

Cisco[®] Network Assistant

Cisco[®] Network Assistant is a network management application, available for OS X and Windows, optimized for wired and wireless LANs for growing businesses that have 80 or fewer switches and routers. The application provides a centralized network view through a user-friendly GUI.

The program allows network administrators to easily apply common services, generate inventory reports, synchronize passwords, and employ features across Cisco switches, routers, and access points. Cisco Network Assistant is available at no cost and can be downloaded from <http://www.cisco.com/go/cna>.

New in Cisco Network Assistant Release 5.8

Lifecycle Information for Your Network Inventory

Lifecycle information pertaining to your managed network can be found through [Cisco Active Advisor](#). Through Cisco Network Assistant, device information of your managed networks can be uploaded to Cisco Active Advisor to retrieve important and relevant lifecycle information.

Cisco Active Advisor will report on data such as warranties and service contracts reaching their end, relevant posted advisories (PSIRTs and field notices), and end-of-life milestones for both hardware platforms as well as Cisco IOS[®] Software versions.

Cisco Active Advisor is free and can be accessed using your cisco.com ID at <http://www.ciscoactiveadvisor.com>.

Manage a Wireless Network

Cisco Network Assistant can now manage wireless LAN networks, with support of autonomous access points, as well as wireless LAN controllers. Through Cisco Network Assistant, you can easily install a network of multiple access points with a few simple steps using the bulk edit feature. Through it, you can configure a network of brand-new access points with similar settings.

In addition, the Cisco Catalyst[®] 3850 can be discovered and managed through Cisco Network Assistant.

New in Cisco Network Assistant Release 5.7

Cisco Network Assistant now supports a myriad of different Cisco Catalyst switches, including Cisco Catalyst 3560, 3750, and 2960 variants.

For more detailed information, see the release notes at http://www.cisco.com/en/US/products/ps5931/prod_release_notes_list.html.

New in Cisco Network Assistant Release 5.6

Cisco Network Assistant 5.6 now employs an optional call home feature to help Cisco better understand in-use hardware and software features. Participating will enable customers to participate in future early field trials, and betas of exciting new Cisco software geared at making the operator's management of network hardware much easier.

New in Cisco Network Assistant Release 5.4

Cisco Network Assistant 5.4 provides a straightforward way to configure Cisco Integrated Security Features (CISF). Dynamic ARP Inspection, DHCP Snooping, and IP Source Guard can be configured on Cisco Catalyst 4500 and Cisco Catalyst 4900 devices.

New in Cisco Network Assistant Release 5.0

Topology View Enhancements

Increased Device Limits

Cisco Network Assistant now supports up to 40 devices, including any combination of supported switches and routers. The number of supported access points and IP phones is determined by the type and number of devices in the network.

Tree View

Devices can now be accessed from the tree view when working in the topology view. When users click a device icon in the tree view, it pops up in the topology view. All functions available by right clicking in the topology view are also available in the tree view.

Zoom

With the increase of devices in the topology view, users can enlarge the view of a specific segment of the topology such as phones, routers, or a subnet. Zoom is accessible from the keyboard or the combo box located on the menu bar.

Enhanced Discovery

Discovery is now enhanced to allow for more control when discovering devices in the network. It is now possible to discover devices by entering a seed IP, range IP, subnet IP, or single IP address. This feature provides more flexibility and time savings when designing the topology.

Health Monitoring

With Cisco Network Assistant, users can quickly access the status of switches, including packet errors; temperature; Power over Ethernet (PoE); and bandwidth, CPU, memory, and ternary content addressable memory (TCAM) usage, all from the same window. Users can select the health categories they want to monitor; for each category selected, the switch with the highest usage is displayed in the quick view. Users can access a more comprehensive view by clicking the Details button.

Power Supply Feature

The power supply features support the redundant power supplies for the Cisco Catalyst® 3500 and 3700 Series products as well as the Cisco Catalyst 4500 and 4500 E-Series power supplies. Users can prioritize the switch order for drawing power. The amount of power drawn, what switch is drawing power, and switch priority can all be easily configured and viewed. For the Cisco Catalyst 4500 and 4500 E-Series, this feature provides a convenient way to examine and configure all system and inline power settings, per device and per module.

Power over Ethernet

The PoE feature gives users access to configure power guarantees per port, and the ability to police ports and shut faulty ones down. Users can view the power runtime status, the amount of power consumed, and the device that is connected to the port.

Diagnostics

Administrators can keep their network healthy by running their own diagnostic tests; tests are scheduled from the Diagnostics window.

CLI Preview

Prior to applying features, users now can view the command lines of certain features.

File Management

The new File Management feature provides an overview of all devices in the community. At a glance the user can determine the status of all device file systems in their community. Files are displayed in an easy-to-navigate and familiar file explorer interface.

A file can be managed on all file systems concurrently. Devices that use Class B file systems, such as the Cisco Catalyst 4500 and 4500 E-Series and some Cisco routers, support functions for undeleting files and squeezing file systems to reclaim space.

VLAN Highlighting

From the topology view, users can associate VLAN numbers with colors to quickly view what devices are in a VLAN. Devices that are associated with more than one VLAN display two or more colors with a candy-cane effect.

Cross-Launch Switch Device Managers

Network administrators can now cross-launch the switch device manager from the topology view in Cisco Network Assistant by right-clicking on the device icon to access the device manager.

Telnet Session

Users can access a Telnet session by right-clicking on a device icon from the topology view or front panel view. Cisco Network Assistant automatically derives the IP address and launches the Telnet session. This enhancement provides additional convenient access to devices.

Printing

The enhanced print option allows users to print the Topology View or Front Panel View windows on one page using the “fit to page” option. In addition, reports are now printed in an easier-to-read format.

Annotated Text

Additional text can be added under devices in the topology view to further describe aspects of your network, such as the name of a building, floor, or closet.

Performance Enhancements

The following performance improvements have been implemented on Cisco Network Assistant to save time with configuration and management:

- Launching process of Cisco Network Assistant
- Loading of the topology view and discovering devices
- Accelerated Cisco Smartports propagation speed
- Concurrent multiple-port configuration propagation

Localization

Cisco Network Assistant is available in six additional languages: Japanese, simplified Chinese, French, Italian, German, and Spanish. All portions of Cisco Network Assistant are translated; Cisco IOS® Software commands to and from a remote device will remain in English. Localized versions of Cisco Network Assistant are available for download at <http://www.cisco.com/go/cna>.

