



Cisco Small and Medium Business Extended Product Guide



Purpose Built SMB Solutions

This guide is designed to help you determine the best solutions to recommend to your customers. Other resources you may want to review include the [IDC Smart Business Roadmap Discovery Guide](#) and the [Solutions Recommendations Guide](#).

Small and Medium-Sized Business Customers Face Unique Challenges

The role of technology is changing for today's small and medium-sized businesses (SMBs). As organizations and competitors become more global, they are turning to network technology to better connect with customers, suppliers, and employees.

To remain competitive and to thrive, companies must deploy technology and network solutions that help solve critical business challenges—both today and for the future. To keep pace with these challenges, businesses require a forward-looking technology plan—one that not only addresses current problems, but will also scale easily and effectively as needs change. To implement the solution, they need a trusted IT partner that can help them plan and control the evolution of their company, closely aligning a technology strategy to their business needs.

Selling to SMBs: Cisco Smart Business Communications

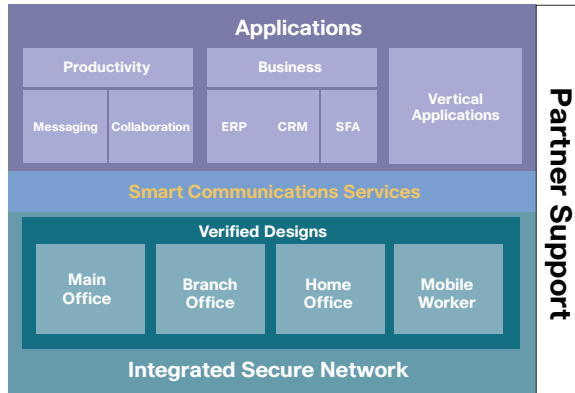
A common situation when selling into the SMB market is bridging the communications gap between the technical and business decision makers within the customer's organization. Cisco® has developed the Smart Business Communications solution and the Smart Business Roadmap to help businesses bridge this gap.

Cisco Smart Business Communications gives organizations a smart platform, with intelligence built into the IT systems. Cisco Smart Business Communications provides secure, immediate, and flexible access to company and customer data—anytime, anywhere—allowing customers to build closer relationships with their customers, suppliers, and employees.

The Cisco Smart Business Communications architectural framework (Figure 1) guides customers' IT evolution. The architecture has two layers: an integrated secure network layer with embedded smart communications services and an applications layer that is connected to the network for faster deployment and maximum utilization. Both layers are supported by Cisco Specialized Partners as they design, install, maintain, or host customer IT systems.

Cisco Smart Business Communications Architecture

Figure 1. Cisco Smart Business Communications Architecture



The Smart Business Communications architecture is a tested guide for implementing technologies for SMB customers. Cisco has verified network design guides for four typical network environments, making it easier for partners to design and install customer networks because they have been tested by Cisco systems engineers.

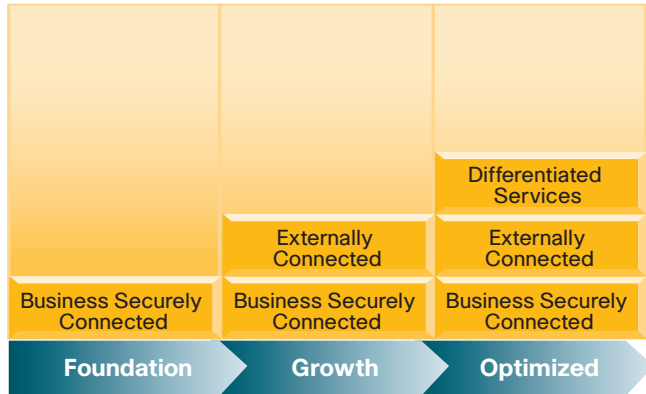
- **Main office or company headquarters:** This environment is usually where most of the intensive IT processing and call management occurs.
- **Branch or remote offices:** These offices need the same security, reliability, and access to information as employees at the main office. In the retail industry, these would be stores; in manufacturing companies, these might be sales offices.
- **Home offices:** This environment includes not just small businesses, but also employees who may work full time out of their homes, such as call center agents.
- **Mobile workers:** Mobile workers need the same connectivity as when they are working in the office. In this environment, e-mail and customer records may be accessed, for example, while at the airport waiting for the next flight.

Cisco Smart Business Roadmap

Cisco Smart Business Roadmap

The Cisco Smart Business Roadmap (Figure 2) is designed to help you improve the way you sell to your customers. Using the Smart Business Roadmap, you can elevate the discussion with your customers from point products to the resolution of business challenges.

Figure 2. Cisco Smart Business Roadmap



The roadmap enables you to help your customers resolve their business challenges with a technology strategy. You work with customers to develop a plan that addresses their current challenges while setting them up for long-term success. The customized plan is designed to be implemented over time at a pace that is right for the customer, helping you develop long-term relationships.

The roadmap helps shorten the sales cycle, increase deal size and attachment rate, and improve customer relationships by enabling you to sell on business challenges that are resolved through technology: for example, you can sell on value.

Cisco Offerings

Cisco offers a comprehensive line of technology solutions to meet customer needs. Cisco offers routers, switches, security devices, VPNs, wireless LANs, IP communications solutions, and the software necessary to integrate each element into a secure, productive, reliable, and easy-to-manage network. The unique Cisco end-to-end networking solutions enable organizations to communicate, collaborate, and compete more effectively by providing real-time access to information, enhanced communications, and improved business processes for today while helping companies evolve to meet constantly changing business requirements.

Cisco solutions offer:

- **Integrated, end-to-end security:** To safeguard confidential business data, a Cisco network provides enhanced security that protects the network from internal and external threats. An integrated security solution also simplifies security management and greatly reduces the total cost of network ownership.
- **High network availability:** A Cisco network helps ensure the reliable network access and maximum uptime that companies depend on to support new users, open new offices, deploy new services, extend their networks to customers and partners, support a more mobile workforce, and more. Cisco switches and routers include support for network and link redundancy, dynamic routing, automatic failover, and redundant power for improved fault tolerance and network availability.
- **Predictable performance:** Intelligent, end-to-end network management maximizes the availability and performance of critical applications. Cost-conscious SMBs can increase WAN bandwidth to serve more users and conduct more business over the Internet without upgrading to more expensive WAN facilities.
- **Ease of use:** Intuitive end-to-end Web-based management helps keep administrative expenses down, even as the network expands.
- **Cost effectiveness:** An end-to-end solution approach reduces complexity and network management costs. Modular and scalable products help reduce costs of future expansion. The Cisco Smart Business Roadmap facilitates growth with technology planning advice that brings together tailored technology solutions, a lifecycle services approach, and flexible financing options.
- **Investment protection:** Customers can receive trade-in value for existing Cisco products against the purchase of new Cisco products. The breadth of Cisco solutions and the capability of Cisco to work closely with companies to help them plan their evolution with a lifecycle services approach can help companies evolve quickly to meet new challenges.

Cisco Technology Solutions for SMBs

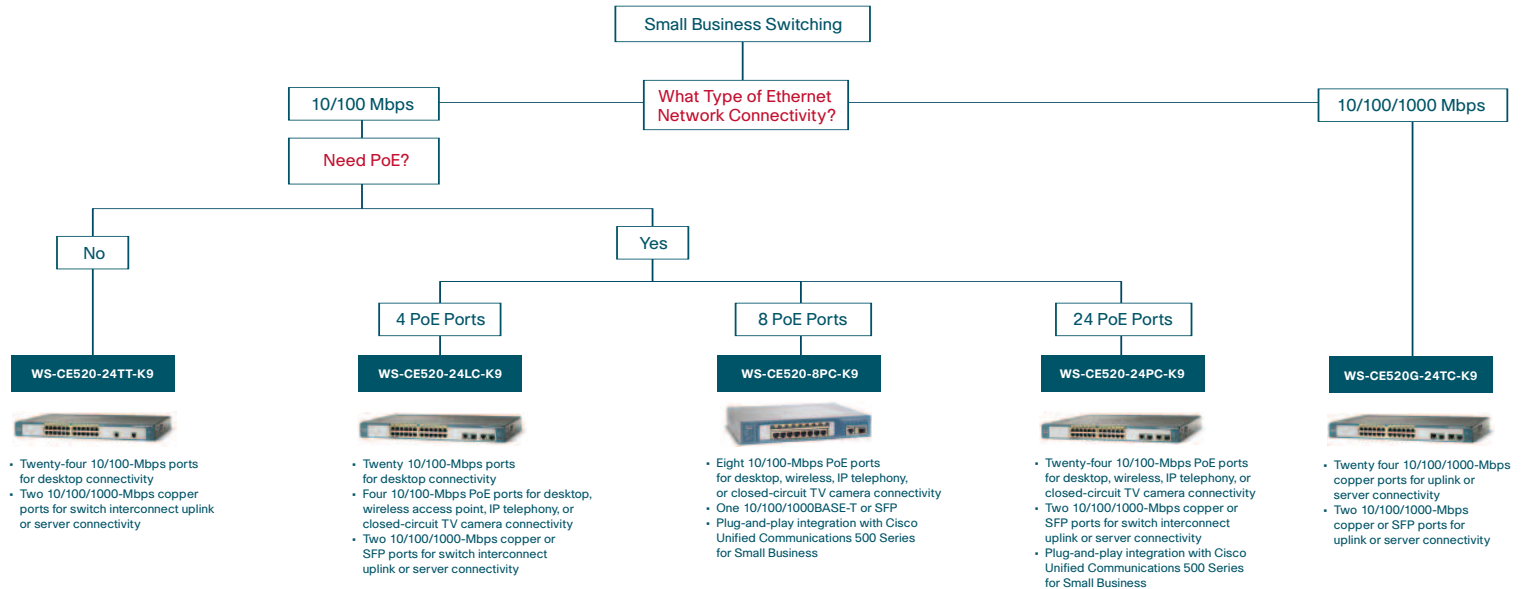
The **Cisco Secure Network Foundation** provides a flexible communications platform that serves as the cornerstone for a business's evolution and as the foundation for other networking solutions. The Cisco Secure Network Foundation delivers integrated security and maximizes reliability, helping ensure that data is protected and that applications function as promised. The Cisco Secure Network Foundation protects an organization's communications by identifying, preventing, and adapting to threats from both internal and external sources. With this protection, organizations are better prepared to take advantage of their network resources—improving business processes and cutting costs.

- The **Cisco Unified Communications Solution** is the industry's first integrated voice, video, data, and wireless communications system designed and priced for SMBs. This innovative systems approach to security, connectivity, and communications enables organizations to grow and optimize their businesses. The Cisco Unified Communications Solution is smart, simple, and secure. It provides an intelligent, resilient, adaptable infrastructure that enables companies to enhance the way they do business and build a competitive edge.

