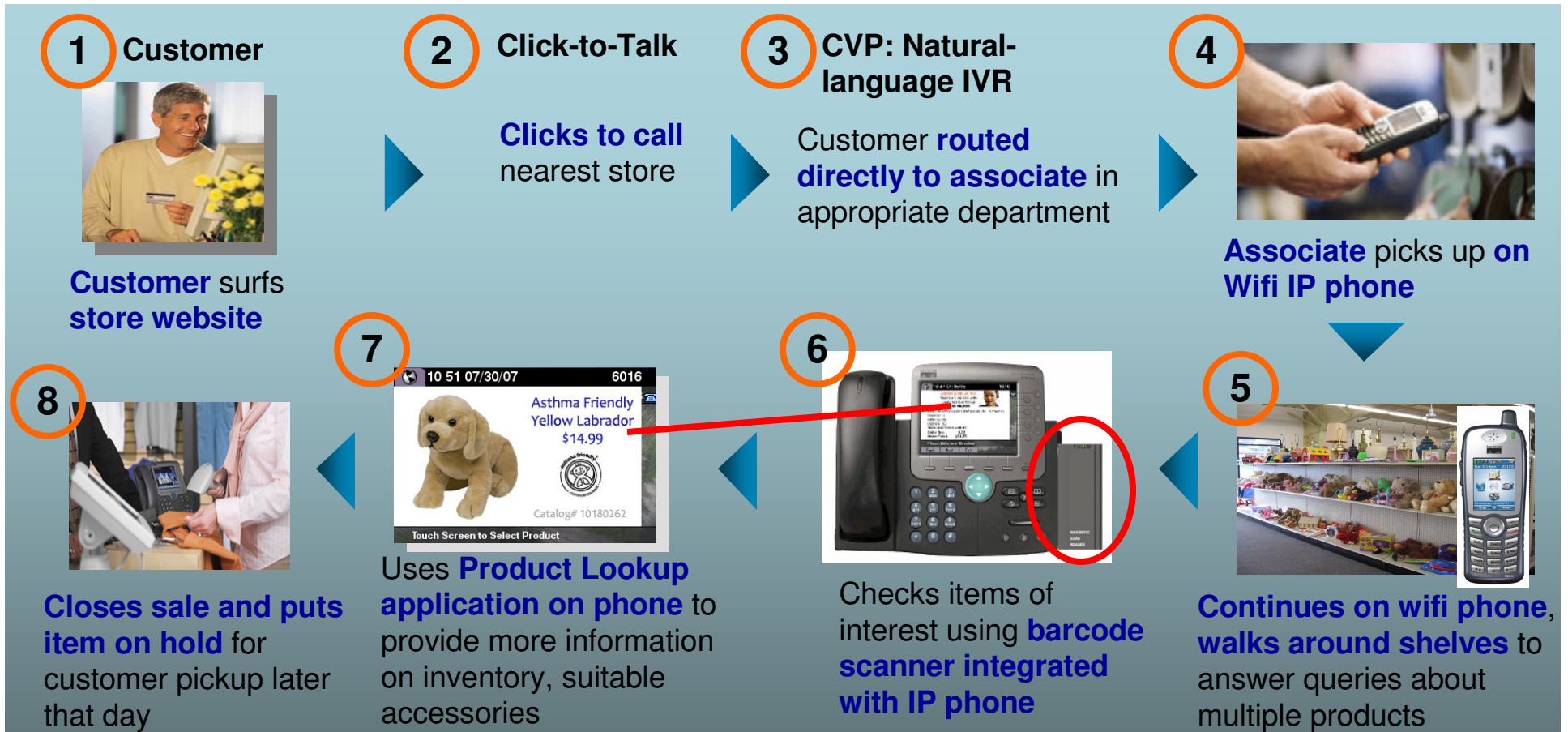
1

2

3



UC-enabled Store Associate Solution enhances associate productivity and customer experience



