



Empowered Branch 4

Optimizing the Branch Experience



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

The Branch Transformation

Today's Branch



**Aging, Disparate Data/
Voice Networks**



**Saturated WAN,
Poor Response Time**



**Blended Security
Threats, Compliance**



**Limited Mobility, Limited
Disaster Recovery**



**Inconsistent Branches
and Branch-HQ solutions**

Empowered Branch

**Unified Voice/Data/Video
Network Platform**

**Optimized WAN,
Accelerated Applications**

Self Defending Networks

**High Availability, Unified
Wireless—Wireline Business**

**Consistent Branches
and Branch-HQ Services**

Cisco Empowered Branch

Empowered Branch 4

Open, Integrated Application Platform

Empowered Virtual Worker

Video and Collaboration

Manageable, Secure, Wireless Branch



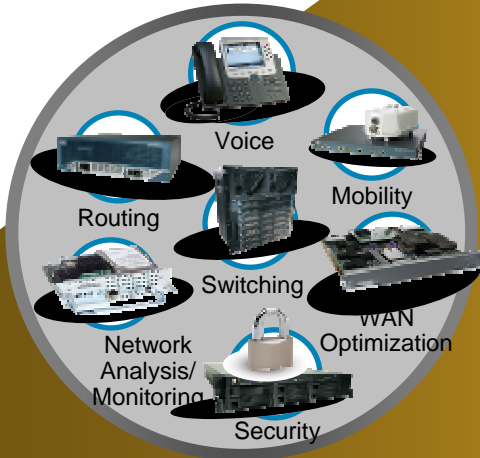
Over 4 Million ISRs Sold!

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



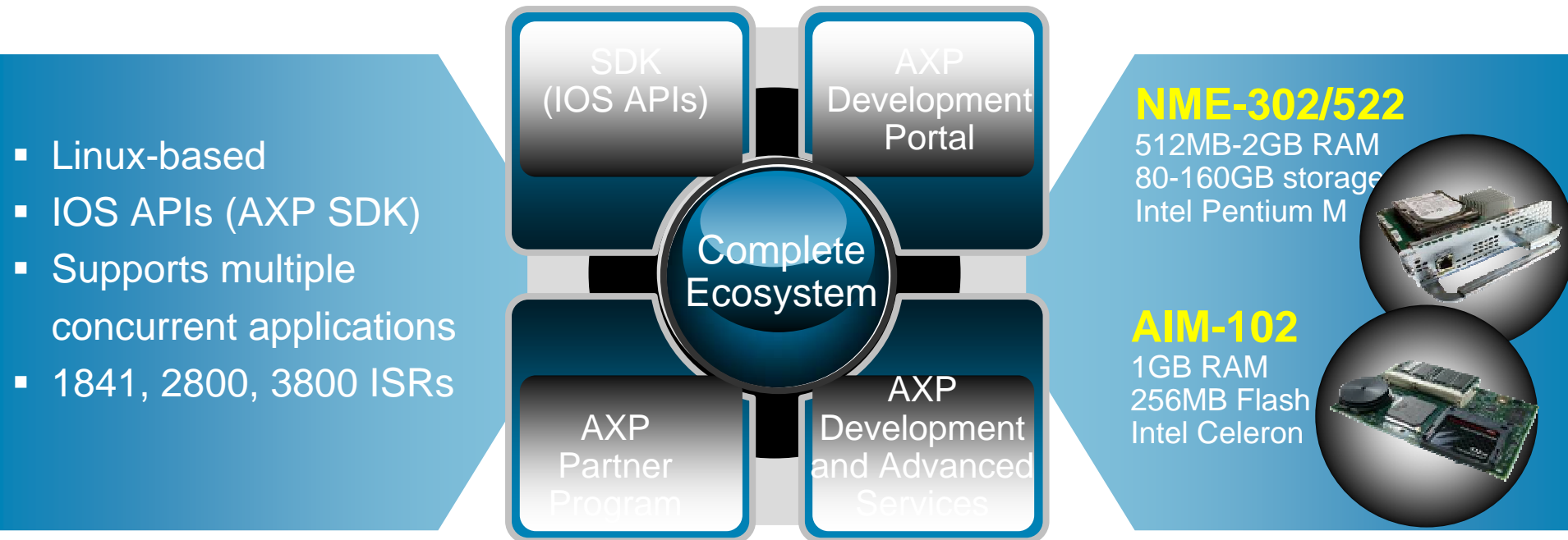
- Applications and network integration
- New business models
- Optimized branch footprint