- **Cisco Mobility Solutions** enhance productivity by making information and applications more readily available to employees in the office, on the road, and at home. With Cisco wireless LAN (WLAN) solutions, companies can set up standalone or controller-based WLANs in buildings, branch offices, kiosks, or wherever they need connectivity. They can transmit data, voice, and video between buildings and provide site-to-site links that cost less than leased lines. Cisco wireless products deliver the same level of security, scalability, and manageability that a business has with a wired LAN.
- **Service and support through local partners** provides the technical expertise and customer services needed to successfully deploy and operate the network. No matter what phase an organization is in—preparation, planning, design, implementation, operation, or optimization—Cisco and its certified, localized partners have a specific support strategy that can help accelerate the success of technology deployments and provide ongoing support.

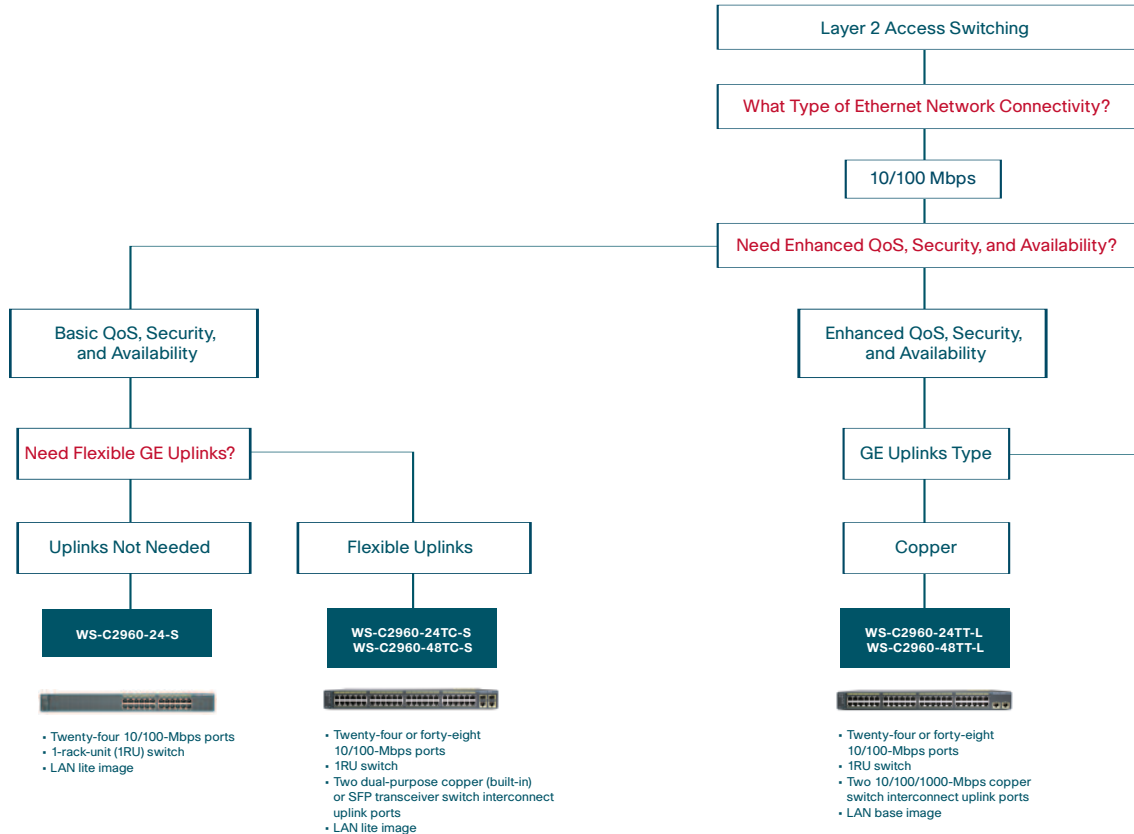
For more information, visit www.cisco.com/go/smbpartner.

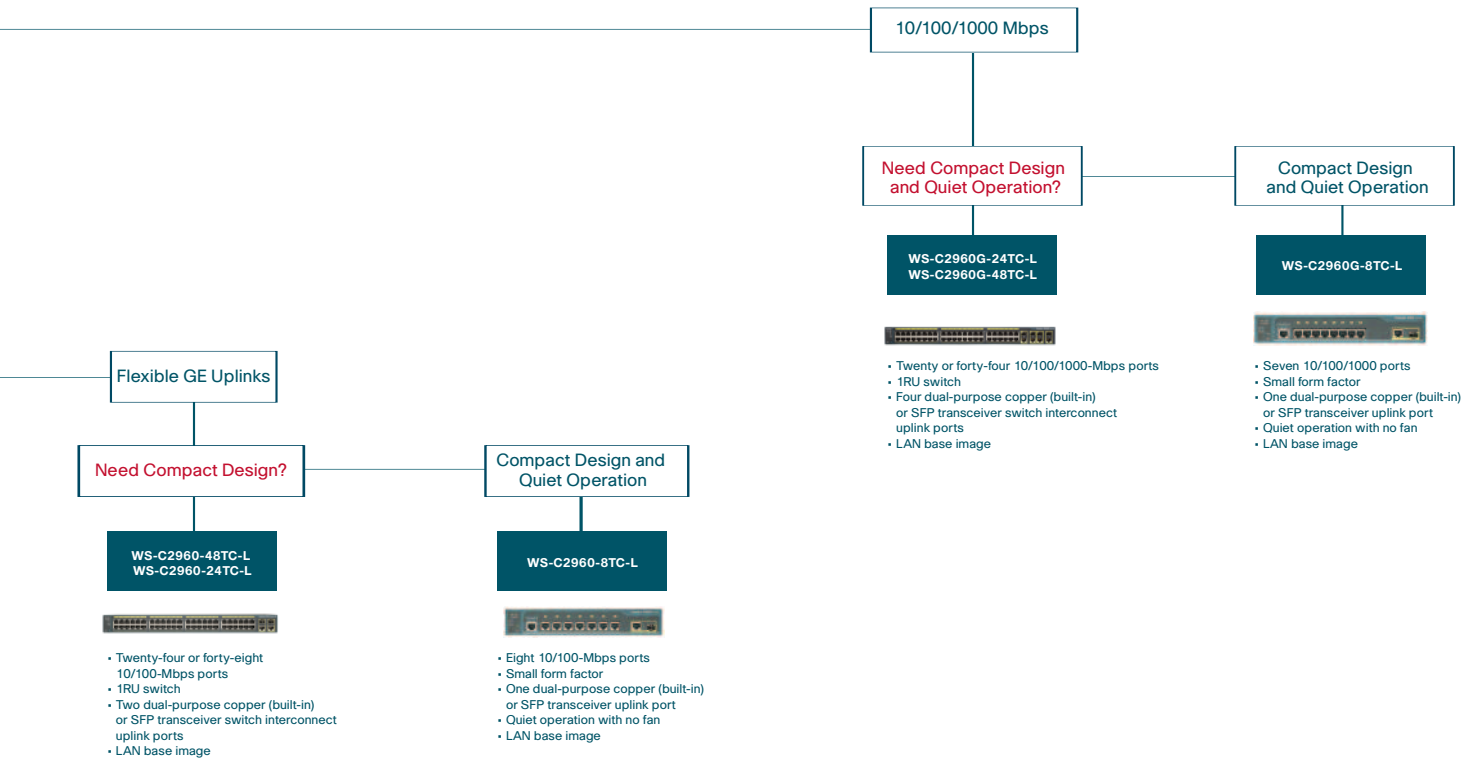
Cisco Catalyst Express 520 Series: Small Business Switches



NOTE: Cisco Catalyst Express 520 Series switches are managed by Cisco Configuration Assistant.

Cisco Catalyst Switches: Layer 2 Access Switches





10/100/1000 Mbps

Need Compact Design and Quiet Operation?

Compact Design and Quiet Operation

WS-C2960G-24TC-L
WS-C2960G-48TC-L

WS-C2960G-8TC-L



- Twenty or forty-four 10/100/1000-Mbps ports
- 1RU switch
- Four dual-purpose copper (built-in) or SFP transceiver switch interconnect uplink ports
- LAN base image

- Seven 10/100/1000 ports
- Small form factor
- One dual-purpose copper (built-in) or SFP transceiver uplink port
- Quiet operation with no fan
- LAN base image

Flexible GE Uplinks

Need Compact Design?