Business Value

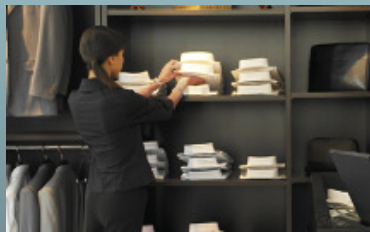
- Enhanced associate productivity (potential >50% improvement in efficiency of interaction with customers)
 - Call routed directly to associate with wifi phone
 - Seamless 2-way phone to radio, phone to PDA communications in store
- Increased cross-sell/upsell due to richer customer experience
 - Phones integrated with product lookup and inventory applications

UC Employee Dashboard Solution decreases on-boarding time by streamlining delivery of information to associates



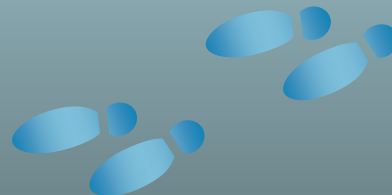
1

Store Associate arrives at start of shift



3

Walks to department, begins work



2

Associate **on-boards at single station** using applications integrated on IP phone

1. **Clock In/Out of Shift**
2. **Receives Shift and Meal Breaks**
3. **Reads Reports and New Information**
4. **Receives goals/tasks**

Business Value

- Improved associate productivity (~>50% decrease in on-boarding time)
- Improved customer service by reinvesting gains to customer facing time
- More consistent delivery of management communications
- (FUTURE): VoDs delivered to IP phones can save training costs

Retail Customer Care

Customer access to product information and sales assistance through IP enabled device from sale floor