Key Features and Benefits

Community

Setting up a community within Cisco Network Assistant allows the definition of a network and the application of common services to supported switches, routers, and access points in that network, including Cisco IOS Software upgrades, configuration management, inventory reports, network events, alerts, and password synchronization. In addition, new devices that are added to the network are automatically added to the community through its discovery mechanism.

Community Security

Cisco Network Assistant provides a Secure Sockets Layer (SSL) connection between the application and each connected device in a community to help ensure security of all sensitive information.

Drag-and-Drop Cisco IOS Software Upgrade

This feature greatly simplifies the Cisco IOS Software upgrade to all supported Cisco products by simply dragging the target Cisco IOS Software from the PC desktop and dropping it onto the icon of the target device depicted in the topology view.

Lifecycle Information

Crucial lifecycle information pertaining to network devices is available automatically through [Cisco Active Advisor](#). Through Cisco Network Assistant, device information can be automatically uploaded to Cisco Active Advisor to retrieve important and relevant lifecycle information.

Cisco Active Advisor will report on data such as warranties and service contracts reaching their end, relevant posted advisories (PSIRTs and field notices), and end-of-life milestones for both hardware platforms and Cisco IOS Software versions.

Cisco Active Advisor is free and can be accessed using your cisco.com ID at <http://www.ciscoactiveadvisor.com>.

Dynamic Application Update

Cisco Network Assistant will always stay updated with the latest versions and patches through dynamic application updates.

Event Notification

Stay up-to-date with issues requiring your attention through the Event Notification feature, which alerts on (among others) a new version of Cisco Network Assistant, a potential problem on a network device, or a needed configuration change. A dialog box provides all necessary information regarding the event such as time; description; and, if applicable, suggestions to resolve the problem.

Guest Port

Cisco Network Assistant allows users to easily set up a guest port to provide visiting guests with Internet access. Guest port users are separated from internal network traffic to make sure company security is in place.

Network Synchronization

This feature detects inconsistent settings in the network such as VLAN mismatches, centralized time, and security policies. Working in concert with the Troubleshooting Advisor, these inconsistencies are detected and fixed easily.

Reporting

Real-time comprehensive reports are available for inventory, ports, QoS, and access control list (ACL) statistics.

Online Help

A detailed embedded help function provides an extensive glossary and powerful search engine that takes users to the correct (requested) window or related links. Online Help empowers the user to find instruction and troubleshoot without having to call for technical support.

Cisco Smartports Advisor

Cisco Smartports Advisor proactively recommends Cisco best practices for security, availability, and quality-of-service (QoS) features on switch ports, based on the device connected to them. Cisco Smartports technology saves time for network administrators; avoids human error and helps ensure a configuration is optimized for these applications.

Topology and Front Panel Views

Users can monitor their network from either the physical topology view or the front panel view. The rich topology view graphically represents the types of devices in the network as well as detailed information about device status, physical connections, and various monitoring capabilities.

The front panel view displays switches in the network simultaneously along with the state, duplex, and speed of each port. It also allows users to apply common features across multiple ports or multiple switches.

Exclusive Features for Cisco Catalyst Express 500 Series

Task-Based Menu

Navigating through Cisco Network Assistant is intuitive and simple. The main toolbar is divided into four categories so users can easily find the important tasks and features to manage their Cisco Catalyst Express 500 Series Switch: Configure, Monitor, Troubleshoot, and Maintenance.

Secure Wireless

As WLAN becomes universal, enabling WLAN security is necessary, even for small businesses. Using the intelligence built into the Cisco Catalyst Express 500 Series, Cisco Network Assistant guides users through the configuration of setting up Service Set Identifier (SSID) and encryption on Cisco Aironet® wireless access points.

Security Slider

Network security and access to your Cisco Catalyst Express 500 Series Switches are facilitated by choosing the desired level (Low, Medium, or High) on the Security Slider in Cisco Network Assistant. The Low setting (default) provides port security and protection against broadcast storms. The Medium setting adds MAC address authentication. The High setting adds IEEE 802.1x authentication for media-level access control, offering the capability to permit or deny network connectivity and control VLAN access based on user or machine identity.

Troubleshooting Advisor

The Troubleshooting Advisor offers an enhanced method of simplified troubleshooting by automatically identifying potential network problems and documenting them with a graphical trend chart. Examples include cabling problems, configuration errors, and other potential network problems. Users receive an explanation of the problem, and the corrective action is as simple as a single mouse click.

Platforms

Table 1 lists the devices that Cisco Network Assistant 5.x supports.

Table 1. Managed and Supported Devices

Cisco Catalyst 3850 Switches	Description
Cisco Catalyst 3850-24T-L	Stackable 24 10/100/1000 Ethernet ports, 1 network module slot, 350-W power supply
Cisco Catalyst 3850-48T-L	Stackable 48 10/100/1000 Ethernet ports, 1 network module slot 350-W power supply
Cisco Catalyst 3850-24P-L	Stackable 24 10/100/1000 PoE+ ports, 1 network module slot, 715-W power supply
Cisco Catalyst 3850-48P-L	Stackable 48 10/100/1000 PoE+ ports, 1 network module slot, 715-W power supply
Cisco Catalyst 3850-48F-L	Stackable 48 10/100/1000 full PoE ports, 1 network module slot, 1100-W power supply
Cisco Catalyst 3850-24T-S	Stackable 24 10/100/1000 Ethernet ports, 1 network module slot, 350-W power supply
Cisco Catalyst 3850-48T-S	Stackable 48 10/100/1000 Ethernet ports, 1 network module slot, 350-W power supply
Cisco Catalyst 3850-24P-S	Stackable 24 10/100/1000 PoE+ ports, 1 network module slot, 715-W power supply
Cisco Catalyst 3850-48P-S	Stackable 48 10/100/1000 PoE+ ports, 1 network module slot, 715-W power supply
Cisco Catalyst 3850-48F-S	Stackable 48 10/100/1000 full PoE ports, 1 network module slot, 1100-W power supply
Cisco Catalyst 3850-24T-E	Stackable 24 10/100/1000 Ethernet ports, 1 network module slot, 350-W power supply
Cisco Catalyst 3850-48T-E	Stackable 48 10/100/1000 Ethernet ports, 1 network module slot, 350-W power supply
Cisco Catalyst 3850-24P-E	Stackable 24 10/100/1000 PoE+ ports, 1 network module slot, 715-W power supply
Cisco Catalyst 3850-48P-E	Stackable 48 10/100/1000 PoE+ ports, 1 network module slot, 715-W power supply
Cisco Catalyst 3850-48F-E	Stackable 48 10/100/1000 full PoE ports, 1 network module slot, 1100-W power supply
Cisco Catalyst 3750, 3750-E, and 3750-X Switches	Description
WS-C3750-24FS-S	24 100BASE-FX and 2 SFP module slots
WS-C3750-24TS	24 10/100 Ethernet ports and 2 SFP module slots
WS-C3750-48TS	48 10/100 Ethernet ports and 4 SFP module slots
WS-C3750G-24T	24 10/100/1000 Ethernet ports
WS-C750G-24TS	24 10/100/1000 Ethernet ports and 4 SFP module slots
WS-C3750G-12S	12 SFP ports
WS-C3750-24PS	24 10/100 PoE ports and 2 SFP module slots
WS-C3750-48PS	48 10/100 PoE ports and 4 SFP module slots
WS-C3750G-16TD	16 10/100/100 Ethernet ports and 1 10-Gigabit SFP slot