Compact Design and Quiet Operation

WS-C2960-48TC-L
WS-C2960-24TC-L

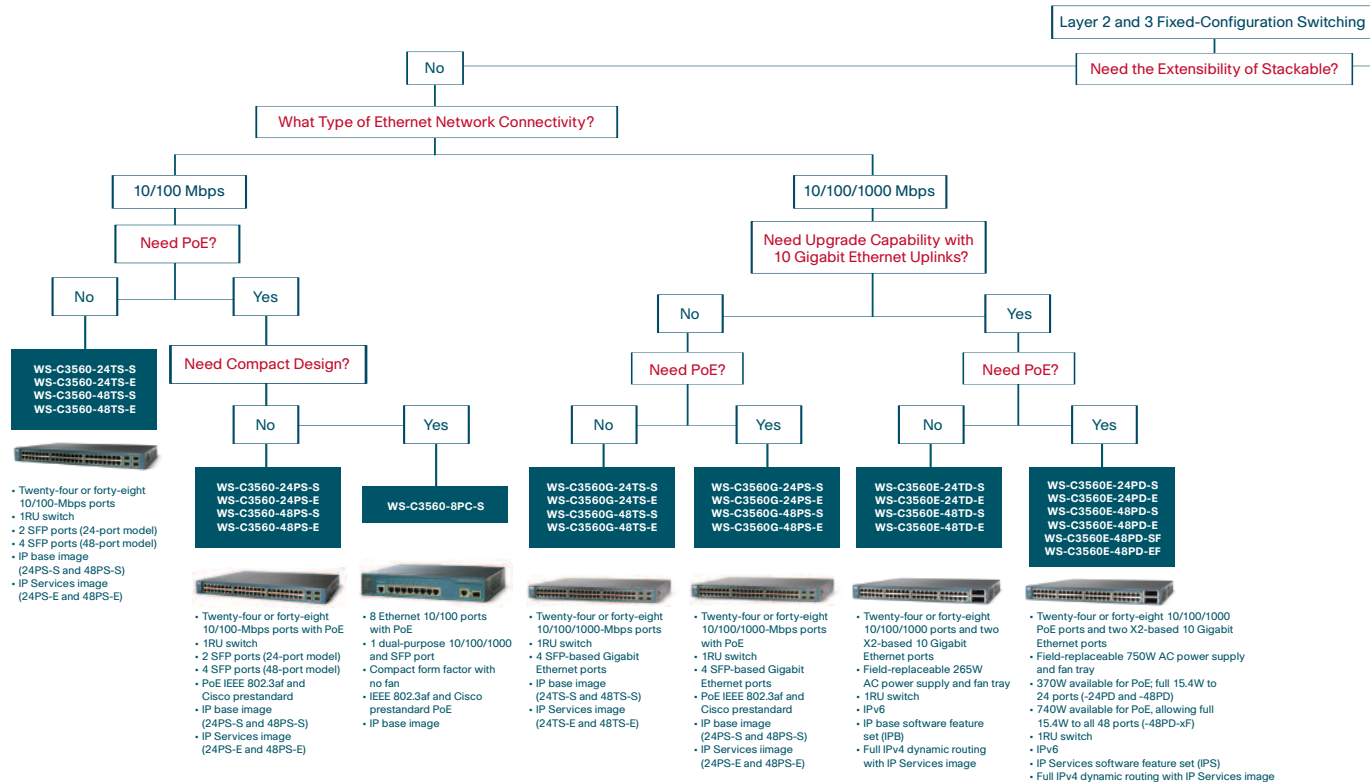
WS-C2960-8TC-L

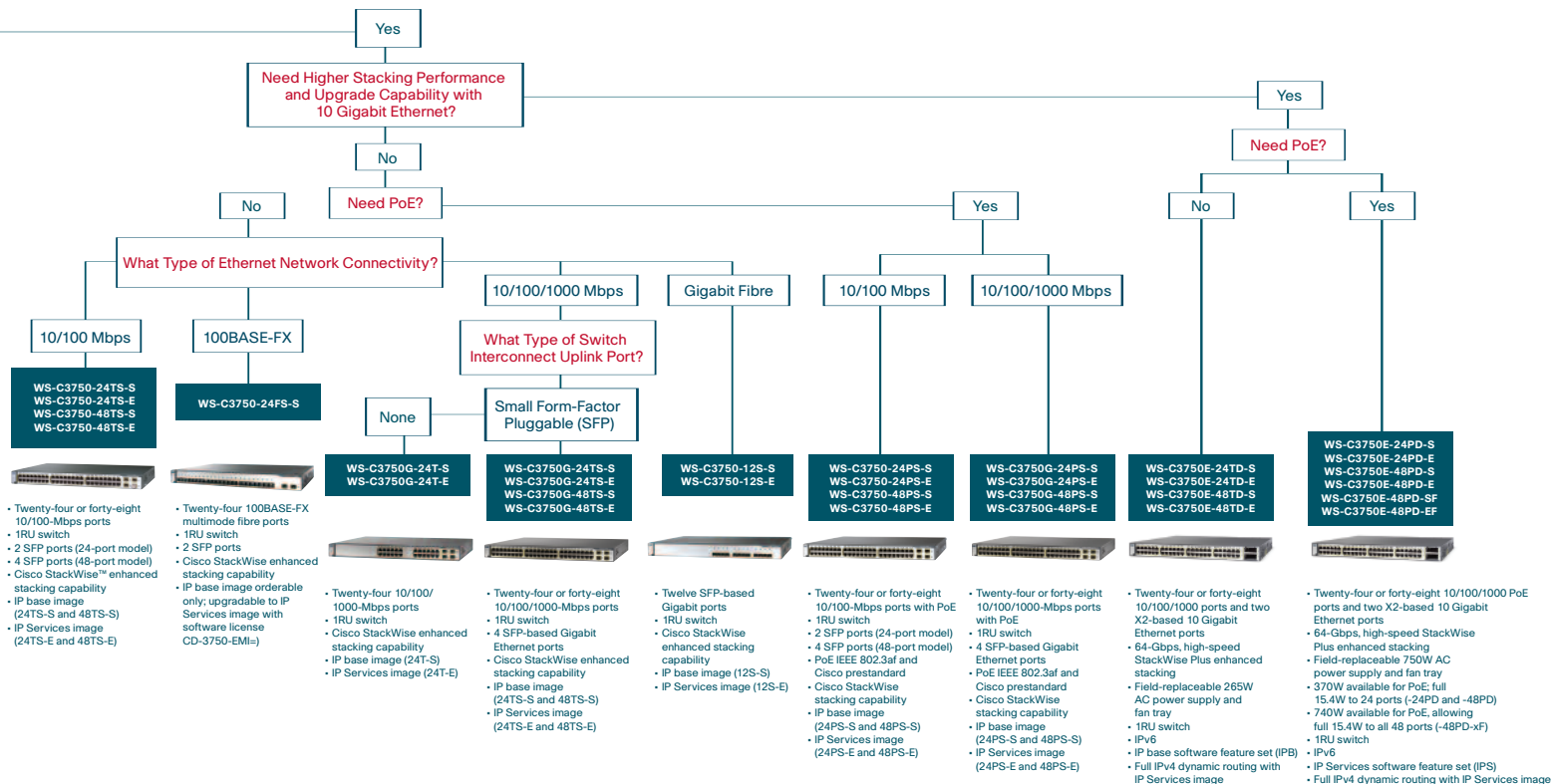


- Twenty-four or forty-eight 10/100-Mbps ports
- 1RU switch
- Two dual-purpose copper (built-in) or SFP transceiver switch interconnect uplink ports
- LAN base image

- Eight 10/100-Mbps ports
- Small form factor
- One dual-purpose copper (built-in) or SFP transceiver uplink port
- Quiet operation with no fan
- LAN base image

Cisco Catalyst Switches: Layer 2 and 3 Fixed-Configuration Switches





Cisco Catalyst Switches: Modular Configuration Switches

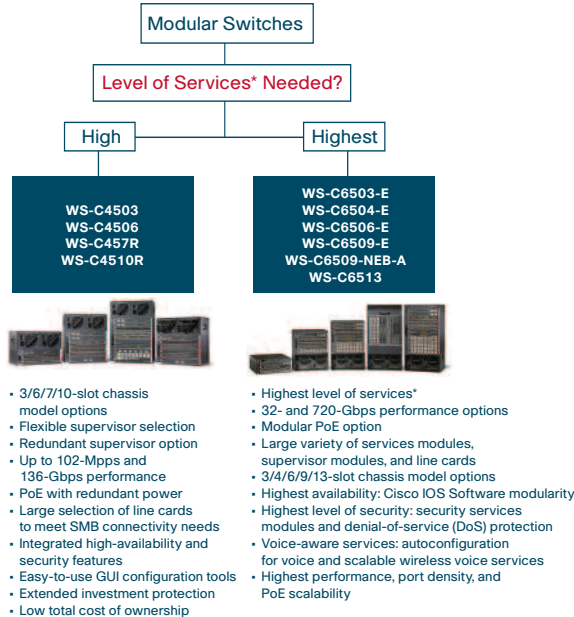
Flexible Cisco Catalyst 4500 Supervisor Engine Options

- **SUP V-10GE:** High-performance for Layers 2 to 4 with Gigabit Ethernet and 10 Gigabit Ethernet uplinks
- **SUP IV:** Medium-performance for Layers 2 to 4 with Gigabit Ethernet uplinks
- **SUP II +:** Medium-performance for Layer 2 with Gigabit Ethernet uplinks
- **SUP II-PLUS-TS:** Small deployment for Layer 2 with twelve 10/100/1000 PoE ports and 8 Gigabit Ethernet ports on the supervisor (Cisco Catalyst 4503 Switch chassis only)

Flexible Cisco Catalyst 4500 Line Card Options



- 24 and 48 port 10/100
- 24 and 48 port 10/100 with PoE
- 24 and 48 port 10/100/1000
- 24 and 48 port 10/100/1000 with PoE



Cisco Catalyst 6500 Series Switches Services Modules



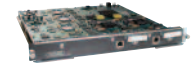
Firewall



Anomaly Detection and Guard



Content Switching and SSL



WLAN Controller



Application-Oriented Networking (AON)



Intrusion Detection System (IDS)



Network Analysis



IPsec VPN

***Services include** high-availability, security, integrated voice, integrated wireless, application networking, and manageability services.

Cisco Catalyst Switches: Management and Software Images

Cisco Network Assistant

- **Intuitive, centralized network management:** A PC-based network management application designed for SMB networks with up to 250 users. Cisco Network Assistant offers centralized network management and configuration capabilities. This application also features an intuitive GUI where users easily can apply common services such as configuration management, inventory reports, password synchronization, and drag-and-drop Cisco IOS Software upgrades across Cisco SMB-class switches, routers, and access points. Cisco Network Assistant is available at no cost and can be downloaded by registered Cisco.com users
- **Smartports Advisor:** Cisco Smartports technology provides a set of common configurations that help accurately enable network security and QoS functions for Cisco network devices. The Smartports Advisor helps Cisco Catalyst Express 500 Series Switches automatically discover connected Cisco devices and suggests appropriate Smartports roles. Unique to the Cisco Catalyst Express 500 Series are additional Smartports roles for third-party devices such as servers, and the capability to detect misconfigured ports.

