



Cisco Expo
2008

Empowered Branch Optimizing the Branch Experience



Denis Zotov

Product Manager

CISCO Access Routing Technology Group

Agenda

- Branch Transformation
- Introducing Empowered Branch 4
- Empowered Branch Solution for Your Branch
- Summary
- Q & A

Branch Transformation Opportunities and Challenges



Enterprises New Business Priorities



Globalization

Number of Branches
Growing 11% per year



Data Center Consolidation

Average number branch
devices decreased from 7 to 5



Collaboration, Web 2.0

Branch Bandwidth
Growth 50% per year



Green Business

62% of Enterprises
adding new branches



Virtual Workers

91% of employees work
away from HQ



Visual Networking

Video & Collaboration Tools
Top Bandwidth Drivers

Significant challenges remain in a highly competitive increasingly commoditised marketplace

Under pressure to cut costs, streamline operations and improve business results

The branch infrastructure is outdated and too inflexible for our current business objectives



The need to embrace a common communications platform to ensure effective multi-channel interactions

The need to position the branch as a central source of sales



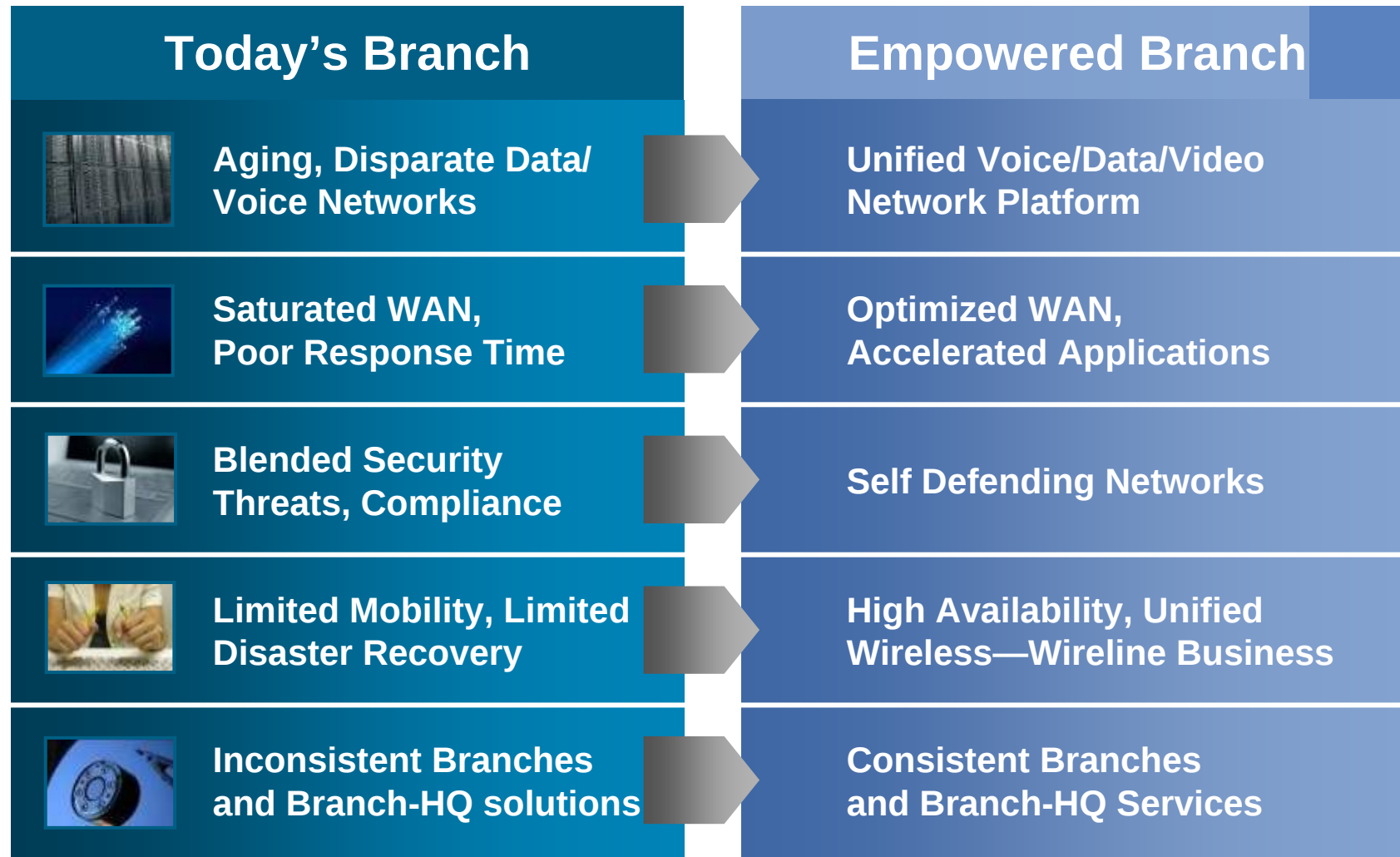
The need to differentiate in an increasingly competitive market

