



**Cisco Expo**  
**2008**

## Empowered Branch



**Denis Zotov**

**Product Manager**

**CISCO Access Routing Technology Group**

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

# Agenda

- Cisco Empowered Branch – Overview
- Routing/Switching/Management
- Unified Communications
- Integrated Security
- Mobility
- Application Services
- Summary

# Empowered Branch Overview



# Branch Office Communication Challenges

## Global



Number of branches  
growing 11% per year

## Mobile



91% of employees  
work away from HQ

## Green



62% of Enterprises  
adding new branches

## Collaboration, Video



Branch bandwidth  
growth 50% per year

## Security



Global threats, compliance,  
physical security

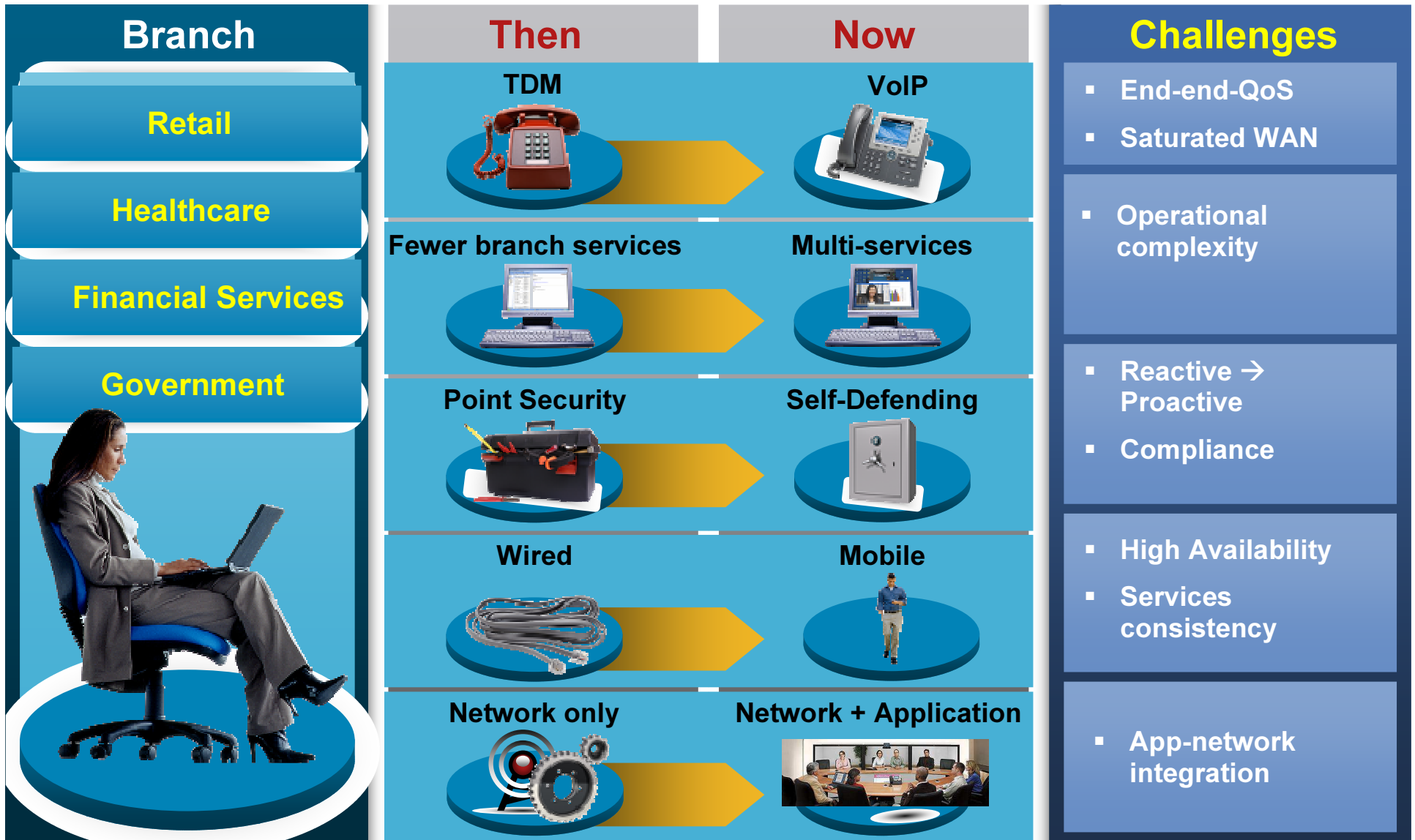
## Data Center Consolidation



Average number  
branch devices  
decreased from 7 to 5



# Branch Transformation



# Cisco Empowered Branch



**Eliminating  
Collaboration  
Boundaries**



**Global, Secure  
Regardless of  
Location**



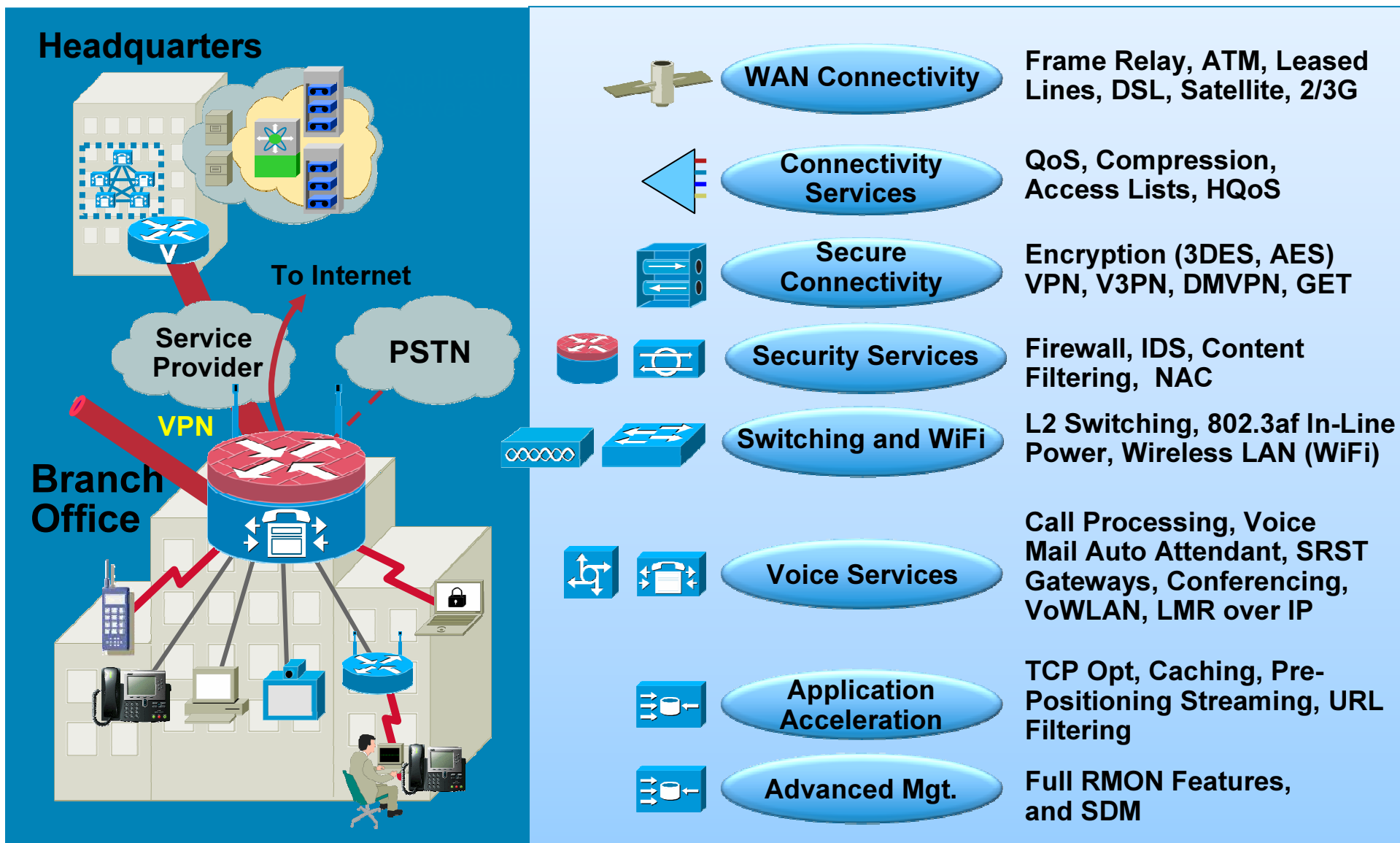
**Any Device,  
Anywhere,  
Anytime**

**Application  
Virtualization,  
Network  
Integration**



**Over 5 Million ISRs Sold!**

# Integrated Full Service Branch



# ISRs part of end-to-end solutions portfolio

## Continuous innovation!



Routing  
Switching  
Mgmt.