WS-C3750G-24PS-W12	24 10/100/100 PoE ports, 2 SFP module slots, and an integrated wireless controller for up to 12 access points
WS-C3750G-24PS-W24	24 10/100/100 PoE ports, 2 SFP module slots, and an integrated wireless controller for up to 24 access points
WS-C3750G-48PS	48 10/100/100 PoE ports and 4 SFP module slots
WS-C3750G-48TS	48 10/100/100 Ethernet ports and 4 SFP module slots
WS-C3750G-24PS	24 10/100/100 PoE ports and 4 SFP module slots
WS-C3750G-24TS	24 10/100/100 Ethernet ports and 4 SFP module slots
WS-C3750E-24TD	24 10/100/1000 Ethernet ports and 2 10-Gigabit Ethernet module slots
WS-C3750E-48TD	48 10/100/1000 Ethernet ports and 2 10-Gigabit Ethernet module slots
WS-C3750E-24PD	24 10/100/1000 PoE ports and 2 10-Gigabit Ethernet module slots
WS-C3750E-48PD	48 10/100/1000 PoE ports (370 W) and 2 10-Gigabit Ethernet module slots
WS-C3750E-48PD (Full Power)	48 10/100/1000 PoE ports (740 W) and 2 10-Gigabit Ethernet module slots
WS-C3750V2-24FS	24 SFP module slots (downlink) and 2 SFP module slots (uplink)
WS-C3750V2-24PS	24 10/100 PoE ports and 2 SFP module slots
WS-C3750V2-24TS	24 10/100 ports and 2 SFP module slots
WS-C3750V2-48PS	48 10/100 PoE ports and 2 SFP module slots
WS-C3750V2-48TS	48 10/100 ports and 2 SFP module slots
WS-C3750X-24T-L	24 10/100/1000 Ethernet ports (350 W), StackWise Plus, and 1 network module slot
WS-C3750X-48T-L	48 10/100/1000 Ethernet ports (350 W), StackWise Plus, and 1 network module slot
WS-C3750X-24P-L	24 10/100/1000 PoE+ ports (715 W), StackWise Plus, and 1 network module slot
WS-C3750X-48P-L	48 10/100/1000 PoE+ ports (715 W), StackWise Plus, and 1 network module slot
WS-C3750X-48PF-L	48 10/100/1000 PoE+ ports (1104 W), StackWise Plus, and 1 network module slot
WS-C3750X-24T-S	24 10/100/1000 Ethernet ports (350 W), StackWise Plus, StackPower, and 1 network module slot
WS-C3750X-48T-S	48 10/100/1000 Ethernet ports (350 W), StackWise Plus, StackPower, and 1 network module slot
WS-C3750X-24P-S	24 10/100/1000 PoE+ ports (715 W), StackWise Plus, StackPower, and 1 network module slot
WS-C3750X-48P-S	48 10/100/1000 PoE+ ports (715 W), StackWise Plus, StackPower, and 1 network module slot
WS-C3750X-48PF-S	48 10/100/1000 PoE+ ports (1100 W), StackWise Plus, StackPower, and 1 network module slot
WS-C3750X-12S-E	12 SFP module slots (350 W), StackWise Plus, StackPower, and 1 network module slot
WS-C3750X-24S-E	24 SFP module slots (350 W), StackWise Plus, StackPower, and 1 network module slot
WS-C3750X-24T-E	24 10/100/1000 Ethernet ports (350 W), StackWise Plus, StackPower, 1 network module slot
WS-C3750X-48T-E	48 10/100/1000 Ethernet ports (350 W), StackWise Plus, StackPower, 1 network module slot
WS-C3750X-24P-E	24 10/100/1000 PoE+ ports (715 W), StackWise Plus, StackPower, 1 network module slot
WS-C3750X-48P-E	48 10/100/1000 PoE+ ports (715 W), StackWise Plus, StackPower, 1 network module slot
WS-C3750X-48PF-E	48 10/100/1000 PoE+ ports (1100W), StackWise Plus, StackPower, 1 network module slot
Cisco Catalyst 3560-C Switches	Description
WS-C3560CG-8PC-S	8 10/100/1000 PoE+ ports and 2 dual-purpose uplink ports
WS-C3560CG-8TC-S	8 10/100/1000 ports and 2 dual-purpose uplink ports
WS-C3560CPD-8PT-S	8 10/100/1000 PoE ports and 2 10/100/1000BASE-T PD uplink copper ports
WS-C3560C-12PC-S	12 10/100 PoE+ ports and 2 dual-purpose ports
WS-C3560C-8PC-S	8 10/100 PoE+ ports and 2 dual-purpose ports