Minimal consistent service across channels

The need to improve employee productivity and customer service



The Branch Transformation



“The branch represents the significant opportunity for changing the customer experience”

From this.....



to this.....

Combining Sales and Operational Improvements

Branch Optimisation – Solutions Based on a Common Platform

Unified Communications

Digital Media

Wireless Mobility

Security Solutions

E-Learning

Network Technologies

Queue Management

Operational Efficiency

Effective skilled resource utilisation, management of disparate systems to drive strategic decisions and reduce costs



Commercial Effectiveness

The ability to understand, sense and respond more quickly to customer needs, providing solutions in real-time with trained staff



Customer Experience

Transform loyalty and propensity to buy through comprehensive solutions based upon a common architecture



Security and Compliance

Solutions to secure the branch network from a logical as well as physical means. Basel II regulations



Introducing Cisco Empowered Branch 4



Cisco Empowered Branch

Empowered Branch 4

Open, Integrated Application Platform

Empowered Virtual Worker

Video and Collaboration

Manageable, Secure, Wireless Branch



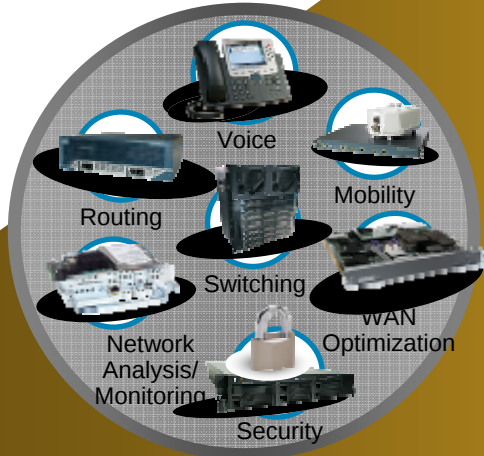
Over 4 Million ISRs Sold!