Integrated  
Security

Application  
Performance

Mobility

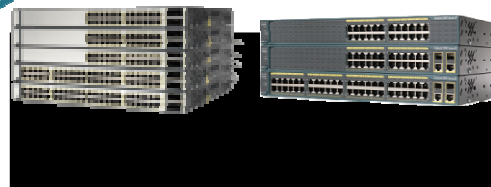
Unified  
Comms



2006



2007



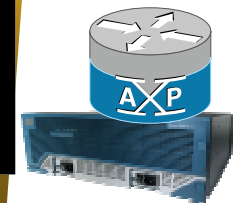
PfR



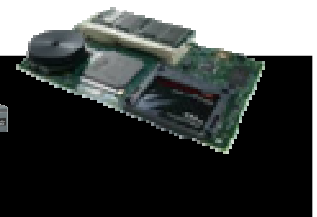
NCE



2008

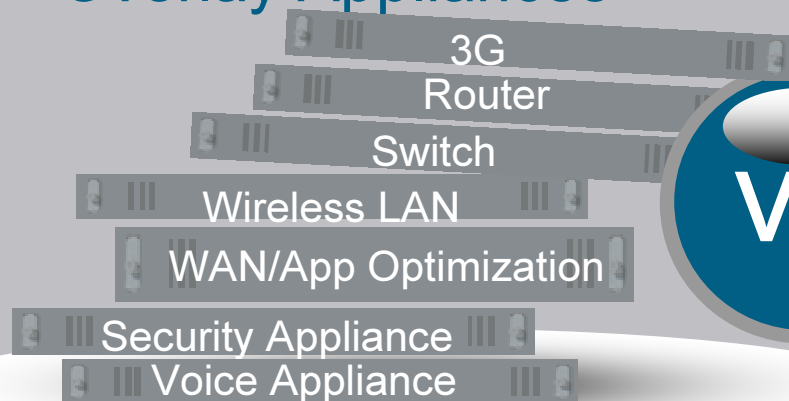


ISR 880 3G



# Integration Delivers Operational Efficiency

## Overlay Appliances



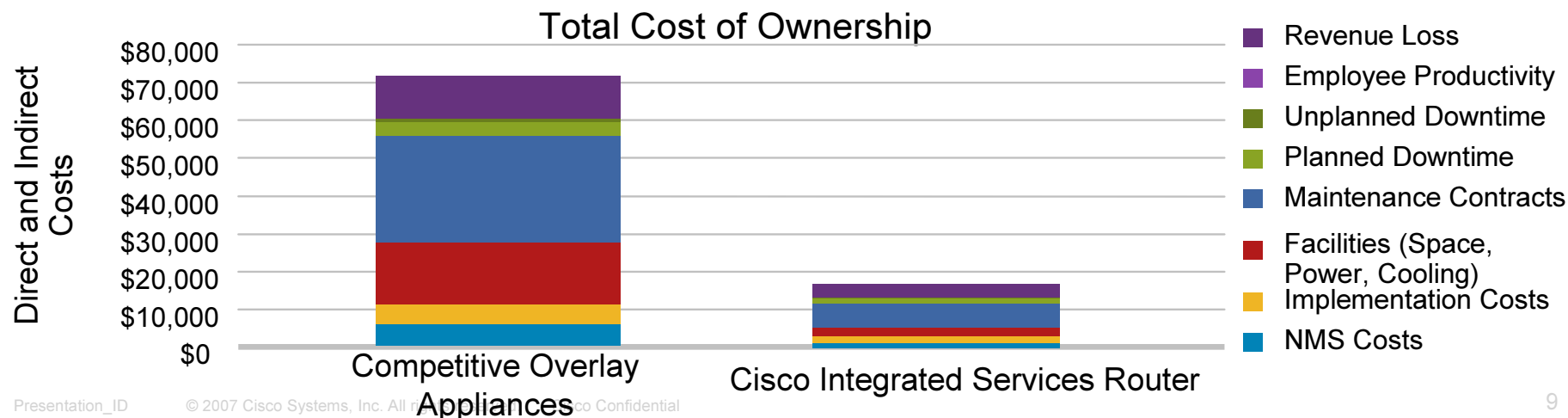
## Integrated Services Router



Cisco® ISR 3845

With voice, wireless, video, WAN optimization, switch

## Over 70% OpEx Reduction



# Routing Switching Management





# Integrated Services Router Portfolio

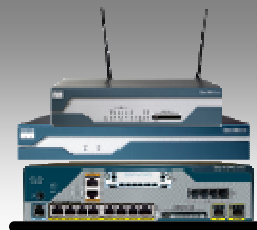
Performance and Services Density

Service Integration  
Scaled to Fit Every Size Branch Office

800 Series



1800 Series



2800 Series

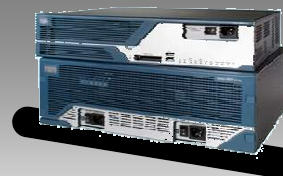


3200 Series



Rugged and  
Mobile  
Applications

3800 Series



High  
Density and  
Performance for  
Concurrent  
Services

Embedded, Advanced Voice, Video,  
Data, and Security Services

Embedded Wireless, Security, and Data

Small Office and  
Teleworker

Small Branch

Medium  
Branch

Mobile/Rugged  
Branch

Medium to  
Large Branch

# Cisco 880 Integrated Services Routers



For Small Office, Small Business,  
or Enterprise Teleworker

- Desktop form factor
- WAN Interfaces: FE, VDSL2\*, G.SHDSL, 3G
- WAN Backup: ISDN, 3G
- Four Fast Ethernet Port Managed Switch; two PoE
- One USB Port
- AUX/Console Ports
- Configuration Reset Button
- Software: Advanced Security (default),  
Advanced IP Services

- Combines Internet access, security and wireless services onto a single device
- WAN/LAN Technologies
  - Fast Ethernet, G.SHDSL
  - 3G, ISDN for Primary or Backup
  - VDSL2\*
  - 802.11n WLAN and Unified Management
- Comprehensive security
  - IPSec acceleration: DMVPN, GET VPN, Easy VPN
  - Firewall, IPS, SSL-VPN
  - Content Filtering (Licensed-based)
- Comprehensive Cisco IOS Routing, QoS and network management
- Ease of Management
  - Cisco Configuration Professional
  - CiscoWorks
  - Unified Wireless Management

\*Future

# Cisco 880 SRST Integrated Services Router



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

- **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

\*Future

# Cisco 3200 Rugged ISR

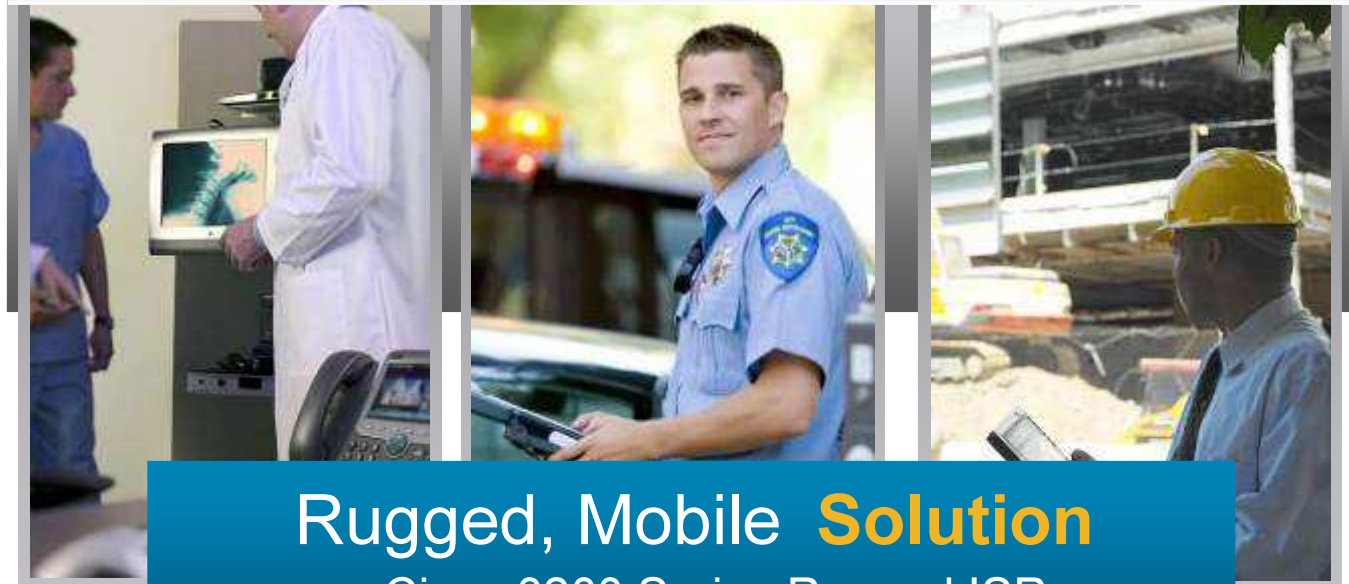
- ✓ Security
- ✓ 3G WAN
- ✓ 802.11 WLAN
- ✓ Unified Communications



**Mobile  
Environments**

**First  
Responder and  
Transportation**

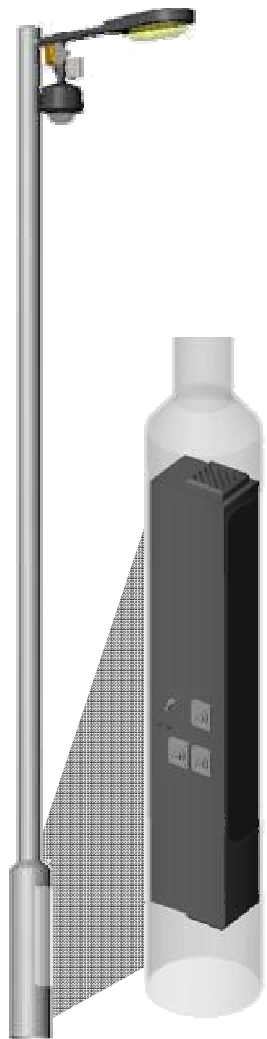
**Rugged  
Environments**



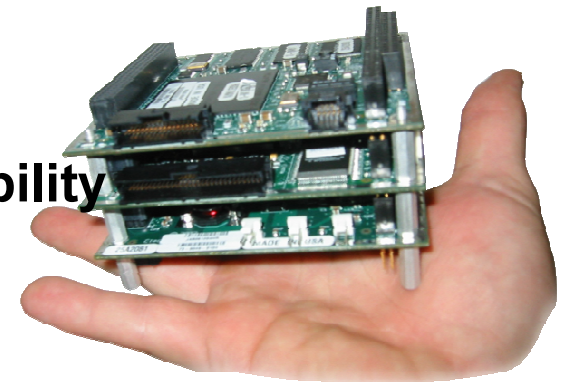
**Rugged, Mobile Solution**

Cisco 3200 Series Rugged ISR

# Cisco 3200 Series Overview



- Flexible, high performance & rugged design for mobile & fixed environments
- Extended temperature ranges of -40° to +85°C
- Integrated 802.11b/g, 4.9GHz, 3rd party Cellular
- Secure, scalable, and managed data, voice and video communications
- Seamless mobility across wireless networks
- Advanced IP services and interoperability through Cisco IOS Software



# Typical Uses for Cisco 3200

- Public Safety
- Metropolitan Transit
- Video Surveillance
- Commercial Trucking
- Utilities & mining
- Military