Cisco Catalyst 3560 Switches	Description
WS-C3560-8PC	8 10/100 PoE ports and 1 dual-purpose port
WS-C3560-24TS	24 10/100 ports and 2 SFP module slots
WS-C3560-48TS	48 10/100 ports and 4 SFP module slots
WS-C3560-48PS	48 10/100 PoE ports and 4 SFP module slots
WS-C3560E-12D	10-Gigabit Ethernet X2 module slots
WS-C3560E-12SD-E	12 SFP module slots, 2 10-Gigabit Ethernet X2 module slots and IP services software feature set (IPS)
WS-C3560E-12SD-S	12 SFP module slots, 2 10-Gigabit Ethernet X2 module slots and IP base software feature set (IPB)
WS-C3560-24PS	24 10/100 PoE ports and 2 SFP module slots
WS-C3560G-48PS	48 10/100/100 PoE ports and 4 SFP module slots
WS-C3560G-48TS	48 10/100/100 Ethernet ports and 4 SFP module slots
WS-C3560G-24PS	24 10/100/100 PoE ports and 4 SFP module slots
WS-C3560G-24TS	24 10/100/100 Ethernet ports and 4 SFP module slots
WS-C3560E-24TD	24 10/100/1000 Ethernet ports and 2 10-Gigabit Ethernet module slots
WS-C3560E-48TD	48 10/100/1000 Ethernet ports and 2 10-Gigabit Ethernet module slots
WS-C3560E-24PD	24 10/100/1000 PoE ports and 2 10-Gigabit Ethernet module slots
WS-C3560E-48PD	48 10/100/1000 PoE ports (370 W) and 2 10-Gigabit Ethernet module slots
WS-C3560E-48PD (Full Power)	48 10/100/1000 PoE ports (740 W) and 2 10-Gigabit Ethernet module slots
WS-C3560-12PC-S	12 10/100 PoE ports and 1 dual-purpose port
WS-C3560V2-24PS	24 10/100 PoE ports and 2 SFP module slots
WS-C3560V2-24TS	24 10/100 ports and 2 SFP module slots
WS-C3560V2-48PS	48 10/100 PoE ports and 2 SFP module slots
WS-C3560V2-48TS	48 10/100 ports and 2 SFP module slots
WS-C3560V2-24TS-SD	24 10/100 ports and 2 SFP module slots
WS-C3560-X-24T-L	24 10/100/1000 Ethernet ports (350 W) and 1 network module slot
WS-C3560X-48T-L	48 10/100/1000 Ethernet ports (350 W) and 1 network module slot
WS-C3560X-24P-L	24 10/100/1000 PoE+ ports (715 W) and 1 network module slot
WS-C3560X-48P-L	48 10/100/1000 PoE+ ports (715 W) and 1 network module slot
WS-C3560X-48PF-L	48 10/100/1000 PoE+ ports (1100 W) and 1 network module slot
WS-C3560X-24T-S	24 10/100/1000 Ethernet ports (350 W) and 1 network module slot
WS-C3560X-48T-S	48 10/100/1000 Ethernet ports (350 W) and 1 network module slot
WS-C3560X-24P-S	24 10/100/1000 PoE+ ports (715 W) and 1 network module slot
WS-C3560X-48P-S	48 10/100/1000 PoE+ ports (715 W) and 1 network module slot
WS-C3560X-48PF-S	48 10/100/1000 PoE+ ports (1100 W) and 1 network module slot
WS-C3560X-24T-E	24 10/100/1000 Ethernet ports (350 W), 1 network module slot
WS-C3560X-48T-E	48 10/100/1000 Ethernet ports (350 W), 1 network module slot
WS-C3560X-24P-E	24 10/100/1000 PoE+ ports (715 W), 1 network module slot
WS-C3560X-48P-E	48 10/100/1000 PoE+ ports (715 W), 1 network module slot
WS-C3560X-48PF-E	48 10/100/1000 PoE+ ports (1100 W), 1 network module slot

Cisco Catalyst 3550 Switches	Description
WS-C3550-12G	10 GBIC-based Ethernet port and 2 fixed 10/100/1000BASE-T ports
WS-C3550-12T	10 fixed 10/100/1000BASE-T and 2 GBIC-based Ethernet ports
WS-C3550-24-DC	24 Ethernet 10/100 ports and 2 GBIC-based Ethernet ports, DC powered
WS-C3550-24	24 Ethernet 10/100 ports and 2 GBIC-based Ethernet ports
WS-C3550-48	48 Ethernet 10/100 ports and 2 GBIC-based Ethernet ports
WS-C3550-24PWR	24 Ethernet 10/100 ports with integrated inline power and 2 GBIC-based Ethernet ports
WS-C3550-24-FX	24 100FX ports and 2 GBIC-based Ethernet ports
Cisco IE 2000 Series Switches	Description
IE-2000-4T-L	4 10/100BASE-T downlink ports and 2 10/100BASE-T uplink ports
IE-2000-4T-B	4 10/100BASE-T downlink ports and 2 10/100BASE-T uplink ports
IE-2000-4T-G-L	4 10/100BASE-T downlink ports and 2 10/100/1000BASE-T uplink ports
IE-2000-4T-G-B	4 10/100BASE-T downlink ports and 2 10/100/1000BASE-T uplink ports
IE-2000-4TS-L	4 10/100BASE-T downlink ports and 2 100 Mb/s SFP module uplink slots
IE-2000-4TS-B	4 10/100BASE-T Ethernet ports and 2 100 Mb/s SFP module uplink slots
IE-2000-4TS-G-L	4 10/100BASE-T downlink ports and 2 100/1000 Mb/s SFP module uplink slots
IE-2000-4TS-G-B	4 10/100BASE-T downlink ports and 2 100/1000 Mb/s SFP module uplink slots
IE-2000-8TC-L	8 10/100BASE-T downlink ports and 2 Fast Ethernet dual-purpose uplink ports
IE-2000-8TC-B	8 10/100BASE-T downlink ports and 2 Fast Ethernet dual-purpose uplink ports
IE-2000-8TC-G-L	8 10/100BASE-T downlink ports and 2 Gigabit Ethernet dual-purpose uplink ports
IE-2000-8TC-G-B	8 10/100BASE-T downlink ports and 2 Gigabit Ethernet dual-purpose uplink ports
IE-2000-8TC-G-E	8 10/100BASE-T downlink ports and 2 Gigabit Ethernet dual-purpose uplink ports. Supports the IEEE-1588 standard for synchronizing clocks.
IE-2000-16TC-L	16 10/100BASE-T downlink ports, 2 Fast Ethernet dual-purpose uplink ports, and 2 100 Mb/s SFP module uplink slots
IE-2000-16TC-B	16 10/100BASE-T downlink ports, 2 Fast Ethernet dual-purpose uplink ports, and 2 100 Mb/s SFP module uplink slots.
IE-2000-16TC-G-L	16 10/100BASE-T downlink ports, 2 Gigabit Ethernet dual-purpose uplink ports, and 2 100 Mb/s SFP module uplink slots.
IE-2000-16TC-G-E	16 10/100BASE-T downlink ports, Gigabit Ethernet dual-purpose uplink ports, and 2 100 Mb/s SFP module uplink slots. Supports the IEEE-1588 standard for synchronizing clocks.
IE-2000-16TC-G-X	16 10/100BASE-T downlink ports, 2 Gigabit Ethernet uplink ports, and 2 100 Mb/s SFP module uplink slots. Supports the IEEE-1588 standard for synchronizing clocks. With 1588 and conformal coat.
IE-2000-16PTC-G-E	12 10/100BASE-T downlink ports, 2 Gigabit Ethernet dual-purpose uplink ports and 4 PoE ports. Supports the IEEE-1588 standard for synchronizing clocks. Can enable NAT by license upgrade.
IE-2000-16PTC-G-NX	12 10/100BASE-T downlink ports, 2 Gigabit Ethernet dual-purpose uplink ports, and 4 PoE ports.
IE-2000-16PTC-G-L	12 10/100BASE-T downlink ports, 2 Gigabit Ethernet dual-purpose uplink ports, and 4 PoE ports.
IE-2000-16TC-G-N	16 10/100BASE-T downlink ports, 2 Gigabit Ethernet dual-purpose uplink ports. Supports the IEEE-1588 standard for synchronizing clocks and Network Address Translation (NAT).
IE-2000-8TC-G-N	8 10/100BASE-T downlink ports, 2 Gigabit Ethernet dual-purpose uplink ports. Supports the IEEE-1588 standard for synchronizing clocks and NAT.