4 Millionth Router Purchased by Coca-Cola Enterprises
Supporting company-wide UC project for voice, video, data

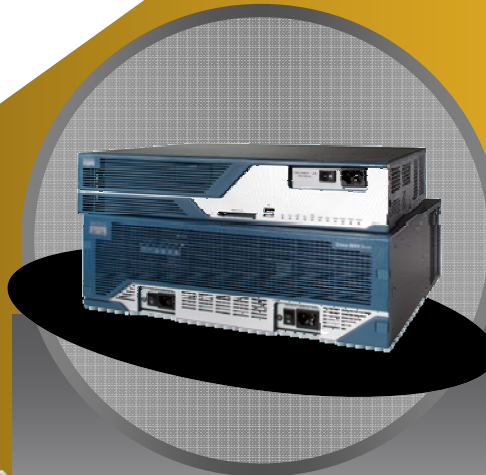
The Network is the Platform

Operational Efficiency

A Few Years Ago

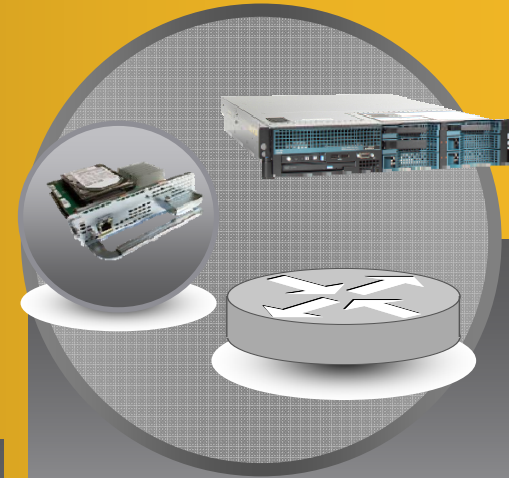


Integrated Services Routers



- 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

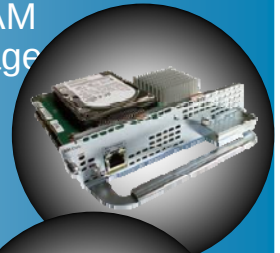
Application eXtension Platform

- 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