**Cisco 3200 Router Cards**



**Cisco 3200 Router in Rugged Enclosure**

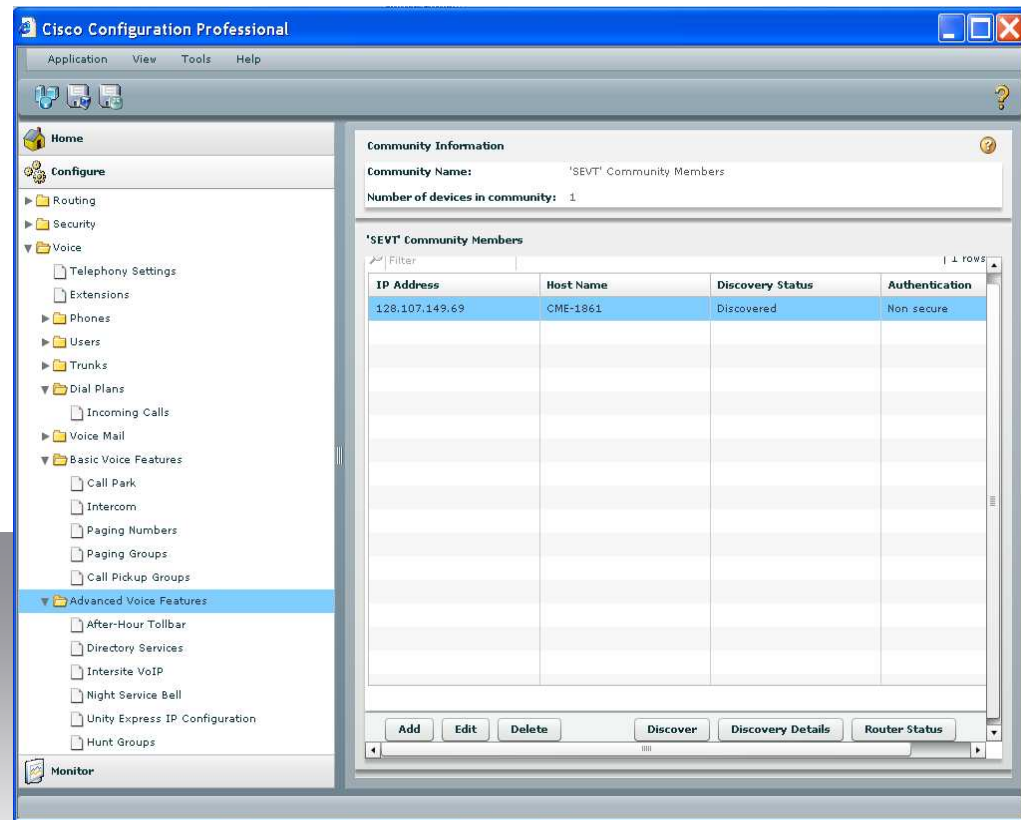




# Simplifying Branch Management with New GUI Tool

- One-stop graphical tool
  - Routing
  - Security
  - Unified Communications
- Wizard led configuration
  - LAN, WLAN, and WAN
  - Firewall, IPS, and VPN
  - QoS, ACLs
- One-step security lockdown
- Voice Gateway, SRST or CME Configuration
- Free with every router

## Cisco Configuration Professional



# Unified Communications



# Integrated UC Architecture on the ISR

Only Cisco UC uses the full power of the Network.



Low Cost  
More Efficient Resources  
Survivability, Disaster Recovery  
Easier Migration to IP  
Application Optimization

## UC as a Network Service

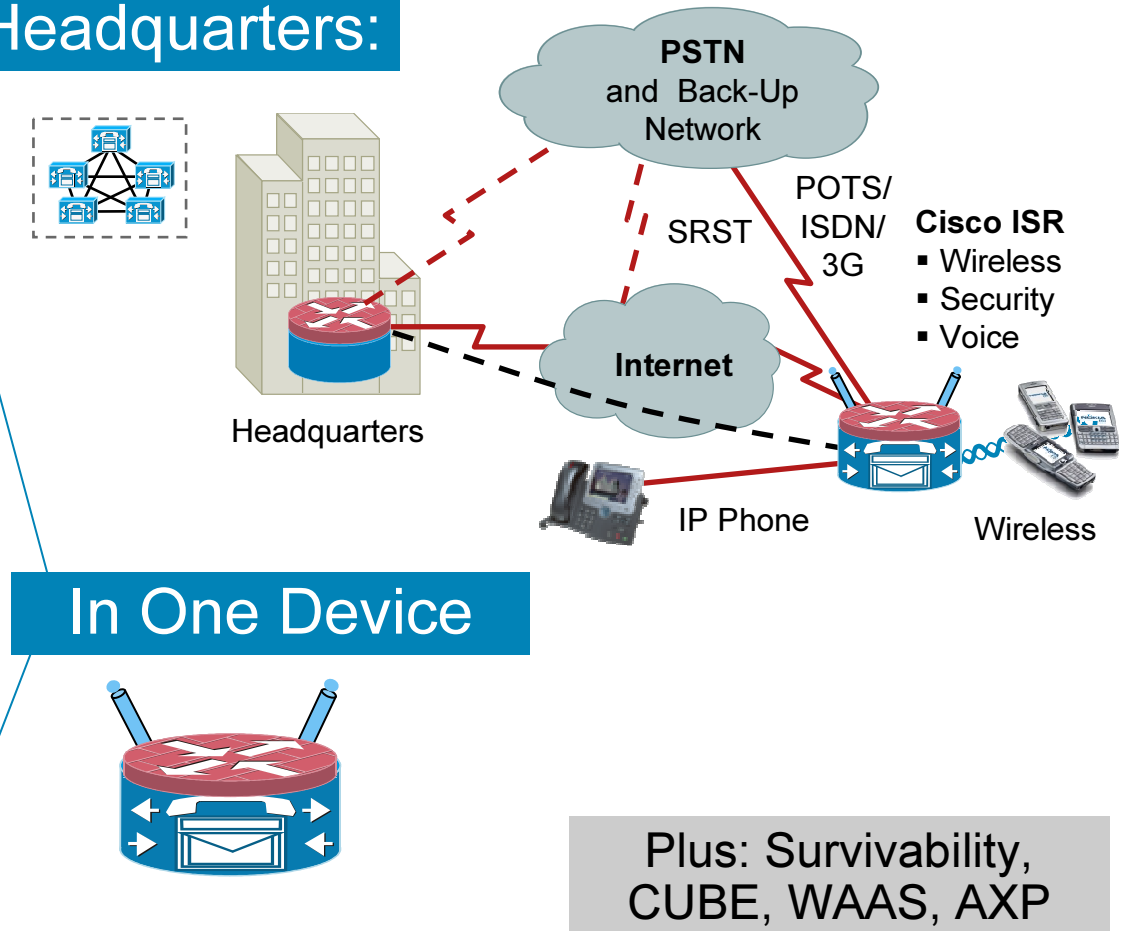
- CDP • Auto QoS • VLANs • RSVP • POE
  - Priority Queuing • SRST • E-911
  - Protocol Translation • Codecs • DSPs
- Integrated Applications on ISRs



# Unified Communications at the Branch

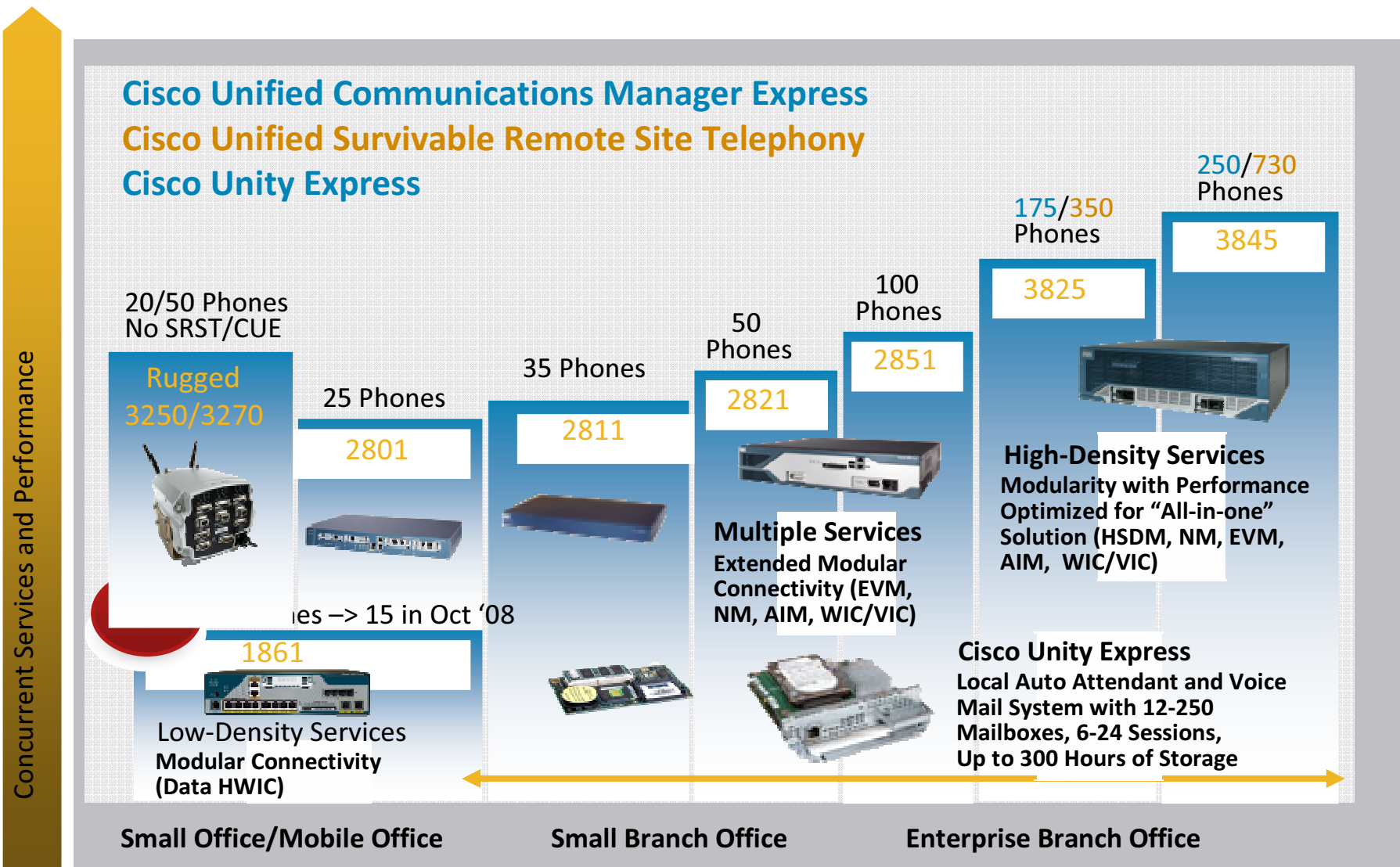
Offers Same UC as the Headquarters:

IP PBX  
Voice Mail  
Auto attendant  
Conferencing  
Desktop Call Control  
Call Connectors  
Video  
IVR  
VXML  
Gateway  
Mobility



Flexibility to Deploy Unified Communications  
with Centralized or Distributed Services