Cisco IE 3000 Series Switches	Description
IE-3000-4TC	4 10/100BASE-T Ethernet ports and 2 dual-purpose ports. Supports the IEEE-1588 standard for synchronizing clocks.
IE-3000-8TC	8 10/100BASE-T Ethernet ports and 2 dual-purpose ports. Supports the IEEE-1588 standard for synchronizing clocks.
IEM-3000-8TM	Expansion module with 8 10/100BASE-T copper Ethernet ports.
IEM-3000-8FM	Expansion module with 8 100BASE-FX optical Ethernet ports.
IE-3000-4TC-E	4 10/100BASE-T Ethernet ports and 2 dual-purpose ports (IP services software feature set). Supports the IEEE-1588 standard for synchronizing clocks.
IE-3000-8TC-E	8 10/100BASE-T Ethernet ports and 2 dual-purpose ports (IP services software feature set).
Cisco IE 3010 Series Switches	Description
IE-3010-24-TC	24 10/100 Fast Ethernet ports, 2 dual-purpose ports (2 10/100/1000BASE-T copper ports and 2 SFP module slots), and 2 AC and DC power-supply module slots.
IE 3010-16S-8PC	16 100BASE-FX SFP-module slots; 8 10/100 Fast Ethernet PoE ports, 2 dual-purpose ports (2 10/100/1000BASE-T copper ports and 2 SFP module slots), and 2 AC and DC power-supply module slots.
Cisco Catalyst 2975 Switches	Description
WS-C2975GS-48PS-L	48 10/100/1000 PoE ports and 4 SFP module slots.
Cisco Catalyst 2970 Switches	Description
WS-C2970G-24T	24 Ethernet 10/100/1000 ports.
WS-C2970G-24TS	24 Ethernet 10/100/1000 ports and 4 SFP module slots.
Cisco Catalyst 2960-C Switches	Description
WS-C2960CG-8TC-L	8 10/100/1000 Ethernet ports and 2 dual-purpose ports.
WS-C2960CPD-8PT-L	8 10/100 PoE ports and 2 10/100/1000BASE-T PD uplink copper ports.
WS-C2960CPD-8TT-L	8 10/100 Ethernet ports and 2 10/100/1000BASE-T PD uplink copper ports.
WS-C2960C-12PC-L	12 10/100 PoE ports and 2 dual-purpose ports.
WS-C2960C-8PC-L	8 10/100 PoE ports and 2 dual-purpose ports.
WS-C2960C-8TC-S	8 10/100 Ethernet ports and 2 dual-purpose ports.
Cisco Catalyst 2960 and 2960-S Switches	Description
WS-C2960-24TC-L	24 Ethernet 10/100 ports and 2 dual-purpose ports (LAN base image)
WS-C2960-48TC-L	48 Ethernet 10/100 ports and 2 dual-purpose ports (LAN base image)
WS-C2960-24TT-L	24 Ethernet 10/100 ports and 2 10/100/1000 TX ports (LAN base image)
WS-C2960-48TT-L	48 Ethernet 10/100 ports and 2 10/100/1000 TX ports (LAN base image)
WS-C2960G-24TC-L	20 Ethernet 10/100/1000 ports and 4 dual-purpose ports (LAN base image)
WS-C2960G-48TC-L	44 Ethernet 10/100/1000 ports and 4 dual-purpose ports (LAN base image)
WS-C2960-24TC-S	24 Ethernet 10/100 ports and 2 dual-purpose ports (LAN lite image)
WS-C2960-48TC-S	48 Ethernet 10/100 ports and 2 dual-purpose ports (LAN lite image)
WS-C2960-24-S	24 Ethernet 10/100 ports (LAN lite image)
WS-C2960-48TT-S	48 Ethernet 10/100 ports and 2 10/100/1000 ports (LAN lite image)
WS-C2960-8TC-S	8 Ethernet 10/100 ports, 1 10/100/1000 ports (LAN lite image)
WS-C2960-8TC-L	8 10/100 Ethernet ports and 1 dual-purpose port
WS-C2960G-8TC-L	7 10/100/1000 Ethernet ports and 1 dual-purpose port
WS-C2960-24PC-L	24 10/100 ports PoE ports, 2 10/100/1000BASE-T copper ports and 2 SFP module slots (LAN base image)
WS-C2960-24PD-8TT-L	8 10/100 ports and 1 10/100/1000 port that receives power
WS-C2960-24LT-L	24 10/100 ports (8 of which are PoE) and 2 10/100/1000 ports (LAN base image)
WS-C2960-48PST-S	48 10/100 PoE ports, 2 10/100/1000 ports, and 2 SFP module slots (LAN lite image)

