



# Cisco Small Business Product Guide



Table of Contents



**Cisco Small Business Products and Solutions ..... 3**

**Cisco Small Business Products ..... 4**

    Small Business Switches ..... 5

    Small Business Routers ..... 13

    Small Business Wireless Access Points ..... 17

    Small Business Network Storage Systems ..... 19

    Small Business Video Surveillance Camera ..... 21

    Small Business Voice Systems ..... 23

**Cisco Products ..... 28**

    Smart Business Roadmap ..... 29

    Smart Business Communications System ..... 30

    Switches ..... 31

    520 Series Secure Router ..... 44

    Integrated Services Routers ..... 46

    Security Appliances ..... 57

    Mobility Express ..... 63

    Unified Communications ..... 66

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## Cisco Small Business Products and Solutions

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### Overview

Cisco Small Business Solutions enable small companies to connect employees, customers, and suppliers – easily, reliably, and affordably. Drawing on a broad portfolio of Cisco products for small business, local partners deliver and maintain solutions that meet the needs of individual businesses. As the leader in networking and communications, Cisco helps small businesses around the world work better.

#### **Cisco Small Business Solutions**

Technology small companies trust to help their business succeed.

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## Cisco Small Business Products



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Cisco Small Business products are ideal for small businesses who want simple products to meet transactional, point network technology needs. Cisco Small Business products (including the Linksys Business Series) are part of a complete portfolio of affordably priced networking products, purpose-built for small businesses – that just work – delivering basic, reliable connectivity right out of the box.

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## Cisco Small Business Switches

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Cisco® Small Business switches provide nonblocking, wire-speed switching for 10-, 100-, and 1000-Mb network clients. These switches can be used to replace the current workgroup hub or switch and to deliver full Gigabit speeds to high-requirement workstations as necessary while continuing to serve other clients at their current speeds.

The switches can also be used to create a local area network within the business, with appropriate link speeds for each user's requirements. Either way, they're perfect for graphics, multimedia, and other applications that have to move large files across the network quickly. In addition, the mini Gigabit Interface Converter (mini-GBIC) ports enable fiber-optic capability to be implemented easily and cost-effectively.

## Cisco Small Business Managed Switches



### Common Features

- Auto-sensing switched ports with auto MDI/MDI-X crossover detection
- Non-blocking, full duplex, and full wire speeds at each port
- Address Learning and Aging, and Data Flow Control for enhanced transmission reliability
- Easy-to-use web browser interface for quick and easy installation
- Enhanced network options such as link aggregation, Spanning Tree, and PortFast for VLAN configuration
- Advanced QoS, enabling voice, video, and data traffic to be prioritized and optimized
- 802.1X port authentication and MAC address filtering, bringing network security down to the switch port level
- Rate limiting, policing, shaping, and multicast support for advanced traffic management

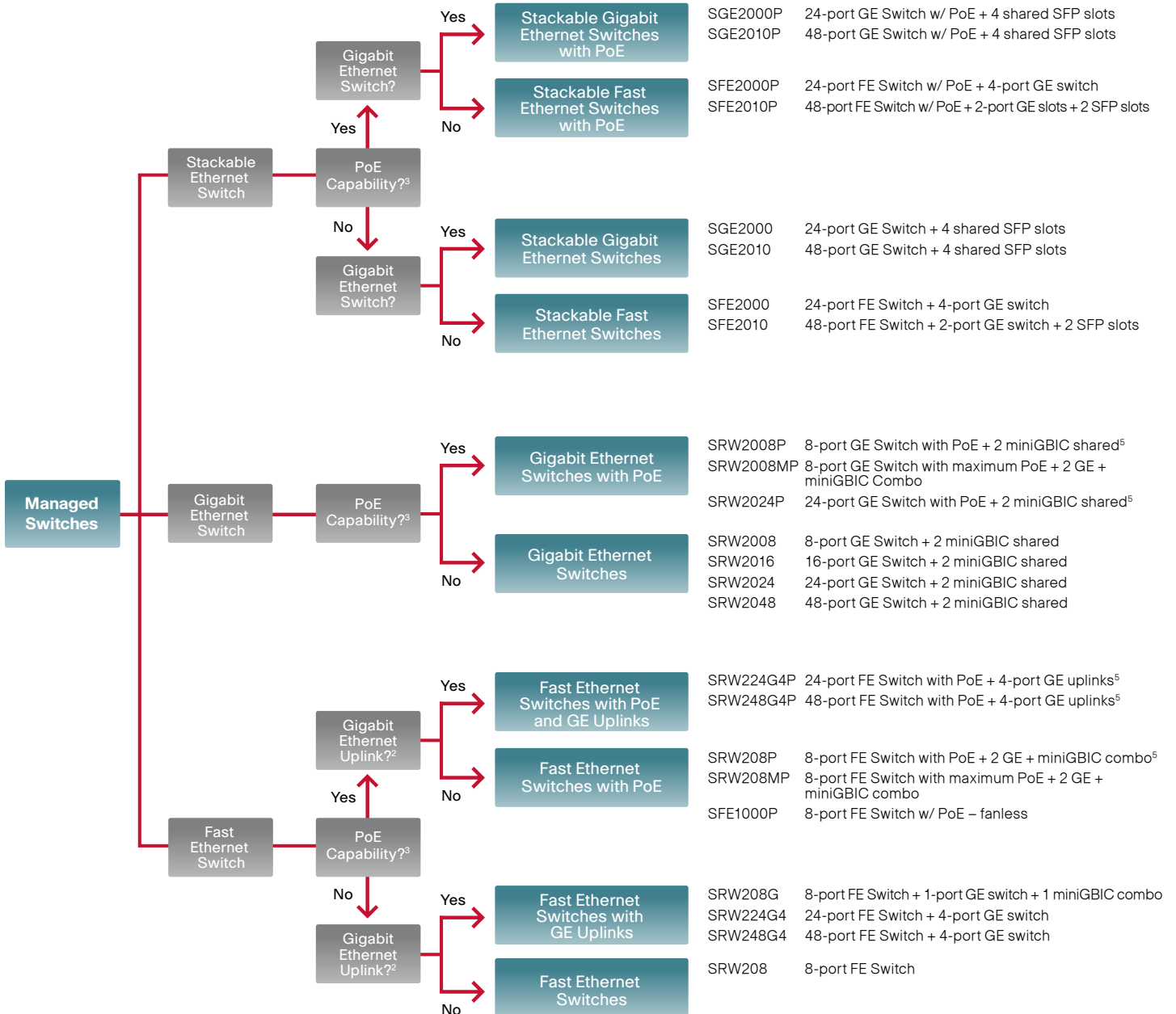
### Propose Cisco Small Business **Managed Switches** if your customer:

- Must have the ability to configure the network for optimal performance and security
- Needs network bandwidth and performance to keep pace with the soon-to-be-deployed network applications
- Must restrict network access using secure authentication and filtering mechanisms to prevent critical information from falling into the hands of unauthorized individuals
- Must have the ability to prioritize video and voice communications, keeping real-time applications at a consistently high quality no matter how many users are being served by the network
- Needs PoE capability for IP voice and wireless access points

# Cisco Small Business Managed Switches



## Decision Tree Overview



<sup>2</sup> Gigabit Copper and mini-GBIC interfaces provide flexible uplink options  
<sup>3</sup> Provides IEEE 802.3af PoE power to IP phones, surveillance cameras, or Wireless Access Points  
<sup>5</sup> PoE internal power support 75W for all PoE ports or 15.4W on half of the ports

## Cisco Small Business Smart Switches



### Common Features

- Auto-sensing switched ports with auto MDI/MDI-X crossover detection
- Nonblocking, full duplex, and full wire speeds at each port
- Address Learning and Aging, and Data Flow Control for enhanced transmission reliability
- Easy-to-use web browser interface for quick and easy installation
- Enhanced network options such as link aggregation, Spanning Tree, and PortFast for VLAN configuration
- Basic QoS, enabling voice, video, and data traffic to be prioritized and optimized
- 802.1X port authentication and MAC address filtering, bringing network security down to the switch port level

### Propose Cisco Small Business **Smart Switches** if your customer:

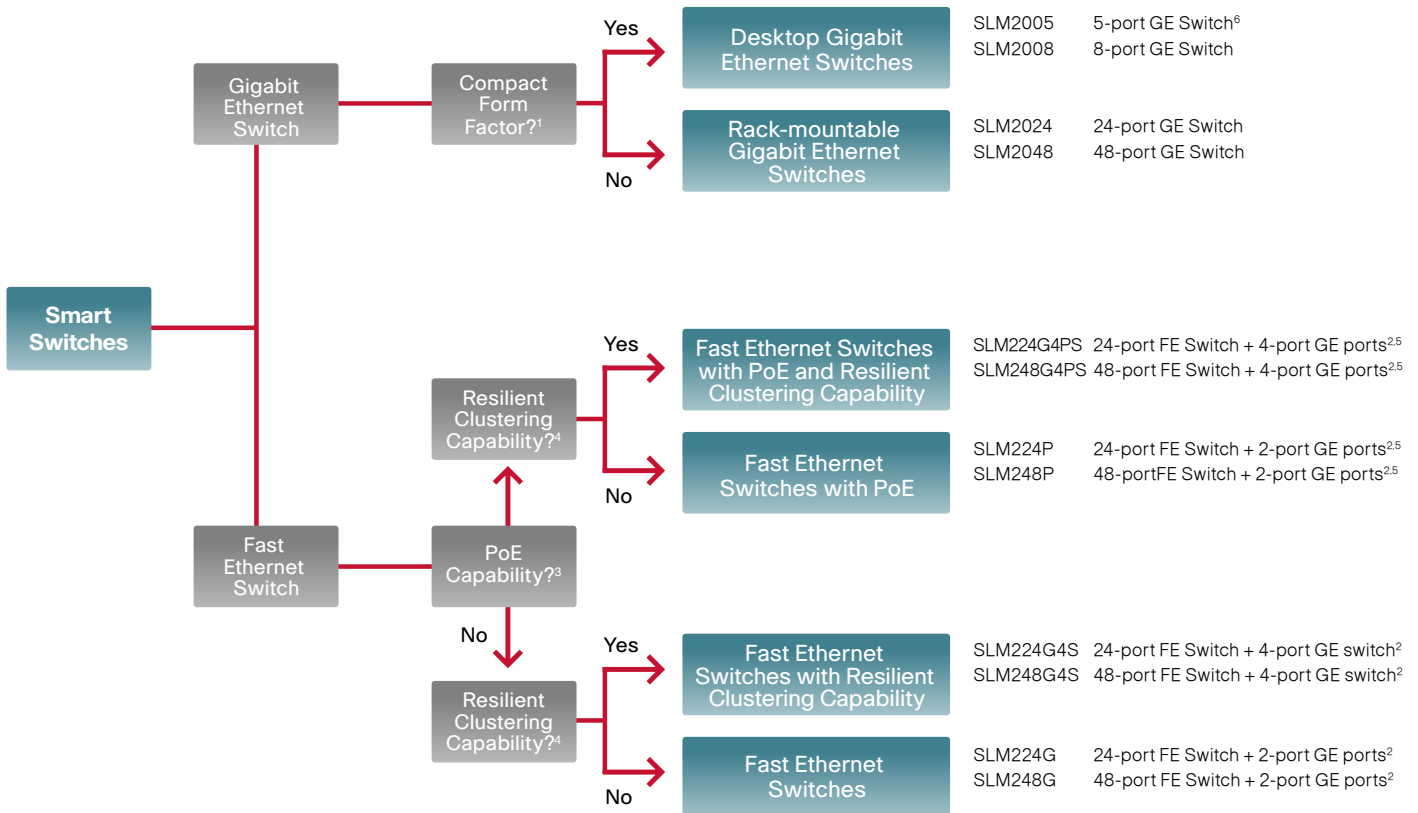
- Needs a simple way to install, configure, and manage the switches
- Needs to implement highly secure, authenticated network access to keep the intranets safe from unauthorized users
- Needs to implement quality of service (QoS) capability to prioritize real-time network traffic
- Is considering deploying IP voice in the near future, which will raise the issue of network performance, bandwidth, and QoS necessary for high-quality voice communications
- Needs Power over Ethernet (PoE) capability for IP voice and wireless access points



# Cisco Small Business Smart Switches



## Decision Tree Overview



<sup>1</sup> Desktop compact size fits into any environment – includes wall-mount slots  
<sup>2</sup> Gigabit Copper and mini-GBIC interfaces provide flexible uplink options  
<sup>3</sup> Provides IEEE 802.3af PoE power to IP phones, surveillance cameras, or Wireless Access Points  
<sup>4</sup> Capability to manage all units in a switch cluster as one entity and cluster up to 192 ports  
<sup>5</sup> PoE internal power support 7.5W for all PoE ports or 15.4W on half of the ports  
<sup>6</sup> Can obtain power from a standard 802.3af PoE switch or from an external AC power outlet

## Cisco Small Business Unmanaged Switches



### Common Features

- Auto-sensing Fast Ethernet and Gigabit Ethernet switched ports with automatic medium dependent interface (MDI) and MDI crossover (MDI-X) detection
- Nonblocking, full duplex, and full wire speeds at each port
- Address Learning and Aging, and Data Flow Control for enhanced transmission reliability

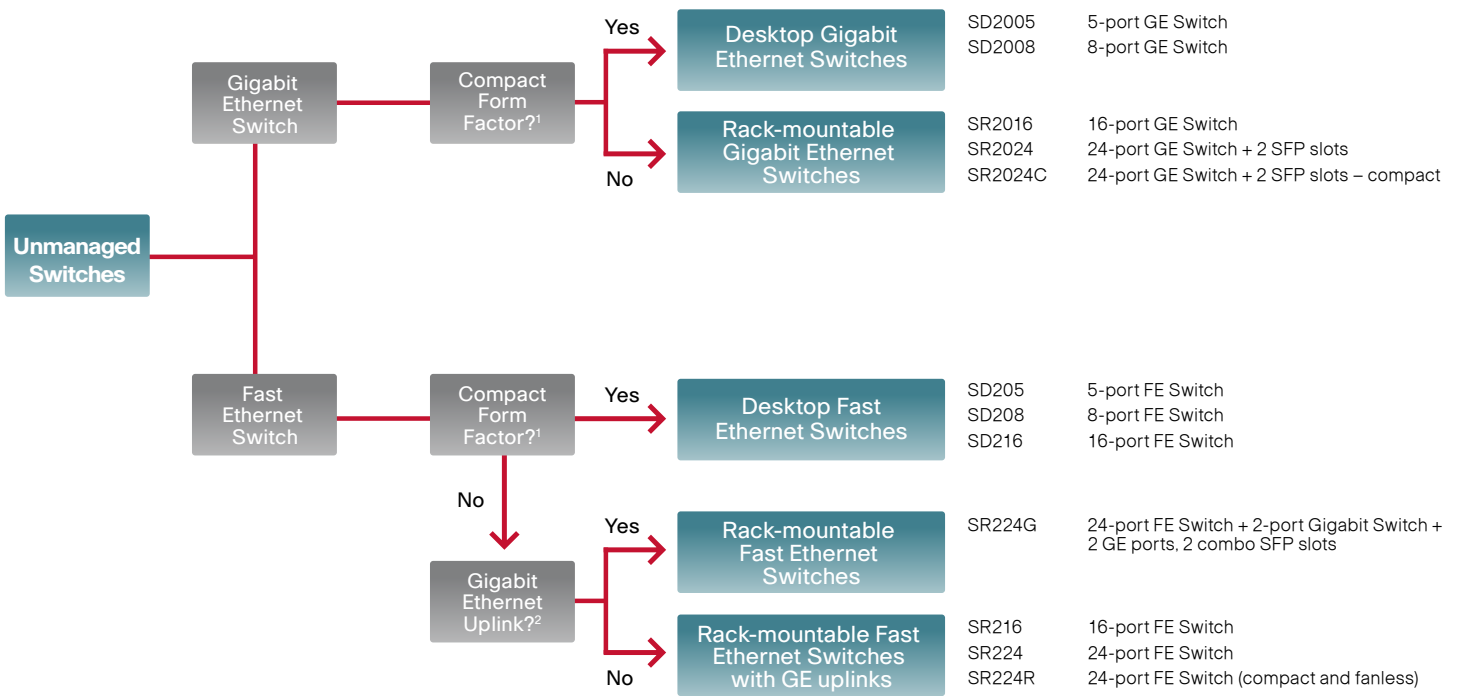
### Propose Cisco Small Business **Unmanaged Switches** if your customer:

- Wants the lowest-cost option to implement a switch
- Has minimal need to control the data flow and manage the network: "I just want basic connectivity"
- Has a low level of concern about network security: "My router/firewall will address network security"
- Has minimal expectations of future growth for the network, both in the technology required and network expansion
- Needs an easy-to-install product with minimal management

# Cisco Small Business Unmanaged Switches



## Decision Tree Overview



(1) Desktop compact size fits into any environment – includes wall-mount slots  
 (2) Gigabit Copper and mini-GBIC interfaces provide flexible uplink options

# Cisco Small Business Switches



## Features Comparison

	VLAN	QoS	POE	SNMP	ACL	SSH/SSL	L3	RPSU
<b>Managed Stackable Switches</b> 	✓	✓	✓	✓	✓	✓	✓	✓
<b>Managed Fixed Switches</b> 	✓	✓	✓	✓	✓	✓		
<b>Smart Stackable Switches</b> 	✓	✓	✓	✓				
<b>Smart Fixed Switches</b> 	✓	✓	✓					
<b>Unmanaged Switches</b> 								

## Cisco Small Business Routers



### Product Positioning

Cisco Small Business Routers are affordable, highly secure network access devices, designed and built for small businesses. Perfect for a transactional buyer looking for a point product to fill a specific need, Cisco Small Business Routers deliver basic, reliable connectivity right out of the box.