Multiple Overlay Products

Network Integration

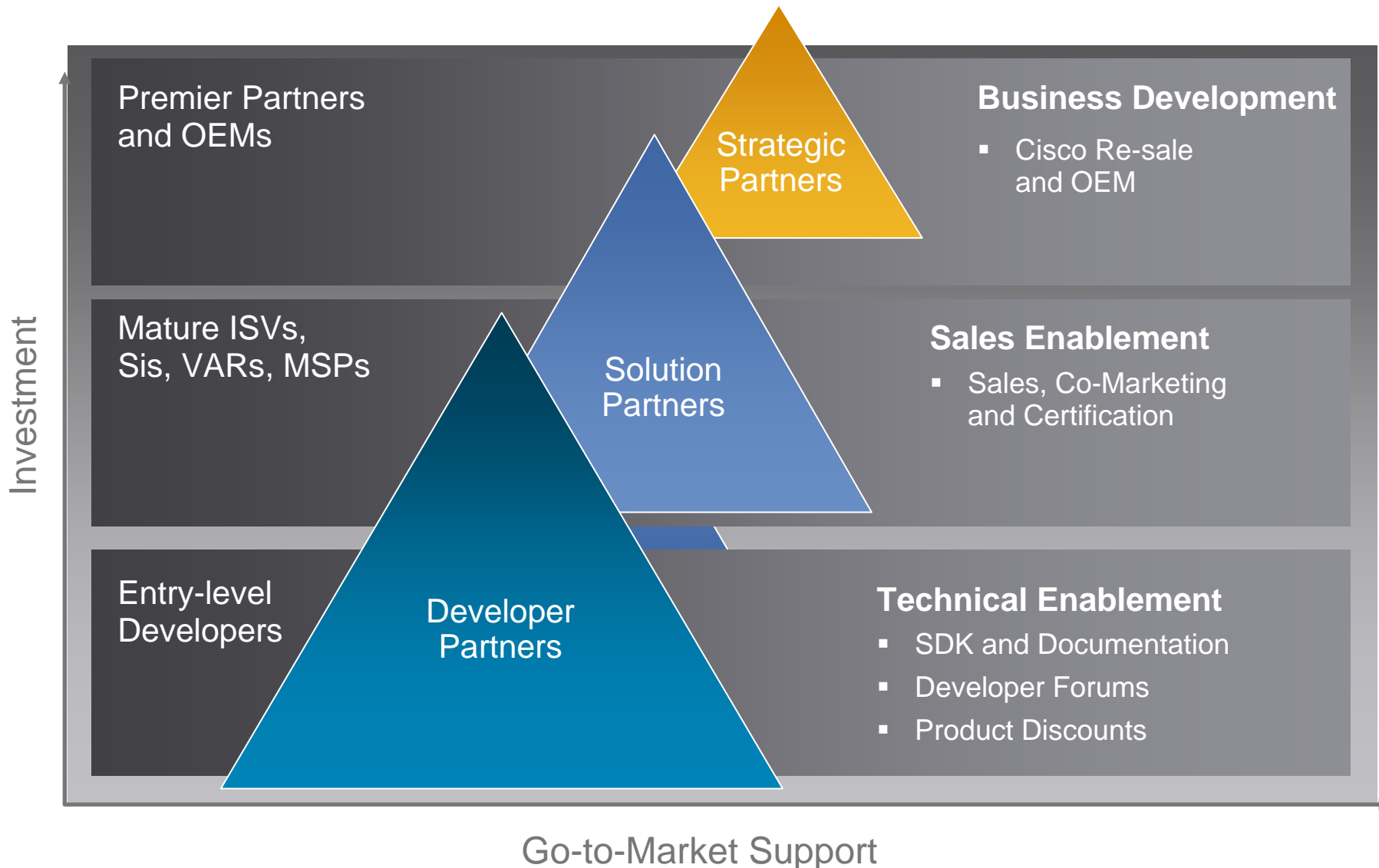
App and Server Integration

Application eXtension Platform



- 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

Vertical Solutions

Healthcare



Financial Services



Retail



Energy



UC Solutions



Network and Management Solutions



Channel Partners
and Reseller



“Build Your Own” or “Pre-packaged” Applications

Integrated Healthcare Solutions

Ministry of Healthcare, Bulgaria



- Router platform
- 3rd level TAC support

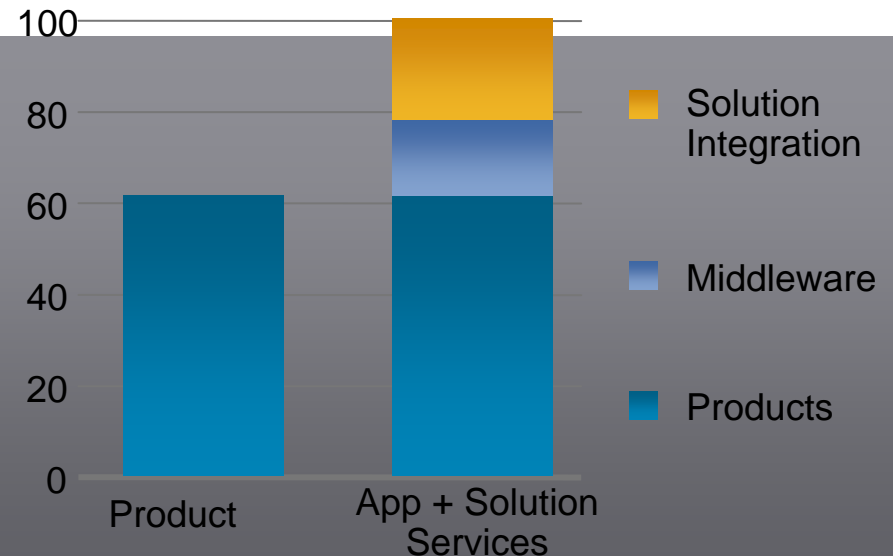


- Middleware: Healthcare connector.
- Leading eHealth Specialist
- 3rd level Application support

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+

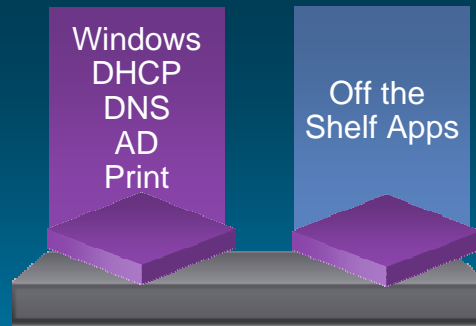
Opening the Branch with WAAS



Cisco WAN Optimization new hosting branch applications



WAE-674
**New Wide Area
Application Services
platform**



WAAS
Virtual Blades
**Virtual hosting
for applications**



- Jointly developed solution
- Joint customer support
- Optimized mix of central, local IT services
- \$1B+ annual opportunity

“Cisco and Microsoft solutions serve our employees in our headquarters as well as in branch offices. I am excited to see these two companies working together to simplify the management of branch office resources so we can quickly deploy Windows Services to remote offices ...”

-Dwight Wheelers, Network Architect



Empowered Virtual Worker

New Small Office and Teleworker Solution

- Availability and reliability
- Next Generation Wireless Capabilities

Secure Remote Collaboration

- Secures voice and data end-to-end
- Advanced security and content filtering

Simplified Operations

- Comprehensive Cisco IOS services: routing, QoS, voice survivability
- New; graphical voice and data configuration

Cisco Integrated Services Router
Cisco 860 ISR family
Cisco 880 ISR family
Cisco 880 IAD family



**For Teleworker, Small Branch Offices, and
Managed Service Provider Offerings**

Cisco 860, 880 Fixed Router Family

Cisco 860 ISR
Data, Security,
Wireless

Cisco 880 ISR
Advanced Data,
Security, Wireless

Cisco 880 IAD
Integrated
Access



Small Branch
and Small
Business

- Entry-level, secure routing solution



Enterprise
Teleworker,
Small Business,
Small Branch

- Full-featured secure router



Small Business

- For SP managed services only

Optional 802.11n

Standalone

Standalone/Unified

Standalone/Unified

Dual WAN Links

No

Yes

Yes

3G Option

No

Yes

No

Unified Wireless

No

Yes

Yes

Security

Basic

Advanced

Advanced

Simplifying Branch Management

Universal Software Image

- Simplified Upgrades
- No software download required
- Scalable Management



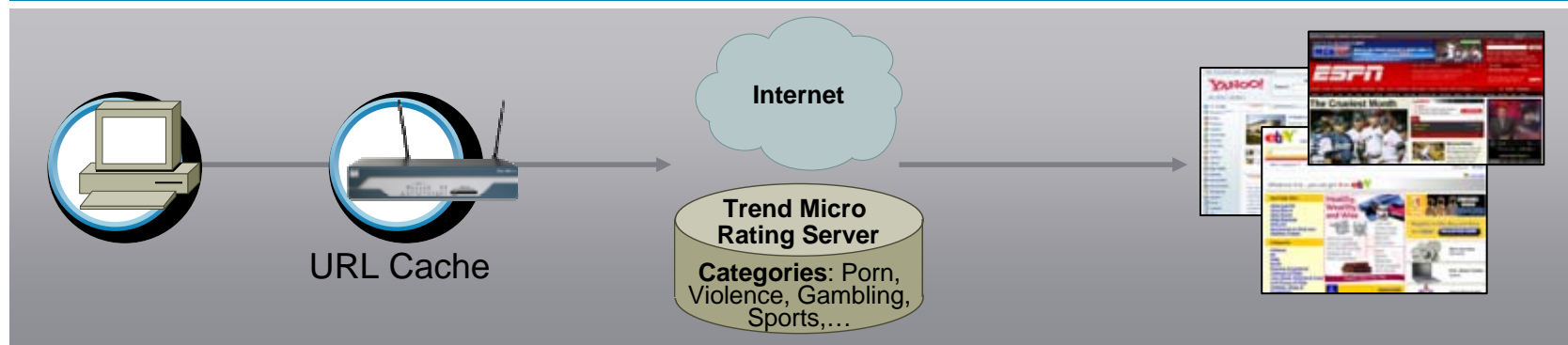
Cisco Configuration Professional

- One-stop graphical tool for
Routing
Security
Unified Communications
- Wizard led configuration
LAN, WLAN, and WAN
Firewall, IPS, and VPN
QoS, ACLs
- One-step security lockdown
- Free with every Router