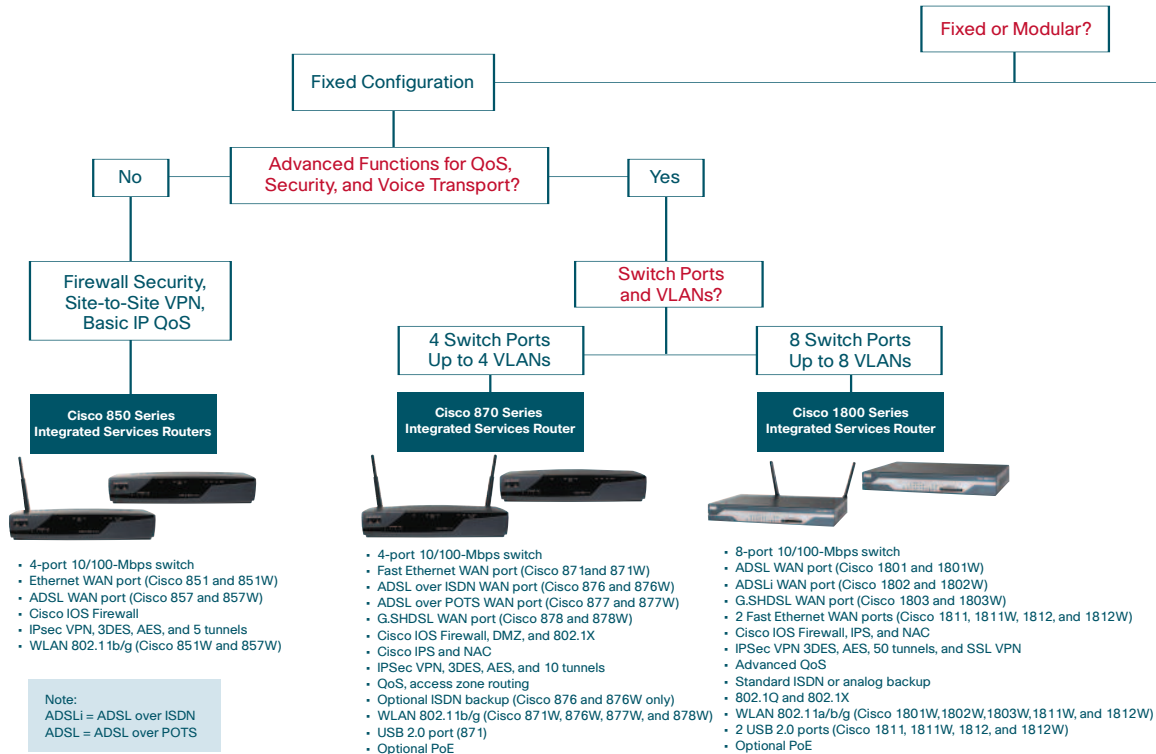


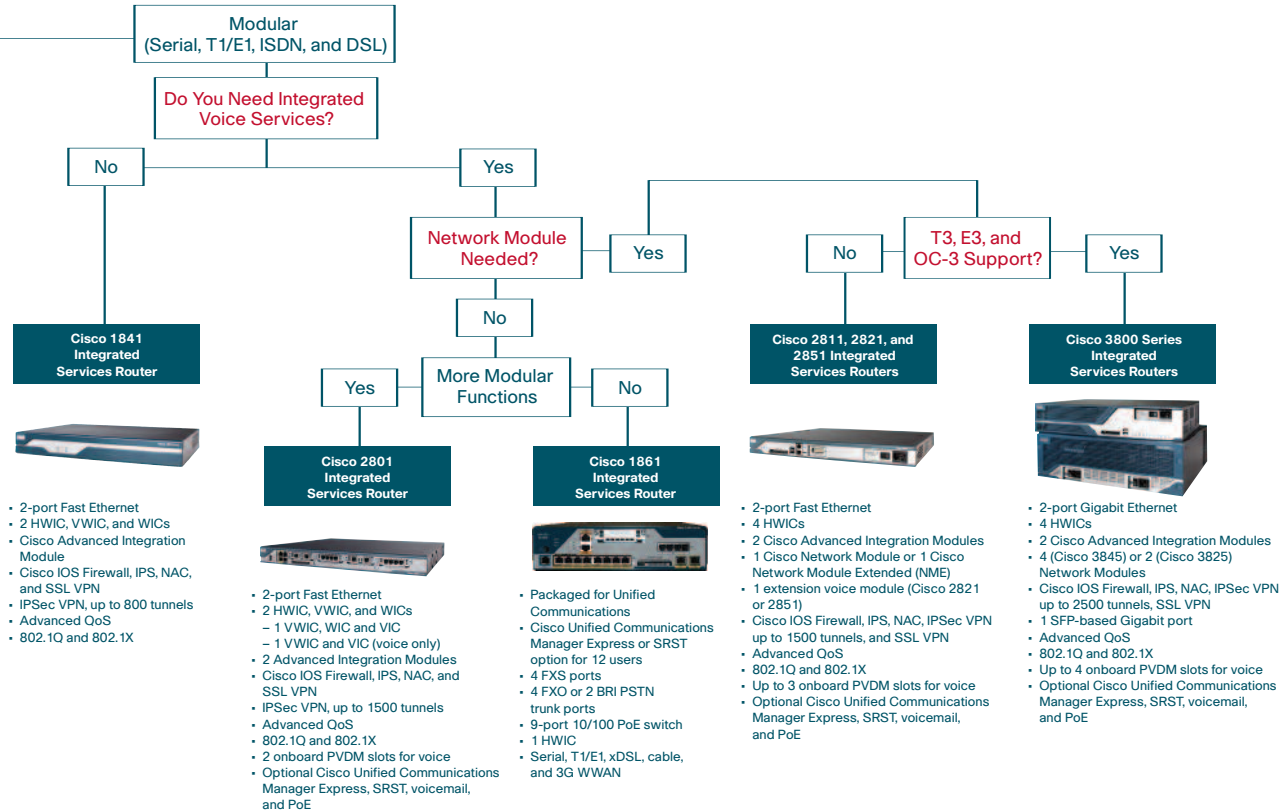
- **Troubleshooting Advisor:** Cisco Network Assistant simplifies troubleshooting even more by automatically identifying potential network problems—such as cabling problems and configuration errors—and documenting them with a graphical trend chart. The Troubleshooting Advisor provides users with an explanation of the problem and gives them the option to take corrective action with a single mouse click.

Cisco Catalyst Switch Software Image Descriptions

- **LAN Base Image for Cisco IOS® Software:** Provides the enhanced Layer 2 Cisco IOS Software image for switches based on the most recent hardware architecture
- **Standard Image for Cisco IOS Software:** Offers Cisco IOS Software functions for basic data, voice, and video services
- **Enhanced Image for Cisco IOS Software:** Offers the same standard services as the standard image, plus intelligent services such as rate limiting and security filtering for deployment at the network edge for networks with requirements for additional security, advanced QoS, and high availability
- **IP Base License:** Offers advanced QoS, rate-limiting, access control lists (ACLs), and basic routing; can be upgraded in the field to an Advanced IP Services License
- **IP Services License:** Provides a richer set of enterprise-class features, including advanced hardware-based IP Unicast and IP Multicast routing as well as policy-based Routing (PBR); can be upgraded in the field to an Advanced IP Services License
- **Advanced IP Services License:** Adds IPv6 routing to both IP Services and IP base images

Cisco Integrated Services Routers: Secure Routing





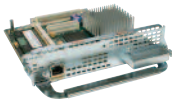
Cisco Routers: Wireless and Management

Wireless Module: HWIC 802.11
Access Point for Modular
Cisco Integrated Services Routers



- 802.11a/b/g and 802.11b/g models
- Removable antennas

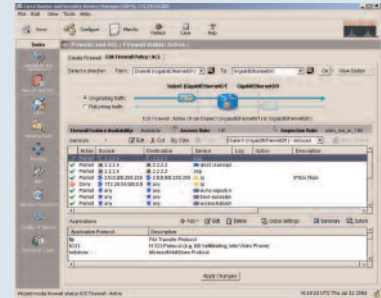
Cisco Wireless LAN Controller Module for
Cisco Integrated Services Routers



- Management of up to 12 Cisco Aironet® lightweight access points
- Centralized security policies
- Wireless intrusion prevention system (IPS) capabilities
- Award-winning radio frequency (RF) management
- QoS
- Layer 3 fast secure roaming for WLANs

Cisco Router and Security Device Manager

- Intuitive, Web-based interface for securely managing a single remote Cisco router
- Intelligent wizards enable quick deployment of network environment, security services, wireless access, and QoS policy features.
- Innovative security auditing capability to check and recommend changes to router configuration
- Simple monitoring and troubleshooting tools for day-to-day operations



Cisco Adaptive Security Appliances

How Many Users?

Up to 100 Users

Cisco ASA 5505



Ideal solution for small offices and businesses in an easy-to-deploy, cost-effective security appliance

1 desktop security appliance providing:

- Market-proven security and VPN capabilities
- 8 integrated 10/100 Fast Ethernet interfaces
- Combined IPSec and SSL VPN
- Up to 25 IPSec VPN peers
- Up to 25 SSL VPN license levels
- Up to 150-Mbps firewall throughput
- Up to 100-Mbps VPN throughput

Up to 500 users

Cisco ASA 5510



Ideal solution for SMB and remote and branch offices in an easy-to-deploy, cost-effective appliance

1RU security appliance providing:

- Market-proven security, VPN, content security, and IPS capabilities
- 3 or 5 integrated 10/100 Fast Ethernet interfaces
- Optional security services module for IPS and anti-X protection
- Combined IPSec and Web VPN
- Extensible VPN peer counts and high-availability capabilities
- Up to 300-Mbps firewall throughput
- Up to 150-Mbps firewall and IPS throughput
- Up to 170-Mbps VPN throughput

500 to 1000

Cisco ASA 5520



Ideal solution for medium-sized networks requiring high availability and Gigabit Ethernet interfaces

1RU security appliance providing:

- Market-proven security, VPN, content security, and IPS capabilities
- 1 Fast Ethernet and 4 Gigabit Ethernet integrated interfaces
- Optional security services module for IPS and anti-X protection
- Combined IPSec and Web VPN
- Extensible VPN peer counts
- Security contexts and virtual interfaces
- Up to 450-Mbps firewall throughput
- Up to 375-Mbps Firewall and IPS throughput
- Up to 225-Mbps VPN throughput

More than 1000

Cisco ASA 5540



Ideal solution for medium-sized and large networks and SMB managed service providers in a reliable and modular appliance

1RU security appliance providing:

- Market-proven security, VPN, content security, and IPS capabilities
- 1 Fast Ethernet and 4 Gigabit Ethernet integrated interfaces
- Optional security services module for IPS and anti-X protection
- Combined IPSec and Web VPN
- Extensible VPN peer counts
- Security contexts and virtual interfaces
- Up to 650-Mbps firewall throughput
- Up to 450-Mbps firewall and IPS throughput
- Up to 325-Mbps VPN throughput

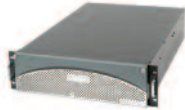


Cisco Adaptive Security Device Manager

- Intuitive, Web-based interface for securely managing a single remote Cisco PIX or ASA security appliance
- Web-based real-time monitoring of CPU and memory use, interface throughput, connections, and VPN tunnels.
- Full-featured wizards for initial firewall

Cisco Security Management: Cisco Security Monitoring, Analysis, and Response System and Cisco Access Control Server Express

Cisco Security Monitoring, Analysis, and Response System



Cisco Security Monitoring, Analysis, and Response System (Cisco Security MARS) is a high-performance, scalable appliance for threat management, monitoring, and mitigation that helps customers make better network security decisions. The appliance:

- Combines traditional security event monitoring with network intelligence, to deliver automated mitigation capabilities
- Empowers companies to quickly and confidently identify, manage, and eliminate network attacks, as well as maintain compliance
- Collects events from firewalls, VPN concentrators, host and network IPSs, and system logs and then correlates them with vulnerability assessment to detect anomalies
- Monitors security data from across the network's IDS and IPS, firewalls, routers, switches, Cisco Security Agent syslog, SNMP, and host event logs (Windows and UNIX)
- Analyzes data to rapidly locate known and unknown attacks
- Responds to an attack by reaching out and taking action on the network

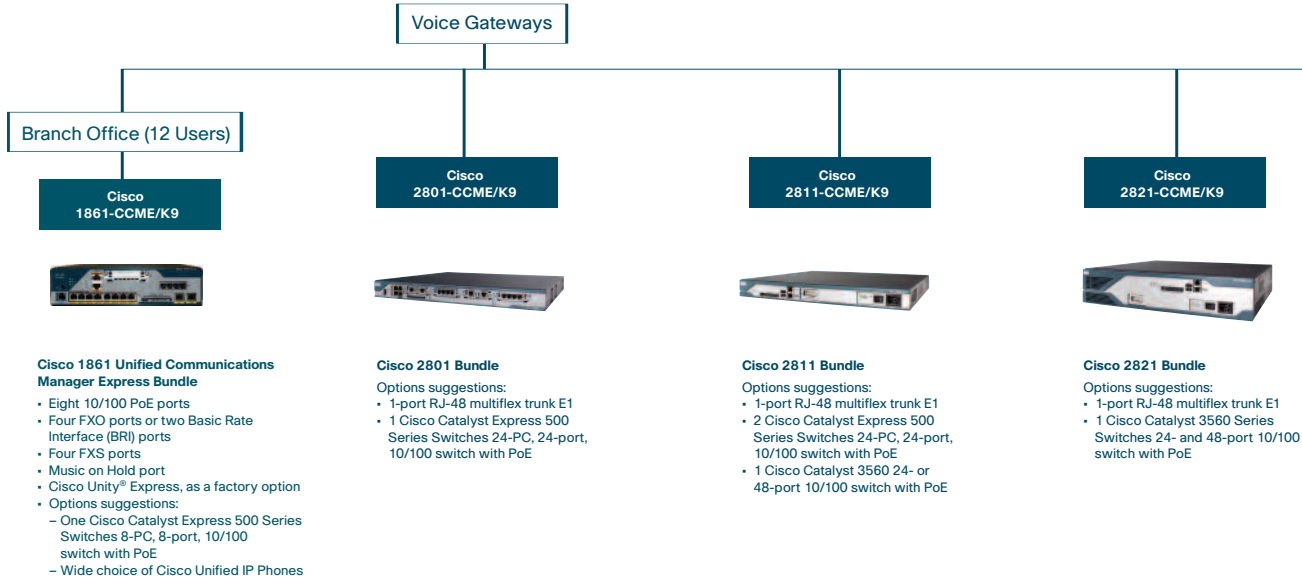
Cisco Access Control Server Express



Cisco Access Control Server (ACS) Express is the perfect SMB solution to verify users before allowing access to systems and networks.