WS-C2960-24PC-S	24 10/100 PoE ports and 2 dual-purpose ports (LAN lite image)
WS-C2960-24LC-S	24 10/100 ports (8 of which are PoE) and 2 dual-purpose ports (LAN lite image)
WS-C2960-48PST-L	48 10/100 PoE ports, 1 10/100/1000 ports and 2 SFP module slots (LAN Base image)
WS-C2960S-48FPD-L	48 10/100/1000 PoE+ ports (PoE budget of 740 W) and 2 SFP+ module slots
WS-C2960S-48LPD-L	48 10/100/1000 PoE+ ports (PoE budget of 370 W) and 2 SFP+ module slots
WS-C2960S-24PD-L	24 10/100/1000 PoE+ ports (PoE budget of 370 W) and 2 SFP+ module slots
WS-C2960S-48TD-L	48 10/100/1000 ports and 2 SFP+ module slots
WS-C2960S-24TD-L	24 10/100/1000 ports and 2 SFP+ module slots
WS-C2960S-48FPS-L	48 10/100/1000 PoE+ ports (PoE budget of 740 W) and 4 SFP module slots
WS-C2960S-48LPS-L	48 10/100/1000 PoE+ ports (PoE budget of 370 W) and 4 SFP module slots
WS-C2960S-24PS-L	24 10/100/1000 PoE+ ports (PoE budget of 370 W) and 4 SFP module slots
WS-C2960S-48TS-L	48 10/100/1000 ports and 4 SFP module slots
WS-C2960S-24TS-L	24 10/100/1000 ports and 4 SFP module slots
WS-C2960S-48TS-S	48 10/100/1000 ports and 2 SFP module slots
WS-C2960S-24TS-S	24 10/100/1000 ports and 2 SFP module slots
WS-C2960S-F48FPS-L	48 10/100 PoE+ ports (PoE budget of 740 W) and 4 SFP module slots
WS-C2960S-F48LPS-L	48 10/100 PoE+ ports (PoE budget of 370 W) and 4 SFP module slots
WS-C2960S-F48TS-L	48 10/100 ports and 4 SFP module slots
WS-C2960S-F24PS-L	24 10/100 PoE+ ports (PoE budget of 370 W) and 2 SFP module slots
WS-C2960S-F24TS-L	24 10/100 ports and 2 SFP module slots
WS-C2960S-F48TS-S	48 10/100 ports and 2 SFP module slots
WS-C2960S-F24TS-S	24 10/100 ports and 2 SFP module slots
Cisco Catalyst 2955 Switches	Description
WS-C2955T-12	12 Ethernet 10/100 ports and 2 fixed 10/100/1000BASE-T ports
WS-C2955C-12	12 Ethernet 10/100 ports and 2 fixed 100BASE-FX ports
WS-C2955S-12	12 Ethernet 10/100 ports and 2 fixed 1000BASE-LX ports
Cisco Catalyst 2950 Switches	Description
WS-C2950-12	12 Ethernet 10/100 ports (SI)
WS-C2950-24	24 Ethernet 10/100 ports (SI)
WS-C2950C-24	24 Ethernet 10/100 ports and 2 fixed 100BASE-FX ports (EI)
WS-C2950G-12	12 Ethernet 10/100 ports and 2 GBIC-based Gigabit Ethernet ports (EI)
WS-C2950G-24	24 Ethernet 10/100 ports and 2 GBIC-based Gigabit Ethernet ports (EI)
WS-C2950G-48	48 Ethernet 10/100 ports and 2 GBIC-based Gigabit Ethernet ports (EI)
WS-C2950G-24-DC	24 Ethernet 10/100 ports and 2 GBIC-based Gigabit Ethernet ports, DC powered (EI)
WS-C2950SX-24	24 Ethernet 10/100 ports and 2 fixed 1000BASE-SX ports (SI)
WS-C2950SX-48	48 Ethernet 10/100 ports and 2 fixed 1000BASE-SX ports (SI)
WS-C2950T-24	24 Ethernet 10/100 ports and 2 fixed 10/100/1000BASE-T ports (EI)
WS-C2950T-48	48 Ethernet 10/100 ports and 2 fixed 10/100/1000BASE-T ports (EI)
WS-C2950ST-8LRE	8 LRE ports, 2 10/100/1000 ports, and 2 SFP module slots
WS-C2950ST-24LRE	24 LRE ports, 2 10/100/1000 ports, and 2 SFP module slots
Cisco Catalyst 2940 Switches	Description
WS-C2940-8TT	8 Ethernet 10/100 ports and 1 fixed 10/100/1000BASE-T port
WS-C2940-8TF	8 Ethernet 10/100 ports, 1 fixed 100BASE-FX, and 1 fixed 1000BASE-X SFP module port

Cisco Catalyst 2928 Switches	Description
WS-2928-24LT-C	24 10/100 BASE-TX Ethernet ports (8 of which are PoE) and 2 dual-purpose ports
WS-2928-24TC-C	24 10/100 BASE-TX Ethernet ports and 2 dual-purpose ports
WS-C2928-48TC-C	48 10/100 BASE-TX Ethernet ports and 2 dual-purpose ports
Cisco Catalyst 2918 Switches	Description
WS-C2918-24TT-C	24 10/100 BASE-TX Ethernet ports and 2 10/100/1000BASE-T copper ports
WS-C2918-24TC-C	24 10/100BASE-TX Ethernet ports and 2 dual-purpose ports
WS-C2918-48TT-C	48 10/100 BASE-TX Ethernet ports and 2 10/100/1000BASE-T copper uplink ports
WS-C2918-48TC-C	48 10/100BASE-TX Ethernet ports and 2 dual-purpose ports
Cisco Catalyst 2350 Switches	Description
WS-C2350-48TD-S	48 10/100/1000 Ethernet ports, 2 10-Gigabit Ethernet X2 module slots, AC power
WS-C2350-48TD-SD	48 10/100/1000 Ethernet ports, 2 10-Gigabit Ethernet X2 module slots, DC power
Cisco Catalyst 2360 Switches	Description
WS-C2360-48TD-S	48 10/100/1000 ports and 4 SFP+ module slots
SFP modules	1000BASE-LX/LH, -SX, 100BASE-FX
Blade Switches	
Cisco Catalyst 3125 Switches	Description
WS-CBS3125G-S	18 internal Gigabit Ethernet 1000BASE-X ports, 4 Gigabit Ethernet (RJ-45) uplink ports, 4 RJ-45 SFP module slots and 1 Ethernet management port
WS-CBS3125X-S	18 internal Gigabit Ethernet 1000BASE-X ports, 4 Gigabit Ethernet (RJ-45) uplink ports, 4 RJ-45 SFP module slots, 2 10-Gigabit Ethernet X2 module slots and 1 Ethernet management ports
Cisco Catalyst 3110 Blade Switch Modules for IBM	Description
WS-CBS3110G-S WS-CBS3110G-S-I	4 external 10/100/1000BASE-T Ethernet ports, 14 internal 1000BASE-X Ethernet downlink ports, 1 internal 100BASE-T Ethernet management port, 2 StackWise Plus ports
WS-CBS3110X-S WS-CBS3110X-S-I	1 external 10-Gigabit Ethernet module slot, 14 internal 1000BASE-X Ethernet downlink ports, 1 internal 100BASE-T Ethernet management port, 2 StackWise Plus ports
Cisco Catalyst 3012 Blade Switches for IBM	Description
WS-CBS3012-IBM-I WS-CBS3012-IBM	4 external 10/100/1000BASE-T Ethernet ports, 14 internal 1000BASE-X Ethernet downlink ports, 1 internal 100BASE-T Ethernet management port
Cisco Catalyst 3020 Blade Switches for HP	Description
WS-CBS3020-HP	16 internal 1000BASE-X ports, 8 10/100/100 copper ports and 4 shared SFP module slots
Cisco Catalyst Blade Switch 3030 for Dell	Description
WS-CBS3030-DEL-F WS-CBS3030-DEL-S	10 internal 1000BASE-X ports, 2 external 10/100/1000 copper ports, and 4 SFP module slots
Cisco Catalyst Blade Switch 3040 for FSC	Description
WS-CBS3040-FSC	10 internal 1000BASE-X ports, 2 external 10/100/1000 copper ports, and 4 SFP module slots
CIGESM Blade Switch	Description
OS-CIGESM-18TT-EBU	14 internal 1000BASE-X ports and 4 external 10/100/1000 copper ports
Cisco Catalyst 3120 Blade Switches for HP	Description
WS-CBS3120G-S	18 internal Gigabit Ethernet 1000BASE-X ports, 4 Gigabit Ethernet (RJ-45) uplink ports, 4 RJ-45 SFP module slots and 1 Ethernet management port
WS-CBS3120X-S	18 internal Gigabit Ethernet 1000BASE-X ports, 4 Gigabit Ethernet (RJ-45) uplink ports, 4 RJ-45 SFP module slots, 2 10-Gigabit Ethernet X2 module slots and 1 Ethernet management port