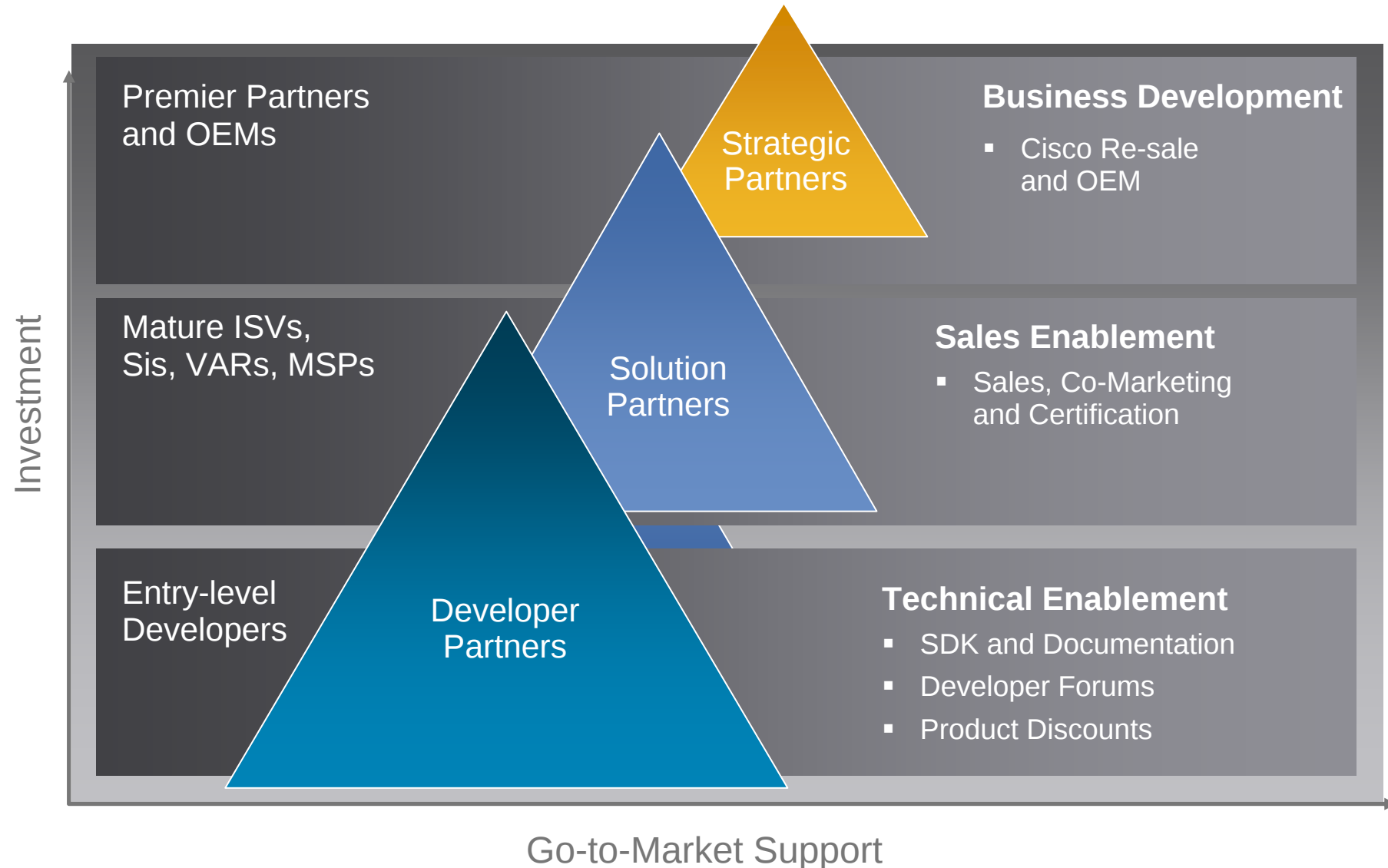
AIM-102

1GB RAM
256MB Flash
Intel Celeron



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

AXP Partner and Business Structure



Cisco AXP Partners



Integrated Healthcare Solutions

Ministry of Healthcare, Bulgaria



- Router platform
- 3rd level TAC support

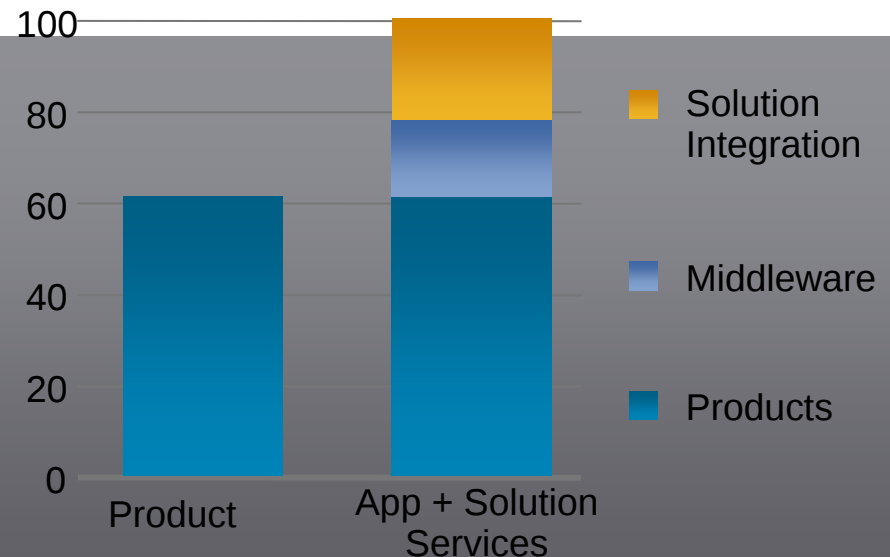


- Middleware:
Healthcare connector.
- Leading eHealth Specialist
- 3rd level Application support