# Cisco Integrated Services Router (ISR) Portfolio for Unified Communications



# Empowered Branch

## New/Enhanced Solutions and Offers

<b>Unified Communications Applications</b>	<ul style="list-style-type: none"><li>▪ Cisco Unified Communications Manager Express 7.0</li><li>▪ Cisco Unified SRST 7.0</li><li>▪ Cisco Unity Express 3.2</li></ul>
<b>Communications Infrastructure</b>	<ul style="list-style-type: none"><li>▪ Cisco Unified Border Element 1.2</li><li>▪ Application eXtension Platform (AXP) for Unified Communications</li><li>▪ QSIG/Q.931 tunneling over IP</li><li>▪ Wideband Codec Support and enhanced codec support</li><li>▪ New VIC3 Voice Modules</li></ul>
<b>Network Management</b>	<ul style="list-style-type: none"><li>▪ Cisco Configuration Professional—Administration GUI for Unified CME</li><li>▪ Cisco NetManager 1.1 – proactive monitoring</li></ul>
<b>Security</b>	<ul style="list-style-type: none"><li>▪ Cisco IOS Firewall ~ v.12.4(20) T</li></ul>
<b>Offers and CVDs</b>	<ul style="list-style-type: none"><li>▪ New UC/UC-VSEC bundles incl. Unified CallConnector</li><li>▪ Branch UC Cisco Validated Designs (CVDs)</li></ul>



# Cisco Unified Communications Manager Express and Cisco Unified SRST 7.0

User  
Experience

## New Capabilities

- Add/change speed dial on phone
- Transfer to voicemail soft key
- Live record soft key
- Blast/Parallel Hunt Group
- Call Barge with privacy release
- CME E911 support
- CME Integration with 3200 Series Rugged ISR
- Integration with new Cisco Configuration Professional
- 8 call lines per button
- SRST feature set updates
- High quality audio with wideband support - G.722
- iLBC codec for narrow band or between site calls

## Benefits

- Improves end user experience and productivity
- Enhanced disaster preparedness and mobility



# Cisco Unity Express 3.2

TCO

## New Capabilities

- Integration with multiple Unified CME sites  
Centralized voicemail and auto attendant for up to 10 Unified CME sites  
Supported on NME-CUE ONLY
- Non-subscriber recipients in Distribution Lists  
Outcall to non-subscribers and voicemail to subscribers
- Integrated Messaging support for Macintosh users  
IMAP access to voicemail using Microsoft Entourage 2004 and 2008
- PIN-less login to voicemail  
Single button press access to voicemail. Very popular in the SMB market
- Ease of install and upgrade  
Multiple upgrade paths and simplified file packages
- Password synchronization between CME and CUE
- Login Banner Support for CLI access



## Benefits

- Easier, more cost-effective management for IT
- Improved end user experience and productivity
- More end user flexibility

# Cisco VG202 & VG204 Analog Voice Gateways



For Enterprise Branch Offices  
and Small & Medium  
Businesses

- Desktop form factor
- WAN – 2 10/100 Mbps Ports
- Voice – 2 FXS or 4 FXS Voice Ports
- Protocol Support – SCCP, SIP, MGCP, H.323
- Unified CM Support – v7.0(1) and 6.1(3)
- Unified CME Support – v7.1

2008

- Unified Communication Analog Gateway solution for Enterprise Branch office and SMBs

Ease of operation—Cisco® IOS®-based  
Provides consistent usability with the rest of the Voice Gateway Integrated Services Routers (Cisco 2800, 3800 Series)

Next-generation platform architecture supports SCCP, SIP and Secure Voice

Desktop form factor with fanless design

- Best of Breed Hardware

Robust Analog Interfaces

Two 10/100 Mbps ports for dual homing

Proven and consistent DSP technology used across Cisco Platforms

# VIC3 Voice Modules

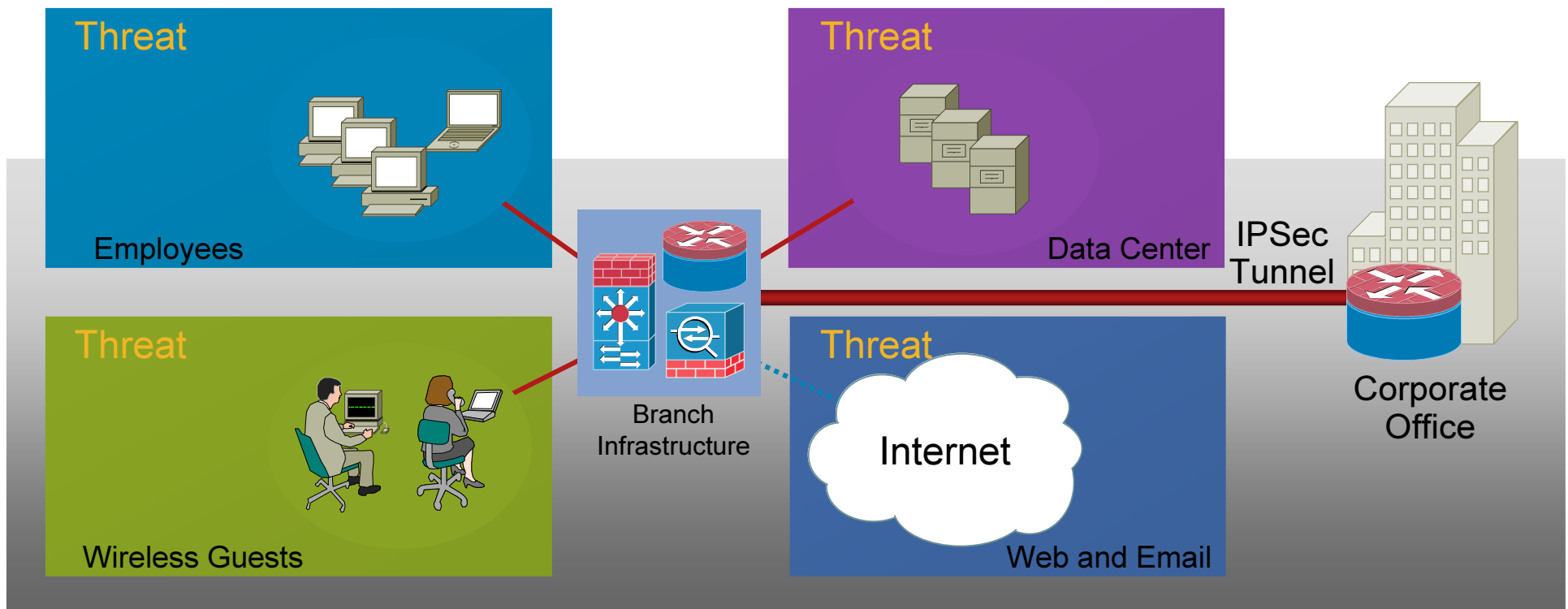
New SKUs	Feature Highlights
<b>VIC3-2E/M</b>	<ul style="list-style-type: none"> <li>Support all E&amp;M features existing on VIC2-2E/M, E&amp;M Types 1, 2, 3 and 5, two-wire/four-wire, and LMR application</li> <li>Control E&amp;M signaling independently, including shut/no shut for each port</li> </ul>
<b>VIC3-4FXS/DID</b>	<ul style="list-style-type: none"> <li>Support all existing FXS and DID features on VIC-4FXS/DID</li> <li>Support both FXS and DID on same module</li> <li>Robust front end protection</li> </ul>
<b>VIC3-2FXS/DID</b>	<ul style="list-style-type: none"> <li>Support all existing FXS and DID features on VIC2-2FXS and VIC-2DID</li> <li>Support both FXS and DID on same module</li> <li>Robust front end protection</li> </ul>
<b>VIC3-2FXS-E/DID</b>	<ul style="list-style-type: none"> <li>Support both FXS and DID on same module</li> <li>Robust front end protection</li> <li>Support FXS "OPX Lite": 65V rms ringing voltage, 35 mA offhook FXS loop current; support for longer loops: 11,000 feet maximum</li> </ul>
<b>EM3-HDA-8FXS/DID</b>	<ul style="list-style-type: none"> <li>Support all existing FXS features on EM-HDA-8FXS</li> <li>Support up to eight ports in DID mode, both expansion slots combined (with eight DIDs on EVM baseboard, up to 16 DIDs maximum)</li> <li>Robust front end protection</li> </ul>

# Integrated Security



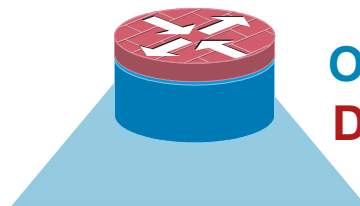
# Branch Evolving Security Requirements

- Compliance drivers for security:
  - PCI (Retail); HIPAA (Healthcare); Sarbanes-Oxley/GLBA (Finance)
- Vulnerabilities from public Internet resources (web and email)
- Security threats from contaminated laptops, guest and rogue users
- Targeted attacks aimed at sensitive information in the data center





# All-in-One Security for the WAN



Only Cisco® Security Routers  
**Deliver All of This**

## Secure Network Solutions



Business  
Continuity



Secure  
Voice



Secure  
Mobility



Compliance

## Integrated Threat Control



Advanced  
Firewall



URL  
Filtering



Intrusion  
Prevention



Flexible  
Packet  
Matching



Network  
Admission  
Control



802.1x



Network  
Foundation  
Protection

## Secure Connectivity



GET VPN



DMVPN



Easy VPN



SSL VPN

## Management and Instrumentation



SDM



Role-Based  
Access



NetFlow

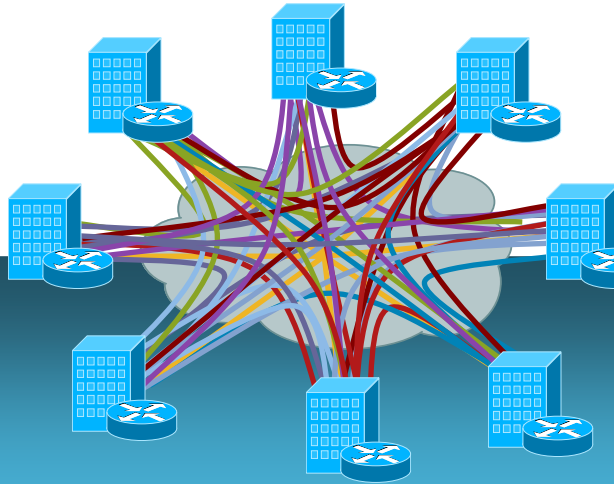


IP SLA

# Secure Connectivity Leadership

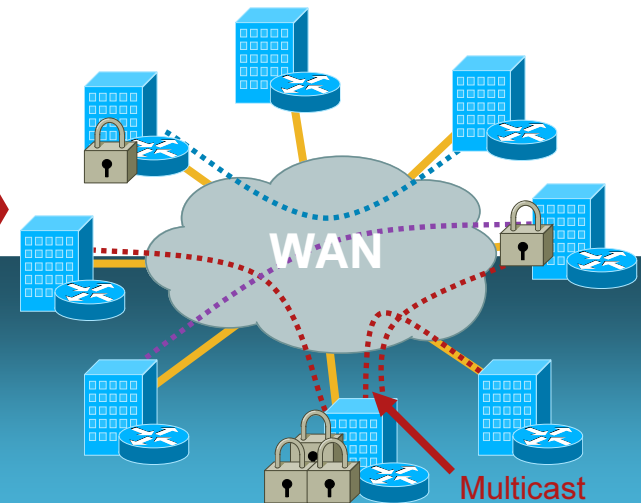
## Get-VPN -Tunnel-less VPNs

Traditional IPsec VPNs



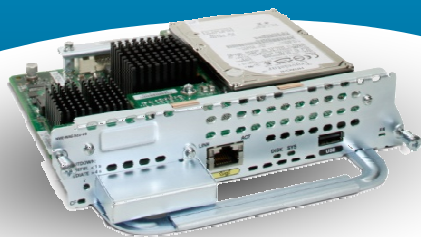
- Peer model:  $N^2$  problem
- Overlay routing → No SLA
- Inefficient multicast replication
- Advanced QoS limitations
- Any-any connectivity issues