Cisco Catalyst 3130 Blade Switches for Dell	Description
WS-CBS3032-DEL (non-stackable) WS-CBS3032-DEL-F (non-stackable) WS-CBS3130-G-S WS-CBS3130-G-S-F	16 Ethernet 10/100/1000 ports, 4 fixed 1-Gigabit Ethernet SFP ports, and 1 fixed 100BASE-T Ethernet port
WS-CBS3130-X-S WS-CBS3130-X-S-F	16 Ethernet 10/100/1000 ports, 4 fixed 1-Gigabit Ethernet SFP ports, 2 10-Gigabit Ethernet X2 module slots, and 1 fixed 100BASE-T Ethernet port
Cisco Catalyst Express 500 Switches	Description
WS-CE500-24TT	24 Ethernet 10/100 ports and 2 10/100/1000BASE-T ports
WS-CE500-24LC	20 Ethernet 10/100 ports, 4 10/100 PoE, and 2 10/100/1000BASE-T ports or SFP module ports
WS-CE500-24PC	24 10/100 PoE ports and 2 10/100/1000BASE-T ports or SFP module ports
WS-CE500G-12TC	8 10/100/1000BASE-T ports and 4 10/100/1000BASE-T ports or SFP module ports
Cisco Catalyst Express 520 Series Switches	Description
WS-CE520-8PC-K9	8 10/100 access ports with PoE and 1 10/100/1000BASE-T or SFP module slots
WS-CE520-24TT-K9	24 10/100 access ports and 2 10/100/1000BASE-T ports
WS-CE520-24LC-K9	20 10/100 access ports, 4 10/100 access ports with PoE ports, and 2 10/100/1000BASE-T or SFP module slots
WS-CE520-24PC-K9	24 10/100 access ports with PoE and 2 10/100/1000BASE-T or SFP module slots
WS-CE520G-24TC-K9	24 10/100/1000BASE-T ports and 2 10/100/1000BASE-T or SFP module slots
Cisco Catalyst 4500, 4900, and 4500 E-Series	
Chassis	Description
WS-C4503	Cisco Catalyst 4503; 3-slot modular chassis
WS-C4506	Cisco Catalyst 4506; 6-slot modular chassis
WS-C4507R	Cisco Catalyst 4507R; 7-slot modular chassis
WS-C4510R	Cisco Catalyst 4510R; 10-slot modular chassis
WS-C4503-E	Cisco Catalyst 4503-E; 3-slot modular chassis with CenterFlex technology
WS-C4506-E	Cisco Catalyst 4506-E; 6-slot modular chassis with CenterFlex technology
WS-C4507R-E	Cisco Catalyst 4507R-E; 7-slot modular chassis with CenterFlex technology
WS-C4510R-E	Cisco Catalyst 4510R-E; 10-slot modular chassis with CenterFlex technology
WS-C4510R+E	Cisco Catalyst 4500E; 10-slot chassis for 48 Gb/s per slot
WS-C4507R+E	Cisco Catalyst 4500E; 7-slot chassis for 48 Gb/s per slot
WS-C4500X-32	32 1G or 10G Ethernet ports (requires either SFP or SFP+ transceivers)
WS-C4500X-16	16 1G or 10G Ethernet ports (requires either SFP or SFP+ transceivers)
Switches	Description
WS-C4948	Cisco Catalyst 4948; 44 Ethernet 10/100/1000 ports, 4 ports alternative-wired SFP module
WS-C4948-10GE	48 fixed 10/100/1000BASE-T ports and 2 ports X2-based
WS-C4900M-10GE	Cisco Catalyst 4900M partially fixed and partially modular switch
WS-C4948E	48 10/100/1000 ports, 4 10-Gigabit Ethernet SFP+ module slots
WS-C4948E-F	48 10/100/1000 ports, 4 10-Gigabit Ethernet SFP+ module slots, Back-to-Front airflow