#### Common Features

Cisco Small Business Routers offer a range of features, including:

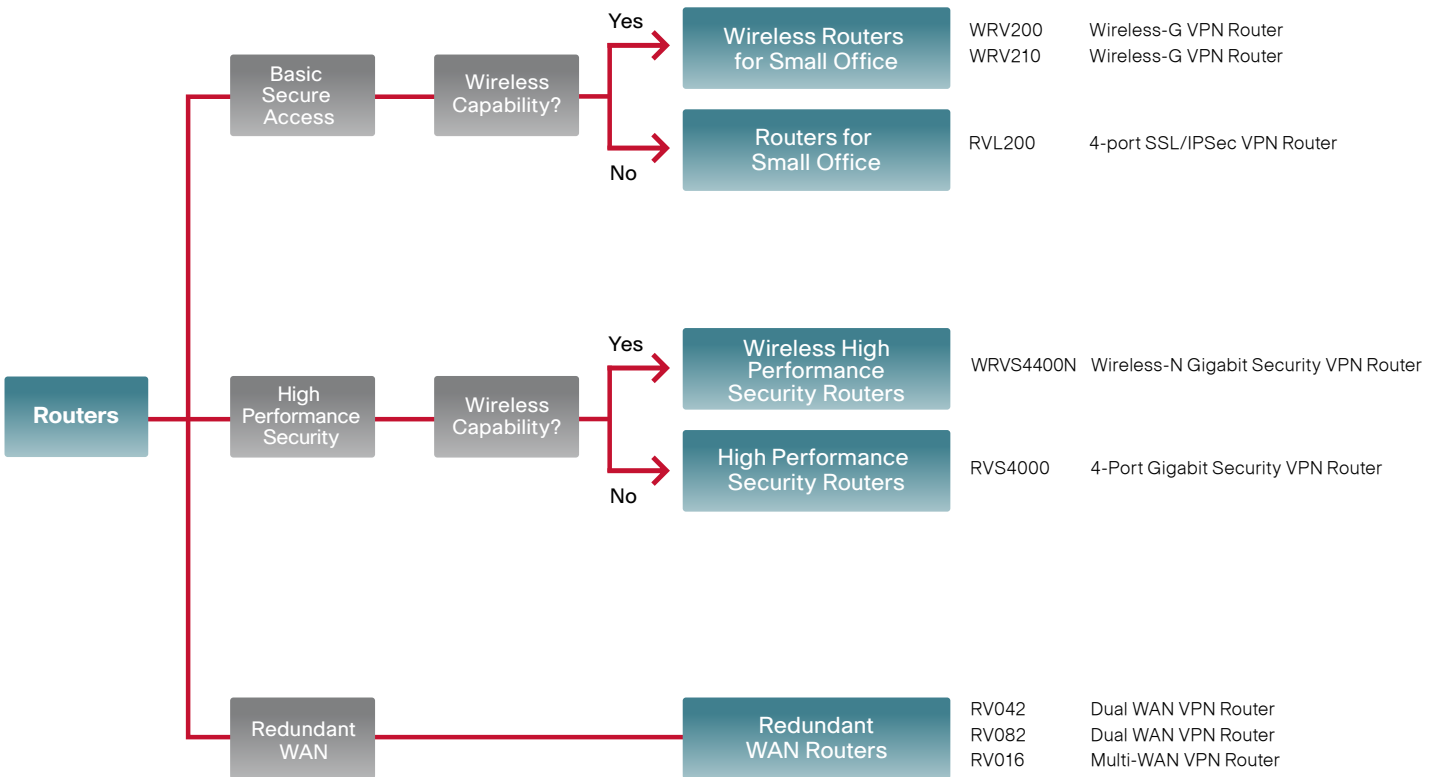
- Secure VPN connectivity for remote workers
- Strong security features, including a stateful packet inspection firewall, encryption, authentication, and access control
- Fast Ethernet ports (most models)
- Gigabit Ethernet ports (Cisco RVS4000 and Cisco WRVS4400N)
- WAN link redundancy and load-balancing features (some models)
- Simple, browser-based configuration



# Cisco Small Business Routers



## Decision Tree Overview



# Cisco Small Business Routers



## Features Comparison

	RVL200	WRV200	WRV210	RVS4000	WRVS4400N	RV042	RV082	RV016
Integrated Ethernet Switch	4-port Fast Ethernet	4-port Fast Ethernet	4-port Fast Ethernet	4-port Gigabit Ethernet	4-port Gigabit Ethernet	4-port Fast Ethernet	8-port Fast Ethernet	16-port Fast Ethernet
WAN Connections (Single or Dual, FE or GE)	Single FE WAN	Single FE WAN	Single FE WAN	Single GE WAN	Single GE WAN	Dual FE WAN	Dual FE WAN	Up to 7 FE WAN
Wireless support	No	802.11g	802.11g	No	802.11n	No	No	No
VPN connectivity	SSL and IPSec	SSL and IPSec	SSL and IPSec	SSL and IPSec	SSL and IPSec	SSL and IPSec	SSL and IPSec	SSL and IPSec
Maximum VPN connections	5	10	10	5	5	50	100	100
Advanced SPI firewall	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Intrusion Prevention System (IPS)	No	No	No	Yes	Yes	No	No	No
Optional Trend Micro ProtectLink Gateway Security Service	No	No	No	Yes	Yes	Yes	Yes	Yes

## Cisco Small Business Routers



### Routers for Small Office

RVL200	4-port SSL/IPSec VPN Router
WRV200	Wireless-G VPN Router
WRV210	Wireless-G VPN Router

### High Performance Security Routers

RVS4000	4-Port Gigabit Security VPN Router
WRVS4400N	Wireless-N Gigabit Security VPN Router

### Redundant WAN Routers

RV042	Dual WAN VPN Router with integrated 4-port FE switch
RV082	Dual WAN VPN Router with integrated 8-port FE switch
RV016	Multi-WAN VPN Router with integrated 16-port FE switch
QVPN50	50 User VPN Tunnel License for RV042, RV082, RV016



## Cisco Small Business Wireless Access Points



### Product Positioning

Cisco Small Business Wireless Access Points connect wireless devices to the wired network with no cabling problems. PoE support makes the access point easy to install – it can be mounted anywhere, even without ready access to a power outlet. With appropriate PoE support at the other end, you need to run only one cable to the access point to deliver both data and power. Of course, you can also use the included AC adapter if power is available nearby.

Cisco Small Business Wireless-G access points feature RangeBooster technology that is comparable to standard 802.11g but with nearly twice the range and with throughput that is up to 35 percent faster and reduces wireless signal dead spots in offices and other buildings.

Cisco Small Business Wireless-N access points feature multiple-input, multiple-output (MIMO) technology, which multiplies the effective data rate and utilizes the inherent signal reflections to increase the range and reduce dead spots in the wireless coverage area. Cisco Small Business Wireless-N access points are also backward compatible with Wireless-G (802.11g) and Wireless-B (802.11b) technology.

#### Common Features

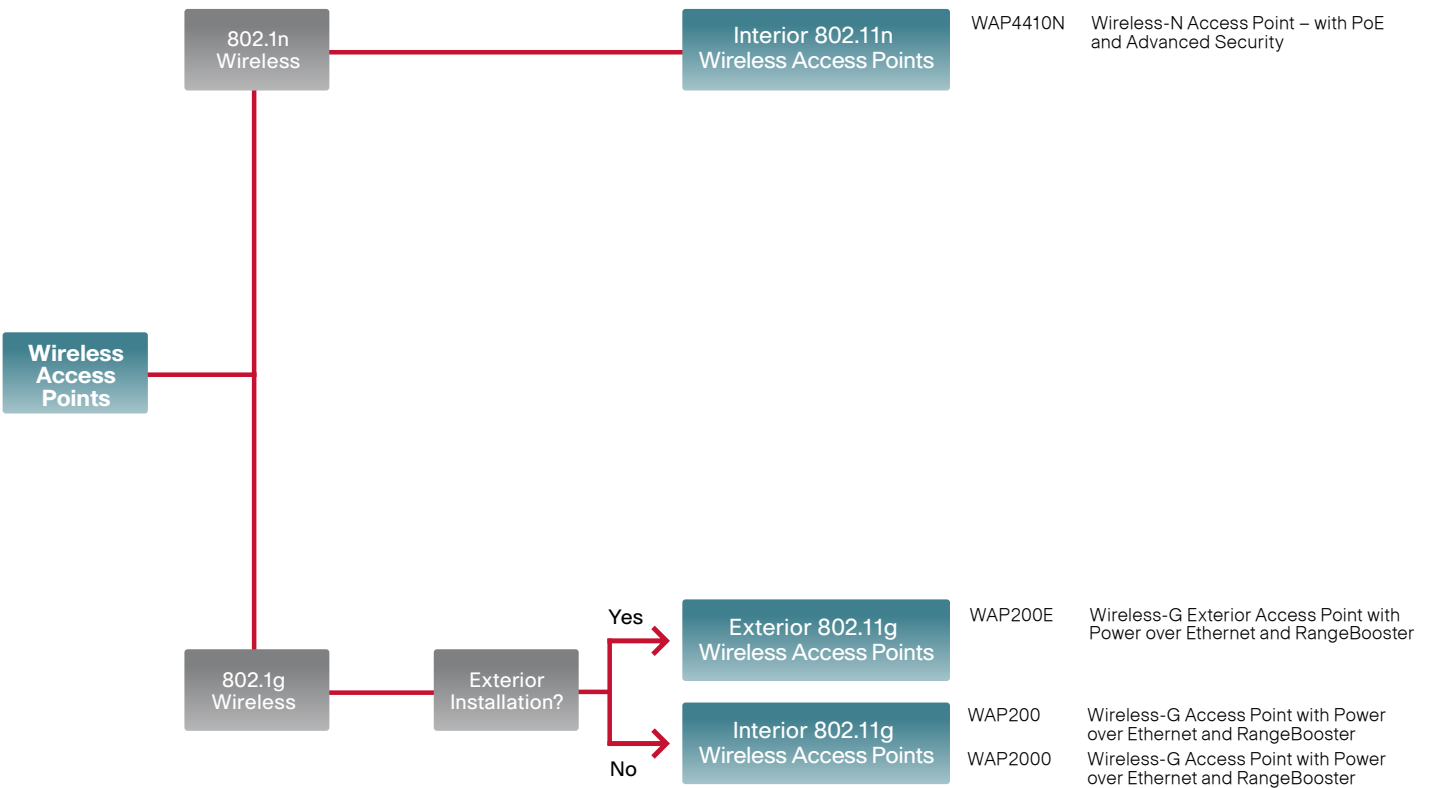


- 802.11n wireless access points comply with IEEE draft 802.11n standards and are backward compatible with 802.11b and 802.11g devices.
- Data rates of up to 54 Mbps in Wireless-G (802.11g) mode or 11 Mbps in Wireless-B (802.11b) mode are supported.
- RangeBooster technology is a compatible add-on to standard Wireless-G that increases the wireless network's range by up to 100 percent and its throughput by up to 35 percent.
- Standards-based PoE (IEEE 802.3af) and external AC power are supported.
- Support for Wi-Fi Multimedia (WMM) provides improved QoS over wireless connections for better video and voice performance.
- Advanced wireless security using Wi-Fi Protected Access (WPA2) with up to 256-bit encryption, and security monitoring gives businesses the visibility and protection they need.
- Multiple SSIDs with VLAN enable users to create separate, secured networks.
- Wireless exterior access points provide weatherproof housing (NEMA IP53 compliant), internal high-gain antennas, and PoE for safe, simple, exterior installations.

# Cisco Small Business Wireless Access Points



## Decision Tree Overview



## Cisco Small Business Network Storage Systems



### Product Positioning

The Cisco Small Business Network Storage Systems are ideal for storing, backing up, sharing, and archiving critical information. The feature set of the network storage systems differentiates them from entry-level storage devices, while at the same time their competitive pricing gives small businesses the opportunity to realize substantial cost savings when compared with more expensive storage systems.

Unlike other NAS systems, which need to contain operating system software on one or more hard drives, the Cisco Small Business Network Storage Systems feature a unique and intelligent chassis containing the Linux operating system that controls it. This gives the storage system added stability and reliability, as well as the flexibility to be configured without connected drives and to be reconfigured at any time – even allowing hot swapping and re-sorting of hard drives to different storage bays.

#### Common Features

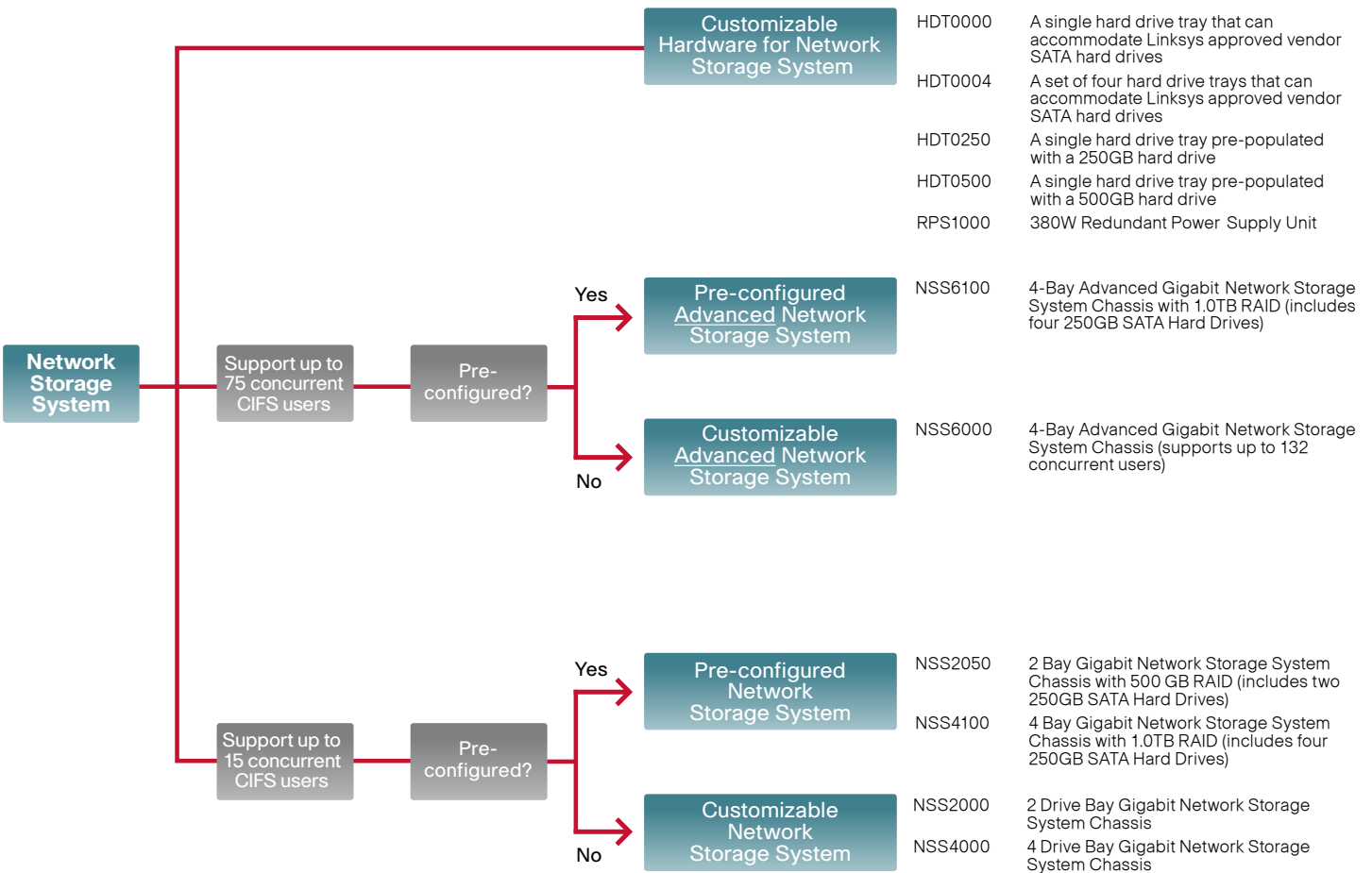


- Chassis with four drive bays supporting RAID 0/1/1+Spare/5/5+Spare/10 and file encryption support
- Advanced data protection and security, with on-disk file encryption via Advanced Encryption Standard (AES), VLANs, support for Self-Monitoring, Analysis, and Reporting Technology (SMART) drives, file journaling, global spares, and snapshot
- Dual Gigabit LAN interfaces supporting VLANs and QoS
- Support for Mac/PC (Common Internet File System [CIFS], Linux (Network File System [NFS]), and FTP clients
- Hard drive trays that provide the flexibility to increase storage capacity and archive older data

# Cisco Small Business Network Storage Systems



## Decision Tree Overview



## Cisco Small Business Video Surveillance Cameras



### Product Positioning

Cisco Small Business Video Surveillance Cameras provide customizable ways for small business owners to monitor and protect their companies. These high-quality solutions can be optimized for many different applications and sites. Each camera can be quickly mounted using the bracket included in the package. The cameras' compact form factor also enables them to be put inside a protective enclosure for interior or exterior installations.

Some models can be powered from a PoE switch or power injector via Ethernet cabling. This feature enables installation near ceilings, on rooftops, or in other places where power outlets are not available.

#### Common Features



- Linksys Wireless-G Pan/Tilt/Zoom Video Camera sends high-quality live video and audio through the Internet to a web browser anywhere in the world!
- Capacity to view images even in low light environments
- Automatically sends email alerts with video clips upon motion detection
- Supports up to ten simultaneous remote users
- Monitor up to 16 cameras with included software
- The WVC210's audio capabilities include 2-way Audio, embedded microphone, external speaker and microphone input ports

**WVC200**      **Wireless-G PTZ Internet Video Camera with one-way Audio**

**WVC210**      **Wireless-G PTZ Internet Camera with two-way Audio**

## Cisco Small Business Video Surveillance Cameras



### Common Features (cont.)

- Wireless Box camera with interchangeable lenses, and IO ports allow for flexible installation for multiple applications
- High quality CCD sensor with low light sensitivity and an IR Filter switcher provides optimal video image under multiple conditions
- Simultaneous dual CODEC provides optimal combination of viewing and storage of video
- Two-way audio, IP Multicast, 3GPP, and lots of other advanced features make this solution ideal for Surveillance deployments

#### **WVC2300      Wireless-G High Quality Business Internet Video Camera with Audio**



- Box camera with PoE, interchangeable lenses, and IO ports allow for flexible installation for multiple applications
- High quality progressive CCD sensor with low light sensitivity and an IR Filter switcher provides optimal video image under multiple conditions
- Simultaneous dual CODEC provides optimal combination of viewing and storage of video
- Two-way audio, IP Multicast, 3GPP, and lots of other advanced features make this solution ideal for Surveillance deployments

#### **PVC2300      Business High Quality Internet Video Camera with two-way Audio and POE**

#### **LBAVMS16      Video Monitoring System for 16 Cameras**

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## Cisco Small Business Voice Systems

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### Product Positioning

The Cisco Small Business Voice System is a cost-effective way to provide basic and advanced voice services for the small business. It is designed to enable Voice over IP (VoIP) for offices with up to 16 IP phones.

The Cisco Small Business Voice System delivers basic, reliable connectivity right out of the box. Its three major components can be customized to fit most small business requirements:

- The Cisco SPA9000 Voice System is the call control portion of the system, providing routing of calls throughout the voice network.
- The Cisco SPA400 Internet Telephony Gateway provides a connection between the voice network and the public switched telephone network (PSTN). Voice mail will be provided for the business by the Cisco SAP400.
- Based on the Session Initiation Protocol (SIP), the Cisco Small Business IP Phones are designed to interoperate in different environments, including a hosted IP telephony service, an IP private branch exchange (PBX), or a large-scale IP Centrex deployment.

## Cisco Small Business Voice Systems



### Cisco SPA400 Internet Telephony Gateway



The Cisco SPA400 Internet Telephony Gateway features the ability to connect up to four standard analog telephone lines to a Cisco SPA9000 Voice System network and includes the additional benefit of an integrated voicemail application. The SPA400 uses multiple analog phone lines and automatically routes calls to and from your existing PSTN telephone service.

- Functions as a gateway to analog lines for a Cisco SPA9000 Voice System
- Integrates a voicemail application server with up to 32 voicemail accounts
- Perfectly suited to connect up to four analog lines
- Enables users of the Cisco SPA9000 Voice System to leave and play back voicemail messages

### Cisco SPA9000 Voice System



The Cisco Small Business SPA9000 Voice System is so easy to configure that a fully working system can be set up in minutes. New telephones are automatically detected and registered when they are connected to the SPA9000. The SPA9000 has an integrated web server that allows features to be configured using a web browser. The web server has multiple levels of password-protected access to user- and service-level features. Service-level settings may be locked by the Internet telephone service provider to ensure that they are not inadvertently corrupted. The Internet telephone service provider also can remotely update the software and settings through a secure encrypted connection.

Powerful configuration capabilities enable the Cisco SPA9000 to support many advanced features, such as shared line appearances, hunt groups, call transfer, call parking, and group paging. With its two FXS ports, the SPA9000 can support traditional analog devices such as telephones, answering machines, fax machines, and media adapters. Each SPA9000 device supports up to 16 Cisco Small Business IP Phones.