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+

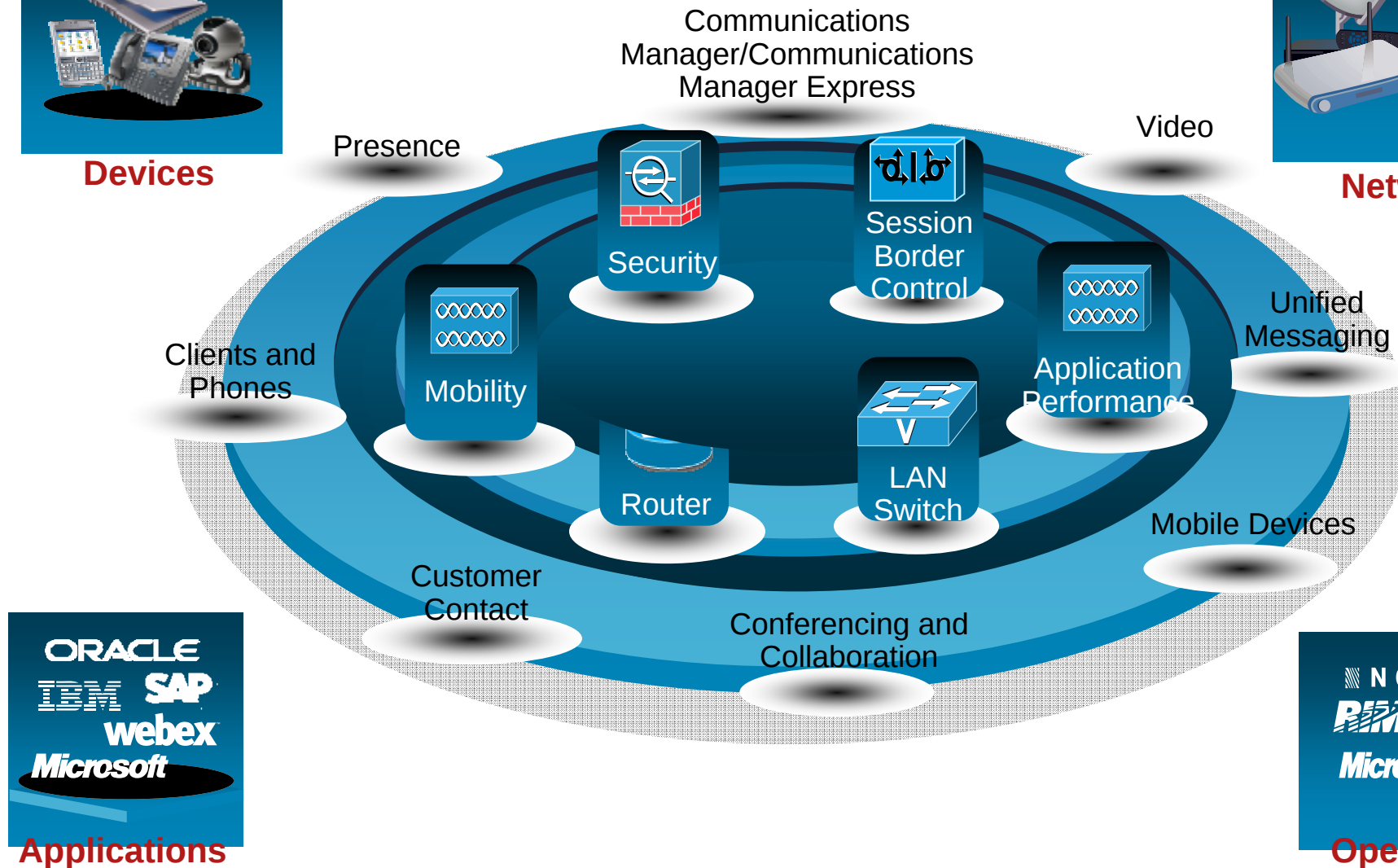
Cisco Integrated Network Services Unify Your Unified Communications



Devices



Networks



Branch Mobility



Wired Branch

- Traditional wired infrastructure
- High bandwidth applications

Enterprise Teleworker

- Office of one
- Remote or home worker needing voice, data, security, wireless

Cisco Unified Wired and Wireless Branch Solution



Portable, Mobile Branch

- 3G Wireless Branch
- In-vehicle public safety and first responder secure access



Wireless Branch

- Highly reconfigurable
- Flexible office for temporary locations or field services workers

Securing the Branch



Network Security

- Nearly 50% of user downtime due to spyware alone*
- Upwards of 25% of IT support time spent on preventable infections**



Physical Security

- Network and physical security converging
 - Proprietary to open
 - Siloed to integrated
 - More IT involvement

Up to 2% of Revenue Losses and 51% of Downtime Costs Are Due to Security Problems

*Infonetics Research

**Cisco Customer Survey

Physical Security Operations Challenges and Drivers

Challenges

- Isolated, disparate security systems
 - Infrastructure, video, access events not shared
 - Operational productivity diminished
 - Lack of alignment and support of organizational goals

Plus



- \$Billions assets at risk
- Policy compliance
- Camera proliferation
- Increasing video storage/ retention
- User authorization

Cisco's "Network-Centric" Physical Security Solutions leverage the Network as the Platform

Transforming from
Silo'd Infrastructure



- Proprietary
- Silo'd
- Difficult to extend

To Collaborative
Applications



- Distributed
- Scalable
- Secure
- Wired / Wireless

Enhancing Safety & Security of People & Assets

Cisco Approach to Deliver Physical Security

Network as a Transformation Platform

- Better control and protection
- Faster response, investigation, and resolution to events
- Greater collaboration between groups
- Leverage existing systems
- Enable new applications and extract more value
- Align with business goals