- Targets SMB and branch offices
- Supports 350 active users and 50 devices
- Provides a simple-to-use GUI
- Enables easy policy management
- Provides authentication, authorization, and accounting (AAA) services
- Connects to Microsoft Active Directory
- Uses a Linux-based operating system

Cisco Unified Communications Solutions



Cisco
2851-CCME/K9



Cisco 2851 Bundle

- Options suggestions:
- 1-port RJ-48 multiflex trunk E1
 - 1 Cisco Catalyst 3560 Series Switches 24 and 48-port 10/100 switch with PoE or 1 Cisco Catalyst 3750 Metro Series Switches switch

Cisco
3825-CCME/K9



Cisco 3825 Bundle

- Options suggestions:
- 2-port RJ-48 multiflex trunk E1
 - 1 Cisco Catalyst 3560 Series Switches 24- and 48-port 10/100 switch with PoE or 1 Cisco Catalyst 3750 Metro Series Switches switch

Cisco
3845-CCME/K9



Cisco 3845 Bundle

- Options suggestions:
- 2-port RJ-48 multiflex trunk E1
 - 1-port RJ-48 multiflex trunk E1
 - 1 Cisco Catalyst 3560 Series Switches 24- and 48-port 10/100 switch with PoE or 1 Cisco Catalyst 3750 Metro Series Switches switch

Cisco Catalyst 6500 and 7600 Series
Communication Media Module



- T1/E1 gateway
- 24-port FXS module available
- Cisco Unified SRST available, supporting up to 480 IP phones
- Conferencing and transcoding

Selecting WAN and Voice Modules

- VIC-2E/M: 2-port E&M VIC
- VIC-2FXS: 2-port analog FXS VIC
- VIC-2FXO: 2-port analog FXO VIC
- VIC-2FXO-EU: 2-port analog FXO VIC (for Europe)
- VIC-2BRI-NT/TE: 2-port BRI VIC (NT and TE)
- VIC-2BRI-S/T-TE: 2-port BRI VIC (terminal)
- VWIC2-1MFT-E1: 1-port E1/PRI VWIC
- VWIC2-2MFT-E1: 2-port E1/PRI VWIC
- VIC2-2FXS: 2-port VIC (FXS)
- VIC2-2FXO: 2-port VIC (FXO: universal)
- VIC2-4FXO: 4-port VIC (FXO: universal)
- VIC2-2E/M: 2-port E&M VIC
- VIC2-2BRI-NT/TE: 2-port BRI VIC (NT and TE)
- 1-slot IP communications voice and fax network module (up to 4 channels of analog and BRI voice)
- 2-slot IP communications voice and fax network module (up to 8 channels of analog and BRI voice)
- 2-slot IP communications enhanced voice and fax network module (up to 24 channels of analog and BRI voice)

Cisco Unified Communications Solutions: Call Processing

Cisco Unified Communications Manager Express

Cisco Unified Communications Manager Express provides call processing for Cisco Unified IP Phones. Embedded in Cisco IOS Software, this solution enables the widely deployed portfolio of Cisco integrated services routers and multiservice access routers to deliver the telephony features that small or medium-sized offices need. With Cisco Unified Communications Manager Express, customers can scale IP telephony to a small or medium-sized site with a solution that is simple to deploy, administer, and maintain. The Cisco Unified Communications Manager Express solution is best suited for customers that are looking for a low-cost, reliable, feature-rich telephony solution for up to 240 users. Its many system and convergence features include:

- Paging
- Intercom
- Integration with Microsoft Customer Response Management (CRM)
- Survivability for Cisco Unified Communications Manager
- Session Initiation Protocol (SIP) line-side enhancements
- Cisco Unified IP Phone 7911, 7941, 7961, 7970, and 7971 SIP load support
- Cisco Unified IP Phone 7931 support

Some of the new features included with Cisco Communications Manager Express 4.2 include:

- Integration with Cisco Unified Contact Center Express supporting up to 50 agents
- Enhancements to SIP presence subscription status
- Extension mobility within the site

For added resiliency, businesses can use the Hot Standby Routing Protocol (HSRP) between two different Cisco Unified Communications Manager Express routers or use Cisco Unified Survivable Remote Site Telephony (SRST) on one of the routers.

IP Phones Supported per Router Platform

Router Platform	Number of IP Phones Supported
Cisco 1861	12
Cisco 2801	24
Cisco 2811	36
Cisco 2821	48
Cisco 2851	96
Cisco 3825	168
Cisco 3845	240

Cisco Unified Communications Manager

Cisco Unified Communications Manager is the software-based call-processing component of the Cisco Business Communications Solution for SMBs and enterprises. Cisco Unified Communications Manager extends telephony features and capabilities to packet telephony network devices such as IP phones, media processing devices, voice-over-IP (VoIP) gateways, and multimedia applications.

The Cisco Unified Communications Manager solution offers high resiliency and redundancy for mission-critical communications. Branch offices use Cisco Unified SRST, the industry-leading survivability feature in Cisco integrated services routers and multiservice access routers, to provide a subset of call processing capabilities to remote users in the event of a WAN failure. For centralized resiliency, customers can create a cluster of multiple Cisco Unified Communications Manager servers, which can be managed as a single system. A unique industry capability, Cisco Unified Communications Manager clustering aggregates the power of multiple, distributed Cisco Unified Communications Manager systems, enhancing the scalability and accessibility of the servers to phones, gateways, and applications.

Cisco Unified Communications Manager now provides a choice of operating systems: either a Windows-based server or the appliance model. The appliance comes with a single firmware image that includes both the underlying operating system and the Cisco Unified Communications Manager application. Access to the appliance is accomplished through a GUI. The latest release of Cisco Unified Communications Manager includes an option to purchase it as a bundled appliance with Cisco Unity Connection.

To enhance the security on the appliance, Cisco Security Agent comes preloaded; a host-based firewall has been added, along with IPSec connectivity between all cluster members.

Some of the new features of Cisco Unified Communications Manager are:

- Database and feature resiliency for loss of publisher
- Commercial features: Do Not Disturb (DND), intercom, and Message Waiting Indication (MWI) audio notification
- Secure conferencing
- Silent observing and monitor recording
- SIP licensing for third-party IP phones
- Support for the Cisco Unified IP Phone 7931
- Resource-Reservation Protocol (RSVP) agent capability

Cisco Unified Survivable Remote Site Telephony

Cisco offers a cost-effective, reliable solution for providing continuous unified communications services to branch offices using Cisco Unified SRST. A unique, industry-first capability embedded in Cisco IOS Software running on Cisco routers, Cisco Unified SRST provides feature-rich call processing redundancy for centralized Cisco Unified Communications Manager and Communications Manager Express deployments, using the existing network infrastructure. If the WAN link to the remote office fails and the connection to the Cisco Unified Communications Manager is lost, branch-office phones are automatically redirected to the Cisco Unified SRST branch router, which takes over and provides a core and critical subset of the functions provided by Cisco Unified Communications Manager, minimizing the effect on the business. After the disrupted WAN link is restored, the phones automatically reregister with the original Cisco Unified Communications Manager; no manual intervention is required.

If the router servicing Cisco Unified Communications Manager Express IP phones is interrupted, the Cisco Unified SRST router takes over and provides core and critical features until connectivity is restored. After the connection is restored, the phones automatically reregister with the Cisco Unified Communications Manager Express router.

Router Platform	Cisco Unified SRST Support
Cisco 2801	24 IP phones and 120 directory numbers
Cisco 2811	36 IP phones and 144 directory numbers
Cisco 2821	48 IP phones and 192 directory numbers
Cisco 2851	96 IP phones and 255 directory numbers
Cisco 3825	336 IP phones and 960 directory numbers
Cisco 3845	720 IP phones and 960 directory numbers

Cisco Unified Communications Solutions: Voicemail

Cisco Unity Express

Cisco Unity Express enables SMBs and enterprise branch offices to cost-effectively integrate voicemail and autoattendant services in Cisco routers for a lower total cost of ownership (TCO) and increased employee productivity. An essential component of the Cisco Unified Communications portfolio of products, Cisco Unity Express provides:

- Integrated voicemail; Internet Mail Access Protocol 4 (IMAP4) client-access support
- Scalability from 4 to 16 concurrent voicemail or autoattendant calls and 12 to 250 mailboxes
- Cisco Unified Communications Manager support
- Message notification
 - E-mail
 - Phone
 - Short Message Service (SMS)
 - E-page
 - Numeric page
- Deployment flexibility with Cisco Unified Communications Manager Express, Cisco Unified Communications Manager, Cisco Unity, and Cisco Unity Connection systems
- Interactive voice response (IVR) integration
- Unified client support
- Fax integration

- Live Record (Call Record)
- Capability for users to call back people who leave voicemails through automatic number identification (ANI) and calling line ID (CLID) with Live Reply
- Automated attendant enhancements

Available as a network module or advanced integration module, Cisco Unity Express is a simple addition to Cisco 2800 Series and 3800 Series routers.

Cisco Unity Connection

Cisco Unity Connection combines integrated messaging, speech recognition, and call routing rules into an easy-to-manage system for organizations with up to 3000 users.

Cisco Unity Connection transparently integrates messaging and speech components with the data network to provide continuous global access to calls and messages. These advanced, convergence-based communication services help you use voice commands to place calls or listen to messages in hands-free mode and check voice messages from your desktop, either through an integrated e-mail inbox or from a Web browser. Cisco Unity Connection also features robust automated-attendant functions that include intelligent routing and easily customizable call-screening and message-notification options.

Built on a platform that is easy to install and maintain, Cisco Unity Connection provides an intuitive Web browser-based system

administration interface that dramatically simplifies the installation, support, and ongoing management of your system, ultimately lowering your organization's TCO.