Tunnel-less VPN



- Group model: highly scalable
- No overlay routing → SLA
- Efficient multicast replication
- Advanced QoS
- Secure any-any connectivity

# Network Admission Control (NAC) Network Module on Cisco ISR



For Cisco 2800, Cisco 3800  
Integrated Services Routers



## Incorporates Network Admission Control (NAC) appliance server

- Enforces security policies
  - Assesses posture of devices
  - Uses network to enforce roles and access VLANs
  - Supports wired, wireless and guest users

## Integrated into Cisco ISRs

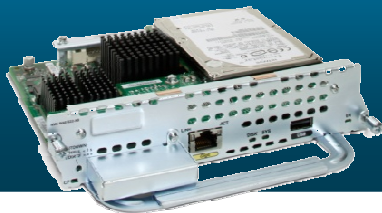
- Provides size and scale ideal for remote offices (<100 users)
  - Works with NAC appliances at headquarters in a network system
- Benefits of router integration
  - Systems Integration
  - Lower Operating Costs

# Intrusion Prevention System (IPS)

## Advanced Integration and Network Modules



**AIM-IPS-K9**

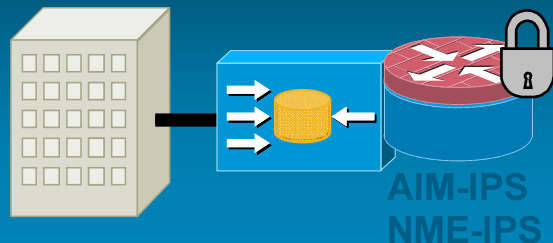


**NME-IPS-K9**

Cisco IOS Advanced Security & above

AIM – Cisco 1841, 2800, 3800

NME – Cisco 2800 and 3800



### Integrated Threat Control for Cisco ISR

- Enables Inline Intrusion Prevention (IPS)
- Runs same software (CIPS 6.0) and enables same features as Cisco IPS 4200

### Performance Improvement by Hardware Acceleration.

- Dedicated CPU and DRAM to offload host CPU

AIM – Up to 45 Mbps

NME – Up to 75 Mbps

### Management by both Routing and IPS software

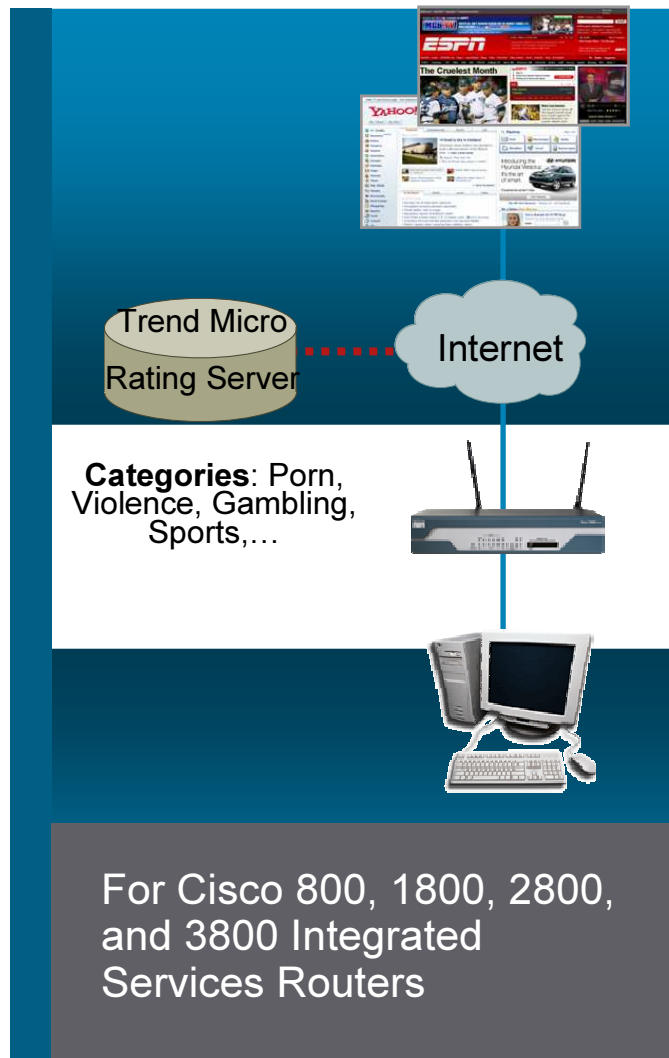
Cisco IPS Device Manager (IDM)

Cisco Configuration Professional (CCP) (Device)

Cisco Security Manager (CSM) (Network wide)

IPS Manager Express (IME) and CS-MARS (event monitoring and correlation)

# Cisco IOS® Content Filtering for ISR with Trend Micro



**Control spyware and malware at the remote site; conserve WAN bandwidth**

**Block malicious sites and enforce corporate policies**

- Offer category-based security and productivity ratings
- Enforce HIPAA, FISMA, CIPA (Children's Internet Protection Act)

**Enforce with latest information, hassle-free**

- Trend Micro maintains and updates the security and productivity database 24x7
- No local database is required on the router

**Enable Registration and Configuration through Cisco Configuration Professional® (CCP)**

# Cisco Integrated Services Router (ISR) Portfolio for Video Surveillance



**Analog Video  
Encoding Module**

**New**



**Video Management  
and Storage System**

**New**

## Cisco IP Video Surveillance Solution

**Cisco  
2821**



### Multiple Services

Extended Modular  
Connectivity

**Cisco  
2851**

**Cisco  
3825**



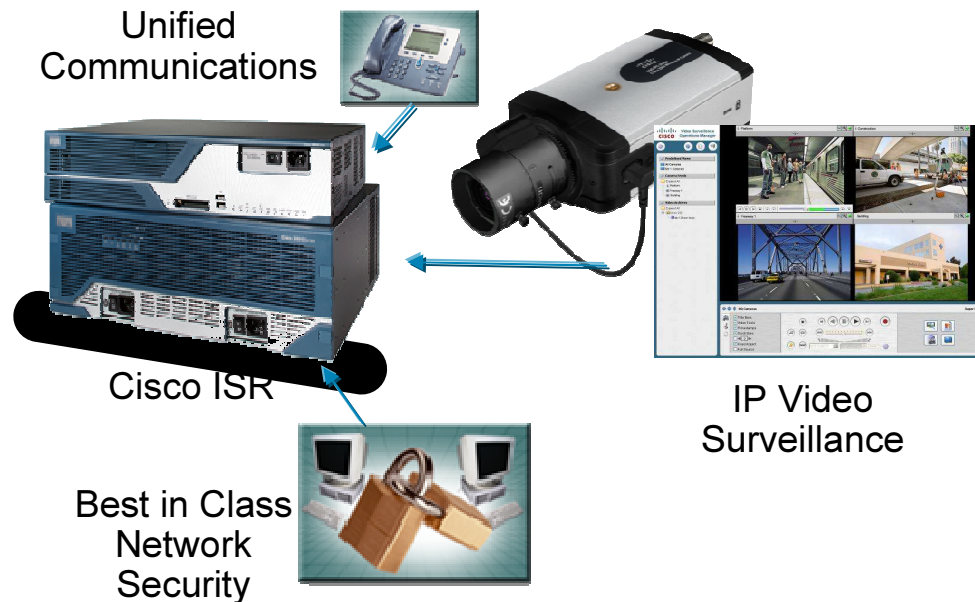
**Cisco  
3845**

### High-Density Services

Modularity with Performance  
Optimized for "All-in-one"  
Solution

**Enterprise Branch Office**

# “Router-Integrated” Video Surveillance



## The network is the platform reinvents safety and security

Easier to deploy new and extend existing sites

Greater monitoring flexibility, anywhere anytime

Tighter linkage between video surveillance and other branch applications

### Operational Efficiency

- Fewer devices at the branch
- Converged UC-VS platform
- One management system
- Simplified troubleshooting
- Lower TCO

### Investment Protection

- Leverages existing IP network
- Smooth analog to IP transition
- Leverages installed base of ISRs



# Router - Integrated IP Video Surveillance and Video Recording

- **Cisco Integrated Services Routers**

- **IPVS-16A: Analog Video Gateway**

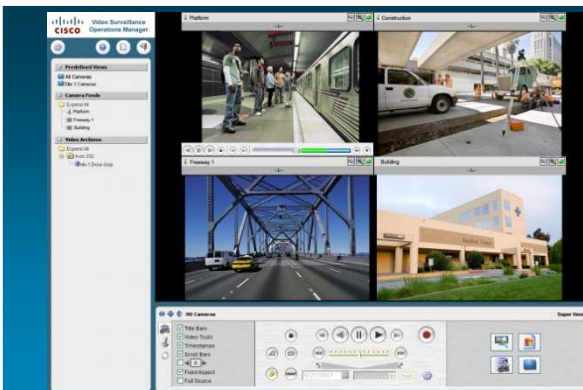
- Analog video interface for IP Video Surveillance
- 16 Analog Video Ports: MJPEG, MPEG-4
- 8 Contact Closure Ports
- 2 RS-485 ports for device Pan/Tilt/Zoom control