UC Media Display: Features



UC Media Display: Features

LiteScape



UC Media Display: Features

LiteScape



Image and
Audio

UC Media Display: Features

LiteScape



Text

UC Media Display: Features

LiteScape



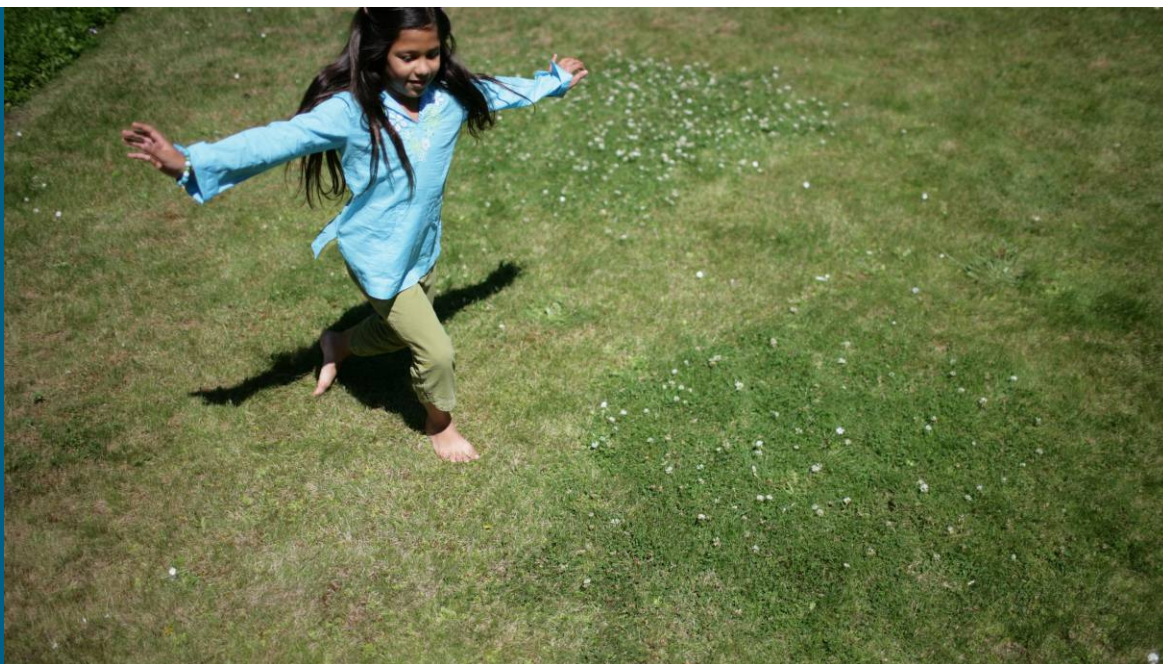
Surveys

UC Media Display: Features

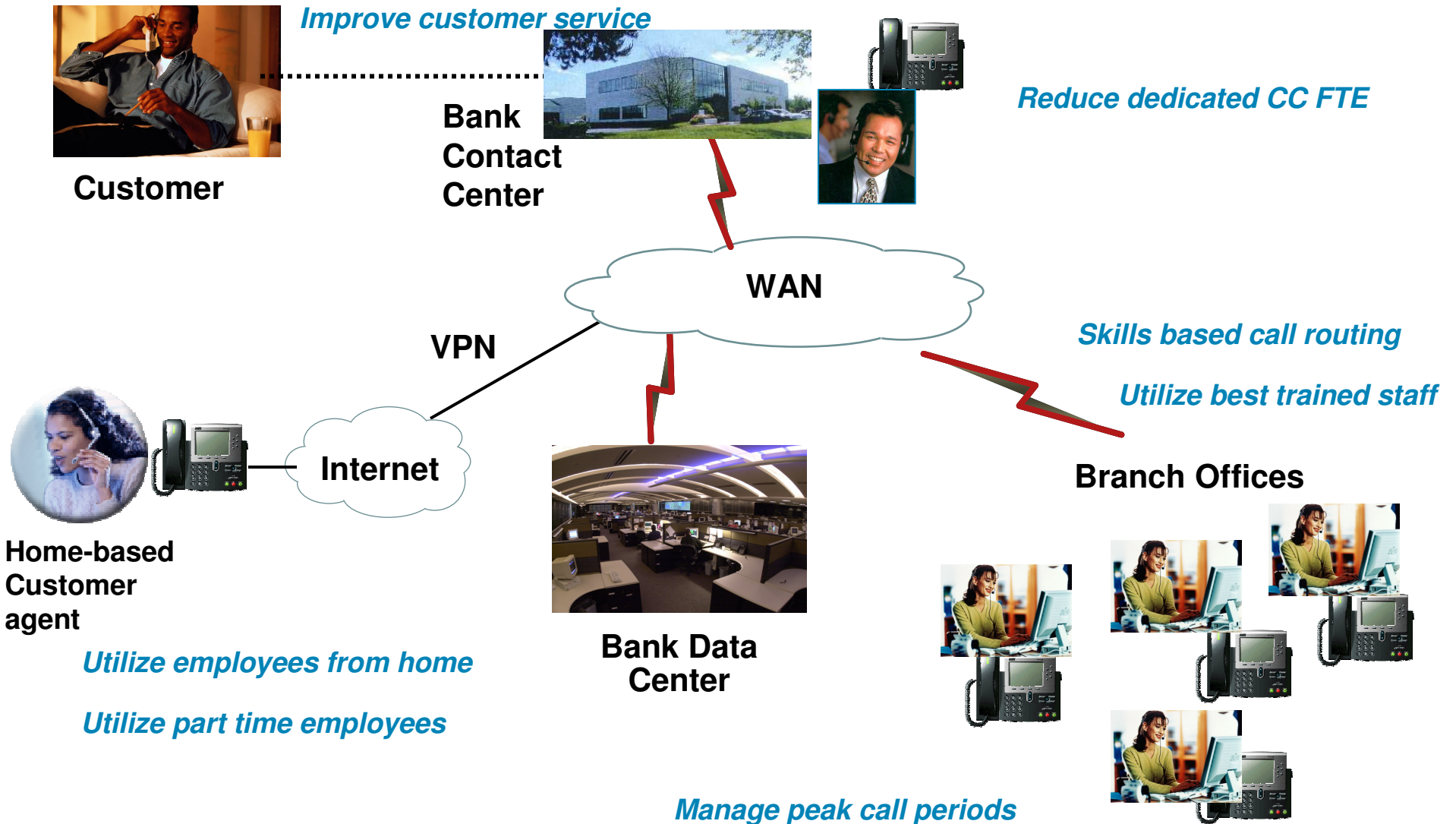
LiteScape



Contact Center

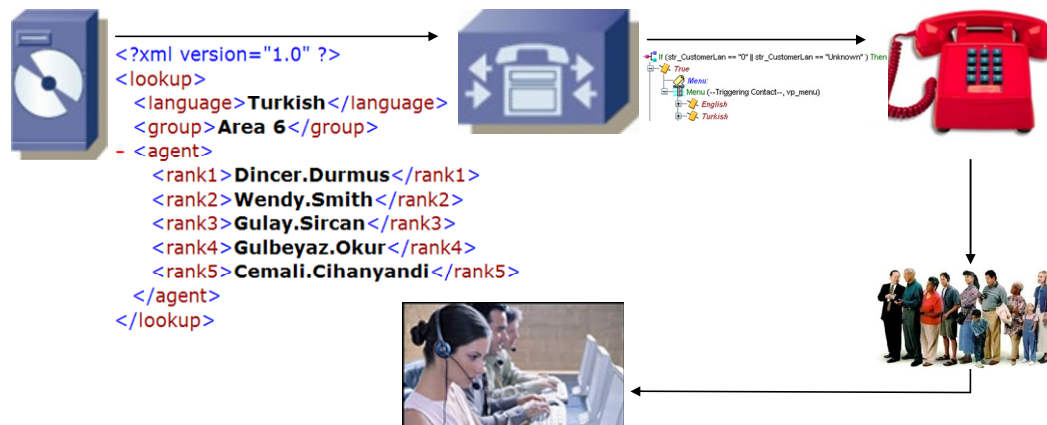


Virtual Call Center



JJ Foods: Integrating the call center with the ERP/CRM systems for increased capacity

Portal sends back information about the customer and how the call should be treated → IPCC Express routes call to the correct person



“This allowed us to cut down 162,500 customer calls a year being transferred and/or being called back.”

162,500 x 105sec =
\$6.5m productivity gain

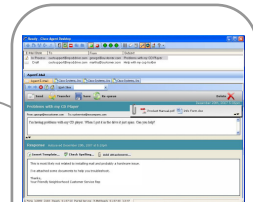
“To build this application has taken a total **10 days** - the web developer has never worked on Cisco Unified Contact Center Express or on a call centre application before.”



Extending the Contact Center with E-Mail Customer Interaction – Agent E-Mail!

- Email interaction management service
- Agent E-Mail provides a core feature set for managing e-mails
 - Distributes e-mails to agents
 - Sends responses from the contact center to the customer
 - Provides real-time and historical reports on e-mail activity
- Zero footprint, browser based and fully integrated with Agent and Supervisor Desktops