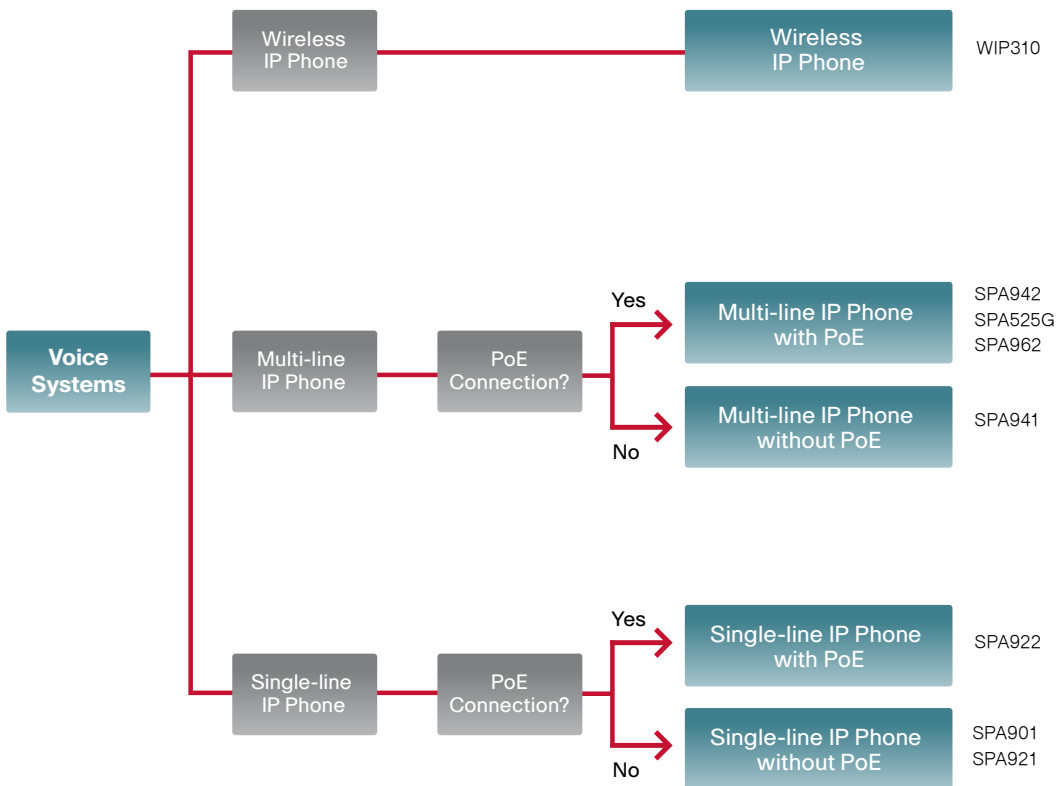
- IP PBX system with high-end features comparable to traditional large business voice services
- Supports up to 16 Cisco Small Business IP Phones
- Offers powerful self-configuration capabilities
- Works with most Internet telephone service providers



# Cisco Small Business Voice Systems – IP Phones



## Decision Tree Overview



## Cisco Small Business Voice Systems – IP Phones



## Single-line IP Phone without PoE

SPA901



- Standards based SIP
- Standard Encryption Protocols
- Single line business class IP Phone
- Connects directly to an Internet telephone service provider or connect to an IP PBX
- Wall mount or table top phone

SPA921



- Single-line business class IP Phone
- Connect directly to an Internet Telephone Service Provider or connect to an IP PBX
- Standards based SIP
- Standard Encryption Protocols
- Speakerphone, Caller ID, Call Hold, Transfer, Conferencing, and more

## Single-line IP Phone with PoE

SPA922



- Single-line business class IP Phone
- Power over Ethernet 802.3af
- Connect directly to an Internet Telephone Service Provider or connect to an IP PBX
- Two Ethernet LAN Ports with Integrated Ethernet Switch
- Standards based SIP
- Standard Encryption Protocols
- Speakerphone, Caller ID, Call Hold, Conferencing, and more
- An optional power supply

## Multi-line IP Phone without PoE

SPA941



- Two or four line business class IP Phone
- Connect directly to an Internet Telephone Service Provider or connect to an IP PBX
- Standards based SIP
- Standard Encryption Protocols
- Speakerphone, Caller ID, Call Hold, Transfer, Conferencing, and more
- High resolution graphical display

\*\*\* Cisco Small Business Voice System support Cisco Small Business IP Phones and other SIP-based IP VoIP devices only

## Cisco Small Business Voice Systems – IP Phones



## Multi-line IP Phone with PoE

SPA942



- Four-line business class IP Phone
- Power over Ethernet 802.3af
- Connect directly to an Internet Telephone Service Provider or connect to an IP PBX
- Standards based SIP
- Standard Encryption Protocols
- Two Ethernet LAN Ports with Integrated Ethernet Switch
- Speakerphone, Caller ID, Call Hold, Conferencing, and more
- An optional power supply

SPA525G



- Five-line business class IP Phone
- High resolution 320x240 QVGA color display
- 5-button Navigation Key
- Power over Ethernet 802.3af
- Two Ethernet LAN Ports with Integrated Ethernet Switch
- Bluetooth embedded for headset support
- Wireless-G client
- USB 2.0 port
- XML Corporate Directory and Application framework
- Wideband audio (G.722)

SPA962



- Six line business class IP Phone
- Power over Ethernet 802.3af
- Connect directly to an Internet Telephone Service Provider or connect to an IP PBX
- Two Ethernet LAN Ports with Integrated Ethernet Switch
- Standards based SIP
- Standard Encryption Protocols
- Speakerphone, Caller ID, Call Hold, Conferencing, and more
- Appealing Four Inch, True Color Liquid Crystal Display (LCD)

## Wireless IP Phone

WIP310



- 802.11b/g wireless LAN access
- 64- and 128-bit WEP and WPA Personal wireless encryption modes
- 802.11e WiFi multimedia QoS
- Unscheduled Automatic Power Save Delivery
- WiFi auto-connection
- 1.8-inch backlit TFT LCD
- Approximately 3-hours of talk time and approximately 50-hours standby time
- Visual and audible ringing notification

\*\*\* Cisco Small Business Voice System support Cisco Small Business IP Phones and other SIP-based IP VoIP devices only

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## Cisco Products



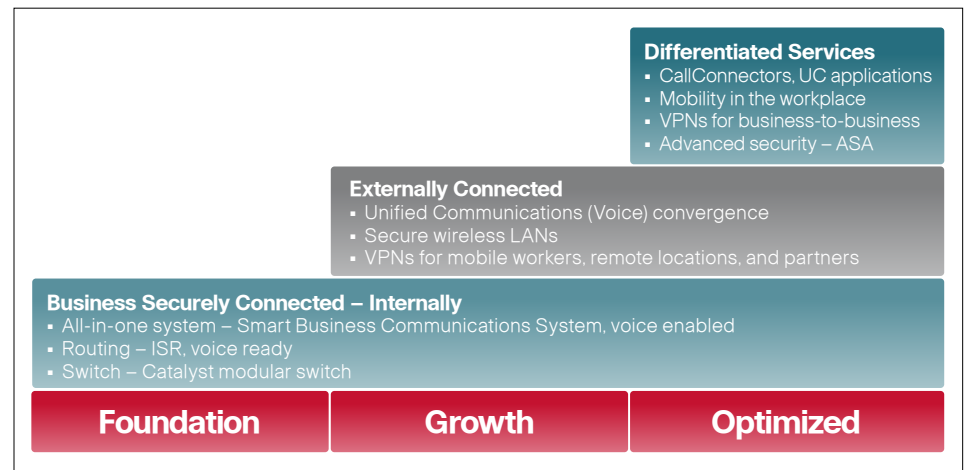
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For small and medium-sized businesses who have more sophisticated networking and communications needs, Cisco products work together in robust, highly resilient, enterprise-class system solutions to deliver proven performance, flexibility, and scalability that can grow with the business. Cisco products are backed by highly experienced partners and unparalleled service and support.

## 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: Cisco Solutions

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 implementation of this plan is broken down into three phases: Foundation, Growth, and Optimized. The Foundation and Growth phases provide an infrastructure that you can build upon to resolve the business challenges in the Optimized phase.

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. These offerings include 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.

## Smart Business Communications System



The Cisco Smart Business Communications System offers a new way for small businesses to reach, serve, and retain customers. Having secure access – anytime, anywhere – to voice, video, and wireless networking enables more effective and efficient communication with customers and employees. Cisco Unified Communications solutions give you the right mix of communications, productivity, and business operations applications, designed to work together so they are easier to deploy, operate, and manage. The Cisco Smart Business Communications System lets you integrate your voice, video, and wireless communications in an affordable, complete system, complemented by award-winning support and easy financing, all delivered through trusted local partners.

### **Smart Business Communications System for Small Business**

The Cisco Smart Business Communications System supports up to 48 IP phones and includes multiple components:

- Cisco Unified Communications 500 Series for Small Business
  - Wireless integrated option on specific models
- Cisco Catalyst® Express 520 Series Switches
- Cisco 520 Secure Router
- Cisco Mobility Express
  - Cisco 521 Wireless Express Access Point
  - Cisco 526 Wireless Express Mobility Controller
- System management
  - Cisco Configuration Assistant
  - Cisco Monitor Director

## Cisco Switches



### Product Positioning

The Cisco® Catalyst® family of fixed-configuration, standalone Ethernet switches supports enhanced switching services, IP communications, and wireless networking for small businesses. These switches provide the performance, availability, and manageability that modern office environments demand, as well as the intelligence to support state-of-the-art business applications and security services.

Cisco Catalyst switches provide:

- Fast Ethernet and Gigabit Ethernet connectivity to the desktop to deliver superior application performance
- Power over Ethernet (PoE) to provide 15.4W on all PoE ports
- Different levels of advanced security capabilities, including identity services and sophisticated access control, to protect critical assets
- Different levels of quality of service (QoS) intelligence to support delay-sensitive IP voice and video applications and optimize bandwidth in the network
- Redundancy and resiliency features to protect the availability of critical applications at all times
- Simple, scalable management with the option to use a command-line interface (CLI) or the GUI-based Cisco Network Assistant with Cisco Smartports interfaces
- Scalability to continually accommodate new applications and services as the business evolves

## Cisco Switches



### Basic Layer 2 Switches



Catalyst Express 500/520 Series



Catalyst 2960 LAN Lite Series

#### Common Features

- Fast Ethernet and Gigabit Ethernet in up to 8-, 24-, and 48-port configurations
- Basic security, basic QoS, standard availability, and multicast features (Cisco Catalyst Express and LAN Lite image for Cisco Catalyst 2960 Series Switches)
- Lower total cost of ownership (TCO) due to scalable and secure network management and simplified troubleshooting
- Limited lifetime hardware warranty, and software updates at no additional charge

#### Propose Cisco **Basic Layer 2 Switches** if your customer:

- Needs a simple, GUI-based interface to manage the network
- Needs a basic level of security and authenticated network access to keep the network safe from unauthorized users
- Requires basic QoS capability to prioritize real-time network traffic

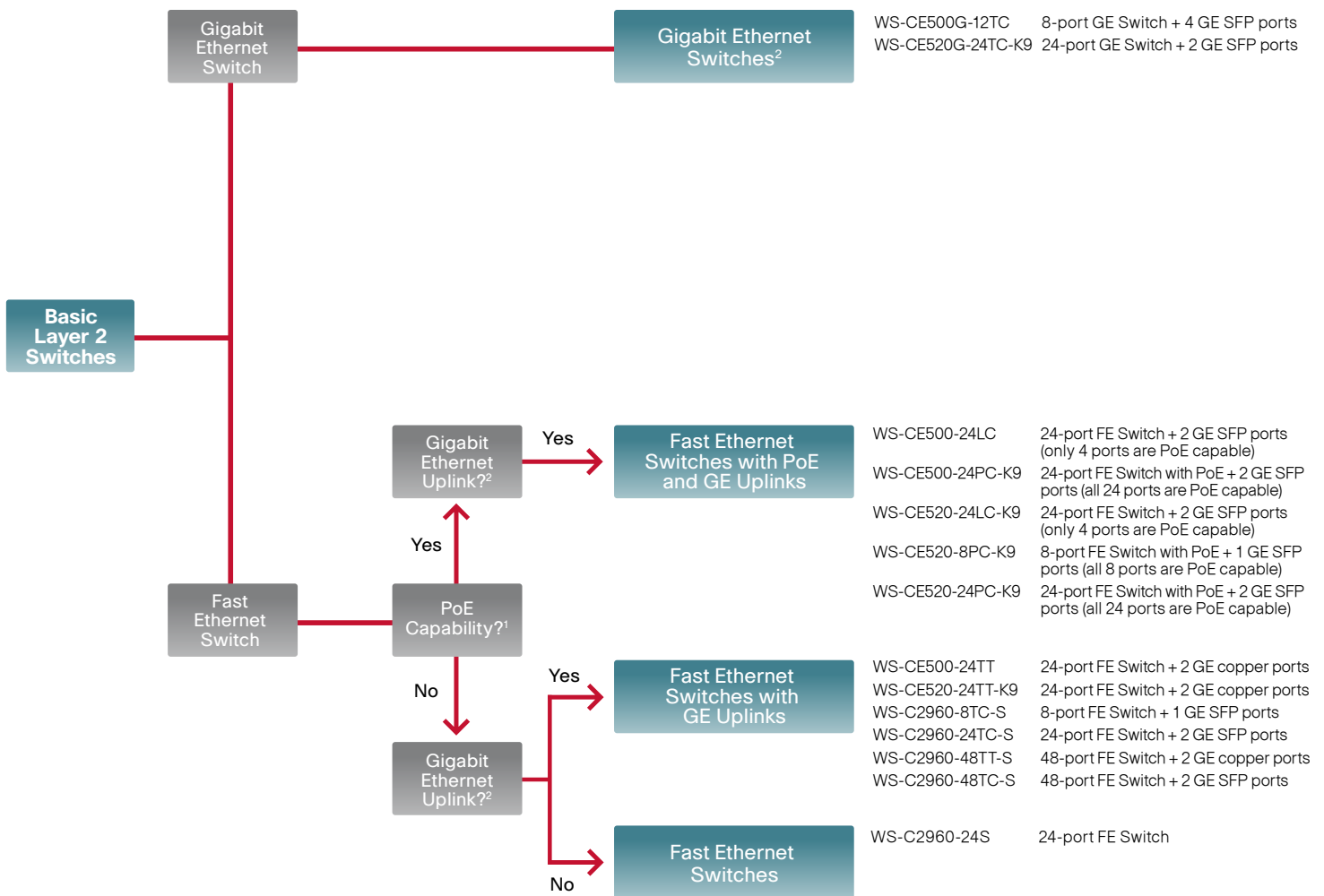


# Cisco Switches



## Basic Layer 2 Switches

### Decision Tree Overview



<sup>1</sup> Provides IEEE 802.3af PoE power to IP phones, surveillance cameras, or Wireless Access Points

<sup>2</sup> Small Form Factor Pluggable Modules (SFP) provide flexible server connectivity or uplink options as indicated

## Cisco Switches



### Enhanced Layer 2 Switches



Catalyst 2960 LAN Base Series

#### Common Features

- Fast Ethernet and Gigabit Ethernet in 8-, 24-, and 48-port configurations
- PoE configurations with up to 15.4W on up to 48 ports
- Network control and bandwidth optimization, delivered via advanced QoS, rate limiting, access control lists (ACLs), IPv6 management, and multicast services
- Enhanced security to protect users and devices from attack via a wide range of authentication methods, data encryption technologies, and Network Admission Control support based on users, ports, and MAC addresses (LAN Base image)
- Simplified network availability with features such as Flex Links, Link State Tracking, and support for a redundant power supply
- Lower TCO due to scalable and secure network management and simplified troubleshooting
- Limited lifetime hardware warranty, and software updates at no additional charge

#### Propose Cisco **Enhanced Layer 2 Switches** if your customer:

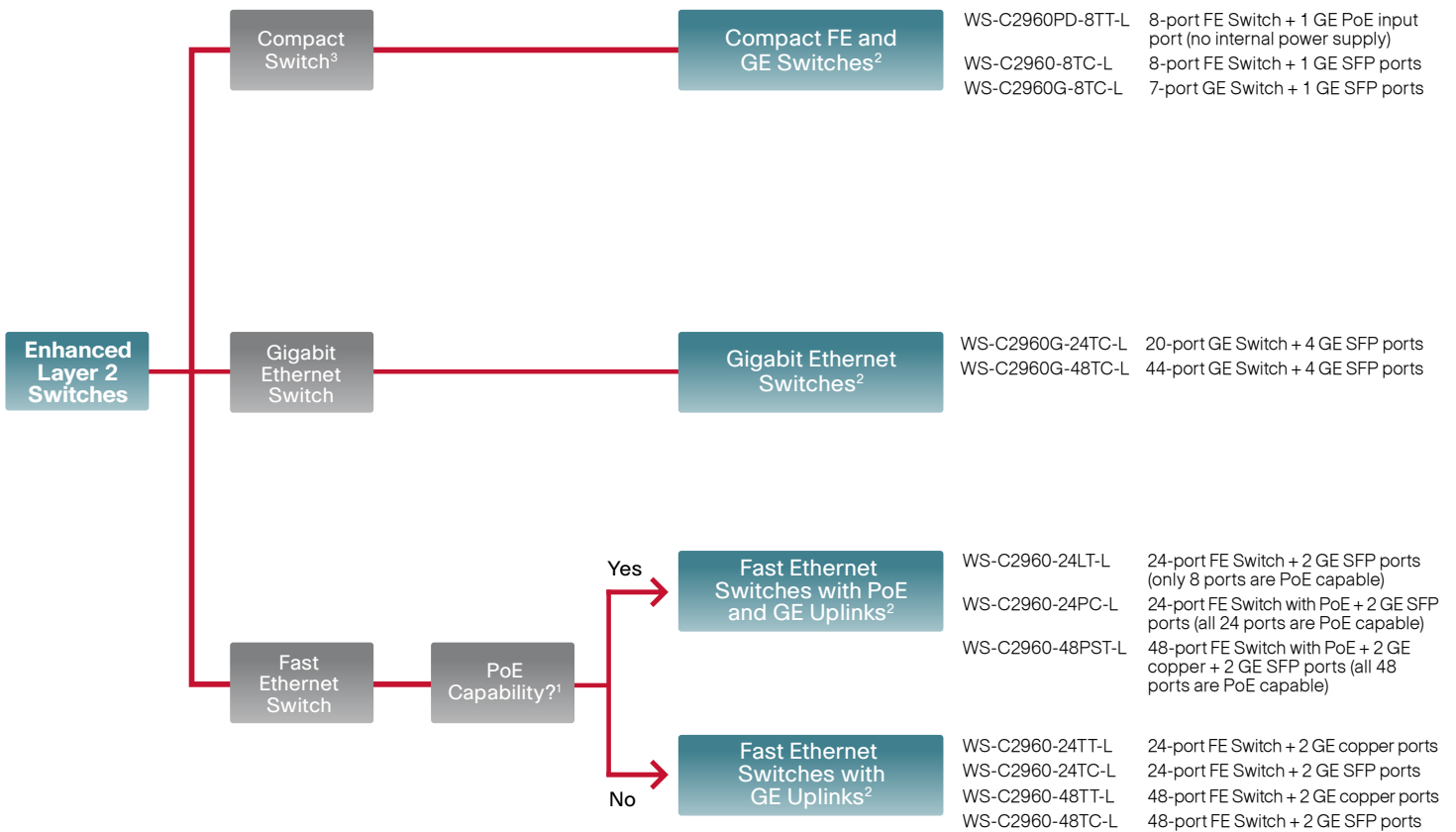
- Needs an enhanced level of security and authenticated network access to keep the intranets safe from unauthorized users
- Requires enhanced QoS capability to prioritize real-time network traffic
- Wants a scalable and simple way for in-house IT staff to configure, optimize, and troubleshoot the network

# Cisco Switches



## Enhanced Layer 2 Switches

### Decision Tree Overview



<sup>1</sup> Provides IEEE 802.3af PoE power to IP phones, surveillance cameras, or Wireless Access Points  
<sup>2</sup> Small Form Factor Pluggable Modules (SFP) provide flexible server connectivity or uplink options as indicated  
<sup>3</sup> Small Form Factor switches designed with no fan for silent operation and magnet for easy wall or under-the desk mounting

## Cisco Switches



### Layer 2 and Layer 3 Switches



Catalyst 3560 and 3560E Series

#### Common Features

- Enterprise-class, fixed-configuration, multilayer switches
- Fast Ethernet and Gigabit Ethernet configurations with 1 Gigabit and 10 Gigabit uplinks
- Support for IEEE 802.3af and Cisco prestandard PoE
- Ability to deploy networkwide intelligent services for converged applications
- Enhanced security, advanced quality of service (QoS), and high availability
- Intelligent power management features, providing granular control
- Express Setup and Cisco Network Assistant software for easy deployment and configuration
- Cisco application-specific integrated circuits (ASICs) for superior hardware and software integration and innovative features
- Field-replaceable power supply and fan on the Cisco Catalyst 3560E Series Switches
- Limited lifetime hardware warranty, and software updates at no additional charge (Catalyst 3650 and 3750; does not include E Series)

## Cisco Switches



### Layer 2 and Layer 3 Switches

#### Common Features (cont.)

The Cisco Catalyst 3650 Series Switches are available with either the IP Base or IP Services software images and can be upgraded to the Advanced IP Services software image

- The IP Base software includes advanced QoS, rate limiting, ACLs, and basic routing and IPv6 functionality.
- The IP Services software 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).
- The Advanced IP Services software includes support for IPv6 routing and IPv6 ACLs