- **VMSS: Integrated Video Management and Storage System**

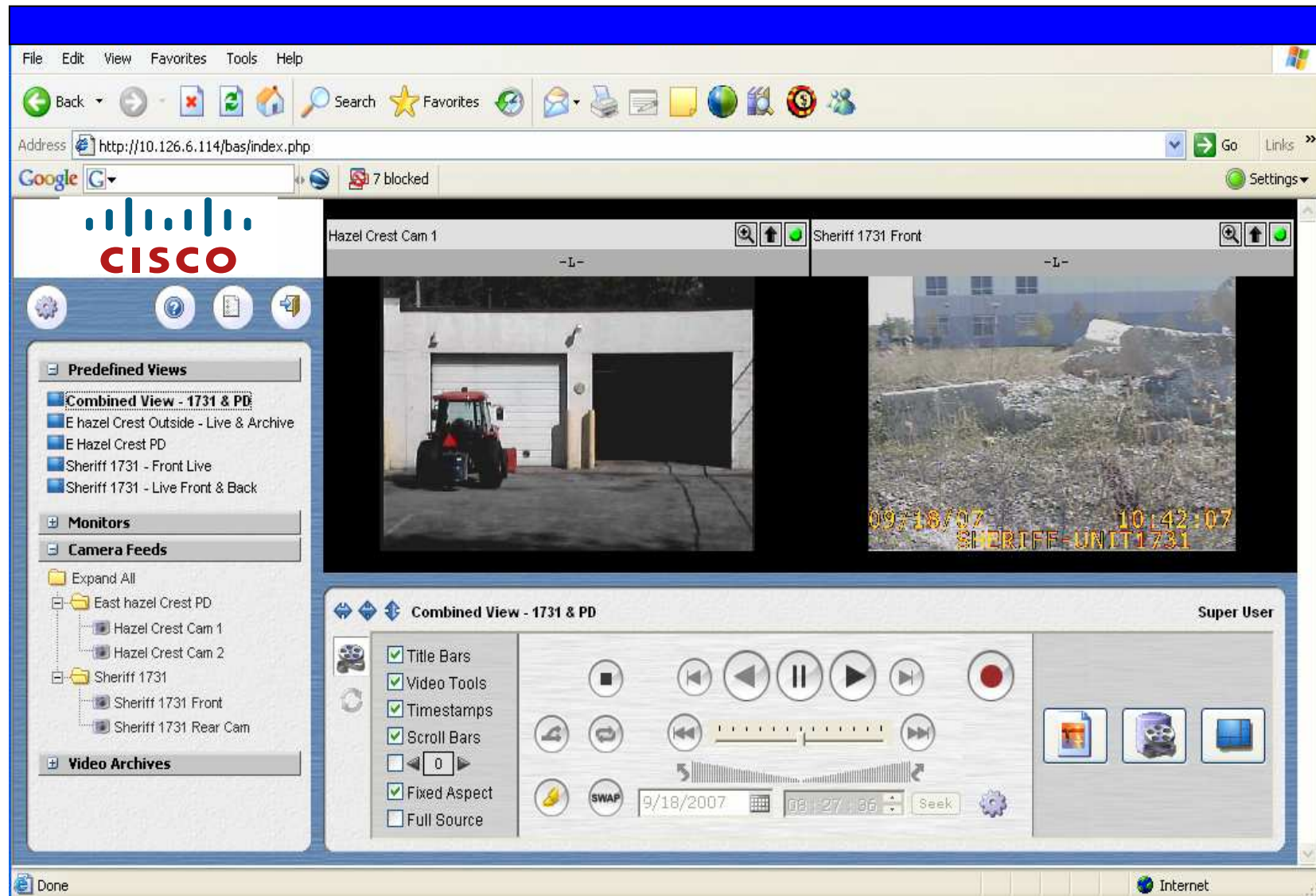
- Targeted at <32 stream (camera) deployments
- Utilizes pre-packaged VS Operation Manager and VS Media Server
- Manage, view and archive surveillance data for up to 32 devices simultaneously
- Unified interface into IP Cameras and Analog devices (through the AVG)

Integrated Analog Video Gateway

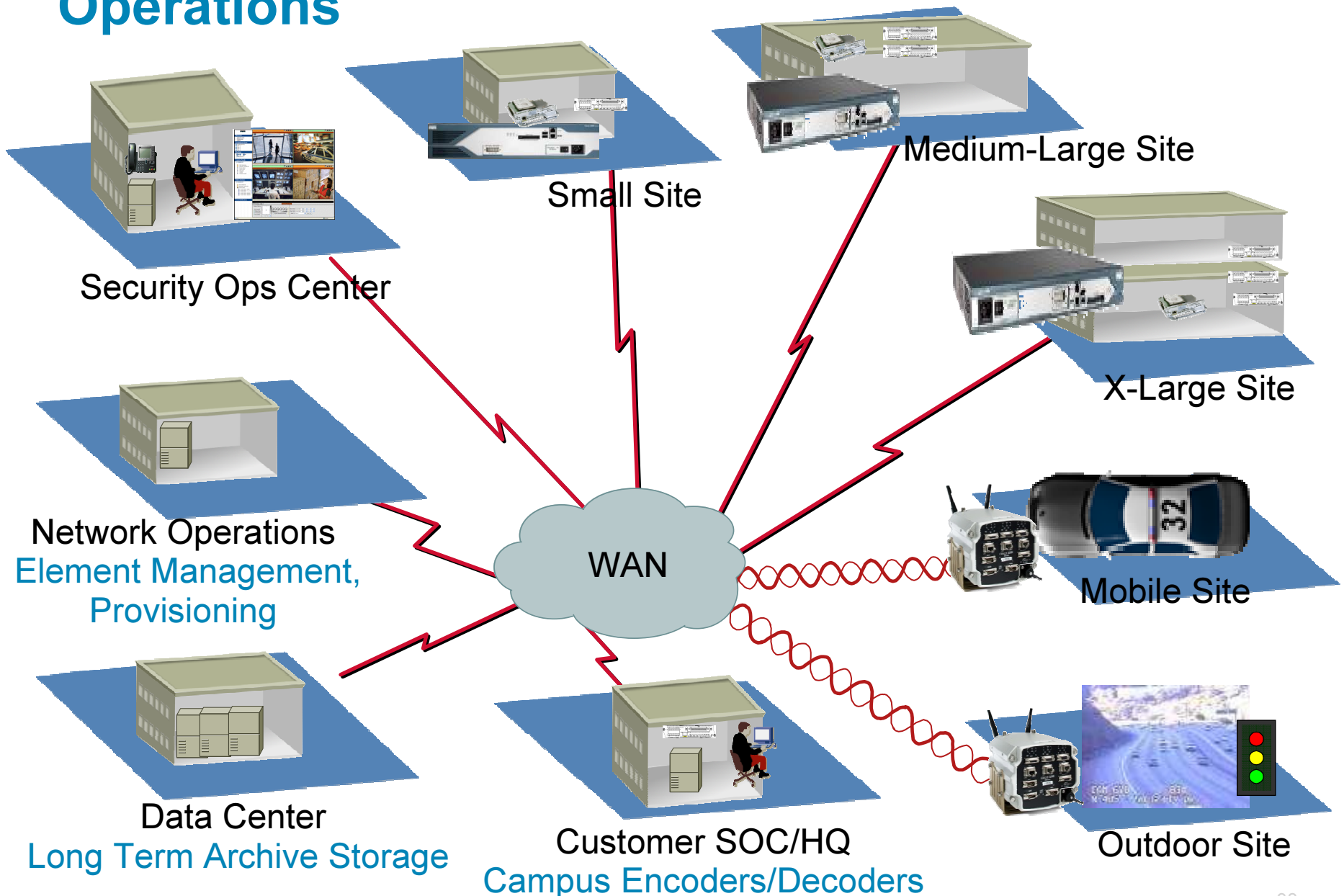
Hybrid Analog and IP Cameras  
Integrated Video Management  
and Storage System



# Mobile Video Surveillance



# Next Generation Distributed Security Operations



# Mobility



# Igniting the Enterprise 3G Data Market

Service available from over 35  
Service Providers Worldwide



**Cisco 3G WWAN HWIC**

**Driving Enterprise  
3G WAN Adoption**



**High Availability Option—  
True multi-path back-up**

Available for Backup or Main  
WAN link

Broadband speeds

Rapid deployment

Portable businesses

Operational efficiency

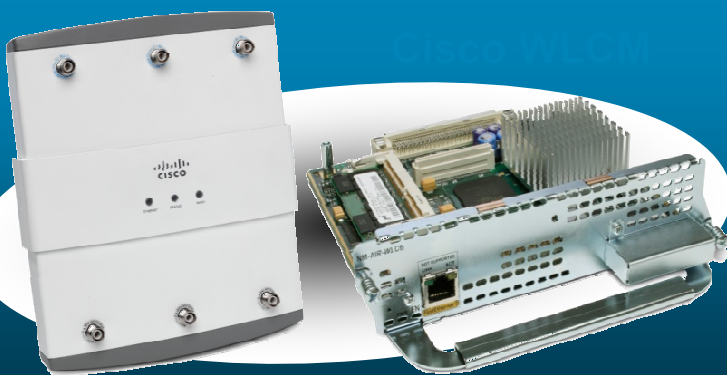
Enterprise-class

- 3G WWAN HWIC for Cisco 1841, 2800 and 3800 Integrated Services Routers
- 3G Option for Cisco 880 ISR



# Cisco Wireless LAN Controller Modules

With 802.11n Next Generation Wireless



**Cisco Aironet 1250 Series**

For Cisco 2800\*, Cisco 3800  
Integrated Services Routers



**Delivers next generation wireless with Wi-Fi certification for 802.11n draft 2.0**

- Increased reliability for diversity of wireless data, voice and video
- Backwards compatibility for all devices in the branch (11a/b/g & n)
- Enhanced branch security with integrated wireless intrusion detection