Contact Center Agent



Cisco Agent Desktop and Agent E-Mail

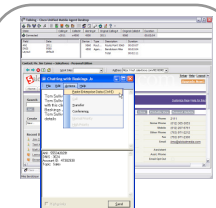


Click to play the demo!

Extending the Contact Center with Enterprise Collaboration: Unified Contact Center Express with Presence!

- Agent and supervisor desktops are presence enabled via integration with Cisco Unified Presence Server
- Available at no additional charge in Standard, Enhanced and Premium
- Unified Contact Center Express with Presence:
 - Enhances collaboration throughout the enterprise
 - Provides agents with visibility to key operational experts
 - Increases agent productivity and First Contact Resolution

Contact Center Agent



Cisco Agent Desktop and Presence



Click to play the demo!

Cisco Telepresence



TelePresence virtuelni stručnjak

- Cisco TelePresence i Cisco Unified contact center
- Virtuelni poslovni terminali
 - Maloprodaja
 - Filijale banaka
 - Virtuelna zdravstvena nega
 - Virtuelna recepcija
 - Hoteli
- Prodajna mesta
- Call centri
- Mesta gde je bliskost sa korisnicima komperativna prednost







Example Deliverable: Productivity and Business Transformation Opportunities for Key Roles in Retail

Retail Store Employee



Role: Maximize customer face time, answering questions and selling.
Issue: Administrative and inventory search activities reduce face time
Impact: Reduce time away from customers by 15-45 mins / day / emp.

From



To



Solution

IP phone time management, inventory lookup apps.