#### Propose Cisco **Layer 2 and Layer 3 Switches** if your customer:

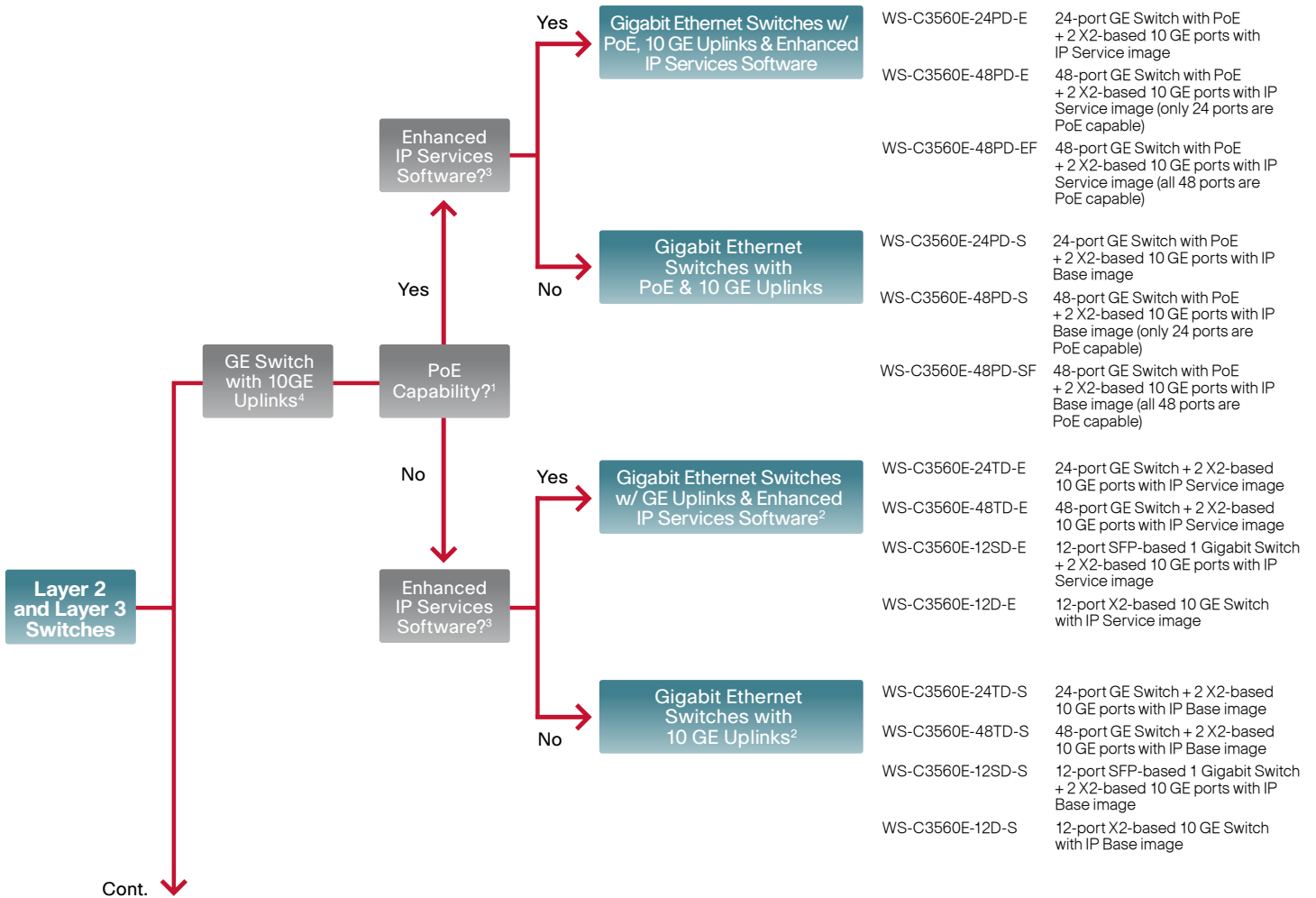
- Needs high-performance IP routing in every switch to maximize network scalability and availability
- Requires a superior level of security and QoS to secure and prioritize network traffic
- Plans to support Gigabit Ethernet to the desktop for high-performance workstations with 10 Gigabit Ethernet uplinks

# Cisco Switches



## Layer 2 and Layer 3 Switches

### Decision Tree Overview



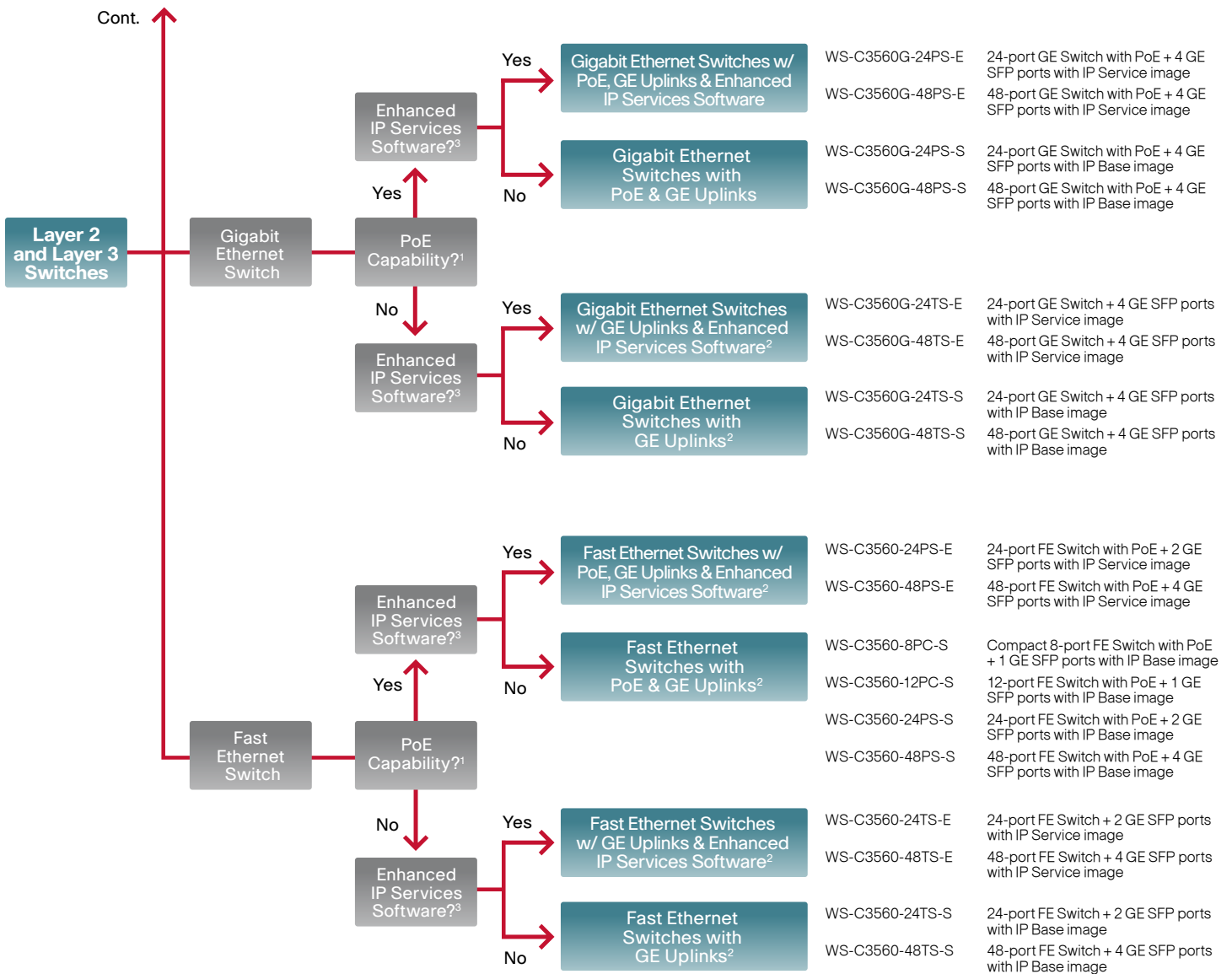
<sup>1</sup> Provides IEEE 802.3af PoE power to IP phones, surveillance cameras, or Wireless Access Points  
<sup>2</sup> Small Form Factor Pluggable Modules (SFP) provide flexible server connectivity or uplink options as indicated  
<sup>3</sup> Small Form Factor switches designed with no fan for silent operation and magnet for easy wall or under-the desk mounting  
<sup>4</sup> Cisco TwinGig converter module can be used for migrating uplinks from Gigabit Ethernet to 10 Gigabit Ethernet

# Cisco Switches



## Layer 2 and Layer 3 Switches

### Decision Tree Overview (cont.)



<sup>1</sup> Provides IEEE 802.3af PoE power to IP phones, surveillance cameras, or Wireless Access Points  
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## Cisco Switches



### Layer 2 and Layer 3 Switches with Stacking



Catalyst 3750 and 3750E Series

#### Common Features

- Enterprise-class, fixed configuration, multilayer switching line
- Fast Ethernet and Gigabit Ethernet configurations with 1 Gigabit and 10 Gigabit uplinks
- Support for IEEE 802.3af and Cisco prestandard PoE
- Ability to deploy networkwide intelligent services for converged applications
- Enhanced security, advanced quality of service (QoS), and high availability
- Intelligent power management features, providing granular control
- Express Setup and Cisco Network Assistant software for easy deployment and configuration
- Cisco ASICs for superior hardware and software integration, and innovative features



## Cisco Switches



### Layer 2 and Layer 3 Switches with Stacking

#### Common Features (cont.)

The Cisco Catalyst 3750 is available with either the IP Base or IP Services software images and can be upgraded to the Advanced IP Services software image.

- The IP Base software includes advanced QoS, rate limiting, ACLs, and basic routing and IPv6 capability.
- The IP Services software provides a richer set of enterprise-class features, including advanced hardware-based IP unicast and IP multicast routing as well as PBR.
- The Advanced IP Services software includes support for IPv6 routing and IPv6 ACLs.

#### Propose Cisco **Layer 2 and Layer 3 Switches with stacking capability** if your customer:

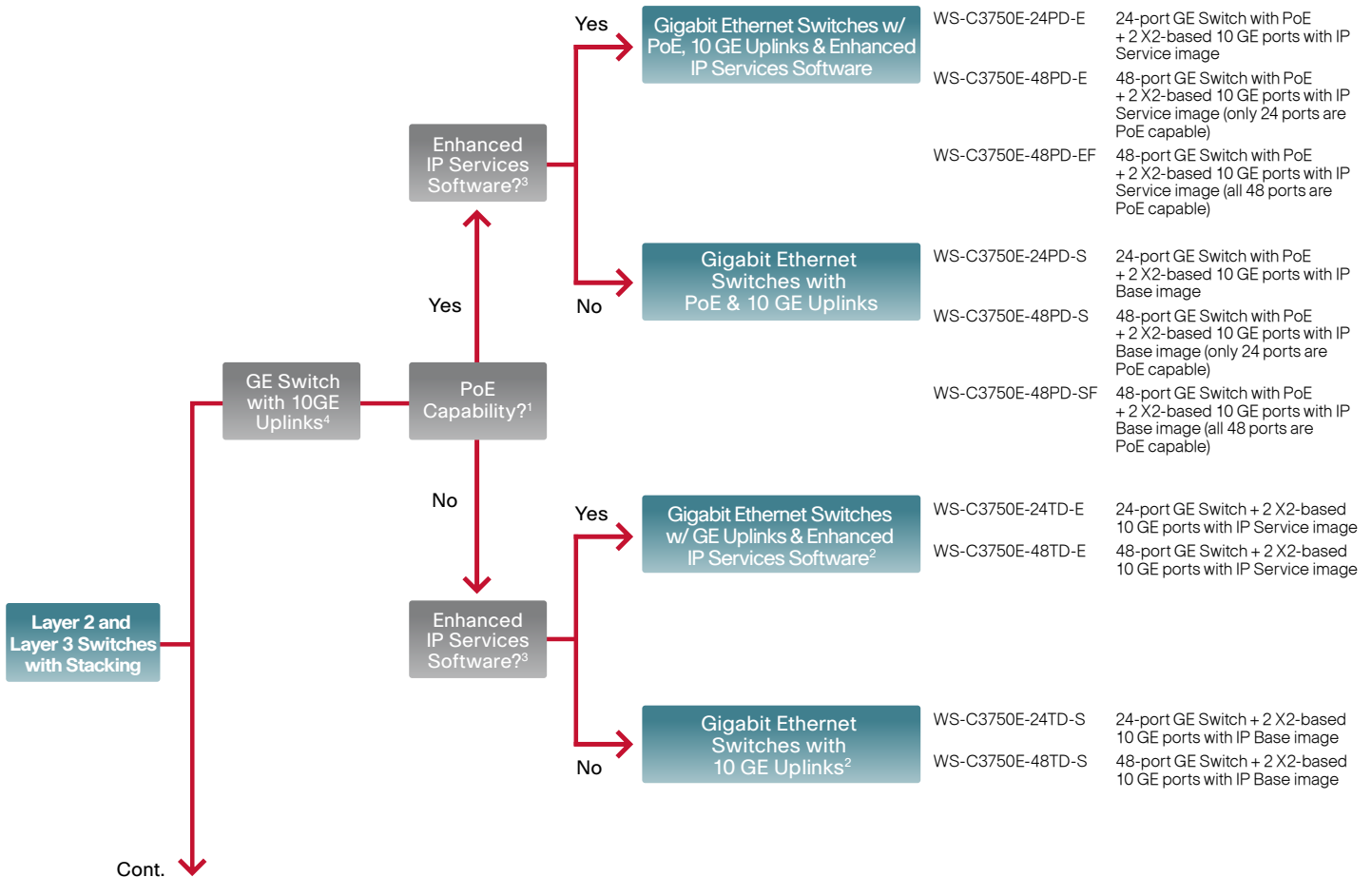
- Needs high-performance IP routing in every switch to maximize network scalability and higher availability
- Requires a superior level of security and QoS to secure and prioritize network traffic
- Plan to support Gigabit Ethernet to the desktop for high-performance workstations with 10 Gigabit Ethernet uplinks
- Wants a unified, highly resilient switching system to maximize availability and simplify management

# Cisco Switches



## Layer 2 and Layer 3 Switches with Stacking

### Decision Tree Overview



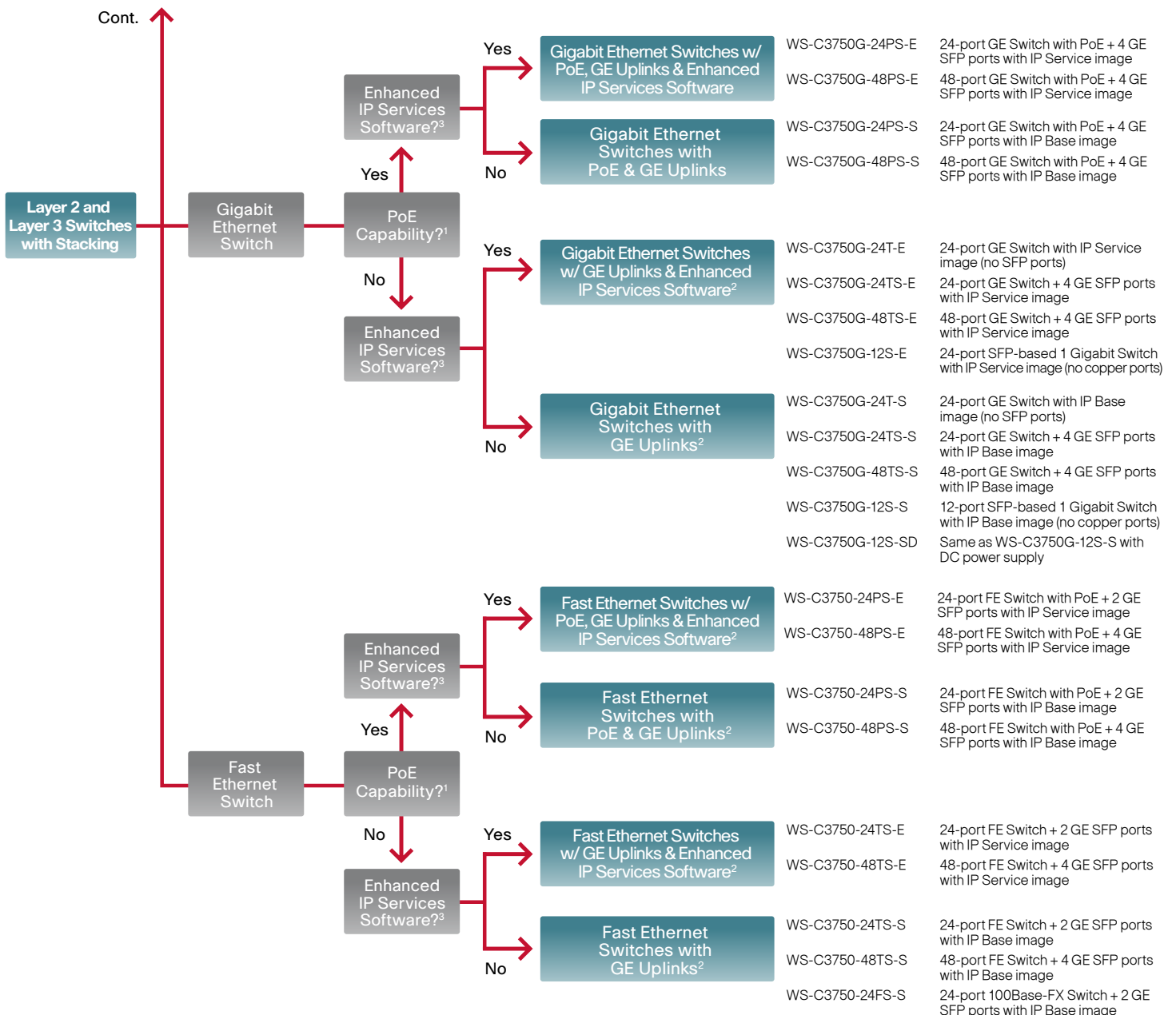
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# Cisco Switches



## Layer 2 and Layer 3 Switches with Stacking

### Decision Tree Overview (cont.)



<sup>1</sup> Provides IEEE 802.3af PoE power to IP phones, surveillance cameras, or Wireless Access Points  
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## Cisco 500 Series Secure Routers



### Product Positioning

Cisco 500 Series Secure Routers combine advanced security, Internet access, VPN connectivity, and optional wireless networking in a single, easy-to-use device. Designed to provide security services for the Cisco Smart Business Communications System, the Cisco 500 Series Secure Routers are deployed and managed using Cisco Configuration Assistant.

#### Common Features

Cisco 500 Series Secure Routers offer:

- Advanced security, including advanced firewall, intrusion prevention system (IPS), and application inspection, and control
- IP Security (IPsec) and SSL VPN
- Network edge (DMZ) and guest access (802.1X) routing
- Dynamic routing
- Choice of WAN connectivity (asymmetric DSL 2 [ADSL2], ADSL2+, Fast Ethernet)
- QoS support for smooth voice and video communications

# Cisco 500 Series Secure Routers



## Cisco 520 Secure Routers



- SR520-FE-K9
- SR520-ADSL-K9
- SR520-ADSLI-K9

- 4-port Cisco Secure Router 520, Fast Ethernet WAN
- 4-port Cisco Secure Router 520, ADSL over ISDN WAN
- 4-port Cisco Secure Router 520, ADSL over POTS WAN

## Cisco 520 Wireless Secure Routers



- SR520W-FE-K9
- SR520W-ADSL-K9
- SR520W-ADSLI-K9

- 4-port Cisco Wireless Secure Router 520, Fast Ethernet WAN, 802.11b/g compliant
- 4-port Cisco Wireless Secure Router 520, ADSL over POTS WAN, 802.11b/g compliant
- 4-port Cisco Wireless Secure Router 520, ADSL over ISDN WAN, 802.11b/g compliant

## Cisco Integrated Services Routers



### Fixed-Configuration Integrated Services Routers

#### Common Features

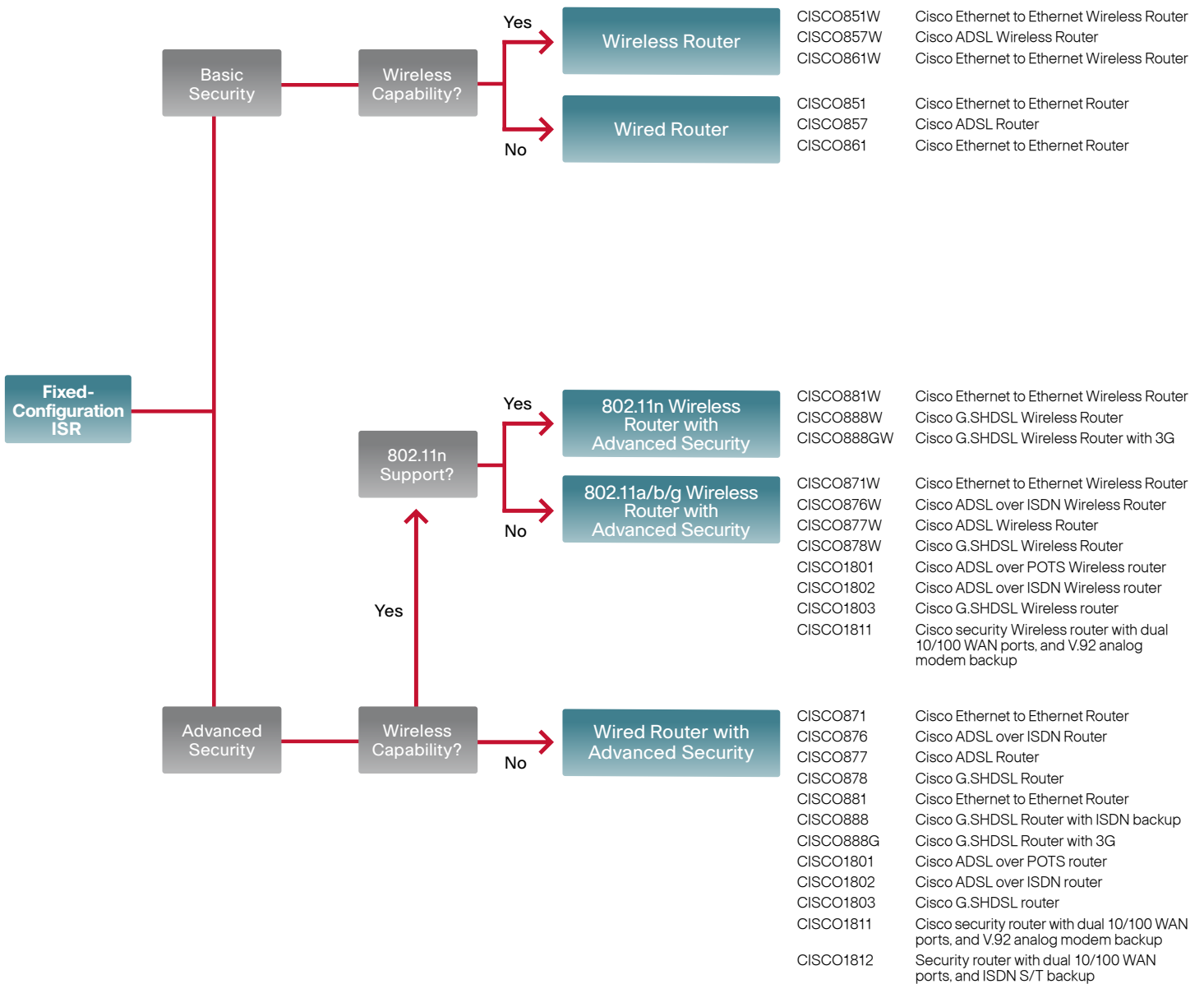
- **Integrated services:** Cisco 800 and 1800 Series fixed-configuration integrated services routers combine Internet access, security, and optional wireless services at broadband speeds in a single, highly secure device.
- **Security:** Advanced security features, even on basic models. Cisco 850, 860, and 880 Series routers can include stateful firewall and IPsec VPN capabilities. Cisco 870, 880, and 1800 Series routers can add inline IPS, URL filtering, Dynamic Multipoint VPN (DMVPN), Group Encrypted Transport VPN (GET VPN), and SSL VPN capabilities.
- **Reliability:** Wide range of advanced routing features helps ensure reliable connections across a variety of WAN access methods. Additional features include integrated switch ports (optional PoE ) and wireless.
- **Manageability:** Telnet, Simple Network Management Protocol (SNMP version 3), CLI, and HTTP management, as well as device management through the Cisco Router and Security Device Manager (SDM).
- **Secondary WAN:** Available in the Cisco 880 and 1800 Series.