**Delivers investment protection for the branch office**

Platform modularity  
Field upgradeable

Models Supporting , 6, 8, 12 or 25 AP's

\* Not included on Cisco 2801

# Application Services





# The WAN is the Barrier to Branch Application Performance

- Applications are designed to work well on LAN's

High bandwidth

Low latency

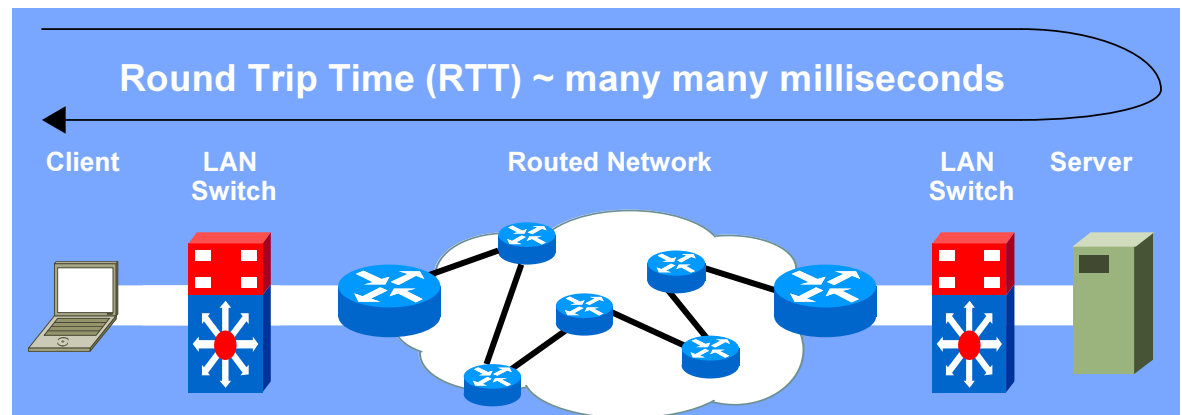
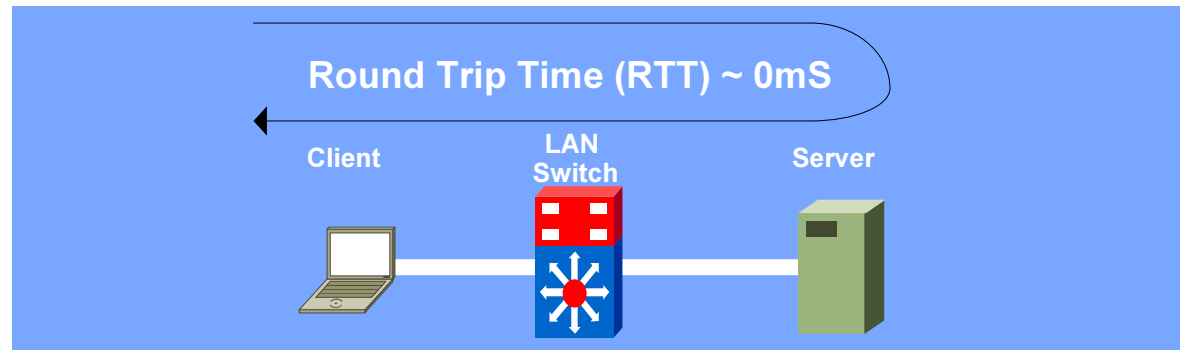
Reliability

- WANs have opposite characteristics

Low bandwidth

High latency

Packet Loss



**WAN Packet Loss and Latency =  
Slow Application Performance =  
Keep and manage servers in branch offices (\$\$\$)**

# Application Optimization Solutions

## Cisco WAAS, NCE and Performance Routing

- Choice of router integrated solutions
- WAAS Appliance / Integrated solution consistency
- Maximizes branch bandwidth, minimizes latency
- Maximize value of WAN investment



## IOS Application Intelligence



NetFlow

IPSLA

QoS

PfR

- Enhances performance of business critical applications
- Transparent service interoperability
- Network visibility minimizes operational overhead

# Application Expectations with WAAS

Category	Applications	2X	5X	10X	25X	50X	100X+
File Sharing	CIFS NFS	2-20X Avg		>100X Peak			
Email	Microsoft Exchange Lotus Notes Internet Mail	2-5X Avg		20X Peak			
Web and Collaboration	HTTP WebDAV FTP Microsoft Sharepoint	2-10X Avg		100X Peak			
Software Distribution	Microsoft SMS Altiris HP Radia	2-20X Avg		>100X Peak			
Enterprise Applications	Microsoft SQL Oracle, SAP Lotus Notes	2-5X Avg		20X Peak			
Backup Applications	Microsoft NTBackup Legato Networker Veritas Netbackup CommVault Galaxy	2-10X Avg		50X Peak			
Data Replication	EMC SRDF/A EMC IP Replicator NetApp SnapMirror Data Domain Double-Take Veritas Vol Replicator	2-10X Avg		50X Peak			

\* Performance improvement varies based on user workload, compressibility of data, and WAN characteristics and utilization. Actual numbers are case-specific and results may vary. Cisco WAAS can employ optimization on almost any TCP-based application.

# Cisco WAAS Network Modules on Cisco Integrated Services Router (ISR)



August  
2007

NEW!

NME-WAE-522-K9

NME-WAE-502-K9

NME-WAE-302-K9

Performance  
Scalability



UC Security PfR

Industry Leading Service Integration

- Accelerates performance of any TCP-based application delivered across a WAN

## Server Consolidation

Enables consolidation of branch-office infrastructure in data centers

## Application Acceleration

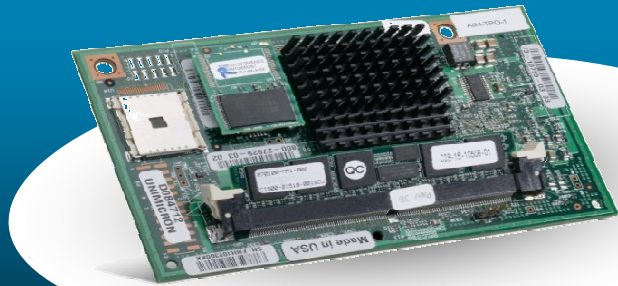
Provides near-LAN performance for enterprise applications

## Secure WAN Optimization

Improves data protection and regulatory compliance by eliminating insecure local resources at remote offices

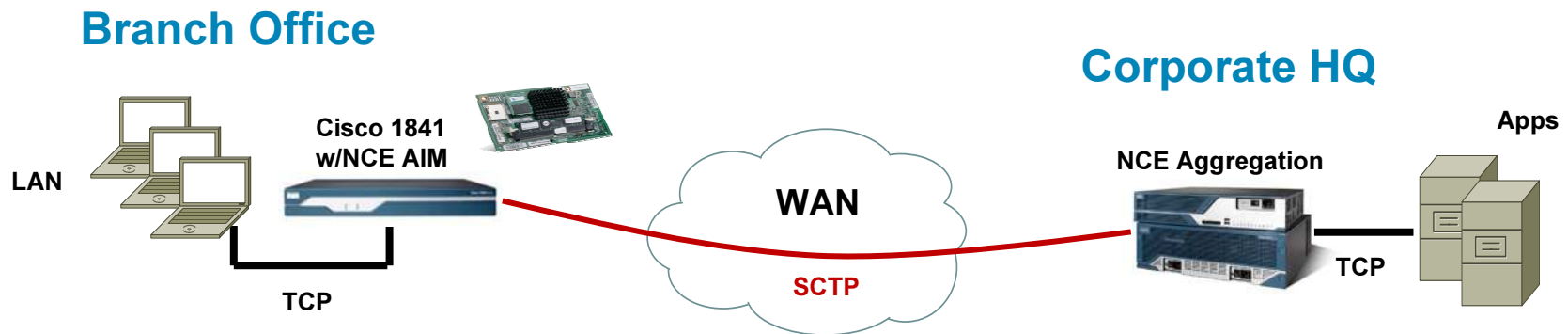
- NME-522 delivers Appliance-equivalent performance for ISR

# WAN Acceleration for Cisco 1841 Integrated Services Routers



A transparent proxy that increases branch office available bandwidth and overcomes WAN bandwidth and latency limitations

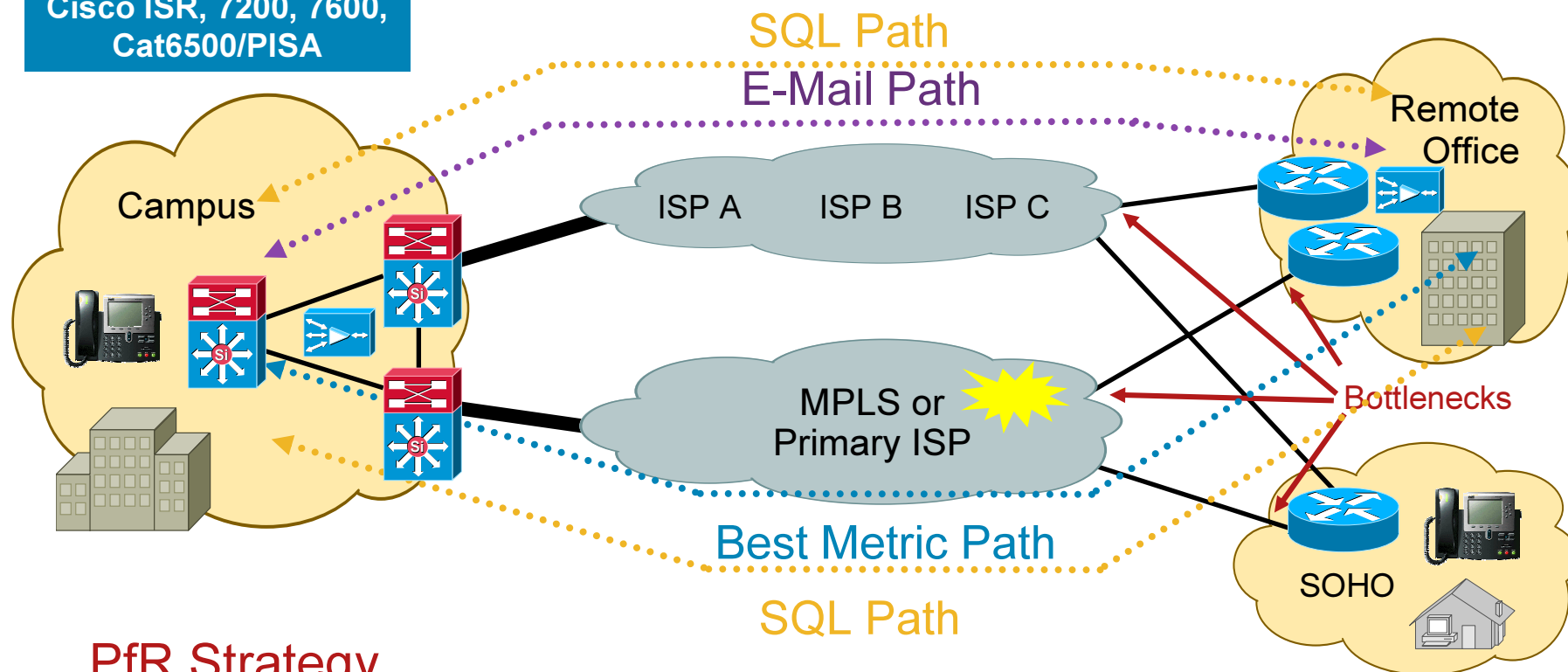
- Expands bandwidth by 400%
- Accelerates WAN data transfer 3-20X
- Optimizes TCP and compresses traffic
- Cost-effective and network transparent
- Useful for all TCP based applications
- Supports IETF standards (SCTP, PEP, Deflate)
- Supported on Cisco 1841 series routers



# Performance Routing (PfR) Enterprise WAN

Optimize by:  
Reachability, Delay, Loss, Jitter\*,  
MOS\*, Throughput, Load, and/or \$ Cost

Cisco ISR, 7200, 7600,  
Cat6500/PISA



## PfR Strategy

- Best path-based upon policy and real-time performance metrics
- Adaptive routing based upon application performance criteria: voice, video, mission critical apps, etc.