New enhancements include:

- Integration with Cisco Unified MeetingPlace® and MeetingPlace Express; you can now check your Cisco Unified MeetingPlace and MeetingPlace Express meeting through Cisco Unity Connection
- Integration with Microsoft Outlook Calendar
- Video integration
- Support for voicemail networking through other Cisco Unity Connection servers, Cisco Unity, and Cisco Unity Express

Cisco Unity

The Cisco Unity platform is a powerful unified communications solution that provides advanced, convergence-based communications services such as voicemail, integrated messaging, and unified messaging. Users can listen to e-mail over the telephone, check voice messages from the Internet, and when the Cisco Unity solution is integrated with a Cisco fax server (or a supported third-party fax server), forward faxes to any local fax machine, increasing organizational productivity and improving customer service and responsiveness. Available for Lotus Domino and Microsoft Exchange environments, the Cisco Unity solution helps customers improve communications, boost productivity, and enhance customer service capabilities across their organizations. System features include:

- Secure messaging so only the person that is supposed to listen to a message does
- Microsoft Exchange and Outlook 2007 support

Some of the Cisco Unity features for end users include the following:

- Customize your message-notification options, manage personal greetings, and change passwords with Cisco Unity Assistant (the Cisco Personal Communications Assistant Web browser-based personal administrator).
- Record up to five personal greetings (alternate, busy, internal, off-hours, or standard).
- Set an expiration date for any personal greeting.
- Manage an alternate greeting, require callers to listen to your full greeting, or notify users that a greeting is available.
- Provide message notification for new messages through devices such as SMTP text, pagers, and phone destinations.
- When you lose a call, you can use interrupted session recovery to retrieve it.
- Set up IP phone integrations that allow users to:
 - View e-mail on the IP phone so they can listen to what they need now
 - Listen to a message being recorded and pick the call up if they want it

Cisco Unified Communications Solutions: Conferencing

Cisco Unified MeetingPlace Express

Cisco Unified MeetingPlace Express promotes communication and collaboration by helping people meet from anyplace, at anytime, and with anyone. Organizations can expand their market reach, improve operational effectiveness, and speed decisions by integrating virtual meetings into everyday communications. With just a phone and a Web browser, users can collaborate with co-workers, demonstrate products and services to customers, and deliver compelling presentations. Cisco Unified MeetingPlace Express helps enable highly productive virtual meetings by integrating meeting management and control capabilities directly into Web and Cisco Unified IP Phone interfaces.

Some new enhancements to Cisco Unified MeetingPlace Express include:

- Video conferencing
 - Scheduled and reservationless: H.323, SIP Integrated with voice, and Web conferencing
- Enhanced security
 - Segment internal and external Web conferences
 - Multiserver (internal and DMZ) server deployment option
 - Cisco Security Agent built in
- G.729a native support

- Enhanced mobility and ease of use
 - Automated phone login and attendant
 - Speech access from Cisco Unity Connection 2.0
- Windows Vista support and Outlook 2007 support

Cisco Unified MeetingPlace

Cisco Unified MeetingPlace is a complete rich-media conferencing solution that integrates voice, video, and Web conferencing capabilities. Cisco Unified MeetingPlace is deployed on the network, behind the firewall. This solution integrates directly with an organization's private voice and data networks and enterprise applications, providing significant cost savings, high security, and an enhanced user experience.

Cisco Unified MeetingPlace delivers a superior user experience by providing intuitive interfaces that make setting up, attending, and managing meetings simple and straightforward. The feature-rich voice, video, and Web conferencing capabilities enable a range of meeting applications, from highly collaborative meetings to training sessions and presentations.

Cisco Unified MeetingPlace takes advantage of existing corporate voice (IP and circuit-switched) and data networks to greatly reduce or eliminate transport toll charges and recurring conferencing charges. On-network deployment results in a more secure meeting environment that allows organizations to isolate their confidential meetings and content behind the firewall for secure data network transport while providing the flexibility to meet with external parties.

Some of the enhancements to Cisco Unified MeetingPlace include:

- Adobe Flash-based Web conferencing
 - Dramatically improved user experience
 - Broader application support
 - Integration with Adobe Acrobat Connect Pro (formerly Macromedia Breeze)
- New integrations
 - Impromptu Web conferencing from Cisco Unified Personal Communicator
 - Cisco Unified MeetingPlace for Microsoft Office Communicator and Microsoft Live Communication Server
 - New Cisco Unified MeetingPlace API
- Cisco Security Agent support

Cisco Unified Communications Solutions: Contact Center

Cisco Unified Contact Center Express

Cisco Unified Contact Center Express meets the needs of individual departments, enterprise branches, and small to medium-sized companies that are planning to deploy an entry-level or midmarket contact center solution. Designed for formal and informal contact centers, Cisco Unified Contact Center Express delivers sophisticated call routing, contact management, and administration features. Cisco Unified Contact Center Express offers ease of installation, configuration, and application hosting.

Cisco Unified Contact Center Express enhances the efficiency of any contact center organization by simplifying business application integration, facilitating agent administration, increasing agent flexibility, and providing efficiency gains in network hosting. These features help reduce business costs and improve your customer response for your contact center. This single-server, integrated "contact center in a box" gives you independence in agent location, improves agent scalability, and provides powerful automatic call distributor (ACD) features, such as conditional routing, call-in-queue and expected-wait-time messages, enterprise data displays, real-time data, and historical reporting together with integrated IVR services. Cisco Unified Contact Center Express provides true integration of ACD and IVR functions and offers a single, integrated service creation environment.

New features have been added to Cisco Unified Contact Center Express to make it even more efficient for SMBs. These new features include:

- E-mail integration into the contact center through the E-mail Integration Manager
- Capability to share Web pages and to handle multiple Web chat session through the Web Integration Manager
- Additional features for the Cisco Agent and Supervisor desktops to make them easier to use

Cisco Unified Contact Center Enterprise Edition

Cisco Unified Contact Center Enterprise Edition uses an IP infrastructure to deliver skills-based contact routing, voice self-service, computer telephony integration (CTI), and multichannel contact management. By combining multichannel ACD functions with IP telephony in a unified solution, Cisco Unified Contact Center Enterprise Edition helps your company rapidly deploy a distributed VoIP contact center infrastructure.

Cisco Unified Contact Center Enterprise Edition segments customers, monitors resource availability, and delivers each contact to the most appropriate resource anywhere in the enterprise. The software profiles each customer contact using related data such as dialed number and calling line ID, caller-entered digits, data submitted on a Web form, and information obtained from a customer database lookup. Simultaneously, the system monitors the resources available in the contact center to meet customer needs, including agent skills and availability, IVR status, and queue lengths.

This combination of customer and contact center data is processed through user-defined routing scripts that graphically reflect your company's business rules, enabling Cisco Unified Contact Center Enterprise Edition to route each contact to the right place. Wherever an agent is based, the system delivers a rich set of call event and customer-provided data to the targeted desktop as a contact arrives, personalizing service and increasing efficiency. Throughout the process, distributed fault tolerance helps ensure uninterrupted operation.

Cisco Unified Communications Solutions: Applications

Cisco Emergency Responder

Cisco Emergency Responder enhances emergency calling from Cisco Unified Communications Manager. It helps ensure that Cisco Unified Communications Manager sends emergency calls to the appropriate public safety answering point (PSAP) for the caller's location, and that the PSAP can identify the caller's location and, if necessary, return the call. Cisco Emergency Responder can also notify customer security personnel of an emergency call in progress and the caller's location.

Cisco Emergency Responder helps Cisco Unified Communications Manager customers comply more effectively with their legal or regulatory obligations and reduce their risk of liability related to emergency calls.

Cisco Emergency Responder features include the following:

- Automatically tracks IP phone location
- Provides emergency call routing instructions to Cisco Unified Communications Manager
- Identifies caller location to local exchange carriers (LECs) and PSAPs
- Eliminates administration for IP phone relocation
- Supports emergency callback
- Alerts customer security personnel to emergency calls in progress
- Logs emergency calls and location record changes

Cisco Fax Server

Cisco Fax Server is an easy-to-use, easy-to-manage fax and e-document delivery solution that helps companies integrate voice, fax, data, and desktop applications. Companies using Cisco Fax Server can efficiently and securely send and receive documents through fax, e-mail, print devices, and the Internet.

Cisco Fax Server increases employee productivity by automating fax delivery of user-created documents; reduces costs by eliminating manual faxing, paper, phone lines, and fax machines; and improves customer service by providing secure, confirmed, and immediate document delivery.

Cisco Unified CallConnector for Microsoft Dynamics CRM

Cisco Unified CallConnector for Microsoft Dynamics Customer Relationship Management (CRM) integrates the Cisco Business Communications Solution with the Microsoft Business Solution CRM application to provide everyone in an SMB with an easy-to-use and more complete CRM solution. Cisco Unified CallConnector integrates the Cisco Business Communications Solution products with Microsoft CRM at the desktop, without requiring additional hardware. In addition, the Microsoft CRM client uses Microsoft Outlook or Internet Explorer as the primary client for managing tasks and contacts.

Cisco Unified CallConnector for Microsoft Dynamics CRM is a highly configurable client-server-based application that supports the following primary features in Cisco Unified Communications environments that use Microsoft CRM:

- Automatic detection and screen-pop searches of the CRM database for both incoming and outgoing phone calls
- Automatic creation of phone call activity records for incoming and outgoing calls with call duration tracking
- Click-to-dial from the Microsoft CRM user interface
- Multisite configuration capabilities with geographically correct dialing configurations per user
- Easy-to-use search system that allows the user to search by name or phone number and have access to contact records and associated support cases
- Integration with Cisco Unified Communications Manager, Cisco Unified Communications Manager Express, and Cisco Unified Contact Center Express
- No need for an additional server

These features allow Microsoft CRM users to personalize their interaction with callers, improving customer service. It also helps enforce administrative policy for the creation of phone call activity records.

Cisco Unified CallConnector for Salesforce.com

Cisco Unified CallConnector for Salesforce.com integrates the Cisco Unified Communications system for SMBs with Salesforce.com's on-demand CRM services. The result is an easy-to-use, more complete on-demand (or hosted) CRM solution that helps you increase productivity and improve customer satisfaction. Salesforce's on-demand CRM solution promotes user adoption with quick and easy deployment, transparent periodic upgrades, and secure access to customer information from anywhere.

Salesforce.com also integrates with popular Microsoft applications such as Outlook, Word, and Excel. Depending on your requirements, the Cisco Unified Communications and Salesforce.com CRM solution components can include:

- **Salesforce.com Sales Force Automation (SFA):** Helps companies increase sales productivity, visibility, and revenue with easy-to-deploy applications for effectively managing salespeople and processes
- **Cisco Unified IP Phones:** Combine the power of data networks with the convenience and ease-of-use of telephones
- **Cisco Unified Communications Manager and Communications Manager Express:** Enable quick and efficient feature-rich call processing in midmarket companies and branch offices

Here are some of the features that benefit customers through integration of Cisco Unified communications and Salesforce.com:

- For inbound customer calls to your Cisco Unified IP phones, employees can immediately view customers' recent activity history, outstanding follow-up tasks, sales opportunities, service level agreements, and more with just a few clicks.
- Outbound calls can easily be placed using click-to-dial from the Salesforce.com user interface, or directly from the Cisco Unified IP Phone. Regardless of how a call is initiated, calls are automatically tracked and logged with the customer record in Salesforce.com.
- Home-based workers and remote sales teams using Cisco Unified IP Phones and an Internet-connected PC have access to the same integrated telephony salesforce.com tools as those working in the main office.