Security Innovations

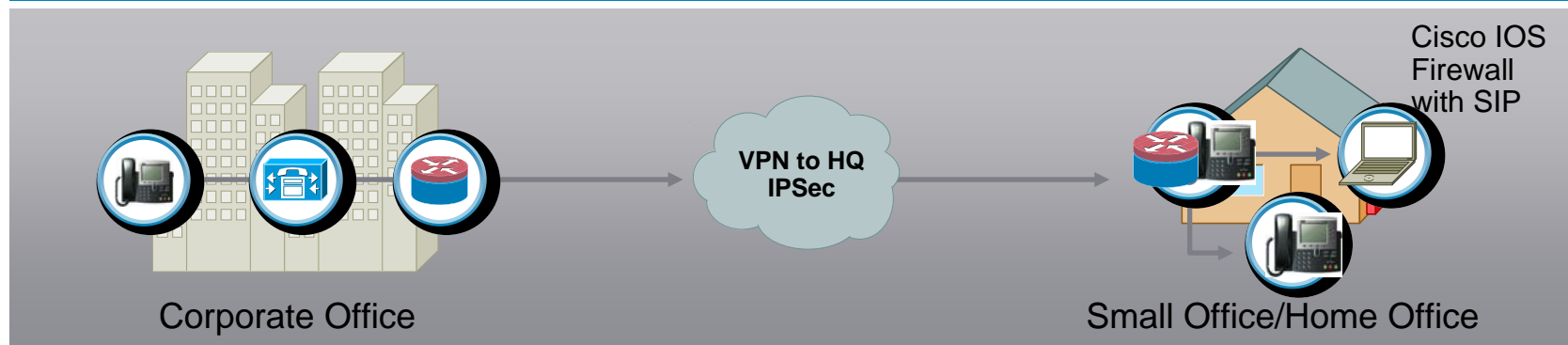
Cisco IOS Content Filtering

Blocks Malicious Sites and Enforces Corporate Policies



Cisco IOS Secure SIP Firewall

Enhance the Integrity and Availability of Cisco UC



Branch Mobility

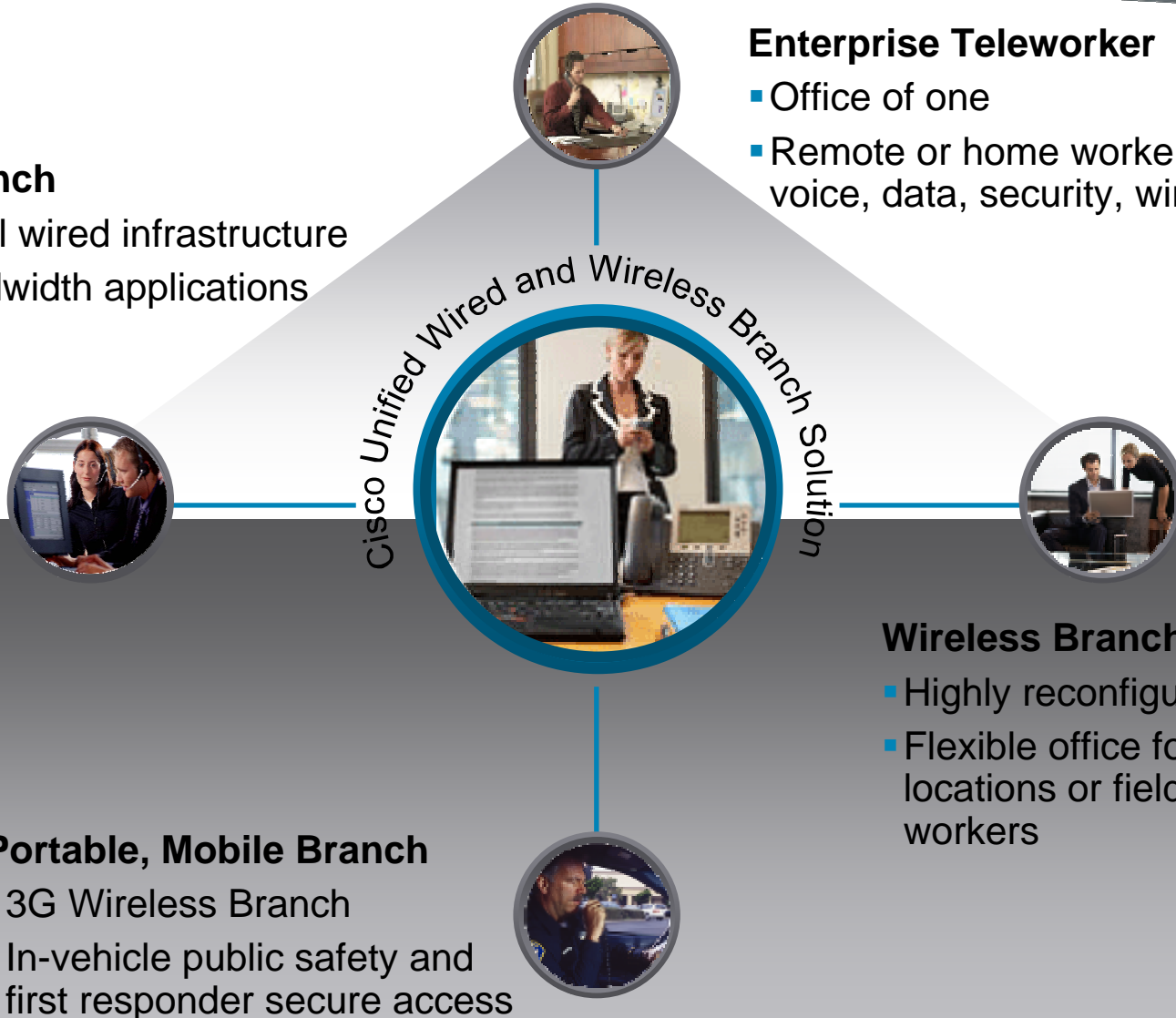


Wired Branch

- Traditional wired infrastructure
- High bandwidth applications

Enterprise Teleworker

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



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

Cisco 3200 Rugged ISR

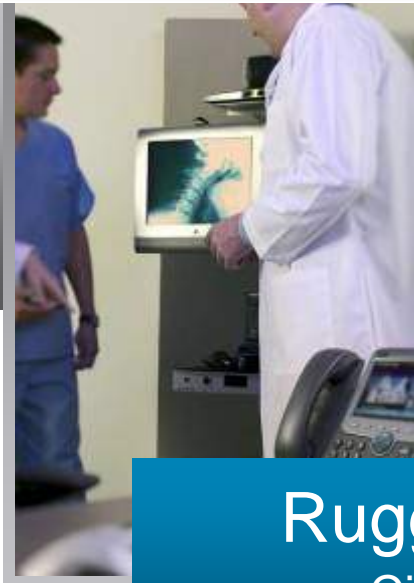
- ✓ Security
- ✓ 3G WAN
- ✓ 802.11 WLAN
- ✓ Unified Communications