# The Network is the Platform

Operational Efficiency

## A Few Years Ago

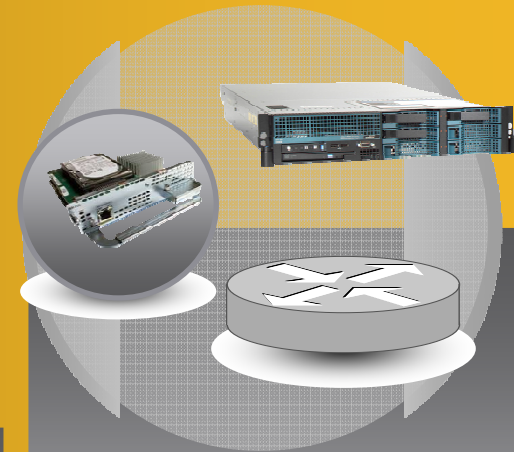


## Integrated Services Routers



- Service Integration
- Survivability
- 50–70% Opex reduction

## Integrated Application Platform



- Applications and network integration
- New business models
- Optimized branch footprint

Multiple Overlay Products

Network Integration

App and Server Integration



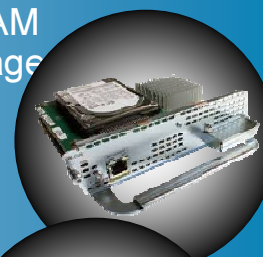
# Application eXtension Platform

- Linux-based
- IOS APIs (AXP SDK)
- Supports multiple concurrent applications
- 1841, 2800, 3800 ISRs



## NME-302/522

512MB-2GB RAM  
80-160GB storage  
Intel Pentium M



## AIM-102

1GB RAM  
256MB Flash  
Intel Celeron



- Optimized, open branch architecture
- Tight Network-Application linkage
- A new business architecture
- Anything you need in the branch

# Cisco AXP Solution Partners

## Vertical Solutions

Healthcare



Secure Healthcare

Financial Services



VoIP Recording

Retail



Secure Payment Processing

Energy



Real-Time Information Management

Channel Partners  
and Reseller



## Horizontal Solutions



Workforce Management



Sagem-Interstar  
SAFRAN Group

Fax-Over-IP



Avocent



ProSyst

Remote Device Management

NEW



Optimized Wireless Communications



Strong Vertical Momentum with Multiple Partners

# Integrated Healthcare Solutions

## Ministry of Healthcare, Bulgaria



- Router platform
- 3rd level TAC support

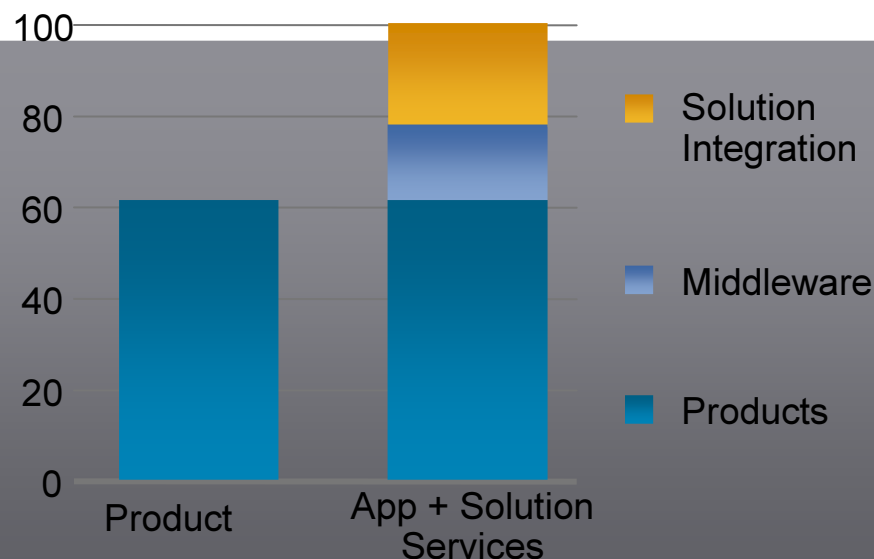


- Middleware: Healthcare connector.
- Leading eHealth Specialist
- 3<sup>rd</sup> level Application support

### Integration Partner

- Secure staging, Datacenter
- Co-branding
- 2nd level support, DoA

- Collaborative Healthcare network
- Connect 4Ps - patients, providers, payment systems, pharmacies
- New Business opportunities
  - \$150M+ ISV solution opportunity
  - \$250M+ Channel opportunity
  - Competitive Differentiation
  - Customer loyalty



**New Market in Sub-SMB “SOPO” Market**  
Total Solution \$1B+, Channel Opportunity \$250M+

## Call and screen recording on AXP

- **ZOOM CallREC** and **ScreenREC** provides call recording and agent desktop screen capture on AXP module for Cisco UC and contact centers
- Supported platforms – **everything that Cisco offers**
  - Cisco UC Manager, UC Manager Express and UC500
  - Full support of SRST architectures!
  - Cisco UCC Express and Enterprise
- Offers central management of users, recording rules, security policies and media lifecycle management
- **ZOOM TrackALL** – desktop activity tracking – on AXP in Q1/Q2 2009
- ZOOM is SIP (Solution Incentive Program) approved – **get 54% of the Cisco order when including ZOOM in project!**
- Contact ZOOM at [ciscoaxp@zoomint.com](mailto:ciscoaxp@zoomint.com) for more info & sales

IP Solutions, pure and simple.

# Cisco Developer Contest

Think **Inside** the Box™



Any Individual over 18 who Is  
Not a Cisco Employee,  
considers himself/herself a family



3 Prizes : \$50k, \$30K, \$20K

Total Prize money =  
U.S\$100,000

[www.cisco.com/go/thinkinside](http://www.cisco.com/go/thinkinside)



Inviting Programmers  
Who **Think Outside the Box**



Develop  
an Application on  
Integrated Services Router

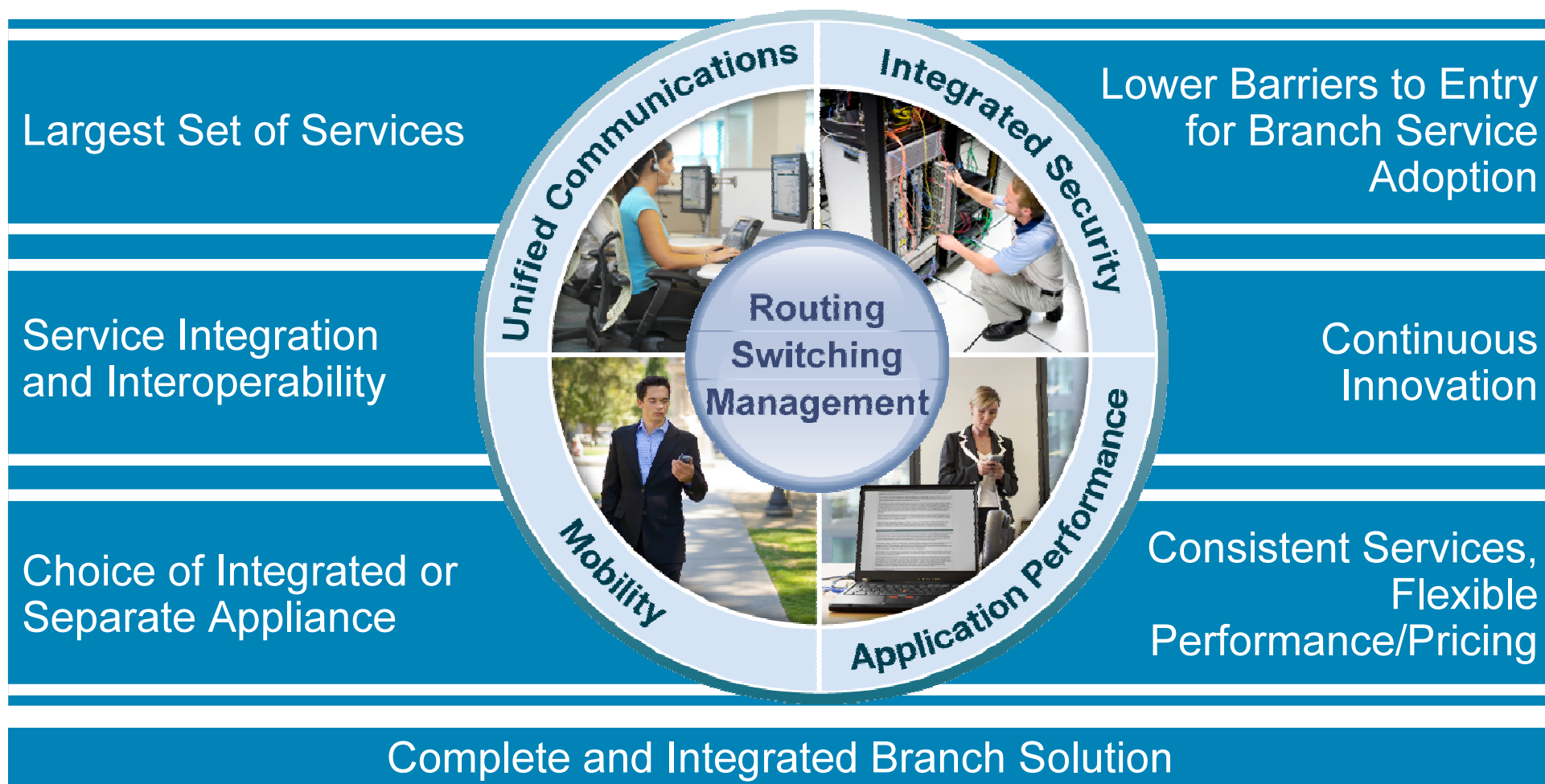
Contest begins October 14, 2008

Learn more at [www.cisco.com/go/thinkinside](http://www.cisco.com/go/thinkinside)  
For Career Opportunities visit [www.cisco.com/go/universityjobs](http://www.cisco.com/go/universityjobs)



NO PURCHASE NECESSARY. A PURCHASE WILL NOT IMPROVE YOUR CHANCES OF WINNING. INTERNET ACCESS IS REQUIRED TO ENTER. Void where prohibited or restricted by law. This Contest is sponsored by Cisco Systems, Inc. and is open to individuals 18 years of age or older at time of entry. For Complete Official Rules, including eligibility requirements, terms and limitations for submissions, and how to enter, click here [www.cisco.com/go/thinkinside](http://www.cisco.com/go/thinkinside). One (1) Grand Prize: US\$50,000. 2nd Prize: US\$30,000. 3rd Prize: \$20,000. Subject to complete official rules.

# Cisco Empowered Branch





# Q & A



[www.cisco.com/go/empoweredbranch](http://www.cisco.com/go/empoweredbranch)