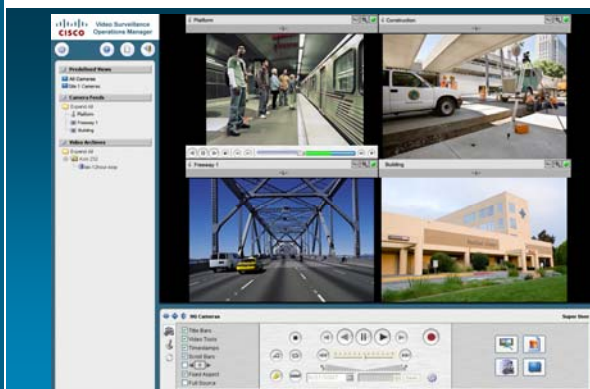
Transformation Enablers

- Cisco Networked Physical Security
- Cisco Convergence Infrastructure
- Cisco Expertise



Router - Integrated IP Video Surveillance and Video Recording

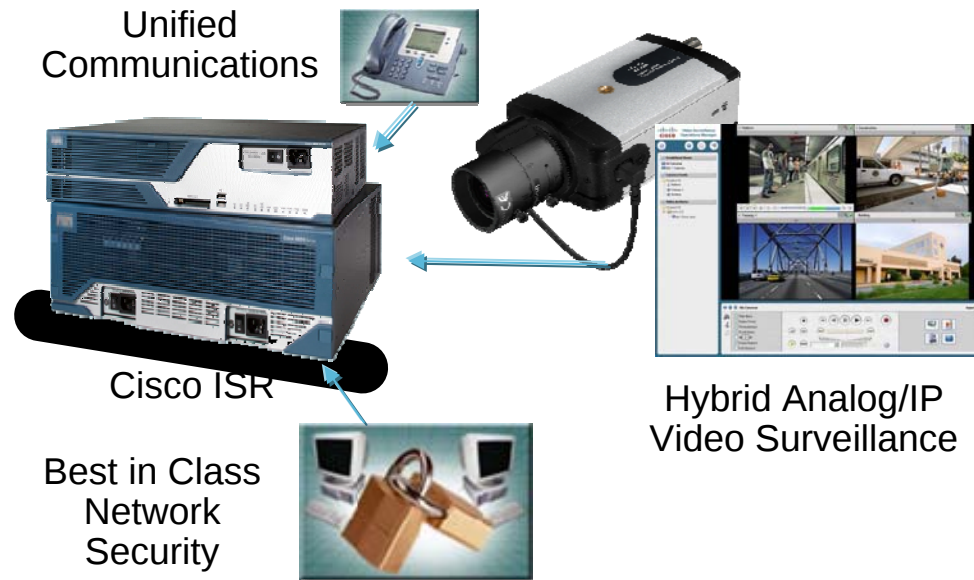
Hybrid Analog and IP Cameras Integrated Video Management and Storage System



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)