Contact Center Agent



Role: Product expertise and peak time resource for stores
Issue: Lost sales due to lack of point of sale product expertise
Impact: Reduce customer walk aways and increase customer loyalty

From



To



Solution

Click-to-talk to expert, integrated routing

Retail Store Manager



Role: Increase sales and customer loyalty, while minimizing opex
Issue: High turnover and employee retraining burden
Impact: Improve employee knowledge, reduce turnover, increase sales 4-6%

From



To



Solution

Web enabled distance learning, IP phone policy adherence apps

IT Application Manager / Engineer



Role: Maximize uptime of enterprise and store applications
Issue: Slow response time on critical system down situations.
Impact: Reduce lost store revenue by up to \$200K per incident

From



To



Solution

Rich media conferencing outdial functionality ? !

Retail: Fashion Retailer Enhancing Employee Productivity and Business Agility Through UC

Business Challenges

- Need to facilitate better communication and collaboration between executives discussing strategy, design decisions, new product lines etc.
- Improve productivity for mobile workers and teleworkers
- Reduce telephony costs while facilitating expansion and acquisitions
- Improve contact center service

Solution

- Cisco IP telephony solution including Call Manager, IP phones and broadband routers; IP Communicator softphones for traveling executives and associates
- Cisco IPCC Express to obtain integrated reports and performance metrics
- Planned deployment of video telephony solution to increase productivity of design discussions, reduce frequent travel between offices etc.

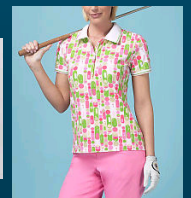
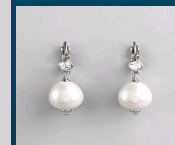
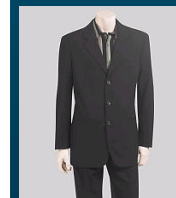
Business Value

- Improved productivity for executives visiting other locations since they can log on to any phone as their own
- Significant cost reduction due to savings in connectivity, toll bypass, MACs, cell phone and home phone expenses for mobile and teleworkers
- Faster integration of new offices into the corporate telephony network
- Optimized staffing and improved customer service through detailed contact center reporting and enhanced routing capabilities



“Extension Mobility is a boon for productivity”

“Integrating telephony systems of acquisitions is 3X faster than the industry standard”



Hannaford Brothers Enables Growth Via UC-driven Employee Productivity



Company Profile

- Fifth largest grocery operator in U.S. - 147 supermarket / food / drug stores in Northeast – business segment of Belgian based global retailer Delhaize. 24,000 employees

Business Challenges

- Improve store employee productivity – increase customer face time and improve task allocation across employees
- Improve ability to open / close stores more effectively
- Enhance user experience and reduce costs of international meetings and presentations

Solution

- Unified Communications: Call Manager, IP Phones, Unified Messaging, Video Conferencing, phone-based applications

Business Value

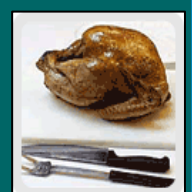
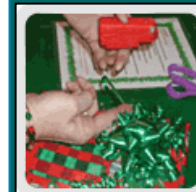
- Opened 14 new stores in 2006 – highest single year in history
- \$75M annual savings from unified communications, IP videoconferencing and converged network.
- Better communication / collaboration between stores, Hannaford HQ and Delhaize parent company.
- Improved customer experience and video “how to” content

“We’re lowering the cost of doing business, and we’re running a better store.

Our customers see it both in the cost of our products and how well the store is organized – very few products are ever out of stock, for example.

It’s subtle, but its very powerful.”

- **Bill Homa, CIO**



Example: Global Quick Service Chain

UC Platform Saved 23% on TCO in First Year

Business Challenges

- Improve communications across 5 brand silos, multiple geographies, consistent management, quality and policy
- Move away from EOL PBX solution, with escalating support costs
- Reduce voice TCO and consolidate 4 VM platforms to enable corporate wide communications

Solution

- End-to-end IPT / messaging in HQ, regional sites
- Click to talk integration with corporate directories, web conferencing application, crisis management
- Next phase: Leverage platform to expand—
Contact center, rich media, UM

Business Value

- 23% reduction in voice TCO realized in first year
- Consistency of communications and adherence, faster crisis resolution, productivity gains on repetitive communications tasks



“Crisis situations drive need to bring disparate team together. Before, it was difficult...and involved making multiple phone calls, searching offices, paging people, setting up impromptu meetings... just to start resolution”