# Cisco Integrated Services Routers



## Fixed-Configuration Integrated Services Routers

### Decision Tree Overview



# Cisco Integrated Services Routers



## Features Comparison

	851	857	861	871	876, 877, 878	881, 888	1801, 1802, 1803	1811, 1812	
Multiple concurrent services	Yes	Yes	Yes	Yes	Yes	Yes	Broadband-speed delivery	Broadband-speed delivery	
Advanced security	<ul style="list-style-type: none"> <li>Stateful firewall</li> <li>3DES/AES IPsec</li> </ul>	<ul style="list-style-type: none"> <li>Stateful firewall</li> <li>3DES/AES IPsec</li> </ul>	<ul style="list-style-type: none"> <li>Stateful firewall</li> <li>3DES/AES IPsec</li> </ul>	<ul style="list-style-type: none"> <li>Stateful firewall</li> <li>3DES/AES IPsec and SSL VPN encryption</li> <li>IPS</li> <li>GET VPN</li> </ul>	<ul style="list-style-type: none"> <li>Stateful firewall</li> <li>3DES/AES IPsec and SSL VPN encryption</li> <li>IPS</li> <li>GET VPN</li> </ul>	<ul style="list-style-type: none"> <li>Stateful firewall</li> <li>3DES/AES IPsec and SSL VPN encryption</li> <li>IPS</li> <li>GET VPN</li> </ul>	<ul style="list-style-type: none"> <li>Stateful firewall</li> <li>3DES/AES IPsec and SSL VPN encryption</li> <li>IPS</li> <li>GET VPN</li> </ul>	<ul style="list-style-type: none"> <li>Stateful firewall</li> <li>3DES/AES IPsec and SSL VPN encryption</li> <li>IPS</li> <li>GET VPN</li> </ul>	<ul style="list-style-type: none"> <li>Stateful firewall</li> <li>3DES/AES IPsec and SSL VPN encryption</li> <li>IPS</li> <li>GET VPN</li> </ul>
Integrated switching	4-port 10/100 Mbps managed LAN switch	4-port 10/100 Mbps managed LAN switch	4-port 10/100 Mbps managed LAN switch with VLAN support	4-port 10/100 Mbps managed LAN switch with DMZ ports	4-port 10/100 Mbps managed LAN switch with DMZ ports	4-port 10/100 Mbps managed LAN switch with VLAN support	8-port 10/100 Mbps managed LAN switch with DMZ ports	8-port 10/100 Mbps managed LAN switch with DMZ ports	
PoE option	-	-	-	External	External	Integrated	Integrated	Integrated	
Wireless option	802.11b/g with one fixed antenna	802.11b/g with one fixed antenna	802.11g/n	802.11b/g with replaceable antennas	802.11b/g with replaceable antennas	802.11g/n	802.11a/b/g with replaceable antennas	802.11a/b/g with replaceable antennas	
Secondary WAN ports	No	No	No	No	No	Yes	Yes	Yes	
ADSL 2+ and G.SHDSL 4-wire support	-	Yes	-	-	Yes	G.SHDSL on 888, ADSL2/VDSL2 support pending	Yes	-	



# Cisco Integrated Services Routers



## Fixed-Configuration Integrated Services Routers



### Wired Router

CISCO851-K9  
 CISCO857-K9  
 CISCO861-K9

Cisco 851 Ethernet to Ethernet Router  
 Cisco 857 ADSL Router  
 Cisco 861 Ethernet to Ethernet Router



### Wireless Router

CISCO851W-G-A-K9  
 CISCO851W-G-E-K9  
 CISCO851W-G-J-K9

Cisco 851 Ethernet to Ethernet Wireless Router; Americas  
 Cisco 851 Ethernet to Ethernet Wireless Router; Europe  
 Cisco 851 Ethernet to Ethernet Wireless Router; Japan

CISCO857W-G-A-K9  
 CISCO857W-G-E-K9

Cisco 857 ADSL Wireless Router; Americas  
 Cisco 857 ADSL Wireless Router; Europe

CISCO861W-GN-A-K9

Cisco 861 Ethernet to Ethernet Wireless Router;  
 802.11n FCC Compliant

CISCO861W-GN-E-K9

Cisco 861 Ethernet to Ethernet Wireless Router;  
 802.11n ETSI Compliant

CISCO861W-GN-P-K9

Cisco 861 Ethernet to Ethernet Wireless Router;  
 802.11n Japan Compliant

## Cisco Integrated Services Routers



## Fixed-Configuration Integrated Services Routers



## Wired Router with Advanced Security

CISCO871-K9  
CISCO871-SEC-K9

Cisco 871 Ethernet to Ethernet Router  
Cisco 871 Ethernet to Ethernet Router with Plus Feature Set

CISCO876-K9  
CISCO876-SEC-K9  
CISCO876-SEC-I-K9

Cisco 876 ADSL over ISDN Router  
Cisco 876 ADSL over ISDN Router with Plus Feature Set  
Cisco 876 ADSL over ISDN Router with Advanced Enterprise Feature Set

CISCO877-K9  
CISCO877-M-K9  
CISCO877-SEC-K9

Cisco 877 ADSL Router  
Cisco 877 ADSL Router with Annex M  
Cisco 876 ADSL Router with Plus Feature Set

CISCO878-K9  
CISCO878-SEC-K9  
CISCO888-K9  
CISCO888G-K9  
C888SRST-K9

Cisco 878 G.SHDSL Router  
Cisco 878 G.SHDSL Router with Plus Feature Set  
Cisco 888 G.SHDSL Router with ISDN backup  
Cisco 888 G.SHDSL Router with 3G  
Cisco 888 SRST G.SHDSL Router with FXS, BRI

CISCO881-K9  
CISCO881G-K9  
CISCO881G-S-K9

Cisco 881 Ethernet to Ethernet Router  
Cisco 881 Ethernet to Ethernet Router with 3G  
Cisco 881 Ethernet to Ethernet Router with 3G Sprint Carrier Bundles

CISCO881G-V-K9

Cisco 881 Ethernet to Ethernet Router with 3G Verizon Carrier Bundles

CISCO881G-A-K9

Cisco 881 Ethernet to Ethernet Router with 3G GSM North America Carrier Bundles

C881SRST-K9

Cisco 881 SRST Ethernet to Ethernet Router with FXS, FXO

## Cisco Integrated Services Routers



## Fixed-Configuration Integrated Services Routers

## Wireless Router with Advanced Security



CISCO871W-G-A-K9  
 CISCO871W-G-E-K9  
 CISCO871W-G-J-K9

Cisco 871 Ethernet to Ethernet Wireless Router; Americas  
 Cisco 871 Ethernet to Ethernet Wireless Router; Europe  
 Cisco 871 Ethernet to Ethernet Wireless Router; Japan



CISCO881W-GN-A-K9  
 CISCO881W-GN-E-K9  
 CISCO881W-GN-P-K9

Cisco 881 Ethernet to Ethernet Wireless Router; 802.11n FCC Compliant  
 Cisco 881 Ethernet to Ethernet Wireless Router; 802.11n ETSI Compliant  
 Cisco 881 Ethernet to Ethernet Wireless Router; 802.11n Japan Compliant

C881SRSTW-GN-A-K9  
 C881SRSTW-GN-E-K9

Cisco 881 SRST Ethernet to Ethernet Router with FXS, FXO; 802.11n FCC Compliant  
 Cisco 881 SRST Ethernet to Ethernet Router with FXS, FXO; 802.11n ETSI Compliant

CISCO876W-G-E-K9

Cisco 876 ADSL over ISDN Wireless Router

CISCO877W-G-A-K9  
 CISCO877W-G-E-K9  
 CISCO877W-G-E-M-K9

Cisco 877 ADSL Router; Americas  
 Cisco 871 ADSL Wireless Router; Europe  
 Cisco 871 ADSL Wireless Router with Annex M; Europe

CISCO878W-G-A-K9  
 CISCO878W-G-E-K9  
 CISCO888W-GN-A-K9

Cisco 878 G.SHDSL Wireless Router; Americas  
 Cisco 878 G.SHDSL Wireless Router; Europe  
 Cisco 888 G.SHDSL Wireless Router with ISDN backup; 802.11n FCC Compliant

CISCO888W-GN-E-K9

Cisco 888 G.SHDSL Wireless Router with ISDN backup; 802.11n ETSI Compliant

CISCO888GW-GN-A-K9

Cisco 888 G.SHDSL Wireless Router with 3G; 802.11n FCC Compliant

CISCO888GW-GN-E-K9

Cisco 888 G.SHDSL Wireless Router with 3G; 802.11n ETSI Compliant

C888SRSTW-GN-A-K9

Cisco 888 SRST G.SHDSL Wireless Router with FXS, BRI; 802.11n FCC Compliant

C888SRSTW-GN-E-K9

Cisco 888 SRST G.SHDSL Wireless Router with FXS, BRI; 802.11n ETSI Compliant

# Cisco Integrated Services Routers



## Fixed-Configuration Integrated Services Routers

### 1800 Series Wired Router with Advanced Security



CISCO1801	ADSL over POTS router with 8-port 10/100BASE-T switch, ISDN S/T backup, Cisco IOS IP broadband
CISCO1801-M	ADSL over POTS Annex M router with 8-port 10/100BASE-T switch, ISDN S/T backup, Cisco IOS IP broadband
CISCO1801/K9	ADSL over POTS router with 8-port 10/100BASE-T switch, ISDN S/T backup, Cisco IOS Advanced IP Services
CISCO1801-M/K9	ADSL over POTS Annex M router with 8-port 10/100BASE-T switch, ISDN S/T backup, Cisco IOS Advanced IP Services
CISCO1802	ADSL over ISDN router with 8-port 10/100BASE-T switch, ISDN S/T backup, Cisco IOS IP broadband
CISCO1802/K9	ADSL over ISDN router with 8-port 10/100BASE-T switch, ISDN S/T backup, Cisco IOS Advanced IP Services
CISCO1803/K9	G.SHDSL router with 8-port 10/100BASE-T switch, ISDN S/T backup, Cisco IOS Advanced IP Services
CISCO1811/K9	Security router with dual 10/100 WAN ports, 8-port 10/100BASE-T switch, V.92 analog modem backup, Cisco IOS Advanced IP Services
CISCO1812/K9	Security router with dual 10/100 WAN ports, 8-port 10/100BASE-T switch, ISDN S/T backup, Cisco IOS Advanced IP Services

## Cisco Integrated Services Routers



## Fixed-Configuration Integrated Services Routers

## 1800 Series Wireless Router with Advanced Security



CISCO1801WM-AGE/K9	ADSL over POTS Annex M wireless router with 8-port 10/100BASE-T switch, ISDN S/T backup, Cisco IOS Advanced IP Services, and integrated ETSI compliant 802.11a,b,g wireless capability
CISCO1801W-AG-E/K9	ADSL over POTS wireless router with 8-port 10/100BASE-T switch, ISDN S/T backup, Cisco IOS Advanced IP Services, and integrated ETSI-compliant 802.11a,b,g wireless capability
CISCO1801W-AG-B/K9	ADSL over POTS wireless router with 8-port 10/100BASE-T switch, ISDN S/T backup, Cisco IOS Advanced IP Services, and integrated FCC-compliant 802.11a,b,g wireless capability
CISCO1801W-AG-C/K9	ADSL over POTS wireless router with 8-port 10/100BASE-T switch, ISDN S/T backup, Cisco IOS Advanced IP Services, and integrated China compliant 802.11a,b,g wireless capability
CISCO1801W-AG-N/K9	ADSL over POTS wireless router with 8-port 10/100BASE-T switch, ISDN S/T backup, Cisco IOS Advanced IP Services, and integrated Australia/NZ compliant 802.11a,b,g wireless capability
CISCO1802W-AG-E/K9	ADSL over ISDN wireless router with 8-port 10/100BASE-T switch, ISDN S/T backup, Cisco IOS Advanced IP Services, and integrated ETSI-compliant 802.11a,b,g wireless capability
CISCO1803W-AG-B/K9	G.SHDSL wireless router with 8-port 10/100BASE-T switch, ISDN S/T backup, Cisco IOS Advanced IP Services, and integrated FCC-compliant 802.11a,b,g wireless capability
CISCO1803W-AG-E/K9	G.SHDSL wireless router with 8-port 10/100BASE-T switch, ISDN S/T backup, Cisco IOS Advanced IP Services, and integrated ETSI-compliant 802.11a,b,g wireless capability
CISCO1811W-AG-B/K9	Security wireless router with dual 10/100 WAN ports, 8-port 10/100BASE-T switch, V.92 analog modem backup, Cisco IOS Advanced IP Services, and integrated FCC-compliant 802.11a,b,g wireless capability

## Cisco Integrated Services Routers



### Modular-Configuration Integrated Services Routers



#### Common Features

- **Flexibility:** The modular configuration supports multiple network services on a single device. Adding or changing features no longer requires major changes to the network.
- **Performance:** Cisco modular-configuration routers deliver multiple high-quality services at high speed over multiple connections. In addition, many modules run independently, further enhancing overall performance.
- **Integrated IP telephony** (except the Cisco 1841 Integrated Services Router): Support for analog and digital phones. Adding Cisco Unified Communication Manager Express and Cisco Unity® Express brings support for unified communications.
- **Intelligent security:** Firewall, IPS, IPsec, Secure Sockets Layer (SSL) VPN, and advanced application inspection.
- **Investment protection:** With access to more than 100 network modules and many more features in Cisco IOS® Software, the network can change with the business, without major equipment upgrades.

## Cisco Integrated Services Routers



## Features Comparison

	1841	1861	2801	2811	2821	2851
Integrated, routed/ WAN Ethernet	Two 10/100	One 10/100	Two 10/100	Two 10/100	Two 10/100/1000	Two 10/100/1000
Interface slots	2 high-speed WAN interface card (HWIC)/WIC/voice WIC (VWIC)	1 HWIC	2 HWIC/WIC/voice interface card (VIC)/VWIC 1 WIC/VIC/VWIC 1 VWIC and VIC	4 HWIC/WIC/VIC/VWIC	4 HWIC/WIC/VIC/VWIC	4 HWIC/WIC/VIC/VWIC
Network module slots	No	No	No	1 standard or enhanced network module (NM, NME)	1 standard, enhanced, or extended NM (NM, NME, NME-X)	1 standard, enhanced, extended, or double-wide NM (NM, NME, NME-X, NME-XD)
Advanced Integration Module (AIM) slots	1	No	2	2	2	2
Advanced security	Yes, enabled through Cisco IOS security image	Yes, enabled through Cisco IOS security image	Yes, enabled through Cisco IOS security image	Yes, enabled through Cisco IOS security image	Yes, enabled through Cisco IOS security image	Yes, enabled through Cisco IOS security image
Voice support	No	Yes, up to 15 IP phones	Yes, up to 25 IP phones	Yes, up to 35 IP phones	Yes, up to 50 IP phones	Yes, up to 100 IP phones
Optional integrated wireless	Yes, HWIC	No	Yes, HWIC	Yes, HWIC	Yes, HWIC	Yes, HWIC
Switch ports	Yes, up to 4 ports	Yes, up to 8 ports	Yes, up to 16 ports	Yes, up to 32 ports	Yes, up to 40 ports	Yes, up to 64 ports

## Cisco Integrated Services Routers



### 1800 Series Integrated Services Routers Modular-Configuration



#### Common Features

- Wire-speed performance up to T1/E1/xDSL rates
- Increased services density for security
- Support for high-speed WAN interface cards (HWIC)
- Support for more than 30 modules
- Hardware-based VPN acceleration

### 2800 Series Integrated Services Routers Modular-Configuration



#### Common Features

- Wire-speed performance up to multiple T1/E1/xDSL rates
- Increased services density for security, voice, caching, video, network analysis, and Layer 2 switching
- Support for enhanced interfaces (enhanced network module [NME], HWIC, extension voice module [EVM], packet voice DSP module [PVDM2])
- Support for more than 90 modules
- Hardware-based VPN acceleration
- Cisco Unified Communications Express (Survivable Remote Site Telephony [SRST], Cisco Unity Express)



## Cisco Security Appliances



### Product Positioning

Cisco ASA 5500 Series Adaptive Security Appliances combine best-in-class security and VPN services with an innovative, extensible services architecture. The Cisco ASA 5500 Series provides proactive threat defense that stops attacks before they spread through the network, controls network activity and application traffic, and delivers flexible VPN connectivity.

The Cisco ASA 5500 Series delivers a powerful combination of multiple market-proven technologies in a single platform, making it operationally and economically feasible for organizations to deploy comprehensive security services to more locations. The portfolio of services within the Cisco ASA 5500 Series enables customization for location-specific needs through tailored product editions for small to medium-sized businesses and for enterprises.