Mobile
Environments

First
Responder and
Transportation

Rugged
Environments



Rugged, Mobile **Solution**

Cisco 3200 Series Rugged ISR

Integrated Services Router Portfolio

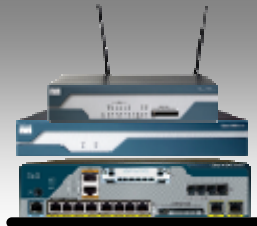
Performance and Services Density

**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

Empowered Branch 4



CUBE 1.2
CME 4.3
CUE 3.2



IAD 880



ISR 860
ISR 880



Cisco Configuration
Professional



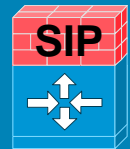
Cisco 3200
Rugged ISR



Integrated 3G
Integrated 802.11n



Content
Filtering



Secure
Voice



Cisco
License
Manager



Network
Capacity
Expansion



Cisco AXP



WAAS WAE-674
Virtual Blade

Optimizing the Branch Experience

Optimizing Branch Experience

Opening the
Branch

Optimizing branch
footprint

Integrating the
network and
applications



Empowering
Virtual Workers

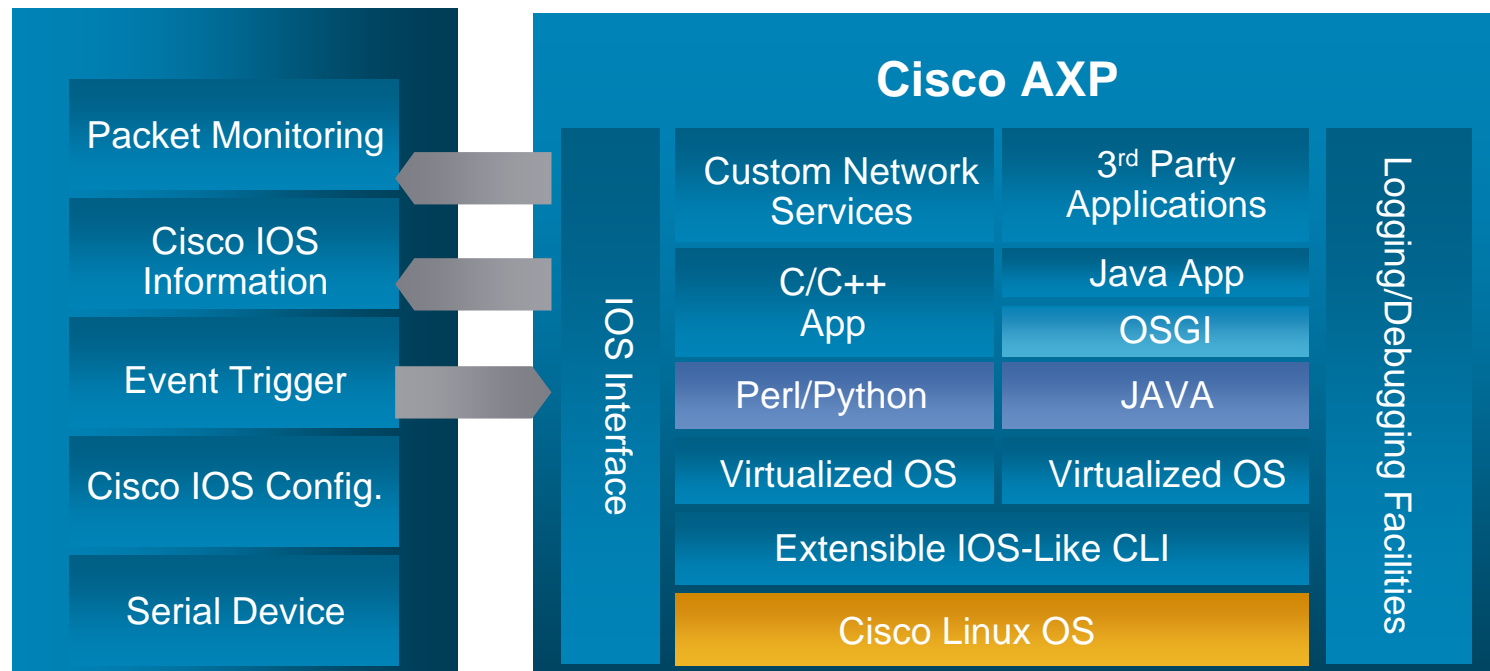
Improving
Collaboration

Improve Branch
Manageability,
security and Wireless

The Network Is The Platform



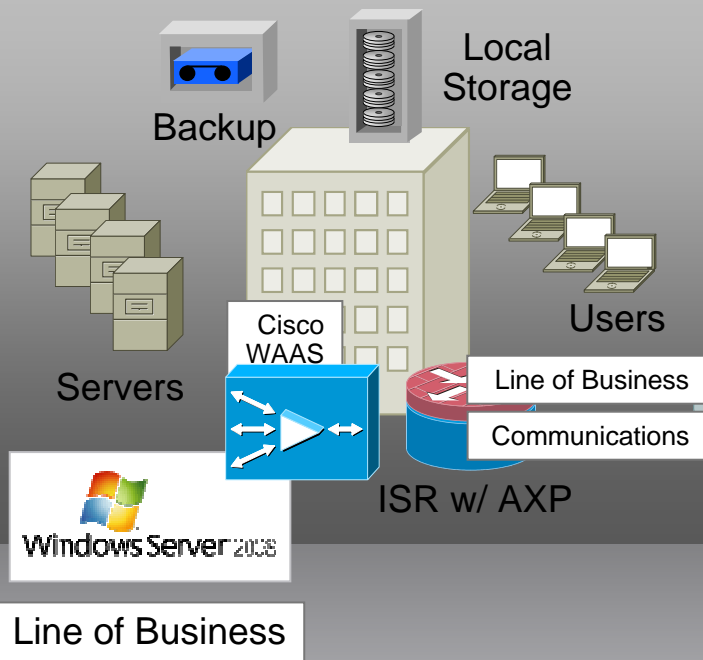
AXP Architecture and Components



**AXP-Based Application Appears
as a Router Extension**

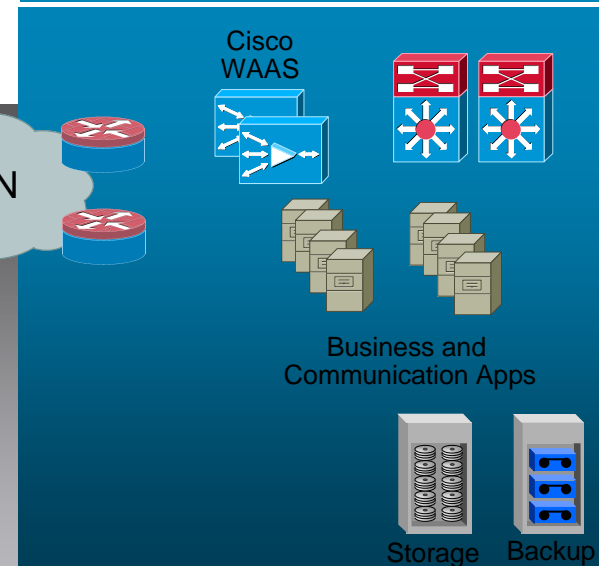
Network-Hosted Applications

Flexible, Optimized Branch IT



- Centralize what you can with Cisco WAAS
- Locally host key business apps and IT services on branch network