Value of Router-Integrated Video Surveillance



The network is the platform for new business possibilities

Easier to deploy new and extend existing sites

Greater monitoring flexibility, anywhere anytime

Tighter linkage between video surveillance and other branch applications

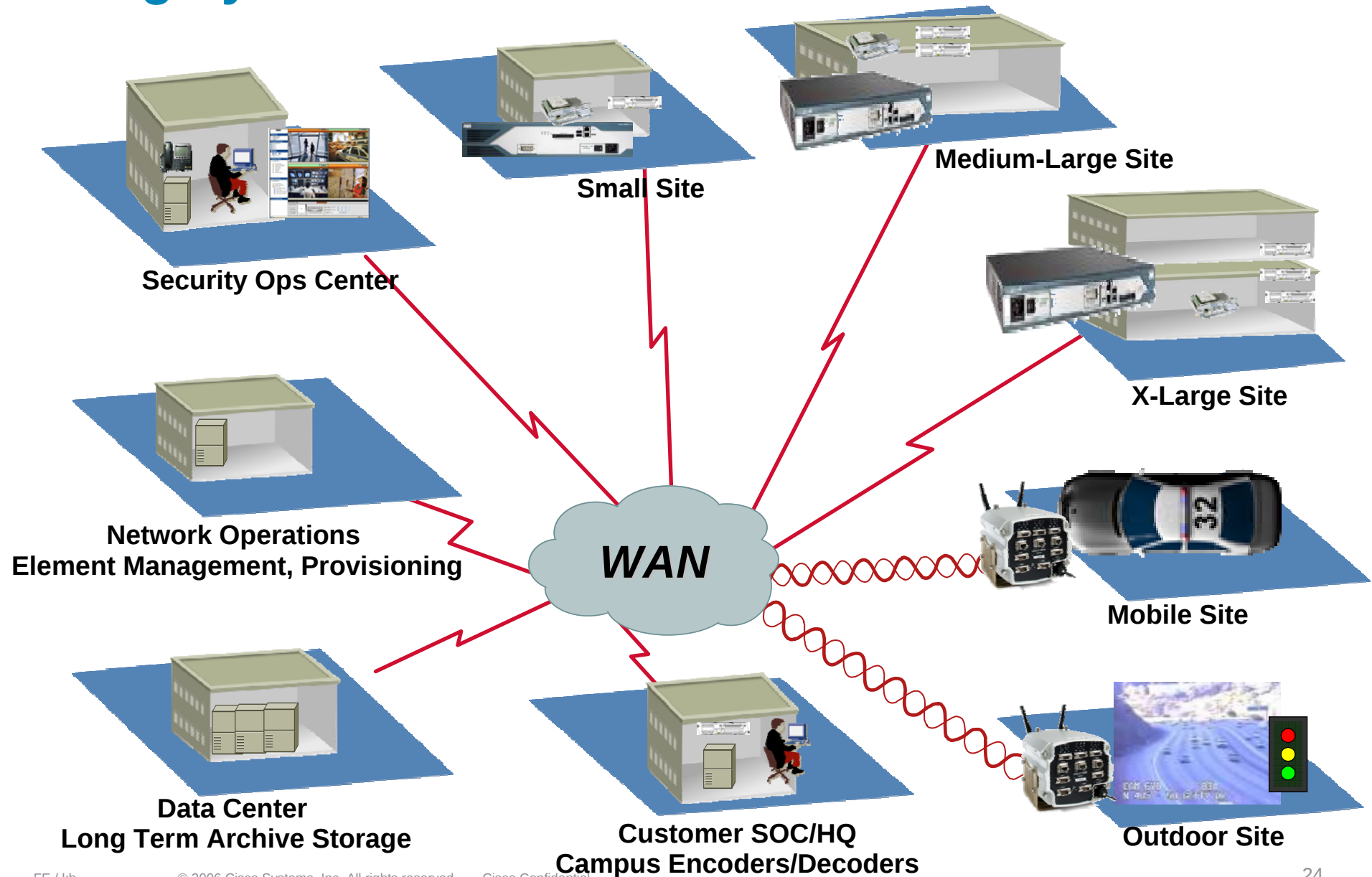
Operational Efficiency

- 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

Focus on Centralized Security Operations for Highly Distributed Environments



Cisco 3200 Rugged ISR

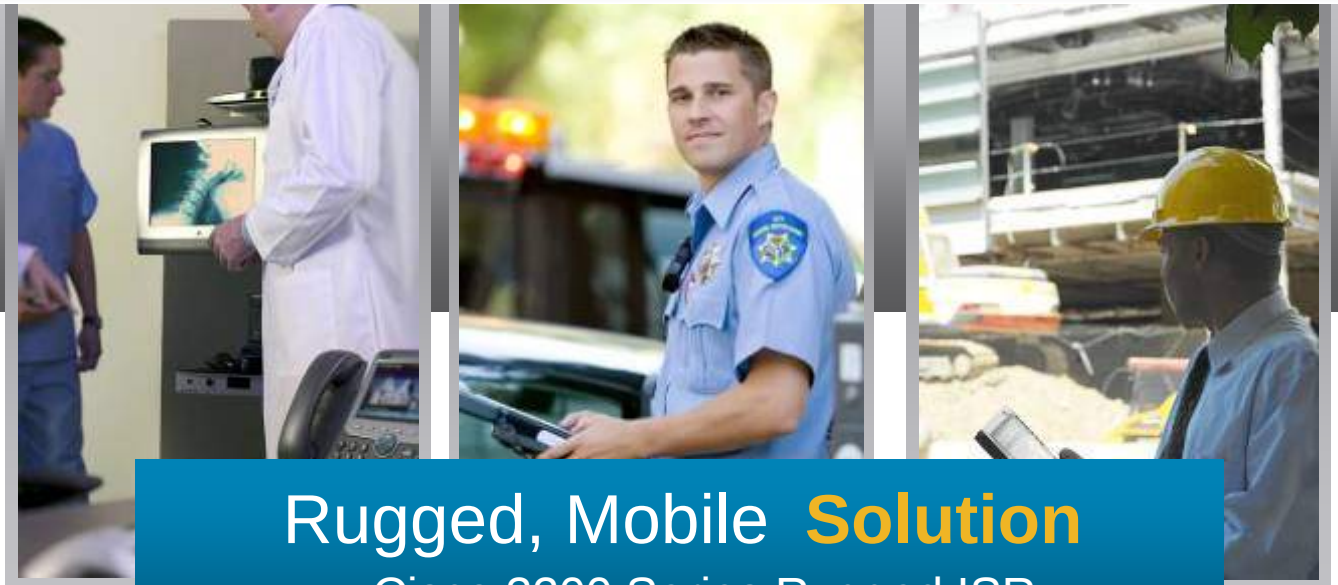
- ✓ Security
- ✓ 3G WAN
- ✓ 802.11 WLAN
- ✓ Unified Communications



Mobile
Environments

First
Responder and
Transportation

Rugged
Environments



Rugged, Mobile **Solution**
Cisco 3200 Series Rugged ISR

Chicago Transit Authority Moving Towards Mobile, Wireless & Real Time Video



Wireless Mobile Video on the buses, with the ability to establish a connection between bus and police cars.



Cameras and DVR on the buses connected to Cisco Mobile Router.



Cisco Mobile Router installed in transit police cars provides access to cameras installed on busses, trains and stations.

Source: Network Computing – www.nwc.com

Cisco Empowered Branch Solution for Your Branch



Integrated Services Router Portfolio

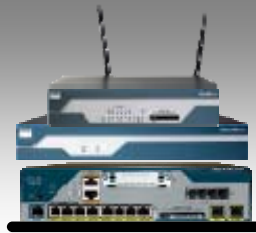
Performance and Services Density

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

Environmental Impact: ISR vs. Appliance