Cisco Unified CallConnector for Microsoft Windows

Cisco Unified CallConnector for Microsoft Windows delivers a new way to handle the everyday task of communicating with others within the business or with customers and vendors. As a fully integrated communications management solution with presence (indication of the availability of a current user), the application is easy to use and can increase productivity when used consistently.

Cisco Unified CallConnector for Microsoft Windows is a suite of three Cisco Unified CallConnector solutions:

- Cisco Unified CallConnector Personal Edition

- Provides call control for Cisco Unified Communications Manager Express customers
- Cisco Unified CallConnector Server Edition
 - Adds presence and instant messaging features
- Cisco Unified CallConnector Mobility
 - Adds Single Number Reach (SNR), through which calls are directed to any phone, including mobile phones, based on the user's current location and availability

Cisco Unified CallConnector Personal Edition is not just another application for the Windows PC; it is embedded in business applications such as Microsoft Outlook and Internet Explorer. Cisco Unified CallConnector offers the following features:

- Simple-to-use toolbar within Microsoft Outlook and Internet Explorer for dialing numbers and controlling calls
- All user contacts (personal, corporate, and Outlook) aggregated for quick dialing or to start a new e-mail or instant message to the contact
- Inbound screen pop (as in Microsoft Outlook e-mail) with CLID and name from Outlook with option to answer or reject call

Cisco Unified CallConnector Server Edition provides the same features as Cisco Unified CallConnector Personal Edition plus dynamic presence, showing the availability, location, phone status (busy or idle), and optional custom message to fellow workers; other features include the following:

- Uses the same toolbar in Microsoft Outlook and Internet Explorer
- Easy to deploy, by sending an e-mail message with an installation link to all users

- Includes Quick Message instant messaging service
- Allows operator or administrator access to change users' status

Cisco Unified CallConnector Mobility Edition includes all the Cisco Unified CallConnector Server Edition features plus it adds rules-based call routing and SNR; other features include the following:

- Uses the same toolbar in Microsoft Outlook and Internet Explorer
- Can route calls to a mobile phone or home phone when the user is away from the office
- Can bridge calls, even with a mobile phone; a single press of a button switches from the mobile phone back to the IP phone
- Returns calls routed to a mobile phone or home phone that are not answered to Cisco Unity Express voicemail, giving users a single mailbox

Cisco Unified CallConnector for Microsoft Windows was especially designed for SMB and branch-office users; it is supported by Cisco Unified Communications Manager Express 4.0 and higher.

Cisco Unified Presence

Cisco Unified Presence offers an environment to enable next-generation services and features. This environment has been created to enable differentiated services for Cisco Business Communications Solution users by providing unique user experiences and application connectivity.

Cisco Unified Presence services allow customers to use SIP to deploy differentiated services in their business communications environment.

SIP is attractive as a signaling standard because it can connect and control communications sessions between applications, independent of media type or the function performed by the end applications. It provides the methods to connect, signal, and control sessions. SIP is quite different from a functionally based signaling protocol, such as Q.SIG, which is used not only to establish sessions, but also to define the specific features those sessions can support. The distinction is important; it greatly affects interoperability and flexibility. SIP is a peer-to-peer protocol, and the intelligence involved in SIP-enabled applications is distributed to endpoints and other components, not centralized in a single call-control component. New features can be added without upgrading infrastructure components such as proxy servers, and developers do not need intimate knowledge of the SIP infrastructure to write SIP-enabled applications.

Support for new clients and applications has been added to Cisco Unified Presence to make deployment easier for your organization.

- Clients
 - Cisco Unified Personal Communicator 1.2
 - Cisco IP Phone Messenger
 - IBM Sametime Communicator 75.1
 - Microsoft Office Communicator 2005 (1.0) or 2007 (2.0)
- Application integration
 - Microsoft Exchange 2003
 - Microsoft Live Communications Server 2005
 - IBM Lotus Sametime Server 75.1

Cisco Unified Communications Solutions: Voice Management

Cisco Unified Operations Manager

Cisco Unified Operations Manager 1.1 is part of the Cisco Unified Communications Management Suite. It provides a real-time, service-level view of the entire Cisco Unified Communications system and presents the current operating status of each element. It continuously monitors the current operating status of elements such as Cisco Unified Communications Manager, Cisco Unified Communications Manager Express, Cisco Unity, Cisco Unity Express, Cisco Unified Contact Center Enterprise, Cisco Unified Contact Center Express, and Cisco Unified MeetingPlace Express, as well as Cisco gateways, routers, switches, and IP phones, and provides an integrated set of diagnostic capabilities for faster trouble isolation and resolution.

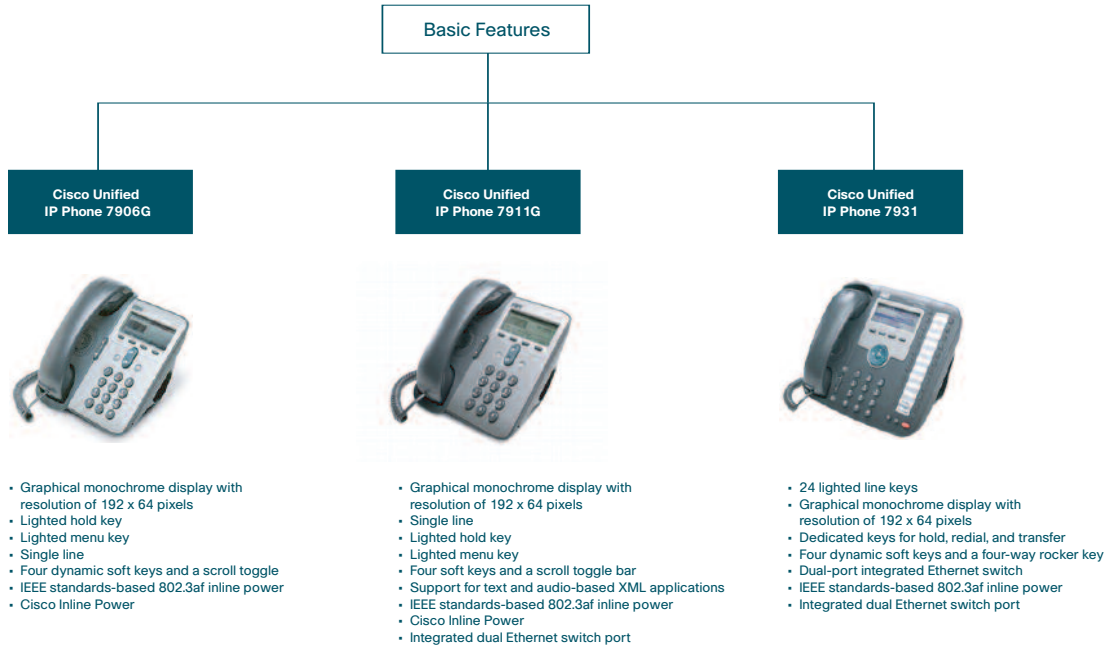
Cisco Unified Service Monitor

Cisco Unified Service Monitor 1.0 evaluates and provides quality-of-voice metrics for active IP telephony calls in a monitored network. It is a component of the CiscoWorks IP Communications management solution that provides real-time management information and diagnostic tools to help ensure an efficient deployment and subscriber satisfaction.

Features and benefits include the following:

- Real-time voice quality monitoring
- Real-time voice quality alerts
- Ease of installation and use
- Scalability and redundancy

Cisco Unified IP Phones



Advanced Features

Cisco Unified
IP Phone 7940G



- Ideal for desktop office use
- Black-and-white graphic display with two fixed lines of characters
- Four dynamic soft keys
- Four configurable keys
- Integrated external headset socket
- Full-duplex speakerphone
- Integrated dual Ethernet switch port

Cisco Unified
IP Phone 7941G



- High-resolution black-and-white graphic display
- Four dynamic soft keys
- Four configurable keys
- Integrated external headset socket
- Full-duplex speakerphone
- Integrated dual Ethernet switch port
- IEEE standards-based 802.3af inline power
- Cisco Inline Power
- Double-byte and Unicode characters
- Lighted line keys

Cisco Unified
IP Phone 7941G-GE



- 10/100/1000BASE-T Ethernet
- High-resolution black-and-white graphic display
- Four dynamic soft keys
- Four configurable keys
- Integrated external headset socket
- Full-duplex speakerphone
- Integrated dual Ethernet switch port
- IEEE standards-based 802.3af inline power
- Cisco Inline Power
- Double-byte and Unicode characters
- Lighted line keys

Cisco Unified
IP Phone 7960G



- Ideal for desktop office use
- Black-and-white graphic display with two fixed lines of characters
- Four dynamic soft keys
- Six configurable keys
- Integrated external headset socket
- Full-duplex speakerphone
- Integrated dual Ethernet switch port

Cisco Unified
IP Phone 7961G



- High-resolution black-and-white graphic display
- Four dynamic soft keys
- Six configurable keys
- Integrated external headset socket
- Full-duplex speakerphone
- Integrated dual Ethernet switch port
- IEEE standards-based 802.3af inline power
- Double-byte and Unicode characters
- Lighted line keys

Cisco Unified
IP Phone 7961G-GE



- 10/100/1000BASE-T Ethernet
- High-resolution black-and-white graphic display
- Four dynamic soft keys
- Six configurable keys
- Integrated external headset socket
- Full-duplex speakerphone
- Integrated dual Ethernet switch port
- IEEE standards-based 802.3af inline power
- Cisco Inline Power
- Double-byte and Unicode characters
- Lighted line keys

Cisco Unified
IP Phone 7970G



- Eight programmable keys
- 320 x 234-pixel touchscreen display
- Five soft keys
- Advanced XML support
- IEEE 802.3af inline power support
- Capability to connect external microphone and speakers
- Integrated dual Ethernet switch port

Cisco Unified
IP Phone 7971G-GE



- 10/100/1000BASE-T Ethernet
- Eight programmable keys
- 320 x 234-pixel touchscreen display
- Five soft keys
- Advanced XML support
- IEEE 802.3af inline power support
- Capability to connect external microphone and speakers
- Integrated dual Ethernet Gigabit switch port

Cisco Wireless
IP Phone 7921G



- 2 in. (5 cm) color display with 176 x 220-pixel resolution
- Dedicated buttons: volume, mute, and push-to-talk (PTT)
- PTT support through XML application
- Two soft keys
- Speakerphone
- Diversity antenna (5-GHz band only)
- Separate ringer and speaker
- Louder ring volume
- Vibrate alert
- Backlit keypad and display
- Headset connector; 2.5 mm (4-conductor tri-band)
- USB 1.1 connector