#### Cisco ASA 5500 Series Adaptive Security Appliances support:

- Customization: Personalized security for specific access needs and business policies
- Flexibility: Ability to easily add capabilities or upgrade from one device to another
- Advanced security: The latest in content security, encryption, identity authentication, authorization, and intrusion prevention
- Simplicity: One device that's easy to install, manage, and monitor
- Advanced networking: VPNs that provide mobile and remote workers highly secure access to company resources, or that allow VPN connections between partners, other offices, or employees based on roles

## Cisco Security Appliances



### Common Features



- Full-featured, high-performance firewall, IPS, content security, and SSL/IPsec VPN technologies deliver robust application security, user- and application-based access control, worm and virus mitigation, malware protection, content filtering, and remote user/site connectivity.
- Firewall technology allows valid business traffic to flow while keeping out unwelcome visitors and preventing unauthorized access to applications or information assets.
- Antivirus and antispymware technology shields internal network resources from virus attacks and reduces the costly process of cleaning up spyware, viruses, and other malware.
- Effective blocking of spam with very low false positives helps restore the effectiveness of email and improves employee productivity.
- VPN capabilities provide site-to-site and remote-user access to internal network systems and services.
- Cisco Adaptive Security Device Manager (ASDM) provides comprehensive configuration and monitoring of all the services in a single application through a powerful and easy-to-use browser-based management and monitoring interface

## Cisco Security Appliances



## Features Comparison

	ASA 5505	ASA 5510	ASA 5520
Firewall Throughput	Up to 150 Mbps	Up to 300 Mbps	Up to 450 Mbps
Maximum Firewall and IPS Throughput		Up to 150 Mbps with AIP SSM-10 Up to 300 Mbps with AIP SSM-20	Up to 225 Mbps with AIP SSM-10 Up to 375 Mbps with AIP SSM-20 Up to 450 Mbps with AIP SSM-40
VPN Throughput	Up to 100 Mbps	Up to 170 Mbps	Up to 225 Mbps
Concurrent Sessions	10,000 25,000**	50,000 130,000**	280,000
IPsec VPN Peers	2, 10 or 25	250	750
SSL VPN Peer License*	10 or 25**	10, 25, 50, 100, or 250	10, 25, 50, 100, 250, 500, or 750
Interfaces	8-port Fast Ethernet switch	Five Fast Ethernet ports; or 2 Gigabit Ethernet + 3 Fast Ethernet**	4 Gigabit Ethernet ports and 1 Fast Ethernet port
High Availability	Active/Standby**	Active/Active, Active/Standby**	Active/Active, Active/Standby

\* Separately licensed feature; includes two with the base system

\*\* Upgrade available with Cisco ASA Security Plus license

# Cisco Security Appliances



## ASA 5505



ASA5505-K8

Cisco ASA 5505 10-User Bundle includes 8-port Fast Ethernet switch, 10 IPsec VPN peers, 2 SSL VPN peers, Data Encryption Standard (DES) license

ASA5505-BUN-K9

Cisco ASA 5505 10-User Bundle includes 8-port Fast Ethernet switch, 10 IPsec VPN peers, 2 SSL VPN peers, Triple Data Encryption Standard/Advanced Encryption Standard (3DES/AES) license

ASA5505-50-BUN-K9

Same as ASA5505-50-BUN-K9 with 50-User Bundle

ASA5505-UL-BUN-K9

Same as ASA5505-50-BUN-K9 with unlimited user Bundle



ASA5505-SEC-BUN-K9

Cisco ASA 5505 Unlimited-User Security Plus Bundle includes 8-port Fast Ethernet switch, 25 IPsec VPN peers, 2 SSL VPN peers, DMZ, stateless Active/Standby high availability, 3DES/AES license

ASA5505-SSL10-K9

Cisco ASA 5505 SSL/IPsec VPN Edition includes 10 IPsec VPN peers, 10 SSL VPN peers, 50 firewall users, 8-port Fast Ethernet switch

ASA5505-SSL25-K9

Same as ASA5505-SSL10-K9 with 25 SSL VPN peers

# Cisco Security Appliances



## ASA 5510



ASA5510-K8

Cisco ASA 5510 Firewall Edition includes 3 Fast Ethernet interfaces, 250 IPsec VPN peers, 2 SSL VPN peers, DES license

ASA5510-BUN-K9

Cisco ASA 5510 Firewall Edition includes 3 Fast Ethernet interfaces, 250 IPsec VPN peers, 2 SSL VPN peers, 3DES/AES license

ASA5510-SEC-BUN-K9

Cisco ASA 5510 Security Plus Firewall Edition includes 2 Gigabit Ethernet + 3 Fast Ethernet interfaces, 250 IPsec VPN peers, 2 SSL VPN peers, Active/Standby high availability, 3DES/AES license



ASA5510-AIP10-K9

Cisco ASA 5510 IPS Edition includes AIP-SSM-10, firewall services, 250 IPsec VPN peers, 2 SSL VPN peers, 5 Fast Ethernet interfaces

ASA5510-CSC10-K9

Cisco ASA 5510 Content Security Edition includes CSC-SSM-10, 50-user antivirus/anti-spyware with 1-year subscription, firewall services, 250 IPsec VPN peers, 2 SSL VPN peers, 3 Fast Ethernet interfaces

ASA5510-CSC20-K9

Same as ASA5510-CSC10-K9 with 500-user antivirus/anti-spyware license

ASA5510-SSL50-K9

Cisco ASA 5510 SSL/IPsec VPN Edition includes 250 IPsec VPN peers, 50 SSL VPN peers, firewall services, 3 Fast Ethernet interfaces

ASA5510-SSL100-K9

Same as ASA5510-SSL50-K9 with 100 SSL VPN peers

ASA5510-SSL250-K9

Same as ASA5510-SSL50-K9 with 250 SSL VPN peers

# Cisco Security Appliances



## ASA 5520



ASA5520-K8

Cisco ASA 5520 Firewall Edition includes 4 Gigabit Ethernet interfaces + 1 Fast Ethernet interface, 750 IPsec VPN peers, 2 SSL VPN peers, Active/Active and Active/Standby high availability, DES license

ASA5520-BUN-K9

Cisco ASA 5520 Firewall Edition includes 4 Gigabit Ethernet interfaces + 1 Fast Ethernet interface, 750 IPsec VPN peers, 2 SSL VPN peers, Active/Active and Active/Standby high availability, 3DES/AES license



ASA5520-AIP10-K9

Cisco ASA 5520 IPS Edition includes AIP-SSM-10, firewall services, 750 IPsec VPN peers, 2 SSL VPN peers, 4 Gigabit Ethernet interfaces, 1 Fast Ethernet interface

ASA5520-AIP20-K9

Cisco ASA 5520 IPS Edition includes AIP-SSM-20, firewall services, 750 IPsec VPN peers, 2 SSL VPN peers, 4 Gigabit Ethernet interfaces, 1 Fast Ethernet interface

ASA5520-AIP40-K9

Cisco ASA 5520 IPS Edition includes AIP-SSM-40, firewall services, 750 IPsec VPN peers, 2 SSL VPN peers, 4 Gigabit Ethernet interfaces, 1 Fast Ethernet interface

ASA5520-CSC10-K9

Cisco ASA 5520 Content Security Edition includes CSC-SSM-10, 50-user antivirus/anti-spyware with 1-year subscription, firewall services, 750 IPsec VPN peers, 2 SSL VPN peers, 4 Gigabit Ethernet interfaces, 1 Fast Ethernet interface

ASA5520-CSC20-K9

Same as ASA5520-CSC10-K9 with 500-user antivirus/anti-spyware license

ASA5520-SSL500-K9

Cisco ASA 5520 SSL/IPsec VPN Edition includes 750 IPsec VPN peers, 500 SSL VPN peers, firewall services, 4 Gigabit Ethernet interfaces, 1 Fast Ethernet interface

## Cisco Mobility Express



### Product Positioning

Cisco Mobility Express brings together the Cisco 521 Wireless Express Access Point and the Cisco 500 Series Wireless Express Mobility Controller to provide a flexible, cost-effective wireless solution specifically designed to meet the needs of small businesses.

The Cisco 521 access point is a single-band 802.11g access point that features business-class management, security, and scalability. It offers high-performance wireless connectivity in offices and similar environments.

As part of this solution, the Cisco 521 access point uniquely addresses the diverse requirements of small businesses through the ability to operate either in standalone mode or in controller-based mode with the Cisco 500 Series Wireless Express Mobility Controller.

- Standalone mode: Access points are directly connected to the wired infrastructure through an Ethernet switch and provide reliable high-speed wireless connectivity to users in the area they cover. Configuration and management are performed locally at the individual access point level.
- Controller-based mode: Access points are directly connected to the wired infrastructure through an Ethernet switch and associated with a Cisco 500 Series Wireless Express Mobility Controller. The controller streamlines and manages the configuration of all connected access points through a single interface and provides a platform for mobility services such as secure guest access and voice over Wi-Fi.

## Cisco Mobility Express



### Common Features



- The Cisco 521 Wireless Express Access Point is a single-band 802.11g access point and is backward compatible with 802.11b devices.
- Hardware-assisted Advanced Encryption Standard (AES) encryption provides a high level of security without performance degradation.
- The access point is IEEE 802.11i compliant and Wi-Fi Protected Access (WPA2) and WPA certified to help ensure interoperable security with a broad range of wireless LAN client devices.
- Power over Ethernet (IEEE 802.3af) provides an interoperable alternative to AC power.
- Cisco Configuration Assistant simplifies the task of configuring and managing the access points.
- The Cisco 526 Wireless Express Mobility Controller simplifies the deployment and management of multi-access-point networks
- Secure guest access creates a partition between the virtual guest network and the corporate LAN.
- Voice over WLAN optimization delivers quality of service, call admission control, and fast handoffs between access points to improve the quality of a wireless voice infrastructure.



## Cisco Mobility Express



### 802.11g Wireless Express Access Points

AIR-AP521G-x-K9

Cisco 521 Wireless Express Access Point (standalone)

AIR-LAP521G-x-K9

Cisco 521 Wireless Express Access Point (Controller mode)

AIR-WLC526-K9

Cisco 526 Wireless Express Mobility Controller

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## Cisco Unified Communications

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### Product Positioning

Cisco Unified Communications provides basic and advanced voice services for the small business at a small business price.

Cisco Unified Communications provides the option for redundancy with most solutions that range from survivability to full redundancy providing constant phone service without interruption.

Some of the advantages of Unified Communications for the Small Business reside in the enterprise features available and other options:

- Data Application integration: CRM, ERP for example
- Contact Center capabilities including help desk functionality
- Presence integration: enabling the ability to see the status of other within the business
- Voicemail, Integrated Messaging and Unified Messaging options
- Video Integration
- Voice, Video and Data Collaboration within the business and also with external customers

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## Cisco Unified Communications

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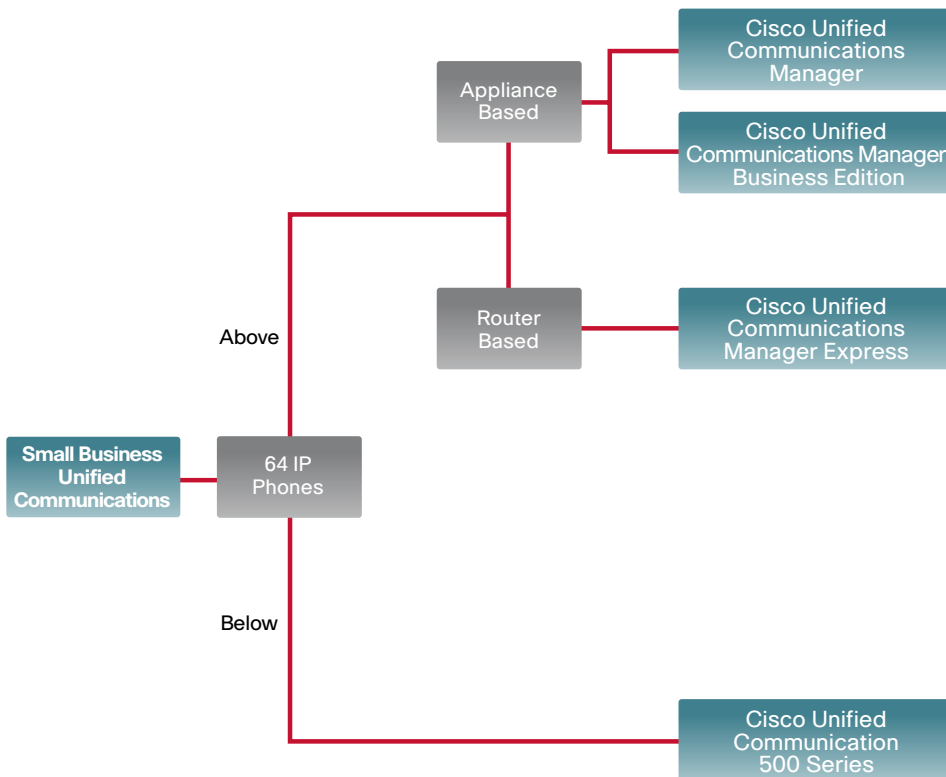
### Common Features

- Small, Medium and Enterprise business features at a Small Business price
- Video support
- Desktop software phone support
- Support for the integration of many different Unified Communications Applications, for instance:
  - Collaboration of Voice, Video and Data
  - Contact Center integration
  - Presence
  - Voicemail, Integrated Messaging and Unified Messaging options

# Cisco Unified Communications



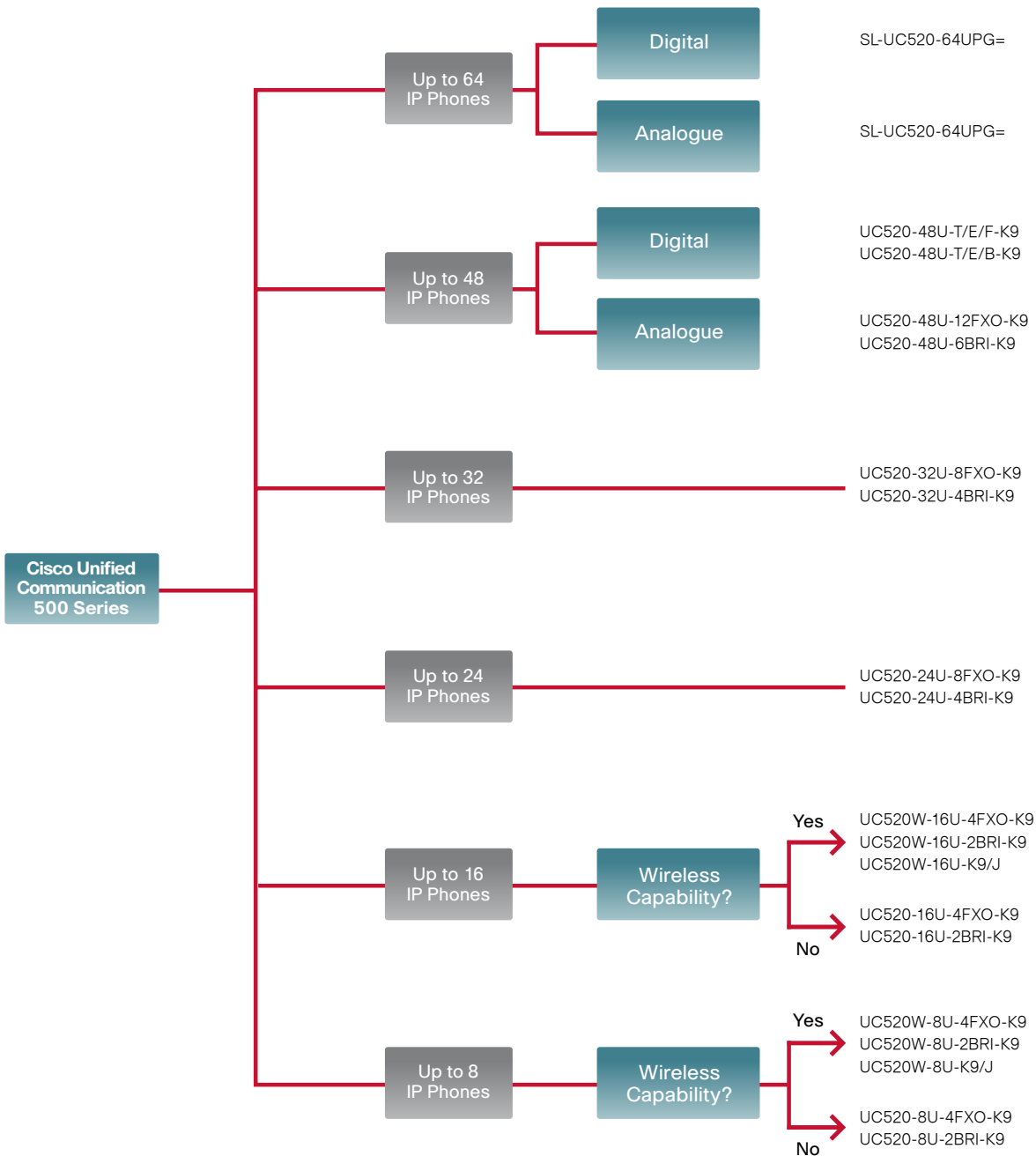
## Decision Tree Overview



# Cisco Unified Communications



## Decision Tree Overview



## Cisco Unified Communications



## Unified Communication 500 Series

## 8 and 16 IP Phones

8 and 16  
IP Phones

**UC520-16U-4FXO-K9**  
**UC520-8U-4FXO-K9**  
**UC520W-16U-4FXO-K9**  
**UC520W-8U-4FXO-K9**  
**PWR-UC500-220W=**

- 4 FXS ports
- 4 FXO ports or 2 Basic Rate Interface (BRI) ports
- 8 Ethernet PoE ports
- Cisco Unified Communications Manager Express
- Cisco Unity Express
- Optional integrated wireless
- 16-user version requires Cisco Catalyst Express 520 Series Switch
- Supports all Cisco Unified IP Phones, including the new 500 series IP Phones

## 24, 32, 48 and 64 IP Phones

24, 32, 48 and  
64 IP Phones

**UC520-24U-8FXO-K9**  
**UC520-32U-8FXO-K9**  
**UC520-48U-12FXO-K9**  
**UC520-48U-T/E/F-K9**  
**PWR-UC500-220W=**

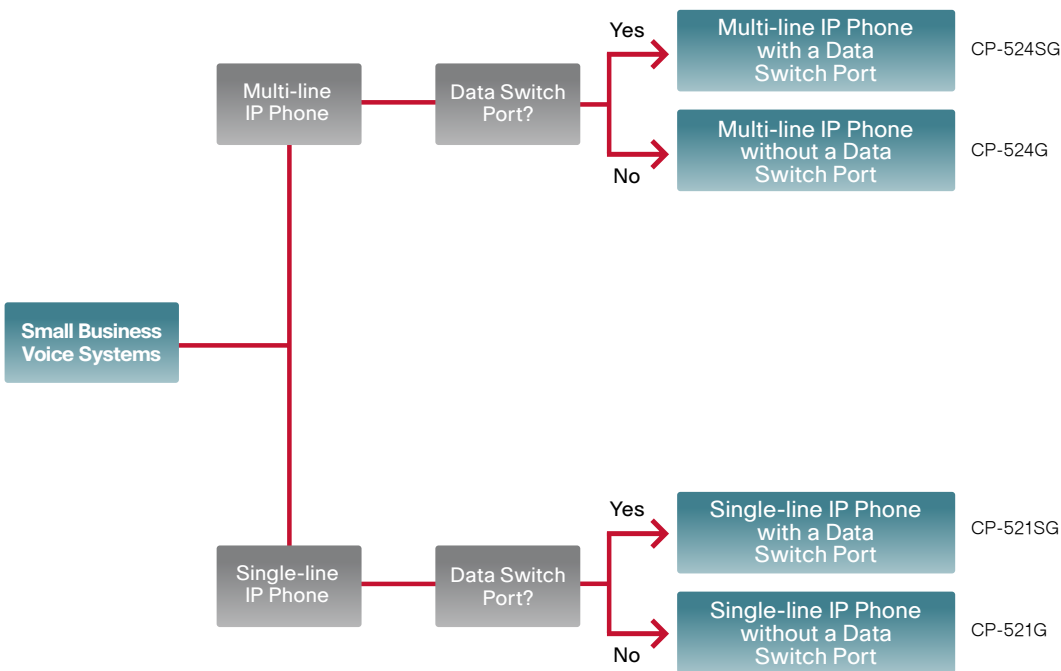
- 4 ports of FXS
- The 24- and 32-phone versions come with either 8 ports of FXO or 4 ports of BRI
- The 48-phone version comes in 2 formats:
  - Analog with 12 ports of FXO or 6 ports of BRI
  - Digital with 2 ports of PRI/T1 and either 4 FXO or 2 ports of BRI
- 8 Ethernet PoE ports
- Cisco Unified Communications Manager Express
- Cisco Unity Express
- 32- and 48-user versions require Cisco Catalyst Express 520 Series Switches
- 64-user version is an upgrade from the 48 user version
- Supports all Cisco Unified IP Phones, including the new 500 series IP Phones

# Cisco Unified Communications



## Cisco Unified IP Phones 500 Series

### Decision Tree Overview



## Cisco Unified Communications IP Phones



## Unified IP Phones 500 Series

## Single-line IP Phone without a Data Switch Port

521G

**CP-521G=**

- Backlit pixel-based display: 128 x 64 monochrome LCD graphical display
- Lighted line key
- Single line with 2 call line appearances
- 4 dynamic soft keys
- IEEE standards-based 802.3af inline power

## Single-line IP Phone with a Data Switch Port

521SG

**CP-521SG=**

- Backlit pixel-based display: 128 x 64 monochrome LCD graphical display
- Lighted line key
- Single line with 2 call line appearances
- 4 dynamic soft keys
- 10/100 Ethernet Switch port
- IEEE standards-based 802.3af inline power

## Multi-line IP Phone without a Data Switch Port

524G

**CP-524G=**

- Backlit pixel-based display: 128 x 64 monochrome LCD graphical display
- Lighted line keys
- 4 lines with 8 call line appearances
- 4 dynamic soft keys
- IEEE standards-based 802.3af inline power

## Multi-line IP Phone with a Data Switch Port

524SG

**CP-524SG=**

- Backlit pixel-based display: 128 x 64 monochrome LCD graphical display
- Lighted line keys
- 4 lines with 8 call line appearances
- 4 dynamic soft keys
- 10/100 Ethernet Switch port
- IEEE standards-based 802.3af inline power