3 Year Environmental Impact of Representative Branch Network

	Cisco ISR 3845	6 Competitor Appliances
Power Consumption (W-hr)	1,310	4,834
Cooling Requirements (BTU)	4,020	16,386
Carbon generated (T)	594	2,431

3 year carbon footprint savings compares to each of the following:

- ***1,900 round-trip flights across the US (from New York to San Francisco)***
- ***850 round-trip flights from San Francisco to Heathrow or to Tokyo***
- ***850 round-trip flights from Heathrow to Bangalore***
- ***250 employees commuting everyday to work for approximately 25 miles a day per employee for 3 years!***

Additional Environmental Benefits

- **Reduce** e-waste due to the lower volumes of material (single chassis + modules vs. multiple chassis)
- **Reuse** of modules means less waste and investment protection
- **Recycle** e-waste via Cisco's Take Back Program



Summary



Summary—How Does the Cisco Empowered Branch with UC help IT and Business?

- Extend services across your entire organization
 - Enable virtualization and new business models
 - Address IT complexity, coverage, and cost
- Enhance the way every department within your organization does business
 - Enable effective interactions with virtual teams all over the world
- Improve security and business continuity
 - Reduce carbon emissions, eliminate toxins
 - Enable ongoing business transformation



Optimizing Branch Experience



The Network Is The Platform

Q and A