Data Center



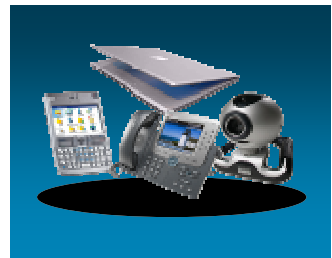
Network Capacity Expansion Capabilities

	Customer Use Cases	WAAS	NCE
WAN Optimization	Desktop Virtualization	✓	
	Backup and Recovery	✓	
	Security and Compliance	✓	
	Server Consolidation	✓	
	Application Performance	✓	
	Bandwidth/Link Optimization	✓	✓

What's New in Empowered Branch 4 for Unified Communications



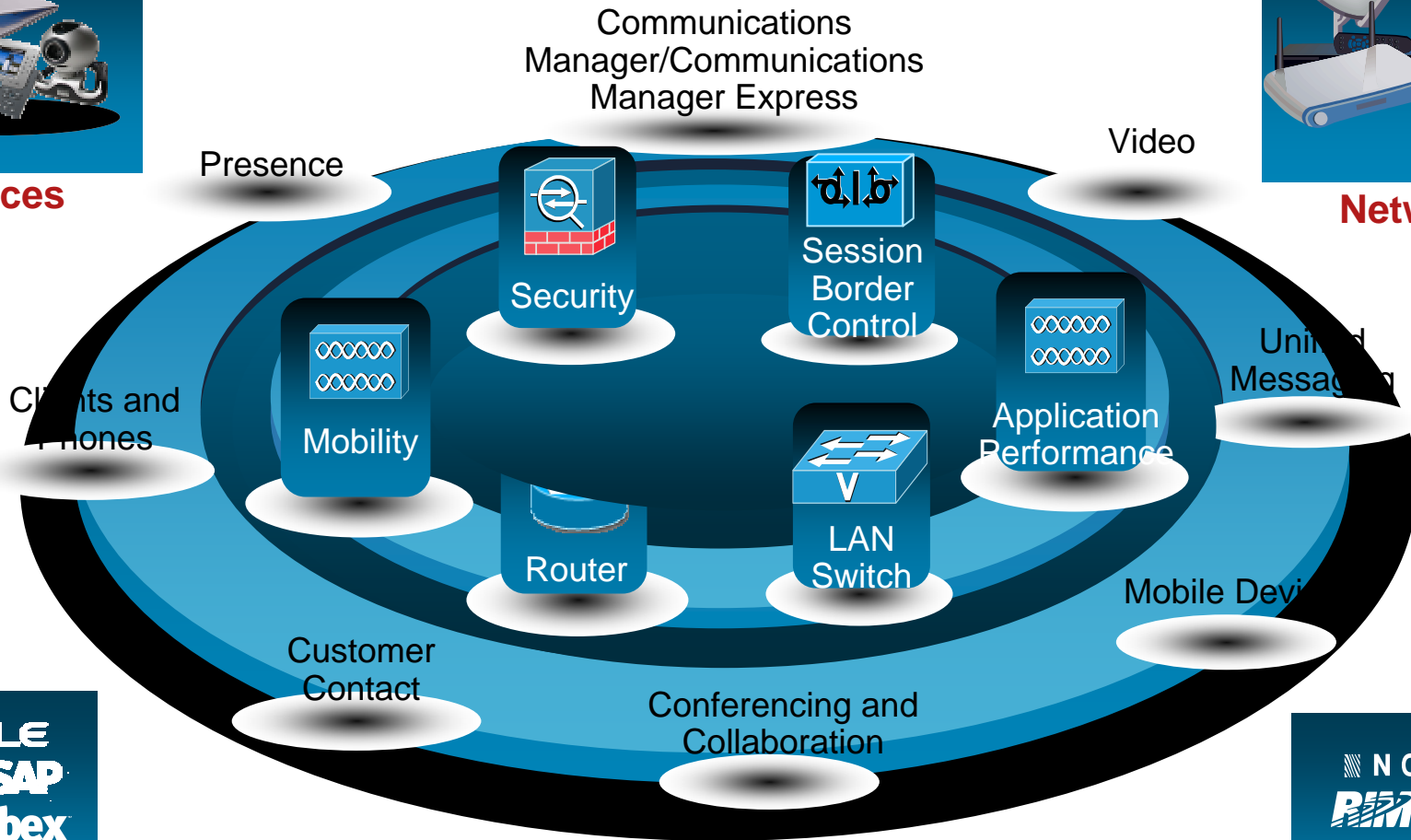
Cisco Integrated Network Services Unify Your Unified Communications



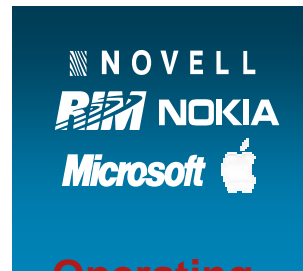
Devices



Networks



Applications



Operating Systems

Empowered Branch 4

New/Enhanced UC Solutions and Offers

Unified Communications Applications	<ul style="list-style-type: none">▪ Cisco Unified Communications Manager Express 4.3▪ Cisco Unified SRST 4.3▪ Cisco Unity Express 3.2
Communications Infrastructure	<ul style="list-style-type: none">▪ Cisco Unified Border Element 1.2▪ Application eXtension Platform (AXP) for Unified Communications▪ QSIG tunneling over IP▪ Wideband Codec Support and enhanced codec support▪ New VIC3 Voice Modules
Network Management	<ul style="list-style-type: none">▪ Cisco Configuration Manager—Administration GUI for CME
Security	<ul style="list-style-type: none">▪ IOS Firewall 12.4(20) T
Offers	<ul style="list-style-type: none">▪ New UC/VSEC bundles with Unified CallConnector▪ “Get the Lead Out”

Cisco Unified Communications Manager

Express (CME) and Cisco Unified Survivable Remote Site Telephony (SRST) 4.3

Solution

- New end-user productivity features in CME
- CME E911 support
- CME Integration w/3200 Mobile Access Router
- Integration w/new Cisco Configuration Professional
- SRST feature set updates

Customer Value

- Improves end user ease of use and productivity
- Enhanced disaster preparedness
- Support for public safety and Department of Defense (DOD) initiatives

Key User Experience/Productivity Enhancements

- Call Barge with Privacy Release
- Add/change speed dial on phone
- Transfer to Voice Mail Key
- Live Record Softkey with Cisco Unity Express
- 8 Calls per Button (Octo-Lines) ~ SRST
- Blast/Parallel Hunt Group
- High Quality Audio with Wideband Support
- iLBC Codec for Narrow Band or Between Site Calls



Cisco Unity Express 3.2

Productivity-Enhancing Voice Mail, Automated Attendant and Interactive Voice Response for Small- and Medium-sized Offices or Enterprise Branches

New Capabilities

- Centralized management of multiple Cisco Unified Messaging Express systems
- Feature parity between router-based solution and UC520-based solution
- Additional languages—Arabic, Russian, and Turkish
- Password synchronization between Cisco Unity Express and Cisco Unified Communications Manager Express
- IMAP Integrated Messaging for Microsoft Entourage on Apple Macintosh