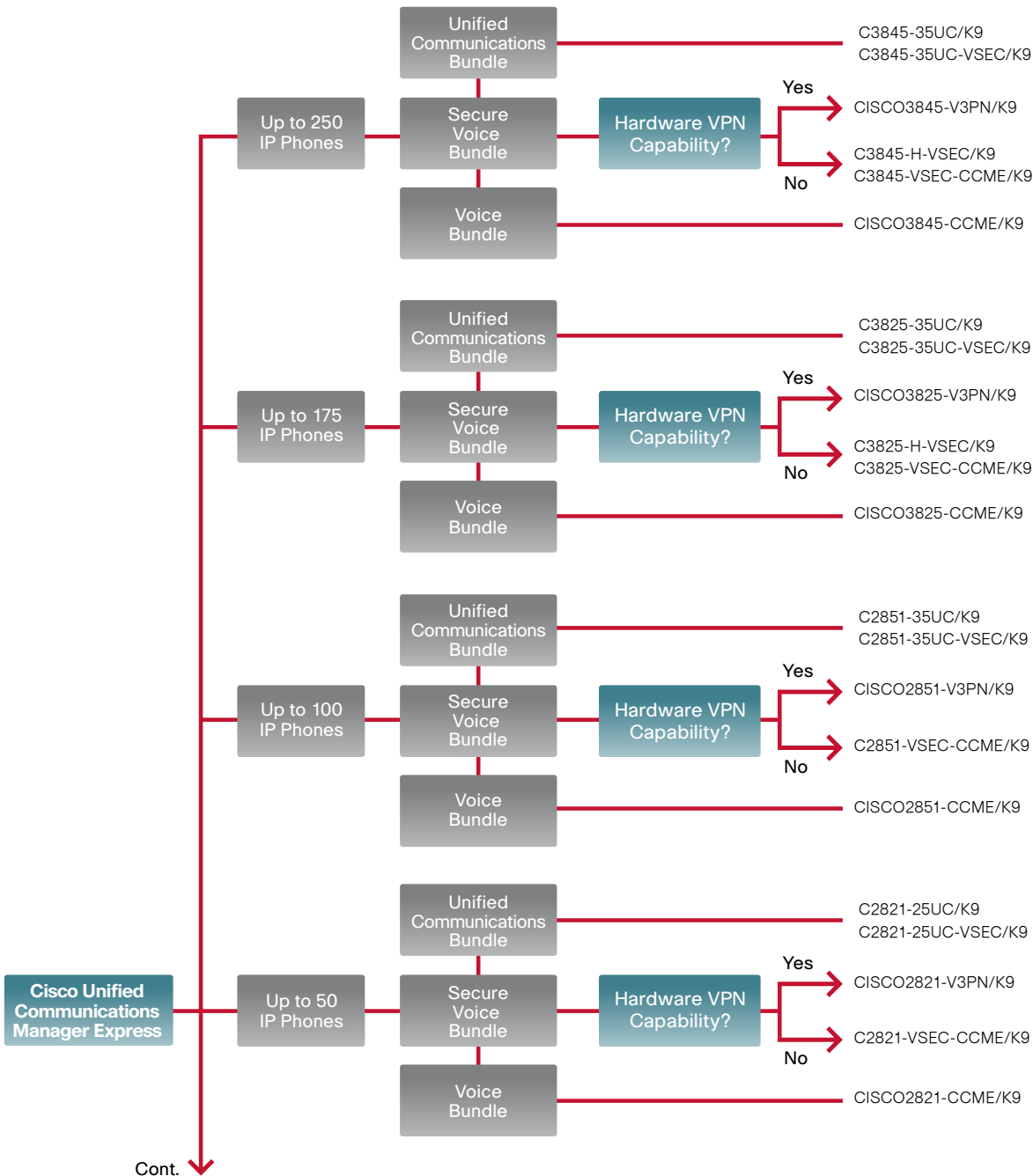
\*\*\* These Cisco Unified IP Phones 500 Series are only supported on the Unified Communications 500 Series. All other Cisco Unified IP Phones are also supported on the Unified Communications 500 Series



# Cisco Unified Communications



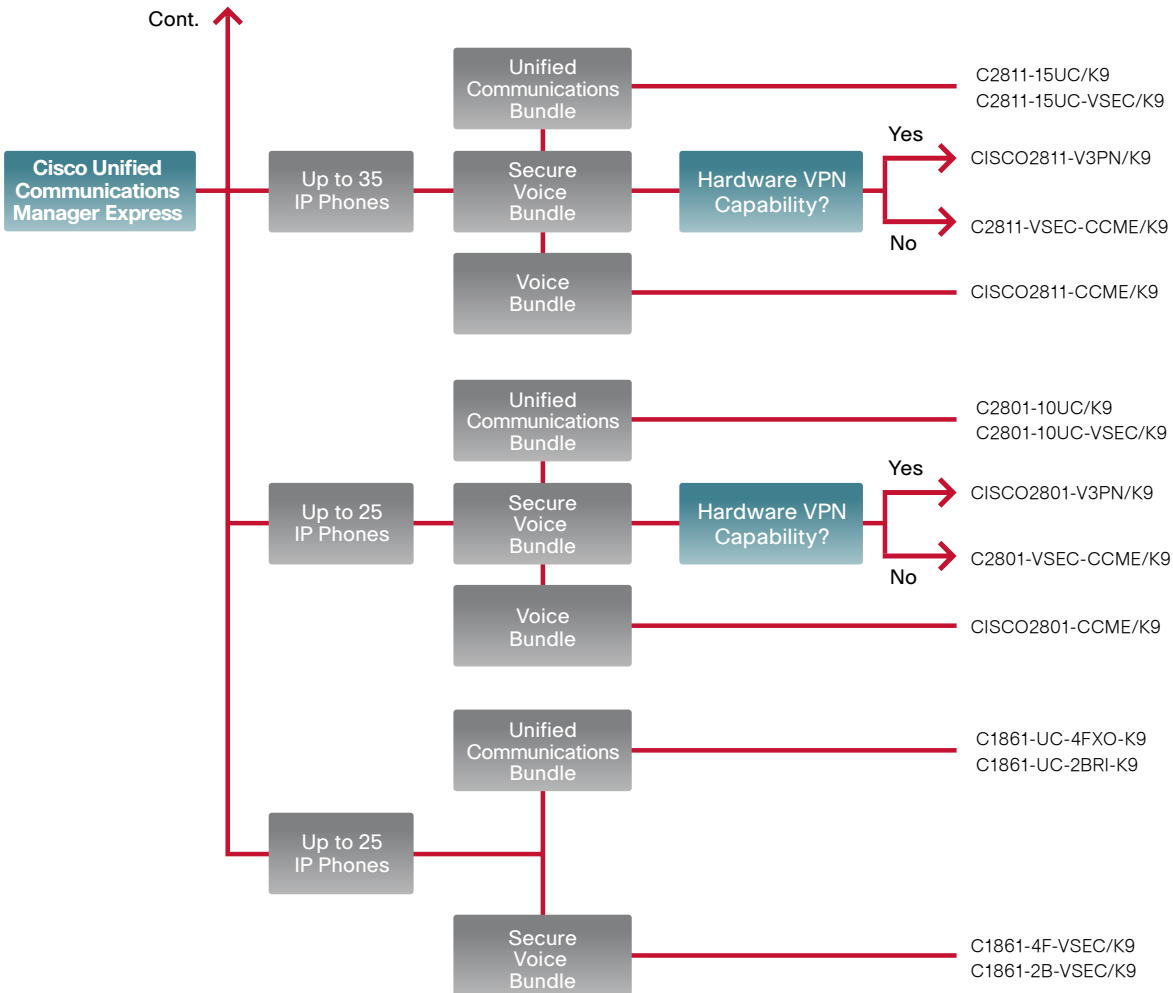
## Decision Tree Overview



# Cisco Unified Communications



## Decision Tree Overview (cont.)



## Cisco Unified Communications



## Unified Communications Manager Express Bundles

## Cisco 1861 Integrated Services Router

1861 Integrated  
Services Router

**Standard:**

- Support for 8 IP Phones (including phone licenses)
- 8 Cisco Unity Express Mailboxes
- 2 Unified CallConnector Personal licenses
- 8 ports of 10/100 PoE
- 4 FXO ports or 2 BRI ports
- 4 FXS ports
- Music-on-hold port

**Options:**

- Up to 15 IP Phones
- Cisco Unity Express, as a factory option
- Cisco Unified Survivable Remote Site Telephony
- Wide choice of Cisco Unified IP Phones

## Cisco 2801 Integrated Services Router

2801 Integrated  
Services Router

**Standard:**

- Support for 10 IP Phones (including Phones licenses)
- 10 Cisco Unity Express Mailboxes
- 2 Unified CallConnector Personal licenses

**Options:**

- Up to 25 IP Phones
- 1-port RJ-48 multiflex trunk E1
- 1 Cisco Catalyst Express 500 Series Switch:  
24-PC, 24-port, 10/100 switch with PoE,  
or 1 Cisco Catalyst 3560 Series Switch:  
24- and 48-port 10/100 switch with PoE
- Wide choice of Cisco Unified IP Phones
- Cisco Unity Express Advanced Integration Module
- Cisco SCUE-LIC-25CME

## Cisco Unified Communications



## Unified Communications Manager Express Bundles

## Cisco 2811 Integrated Services Router

2811 Integrated  
Services Router

**Standard:**

- Support for 15 IP Phones (including Phones licenses)
- 15 Cisco Unity Express Mailboxes
- 5 Unified CallConnector Personal licenses

**Options:**

- Up to 35 IP Phones
- 1-port RJ-48 multiflex trunk E1
- 2 Cisco Catalyst Express 500 Series Switches:  
24-PC, 24-port, 10/100 switches with PoE,  
or 1 Cisco Catalyst 3560 Series Switch:  
24- and 48-port 10/100 switch with PoE
- Wide choice of Cisco Unified IP Phones
- Cisco Unity Express Advanced Integration Module
- Cisco SCUE-LIC-25CME

## Cisco 2821 Integrated Services Router

2821 Integrated  
Services Router

**Standard:**

- Support for 25 IP Phones (including Phones licenses)
- 25 Cisco Unity Express Mailboxes
- 10 Unified CallConnector Personal licenses

**Options:**

- Up to 50 IP Phones
- 1-port RJ-48 multiflex trunk E1
- 1 Cisco Catalyst 3560 Series Switch:  
24- and 48-port 10/100 switch with PoE
- Wide choice of Cisco Unified IP Phones
- Cisco Unity Express Advanced Integration Module
- Cisco SCUE-LIC-50CME

## Cisco Unified Communications



## Unified Communications Manager Express

## Cisco 2851 Integrated Services Router

2851 Integrated Services Router

**Standard:**

- Support for 35 IP Phones (including Phones licenses)
- 35 Cisco Unity Express Mailboxes
- 10 Unified CallConnector Personal licenses

**Options:**

- Up to 100 IP Phones
- 1-port RJ-48 multiflex trunk E1
- 1 Cisco Catalyst 3560 Series Switch: 24- and 48-port 10/100 switch with PoE, or 1 Cisco Catalyst 3750 Metro Series Switch
- Choice of Cisco Unified IP Phones
- Cisco Unity Express Network Module
- Cisco SCUE-LIC-100CME

## Cisco 3825 Integrated Services Router

3825 Integrated Services Router

**Standard:**

- Support for 35 IP Phones (including Phones licenses)
- 35 Cisco Unity Express Mailboxes
- 10 Unified CallConnector Personal licenses

**Options:**

- Up to 175 IP Phones
- 2-port RJ-48 multiflex trunk E1
- 1 Cisco Catalyst 3560 Series Switch: 24- and 48-port 10/100 switch with PoE, or 1 Cisco Catalyst 3750 Metro Series Switch
- Choice of Cisco Unified IP Phones
- Voicemail option: Cisco Unity Express Network Module or Cisco Unity Connection

## Cisco Unified Communications



## Unified Communications Manager Express

## Cisco 3845 Integrated Services Router

3845 Integrated  
Services Router

**Standard:**

- Support for 35 IP Phones (including Phones licenses)
- 35 Cisco Unity Express Mailboxes
- 10 Unified CallConnector Personal licenses

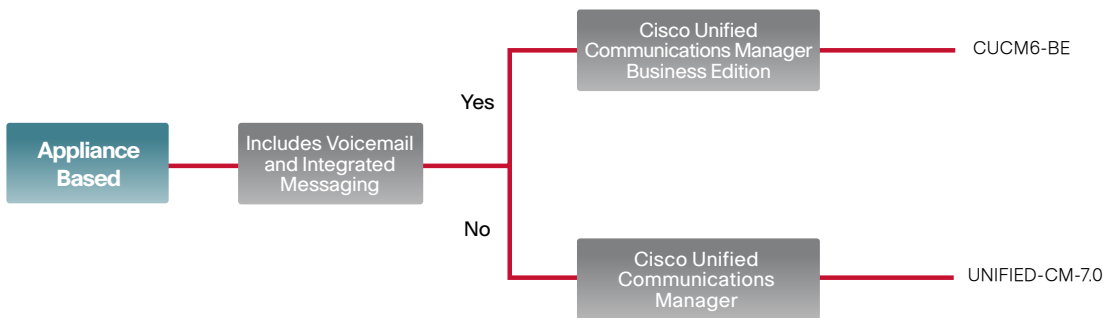
**Options:**

- Up to 250 IP Phones
- 2-port RJ-48 multiflex trunk E1
- 1-port RJ-48 multiflex trunk E1
- 1 Cisco Catalyst 3560 Series Switch:  
24- and 48-port 10/100 switch with PoE,  
or 1 Cisco Catalyst 3750 Metro Series Switch
- Choice of Cisco Unified IP Phones
- Voicemail option: Cisco Unity Express Network Module  
or Cisco Unity Connection

# Cisco Unified Communications



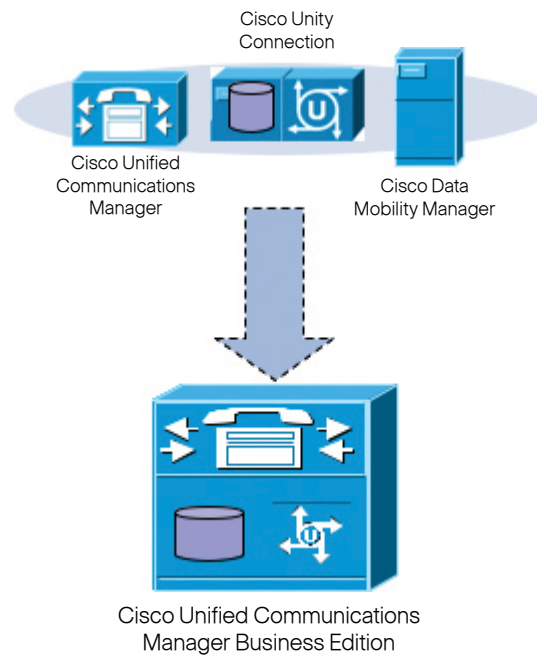
## Decision Tree Overview



## Cisco Unified Communications



### Cisco Unified Communications Manager Business Edition



#### Unified Communications System for Small Businesses

- Key unified communications applications on a single powerful server
- Supports up to 500 users and 20 sites
- Integrates with entire Cisco Unified Communications system of products

#### Simple Setup and Management

- Single server for three applications: Cisco Unified Communications Manager, Cisco Data Mobility Manager, and Cisco Unity Connection
- Preloaded software suite
- Single set of credentials, single sign-on
- Integrated mailbox configuration and common management tools



## Cisco Unified Communications



### Unified Communications Manager

Cisco Unified Communications Manager provides voice, video, mobility, and presence services for businesses. Unified Communications Manager is a scalable, distributable, and highly available IP telephony call-processing system.

Cisco Unified Communications Manager creates a unified workspace that extends telephony features and capabilities to telephony network devices such as IP phones, media processing devices, voice over IP (VoIP) gateways, mobile devices, and multimedia applications. Additional services, such as unified messaging, multimedia conferencing, presence, collaborative contact centers, and interactive multimedia response systems, are made possible through open telephony APIs.

#### Some of the Features Available are:

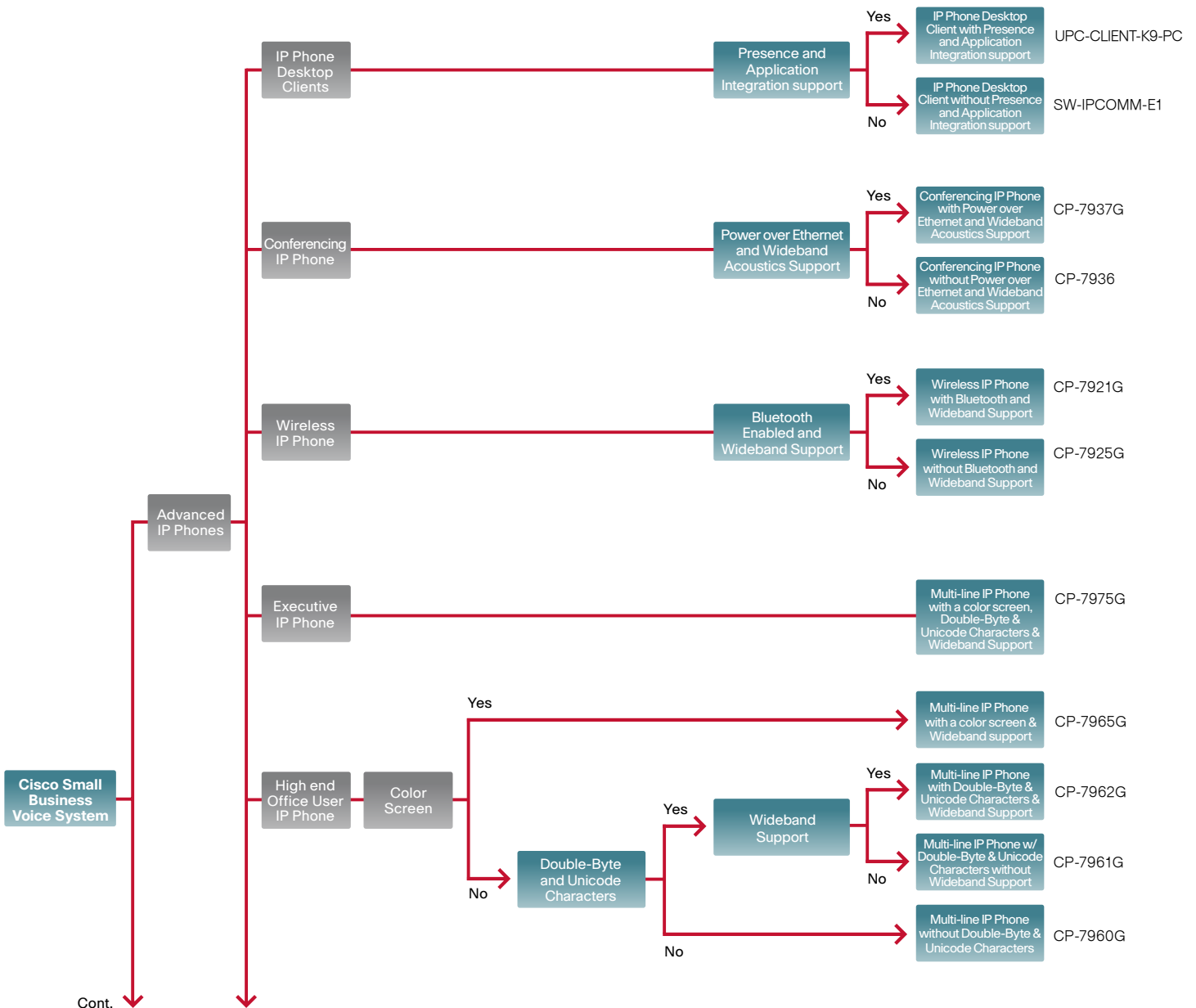
- Able to support a full range of communications features and applications, including SIP-based applications
- Highly available for business continuity, supporting multiple levels of server redundancy and survivability
- Support for a broad range of phones to suit varying user requirements
- Choice of operating system environments: Windows server-based implementation or Linux-based appliance model implementation