Cisco Unified IP
Conference Station 7936



- Equipped with three microphones for better space coverage
- Full-duplex speakerphone
- Three dynamic soft keys
- Support for three external directional microphones

Cisco Unified IP
Expansion Module 7914



- Attendant console station to be used in conjunction with Cisco Unified IP Phones 796XG/G-GE and 797XG/G-GE
- Capability to monitor up to 34 extensions

Cisco Unified
IP Phone 7985



- High-resolution video display
- XML application support
- Five buttons to control video features
- Integrated external headset socket
- Full-duplex speakerphone
- Integrated dual Ethernet switch port
- IEEE standards-based 802.3af inline power

Cisco Unified
Video Advantage



- 640 x 480 VGA sensor for improved video quality
- Support for Cisco Unified IP Phones and IP Communicator
- Camera on and off
- H263 video codec; 128-kbps to 1.5-Mbps bit rate
- USB 2.0-compliant interface with 6-foot cable

Cisco
IP Communicator



- Five dynamic soft keys
- Eight configurable line keys
- Headset and speaker modes
- Audio tuning wizard
- Echo suppression and noise cancellation
- Automated support for most VPN clients
- Drag-and-drop dialing
- Copy-and-paste dialing
- Alphanumeric translation

Cisco Unified
Personal Communicator



- Voice and video calls, voicemail playback, document sharing, and integrated directories
- Capability to view real-time availability of other Cisco Unified Personal Communicator users
- Capability to dial from the contact list
- Instant messaging
- Microsoft Outlook toolbar
- Integration with Cisco Unified MeetingPlace, MeetingPlace Express and MeetingPlace Express VT for voice, video, and Web conferencing
- Integrated voicemail with Cisco Unity 4.2 and 5.0
- Support for Microsoft Windows Vista

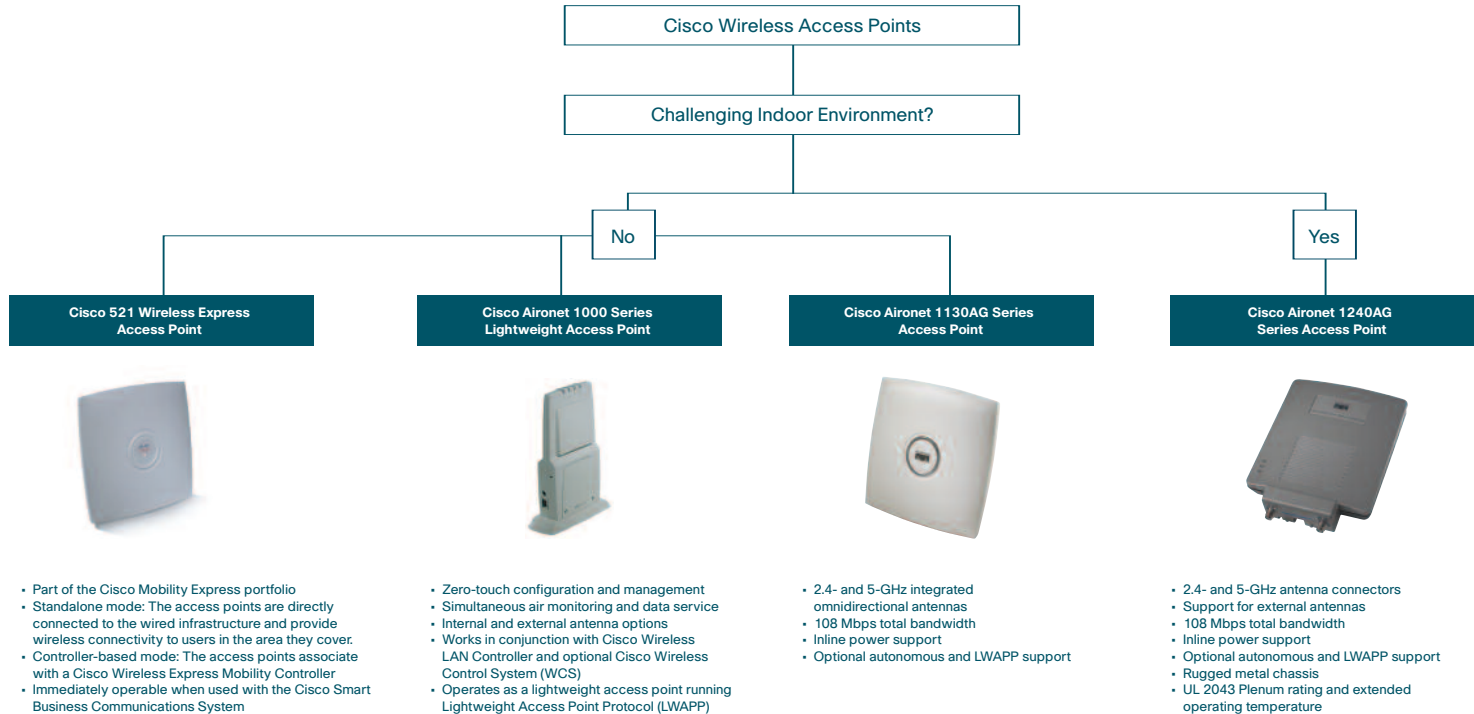
Analog/Fax

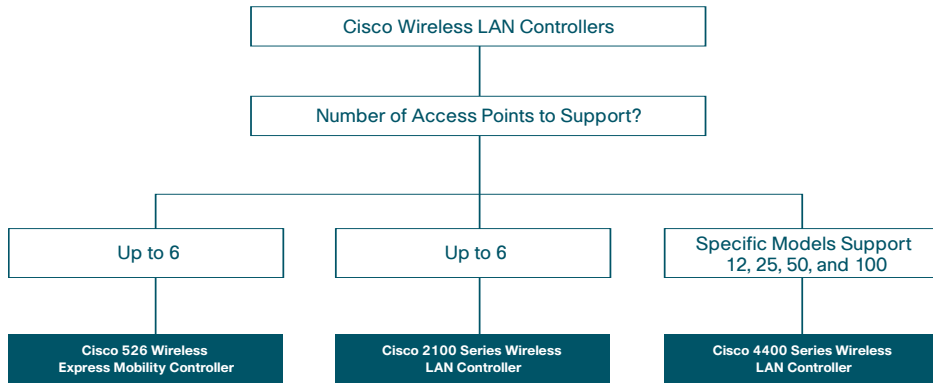
Cisco ATA 186 and 188
Analog Telephone Adapter



- Device with two analog ports to connect faxes and analog phones
- One RJ-45 10BASE-T Ethernet port (Cisco ATA 186)
- Two Ethernet RJ-45 10/100BASE-T ports (Cisco ATA 188)

Cisco Wireless Products





- Part of the Cisco Mobility Express portfolio
- When used with the Cisco Smart Business Communications System, has additional features including:
 - Immediate operability
 - Configuration through the Configuration Assistant
 - Management through Monitor Manager and Monitor Director
 - Guest access and optimized voice-over Wi-Fi ready

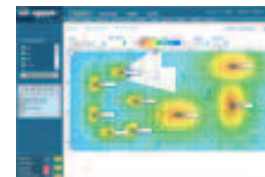


- Cisco Unified Wireless Network LAN Controllers are responsible for system wide WLAN functions, such as security policies, intrusion prevention, RF management, QoS, and mobility. They work in conjunction with Cisco Aironet Lightweight Access Points and Cisco WCS to support business-critical wireless applications.



Cisco 2700 Series Wireless Location Appliance

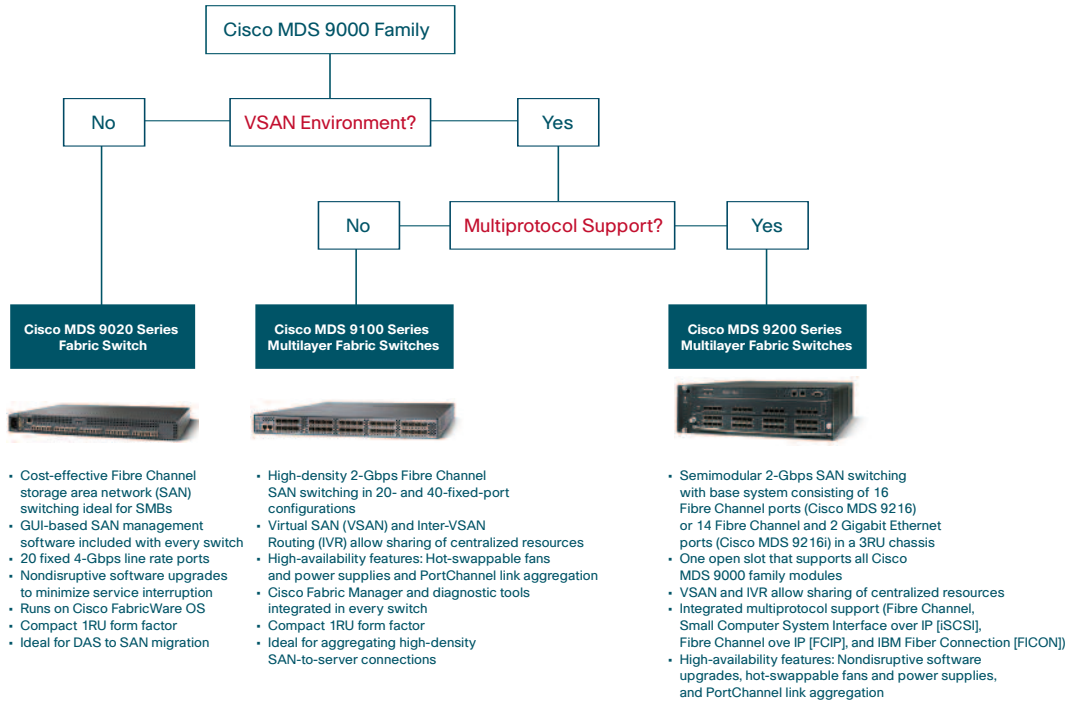
- Scalable location tracking and asset management
- Real-time visibility
- Intuitive centralized management and GUI
- Tight integration with a spectrum of technology and application partners through a rich and open API



Cisco Wireless Control System (WCS)

- Management of LWAPP access points and controllers
- Intuitive GUI and hierarchical maps
- WLAN planning and monitoring tools
- Policy management templates
- Complete WLAN intrusion protection
- Integrated location tracking (optional)

Cisco Storage Networking Products



Product Links

Related Links

Cisco Catalyst Series Switches

<http://www.cisco.com/go/switching>

Cisco Routers

<http://www.cisco.com/go/routers>

Cisco Security Solutions

<http://www.cisco.com/go/security>

Cisco Wireless Networking Products

<http://www.cisco.com/go/wireless>

Cisco Unified Communications

<http://www.cisco.com/go/unified>

Cisco Storage Networking Products

<http://www.cisco.com/go/storagenetworking>

Cisco Smart Business Roadmap

<http://www.cisco.com/go/sbr>