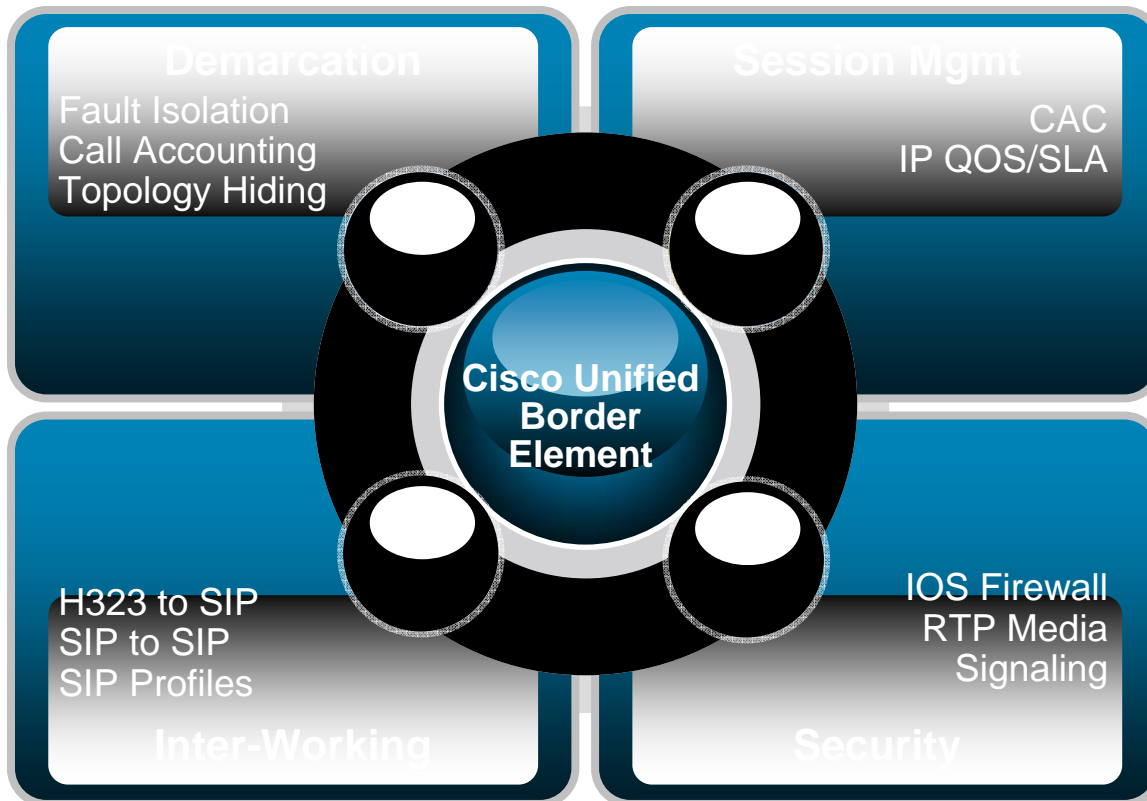
Customer Value

- Cost-effective for the SMB or branch office
- Investment protection: Ease of migration from standalone configuration to networked environment
- Application integration means fewer devices to manage, less staff support
- Native automated attendant and optional interactive voice response (IVR)



Cisco Unity Express Network Modules

Application eXtension Platform



New Features

- SIP Profiles
- SIP Video
- Interconnect enhancements

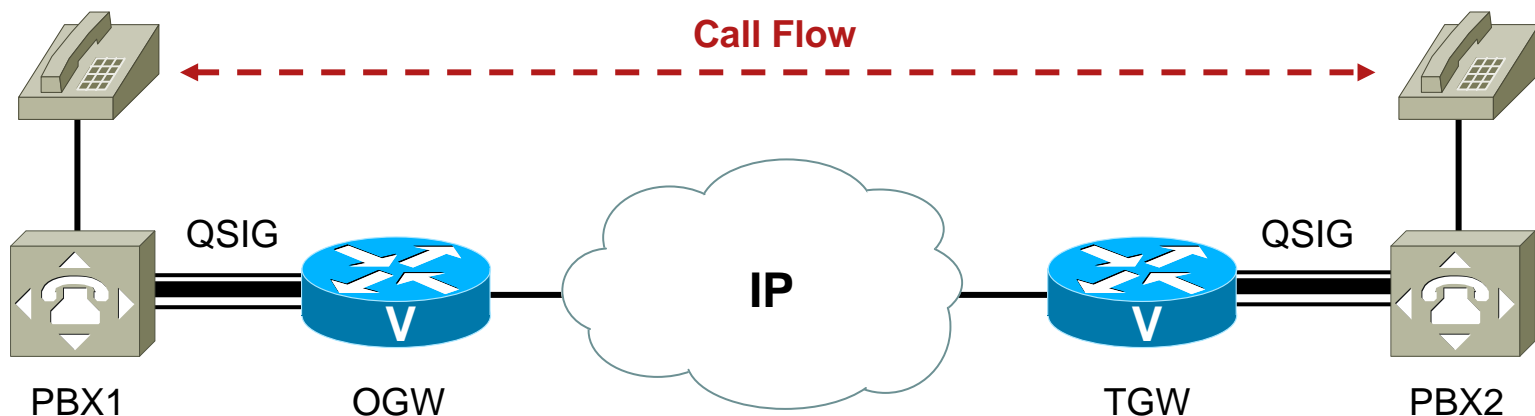
Benefits

- More endpoint interoperability
- Unprecedented adaptability
- Offer video to more users
- Improved manageability

Voice Networks Are Constantly Evolving—CUBE Interconnects These Networks That Are in Various Stages of Evolution

Reducing Branch Cost and Complexity with QSIG Tunneling Over IP

- Multiple ports savings on PBX trunk lines
- Cost savings on dedicated T1/E1 lines
- Ease of increasing capacity as needed
- Easier configuration and maintenance
- Easier migration toward IP telephony



With Hi-Definition Voice, Branches Sound “Closer”

G.722 Codec Support Across Infrastructure and Applications:

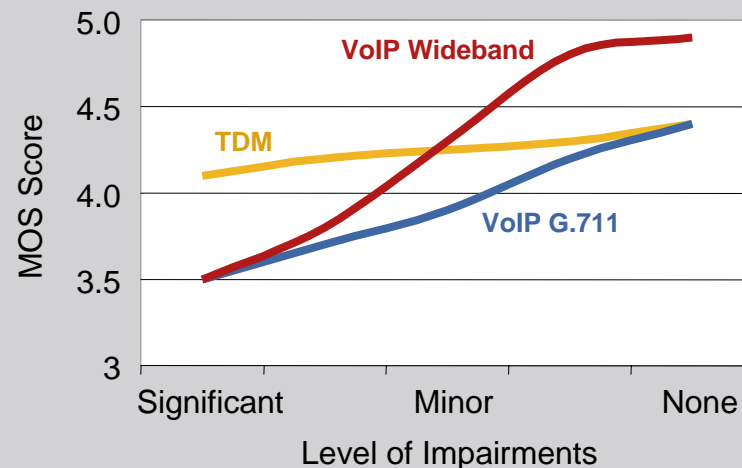
- Cisco UC solutions the ability to surpass TDM in Voice Quality
- Cisco **leads the experience** with “High Definition Voice”