# Cisco Unified Communications



## Cisco Unified IP Phones and Clients

### Decision Tree Overview

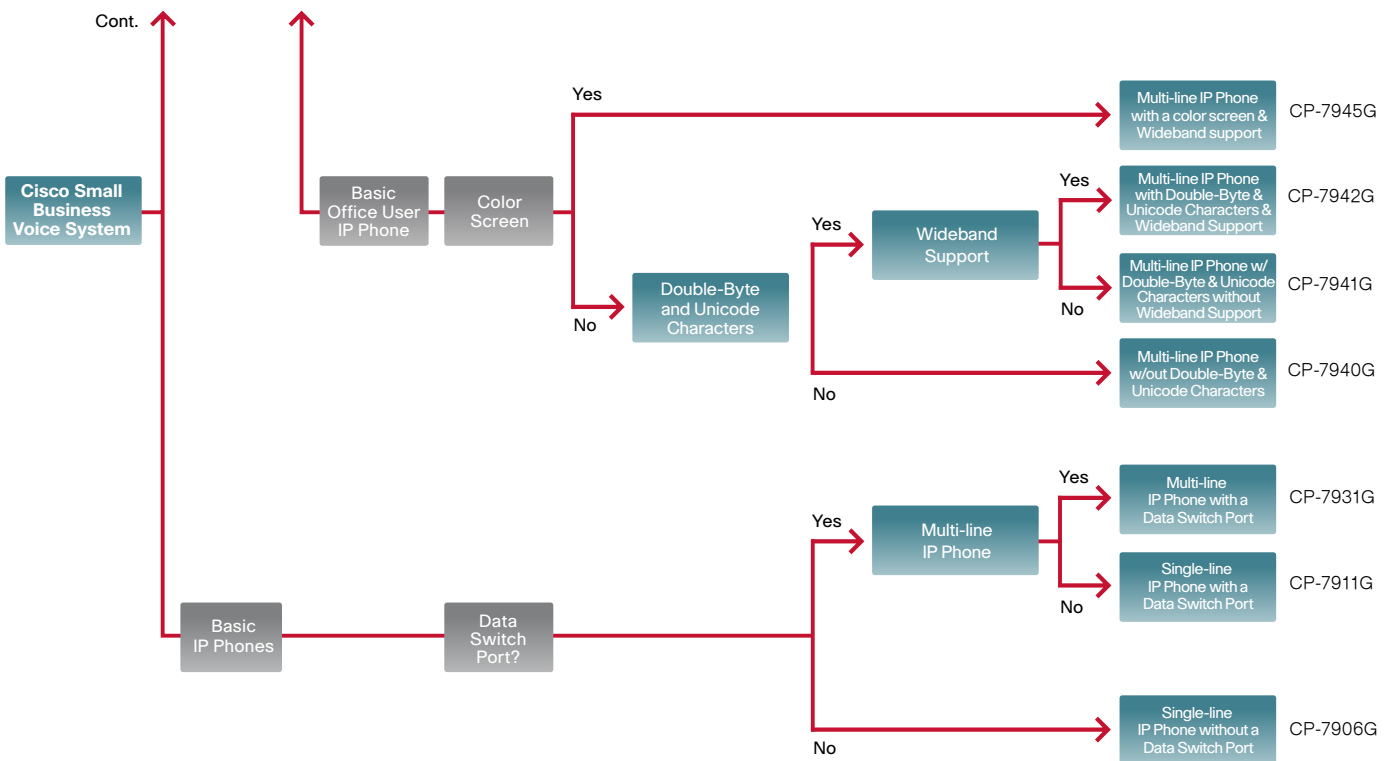


# Cisco Unified Communications



## Cisco Unified IP Phones and Clients

### Decision Tree Overview (cont.)



## Cisco Unified Communications IP Phones



## Basic Features IP Phones

## Single-line IP Phone without a Data Switch Port

IP Phone 7906G

**CP-7906G**

- Graphical monochrome display with 192 x 64 pixels
- Lighted hold key
- Lighted menu key
- Single line
- 4 dynamic soft keys and a scroll toggle
- IEEE standards-based 802.3af inline power
- Cisco Inline Power

## Single-line IP Phone with a Data Switch Port

IP Phone 7911G

**CP-7911G**

- Graphical monochrome display with 192 x 64 pixels
- Single line
- Lighted hold key
- Lighted menu key
- 4 dynamic soft keys and a scroll toggle
- Support for text and audio-based XML applications
- IEEE standards-based 802.3af inline power
- Cisco Inline Power
- Integrated dual Ethernet switch port

## Multi-line IP Phone with a Data Switch Port

IP Phone 7931G

**CP-7931G**

- 24 lighted line keys
- Graphical monochrome display with resolution of 192 x 64 pixels
- Dedicated keys for hold, redial, and transfer
- 4 dynamic soft keys and a 4-way rocker key
- Dual-port integrated Ethernet switch
- IEEE standards-based 802.3af inline power
- Integrated dual Ethernet switch port

## Cisco Unified Communications IP Phones



## Advanced IP Phones

## Multi-line IP Phone without Double-Byte and Unicode Characters

IP Phone 7940G

**CP-7940G**

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

## Multi-line IP Phone with Double-Byte and Unicode Characters without Wideband Support

IP Phone 7941G

**CP-7941G**

- 4-bit grayscale display (320 x 222)
- 4 dynamic soft keys
- 2 configurable keys
- Integrated external headset socket
- Full-duplex speakerphone
- Integrated dual 10/100 Ethernet switch port
- IEEE standards-based 802.3af inline power
- Cisco Inline Power
- Double-byte and Unicode characters
- Lighted line keys

## Multi-line IP Phone with Double-Byte and Unicode Characters and Wideband Support

IP Phone 7942G

**CP-7942G**

- 5-inch (12.5 cm), high-resolution (320 x 222), graphical monochrome 4-bit grayscale display
- 4 dynamic soft keys
- 2 configurable keys
- Integrated external headset socket
- Full-duplex speakerphone
- Integrated dual 10/100 Ethernet switch port
- IEEE standards-based 802.3af inline power
- Cisco Inline Power
- Double-byte and Unicode characters
- Lighted line keys
- Wideband support

## Cisco Unified Communications IP Phones



## Advanced IP Phones

**Multi-line IP Phone with a color screen, Double-Byte and Unicode Characters and Wideband Support**

IP Phone 7945G

**CP-7945G**

- 5-inch (12.5 cm) graphical TFT color display, 16-bit color depth, 320 x 240 effective pixel resolution, with backlight
- 4 dynamic soft keys
- 2 configurable keys
- Integrated external headset socket
- Full-duplex speakerphone
- Integrated dual 10/100/1000 Ethernet switch port
- IEEE standards-based 802.3af inline power
- Double-byte and Unicode characters
- Lighted line keys
- Wideband support

**Multi-line IP Phone without Double-Byte and Unicode Characters**

IP Phone 7960G

**CP-7960G**

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

## Cisco Unified Communications IP Phones



## Advanced IP Phones

**Multi-line IP Phone with Double-Byte and Unicode Characters without Wideband Support**

IP Phone 7961G

**CP-7961G**

- High-resolution, graphical 4-bit grayscale display (320 x 222)
- 4 dynamic soft keys
- 6 configurable keys
- Integrated external headset socket
- Full-duplex speakerphone
- Integrated dual 10/100 Ethernet switch port
- IEEE standards-based 802.3af inline power
- Cisco Inline Power
- Double-byte and Unicode characters
- Lighted line keys

**Multi-line IP Phone with Double-Byte and Unicode Characters and Wideband Support**

IP Phone 7962G

**CP-7962G**

- 5-inch (12.5 cm), high-resolution (320 x 222), graphical monochrome 4-bit grayscale display
- 4 dynamic soft keys
- 6 configurable keys
- Integrated external headset socket
- Full-duplex speakerphone
- Integrated dual 10/100 Ethernet switch port
- IEEE standards-based 802.3af inline power
- Cisco Inline Power
- Double-byte and Unicode characters
- Lighted line keys
- Wideband support

## Cisco Unified Communications IP Phones



## Advanced IP Phones

**Multi-line IP Phone with a color screen, Double-Byte and Unicode Characters and Wideband Support**

IP Phone 7965G

**CP-7965G**

- 5-inch (12.5 cm) graphical TFT color display, 16-bit color depth, 320 x 240 effective pixel resolution, with backlight
- 6 programmable keys
- 4 dynamic soft keys
- Advanced XML support
- IEEE standards-based 802.3af inline power
- Capability to connect external microphone and speakers
- Integrated dual 10/100/1000 Ethernet switch port
- Double-byte and Unicode characters
- Lighted line keys
- Wideband support

**Multi-line IP Phone with a color screen, Double-Byte and Unicode Characters and Wideband Support**

IP Phone 7975G

**CP-7975G**

- 5.6-inch (14 cm) graphical TFT color touchscreen display, 16-bit color depth, 320 x 240 effective pixel resolution, with backlight
- 8 programmable keys
- 5 soft keys
- Advanced XML support
- IEEE standards-based 802.3af inline power
- Capability to connect external microphone and speakers
- Integrated dual 10/100/1000 Ethernet Gigabit switch port
- Double-byte and Unicode characters
- Lighted line keys
- Wideband support



## Cisco Unified Communications IP Phones



## Wireless IP Phones

## Wireless IP Phone without Bluetooth and Wideband Support

Wireless IP  
Phone 7921G



**CP-7921G**

- 2-inch (5 cm) color display with 176 x 220-pixel resolution
- Dedicated buttons: volume, mute, and push-to-talk (PTT)
- PTT support through XML application
- 2 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

## Wireless IP Phone with Bluetooth and Wideband Support

Wireless IP  
Phone 7925G



**CP-7925G**

- Bluetooth v2.0 headset profiles
- IP54 rated hermetically sealed handset/display
- Ruggedized industrial design to military 810F standard
- Wideband audio
- Six line appearances
- Adjustable display brightness and timeout
- Any-key answer
- Audible and vibrating ringers
- Two soft key buttons to access screen-based applications, features, and functions
- Application button that supports Push-to-Talk via XML
- Mute
- Speakerphone
- Five-way navigation support
- Volume control (up/down)
- Send button and Power/End button
- 802.11 a/b/g

## Cisco Unified Communications IP Phones



## Conference Phones

**Conferencing IP Phone without Power over Ethernet and Wideband Acoustics Support**

IP Conference Station 7936



**CP-7936**

- Equipped with 3 microphones for better space coverage
- Full-duplex speakerphone
- 3 dynamic soft keys
- Support for 3 external directional microphones

**Conferencing IP Phone with Power over Ethernet and Wideband Acoustics Support**

IP Conference Station 7937G



**CP-7937G**

- Superior wideband acoustics with the support of the G.722 wideband codec
- Support for IEEE Power over Ethernet (PoE) or the Cisco Power Cube 3
- Expanded room coverage up to 30 feet by 40 feet with the optional external microphone kit
- Support for a third-party lapel microphone kit
- New larger backlit liquid crystal display (LCD)
- XML Support

# Cisco Unified Communications IP Phones



## IP Phone Desktop Clients

### IP Phone Desktop Client without Presence and Application Integration support

IP Communicator



Default Mode    Compact Mode    Screen Only Mode

**SW-IPCOMM-E1**

- 5 dynamic soft keys
- 8 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 Video Advantage support
- SIP support

### IP Phone Desktop Client with Presence and Application Integration support

Unified Personal Communicator



**UPC-CLIENT-K9-PC**

- Presence: View real-time availability of other Cisco Unified Personal Communicator and Cisco Unified IP Phone users.
- Do not disturb (DND)
- Click to call: Dial from the contact list, using either the integrated softphone or an associated Cisco Unified IP Phone.
- Integrated voice and video calling
- IP phone association: Use Cisco Unified Personal Communicator to control your desktop Cisco Unified IP Phone to make, receive, or merge calls.
- Instant messaging
- Conferencing: Create voice or video conferencing sessions by simply merging conversation sessions.
- Web conferencing: Launch a Cisco Unified MeetingPlace or Cisco Unified MeetingPlace Express web conferencing session at a moment's notice to share content, such as a presentation, with others.
- Voice messages

## Cisco Unified Communications



## Video Options

## Cisco Unified Video Advantage Video 2.1

Video Advantage  
Video 2.1



**CUVA-V2=**

- H.263 and H.264 video codecs: Bit rates from 50 kbps to 1.5 Mbps
- Video formats (up to 30 frames per second): 352 x 288, 320 x 240, 176 x 144, and 160 x 120
- Interoperable with most third-party H.323 video terminals from verified IP video telephony partners
- Phone association choice: You can place Cisco Unified Video Advantage video calls with either a Cisco Unified IP phone or Cisco IP Communicator.
- Camera on and off: You can opt to “receive only” by disabling your camera.
- Video preview: You can check your video before placing or receiving calls.
- Video confirmation: You can optionally enable confirmation before sending a video.
- Mute video on audio mute option: When you mute the audio on the phone, video is automatically muted until you resume the audio.
- Vista support

## Cisco Unified Communications



## IP Phone Expansion Modules

## Cisco Unified IP Expansion Module 7914

IP Expansion  
Module 7914



**CP-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 Expansion Module 7915

IP Expansion  
Module 7915



**CP-7915=**

- High-resolution grayscale LCD display
- Attendant console station to be used in conjunction with Cisco Unified IP Phones 7962G, 7965G and 7975G

## Cisco Unified IP Expansion Module 7916

IP Expansion  
Module 7916



**CP-7942G**

- High-resolution color LCD display
- Attendant console station to be used in conjunction with Cisco Unified IP Phones 7962G, 7965G and 7975G

## Cisco Unified Communications



## Analog and Fax

## Cisco ATA 186 Analog Telephone Adapter

ATA 186 Analog  
Telephone Adapter



**ATA186-I1-A**  
**ATA186-I2-A**

- Two voice ports support legacy (analog) touch-tone telephones
- RJ 45 connection to 10BaseT Ethernet hub or switch
- Touch-tone telephone keypad configuration with voice prompt
- High performance line-echo cancellation eliminates noise and echo
- Voice activity detection (VAD) and comfort noise generation (CNG) save bandwidth by delivering voice, not silence
- Dynamic network monitoring to reduce jitter artifacts such a packet loss
- Session Initiation Protocol (SIP)
- Skinny Client Control Protocol (SCCP)

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## Cisco Unified Communications

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### Voicemail and Integrated Messaging



**Product Positioning**

Cisco provides many different options for the Small Business's to keep in touch with their customers, including voicemail and integrated messaging.

Cisco voicemail and integrated messaging options can reside either on a server or integrated into a router on the network, truly reducing the footprint of voice services in the small business.

Cisco voicemail will provide standard voicemail and in most cases Auto Attendant services too.



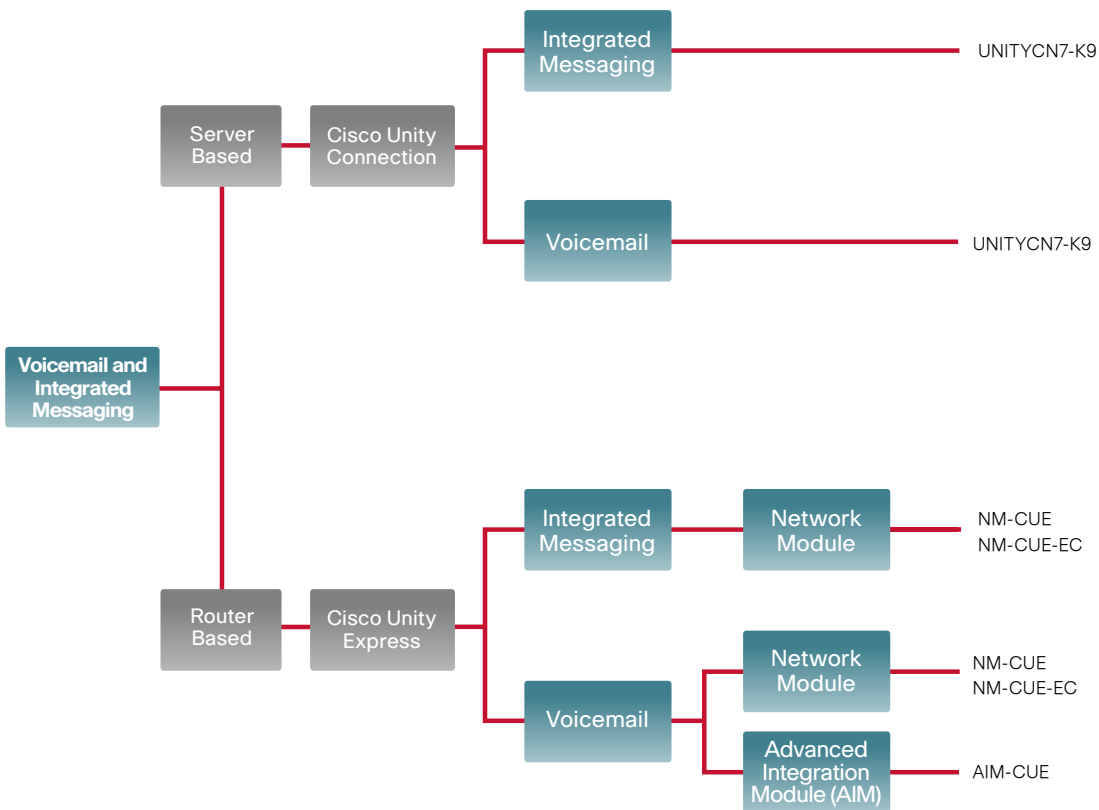
Cisco integrated messaging takes voicemail to the next step by placing the voicemail into the users inbox on their email client.

# Cisco Unified Communications



## Voicemail and Integrated Messaging

### Decision Tree Overview





## Cisco Unified Communications



### Unity Express

#### The Basics

- Cisco Unity Express is a cost-effective voicemail and integrated messaging system with Automated Attendant and optional interactive voice response (IVR) for the branch office or small office.
- Cisco Unity Express supports Cisco Unified Communications Manager Express and Unified Communications Manager.
- Cisco Unity Express is embedded in the Unified Communications 500 Series.
- The platform is a Cisco integrated services router: Industry-leading Cisco 2800 and 3800 Series.
- The message store is a choice of network module or advanced integration module for complete flexibility.
- The system offers 8 to 250 mailboxes.
- The system supports many languages.

Cisco Unified Communications



Unity Express Modules

NME-CUE

NME-CUE



- Voice message storage: 300 hours
- Session/port capacity: 24
- Up to 250 mailboxes supported
- Sessions for voicemail, Auto-Attendant and IVR are shared based on capacity

AIM-CUE

AIM-CUE



- Voice message storage: 14 hours
- Session/port capacity: 6
- Up to 50 mailboxes supported
- Industrial-grade compact flash – 1 GB, 300 MHz processor, 256MB DRAM

\*\*\* Fully self-contained, on-board memory, processing and storage supported on the Cisco 2800 ISR, 3800 Integrated Services Routers

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## Cisco Unified Communications

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### New Cisco Unity Express

#### Feature Examples

- Integration with multiple Cisco Unified Communications Manager Express sites: Cisco Unity Express (network module only) can integrate with Cisco Unified Communications Manager Express at up to 10 remote sites.
- PINless login to voicemail: This feature allows access to voicemail in trusted environments with the click of the messages button on a Cisco IP phone or a call into a mailbox, without the need for any more key-presses.
- Integrated messaging: Cisco Unity Express supports voicemail access via Internet Message Access Protocol (IMAP) using Microsoft Outlook, Outlook Express, and Lotus Notes. With the 3.2 release, Cisco Unity Express extends this support to Apple Macintosh computers running Microsoft Entourage 2004.
- Nonsubscriber distribution list: Cisco Unity Express administrators and end users can program distribution lists to include nonsubscribers along with subscribers.
- Password synchronization: Passwords are automatically synchronized across Cisco Unity Express and Cisco Unified Communications Manager Express.
- Localization: Cisco Unity Express now supports Arabic, Russian, and Turkish languages.

## Cisco Unified Communications



### Unity Connection

#### Basics

- Natural-language based
- Voice recognition features
  - Natural-language based
  - Intuitive control of your messages with natural speech commands
- Voicemail browsing
  - Play, delete, reply, forward, create...
  - Filter messages
- Voice enabled directory dialing
- Manage your greetings
- Using Text to Speech for email access (Exchange only)
- Cisco Unity Connection offers flexible options
  - Email client integrations
  - Web-based voicemail client
  - Integration with Cisco Unified Personal Communicator
  - Mixed-mode deployment with any or all of the above

## Cisco Unified Communications



### New Unity Connection 7.0

#### Feature Examples

- Viewmail for Outlook
  - Supported on Outlook 2003 and 2007
  - Same features and user experience as Unity VMO
- Calendaring
  - Browse Outlook calendar and MeetingPlace meetings in one listing
  - Schedule and join a reservation-less MeetingPlace meeting
- Cisco Fax Integration
  - Accepting a fax message from the Cisco fax server
  - Forwarding a message with a fax messages to another subscriber
- Custom keypad mapping tool
  - Customize which options are voiced in each menu and the order in which they are offered
- Conversation Enhancements
  - 24 Conversation Enhancements
- Speech Recognition Enhancements
  - Allow users to speak their voicemail passwords
  - Speak dates and times

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## Product Links



### **Cisco Switches**

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

### **Cisco Routers**

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

### **Cisco Security Solutions**

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

### **Cisco Wireless Networking Products**

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

### **Cisco Unified Communications**

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

### **Cisco Network Storage Systems**

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

### **Cisco Smart Business Roadmap**

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



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