Frequency Range of Codec Classifications



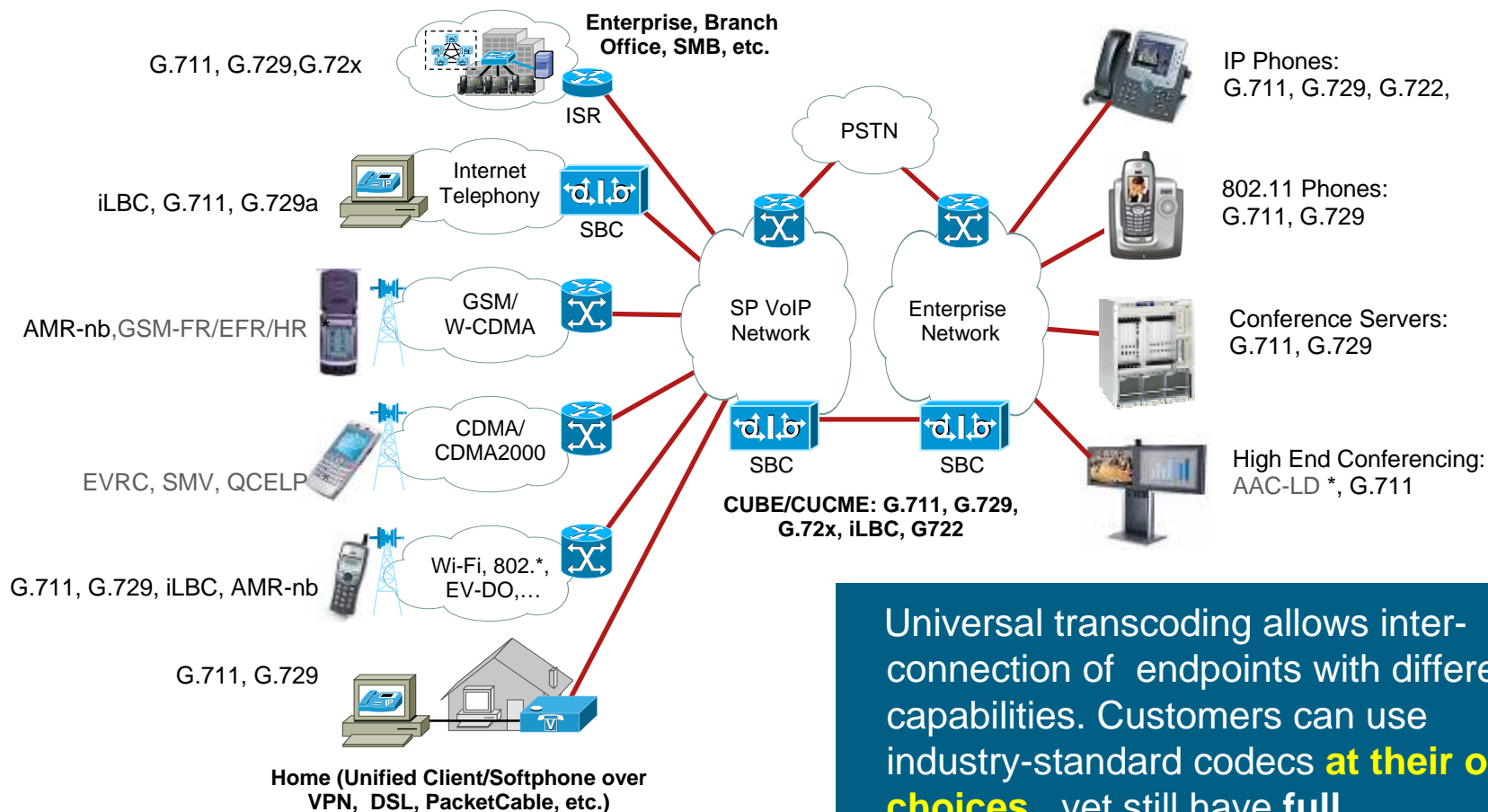
Wideband Code Dramatically Improves Speech Quality

Comparing Wideband and Narrowband MOS (Estimates)



Ultimate Branch Flexibility—Intelligent Network with Universal Transcoding

Different Voice (Codec) Technology Is Deployed in Enterprise, Mobile Wireless, Internet Telephony, and DSL/Packetcable



Universal transcoding allows inter-connection of endpoints with different capabilities. Customers can use industry-standard codecs **at their own choices**, yet still have **full interconnection among networks**.

* Codecs are not yet supported on CUBE/CUCME

New VIC3 Voice Modules

Existing SKUs (EOL Comp's)	New SKUs (Replacements)	Benefits of New Interface	Target IOS Version
VIC-4FXS/DID	VIC3-4FXS/DID	<ul style="list-style-type: none"> Supports both FXS and DID Supports NEBS 1/3 	12.4(15)XZ 12.4(20)T
VIC2-2FXS VIC-2DID	VIC3-2FXS/DID		
	VIC3-2FXS-E/DID	<ul style="list-style-type: none"> In FXS mode, "Off-Premise Extension Lite" 	
VIC2-2E/M	VIC3-2E/M	<ul style="list-style-type: none"> Supports NEBS 2/4 supports independent per port signaling type selection 	12.4(15)T
EM-HDA-8FXS	EM3-HDA-8FXS	<ul style="list-style-type: none"> Feature parity 	12.4(15)XZ 12.4(20)T

Platforms:

- ISRs, IAD2400
- NM-HD-1V/2V/2VE
- NM-HDV2 (all versions)

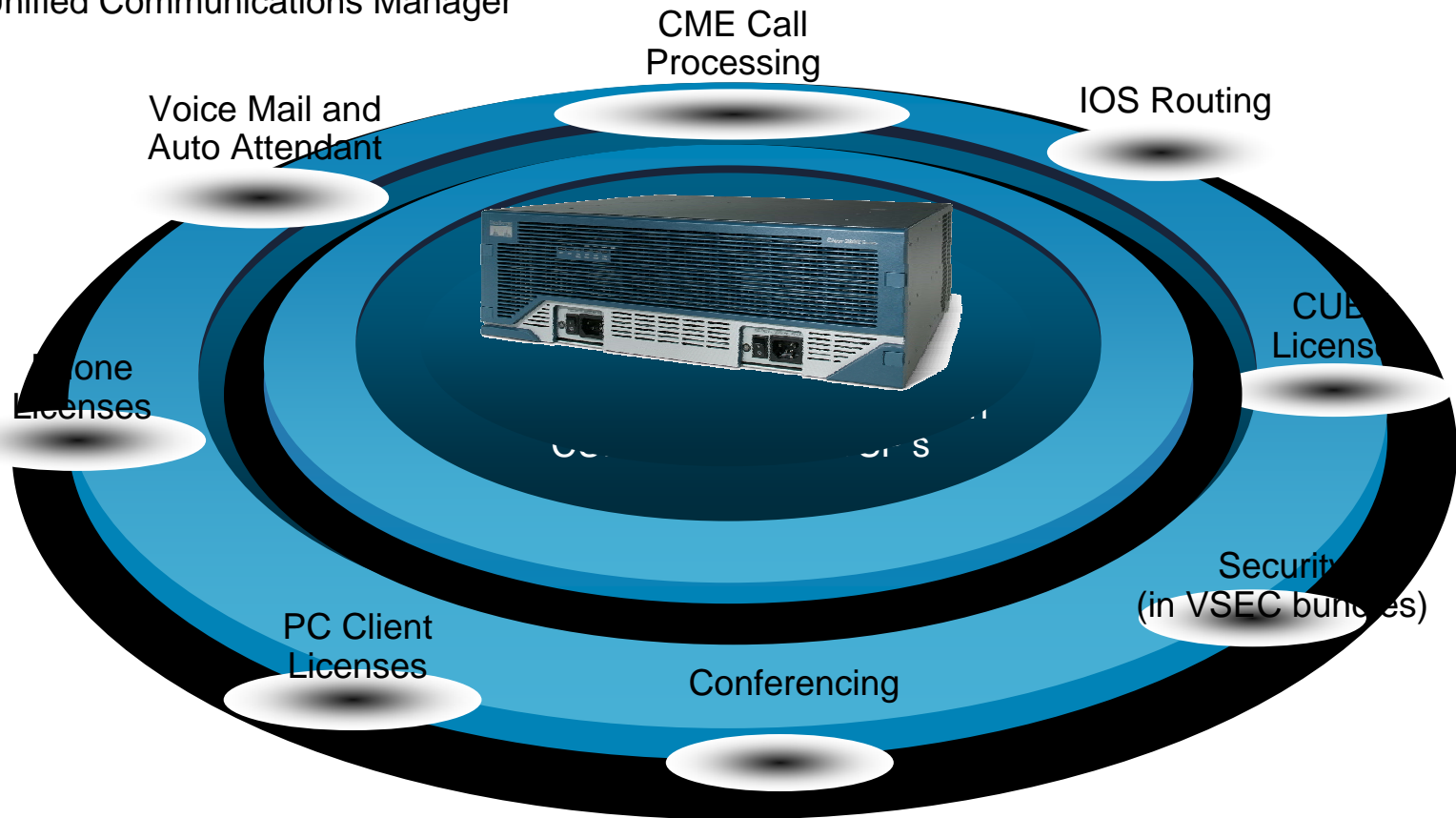
VIC3-2FXS-E/DID (in FXS mode) Supports:

- Loop length up to 11,000 ft (vs. 3,000 ft on VIC2)
- Ringing voltage, Vrms: 65V (vs. 52V on VIC2)
- 35mA off-hook loop (vs. 25mA) (specialty phones)

Cisco ISR Unified Communications Bundles

Combining UC Functionality into Single SKU

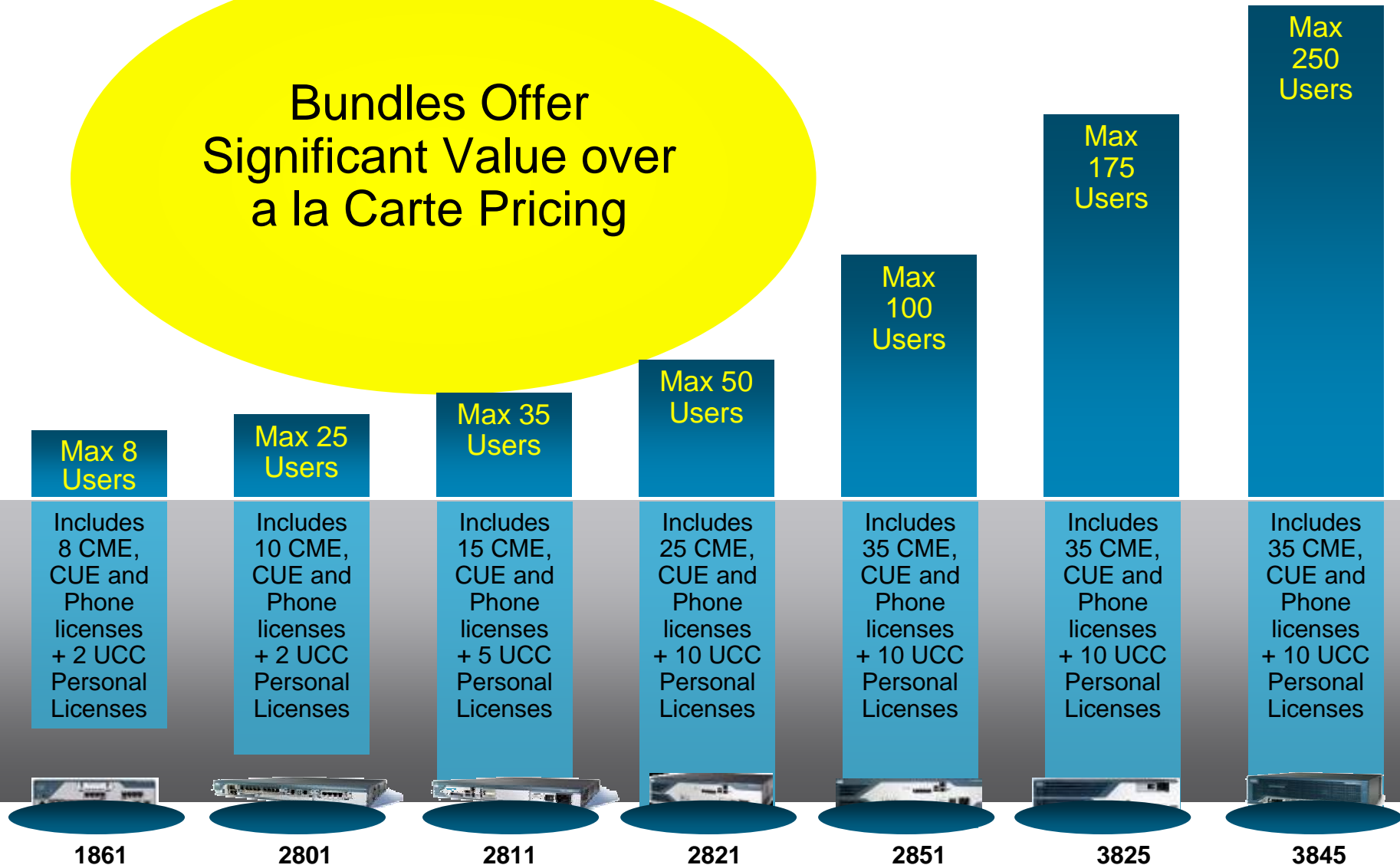
- IP phone licenses usable for all types of Cisco IP phones
- Investment protection to migrate to Cisco Unified Communications Manager



Introductory Offer: Free Unified CallConnector Personal Licenses

Unified Communications Bundles for ISR Included and Max User Counts

Bundles Offer
Significant Value over
a la Carte Pricing



Making Branches More Green

Get the Lead Out Promotion

- Branch-focused trade-in promotion using CTMP
- Trade-in legacy, lead based key system + phones
- Trade-to ISR UC Bundles/UC 500/VSEC Bundles + phones
- Eligible for “enhanced trade-in credits” if trading in Avaya, Alcatel, Ericsson, Mitel, NEC, Nortel, Philips, or Siemens systems



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