Supervisors	Description
WS-X4013+10GE	Cisco Catalyst 4500 Series Supervisor Engine II-Plus-10GE
WS-X4013+TS	Cisco Catalyst 4500 Series Supervisor Engine II-Plus TS
WS-X4013+	Cisco Catalyst 4500 Series Supervisor Engine II-Plus
WS-X4515	Cisco Catalyst 4500 Supervisor Engine IV
WS-X4516	Cisco Catalyst 4516 Supervisor Engine V
WS-X4516-10GE	Cisco Catalyst 4516 10-Gigabit Supervisor Engine V with 2 ports X2-based or 4 ports alternative-wired SFP module
WS-X45-SUP6-E	Cisco Catalyst 4500 E-Series Supervisor Engine 6-E
WS-X45-SUP6L-E	Cisco Catalyst 4500 E-Series Supervisor Engine 6L-E
WS-X45-SUP7-E	Cisco Catalyst 4500E Supervisor Engine 7-E
WS-X45-SUP7L-E	Cisco Catalyst 4500E Supervisor Engine 7L-E
Supervisor Daughter Card	Description
WS-F4531	NetFlow Services daughter card
Power Supplies	Description
PWR-RPS2300	Cisco Redundant Power Supply 2300 for the Cisco Catalyst 3750-E and 3560-E switches
C3K-PWR-1150WAC	FRU power supply module for the Cisco Catalyst 3750-E and 3560-E switches and for the Cisco Redundant Power System 2300
C3K-PWR-750WAC	FRU power supply module for the Cisco Catalyst 3750-E and 3560-E switches and for the Cisco Redundant Power System 2300
C3K-PWR-265WAC	FRU power supply module for the Cisco Catalyst 3750-E and 3560-E switches
C3K-PWR-265WDC	FRU power supply module for the Cisco Catalyst 3750-E and 3560-E switches
C3KX-PWR-1100WAC	FRU power supply module for the Cisco Catalyst 3750-X and 3560-X switches
C3KX-PWR-715WAC	FRU power supply module for the Cisco Catalyst 3750-X and 3560-X switches
C3KX-PWR-350WAC	FRU power supply module for the Cisco Catalyst 3750-X and 3560-X switches
C3KX-PWR-440WDC	FRU power supply module for the Cisco Catalyst 3750-X and 3560-X switches
PWR-C45-1000AC	1000-W AC power supply (data only)
PWR-C45-1300ACV	1300-W AC power supply (data and PoE)
PWR-C45-1400AC	1400-W AC power supply
PWR-C45-1400DC-P	1400-W DC power supply with integrated PEM
PWR-C45-2800ACV	2800-W AC power supply (data and PoE)
PWR-C45-4200ACV	4200-W AC power supply with integrated PoE
PWR-C45-6000ACV	Cisco Catalyst 4500 Series Switch 6000 W AC power supply
Switching Modules	Description
WS-X4124-RJ45	24-port 10/100 with RJ-45 connectors
WS-X4124-FX-MT	24-port Fast Ethernet 100BASE-FX, multimode fiber with MT-RJ connectors
WS-X4148-FX-MT	48-port Fast Ethernet 100BASE-FX, multimode fiber with MT-RJ connectors
WS-X4148-FE-LX-MT	48-port Fast Ethernet 100BASE-LX10, single-mode fiber with MT-RJ connectors
WS-X4148-RJ	48-port 10/100 with RJ-45 connectors
WS-X4148-RJ21	48-port Ethernet 10/100-Mb/s with 4 telco connectors
WS-X4148-RJ45V	48-port Ethernet 10/100-Mb/s inline power
WS-X4224-RJ45V	24-port 10/100 PoE IEEE 802.3af-compliant with RJ-45 connectors
WS-X4232-GB-RJ	32-port Ethernet 10/100 and 2 GBIC uplinks
WS-X4248-RJ21V	48-port 10/100 PoE IEEE 802.3af-compliant with telco connectors
WS-X4248-RJ45V	48-port 10/100 PoE IEEE 802.3af-compliant with RJ-45 connectors
WS-X4302-GB	2 GBIC ports

WS-X4424-GB-RJ45	24-port 10/100/1000 with RJ-45 connectors
WS-X4418-GB	18 GBIC ports
WS-X4448-GB-RJ45	48-port Ethernet 10/100/100 with RJ-45 connectors
WS-X4448-LX	48-port 1000BASE-X, SFP-based with LC connectors (SFP optics included)
WS-X4448-SFP	48-port 1000BASE-X ports, SFP-based with LC connectors
WS-X4548-GB-RJ45	Enhanced 48-port 10/100/1000 with RJ-45 connectors
WS-X4524-GB-RJ45V	24-port 10/100/1000 PoE IEEE 802.3af-compliant with RJ-45 connectors
WS-X4548-GB-RJ45V	48-port 10/100/1000 PoE IEEE 802.3af-compliant with RJ-45 connectors
WS-X4306-GB	6 GBIC ports
WS-X4506-GB-T	6-port 10/100/1000 PoE IEEE 802.3af-compliant or SFP-module based
WS-X4648-RJ45V-E	48-port RJ-45 IEEE 802.3af PoE 10/100/1000
WS-X4748-RJ45V+E	48-port 10/100/1000 line card nonblocking PoE 802.3at providing up to 30 Watts power/port
WS-X4648-RJ45V+E	48-Port Premium PoE 10/100/1000
WS-X4606-X2-E	6-port 10-Gigabit Ethernet X2
WS-X4624-SFP-E	24-port 1000BASE-X ports, SFP-based with LC connectors
WS-X4248-FE-SFP	48-port 100BASE-X ports, SFP-based with LC connectors
WS-X4624-SFP-E (Cisco Catalyst 4500 E-series switches)	
WS-X4248-FE-SFP (Cisco Catalyst 4500 series switches)	
WS-X4548-RJ45V+	48-port 10/100/1000 Premium PoE line card
WS-X4648-RJ45-E	48-port 10/100/1000BASE-T Gigabit Ethernet switching module
WS-X4712-SFP+E	12-port 10 Gigabit Ethernet (SFP+) line card
WS-X4612-SFP-E	12-port 1000BASE-X SFP module slots
WS-X4748-UPOE+ E	48-port intelligent 60 W PoE per port (maximum of 1500 W per module). 10/100/1000 Ethernet module. Module supports 48 ports at 30 W per port simultaneously, or 24 ports at 60 W per port simultaneously
C4KX-NM-8	8-port 1-Gigabit/10-Gigabit BASE-X module
Cisco Catalyst 4900M Switching Modules	
WS-X4920-GB-RJ45	20-port 10/100/1000 half card with RJ-45 connectors
WS-X4904-10GE	4-port 10-Gigabit Ethernet X2 half card
WS-X4908-10GE	8-port 10-Gigabit Ethernet X2 half card
WS-X4908-10G-RJ45	8-port 10-Gigabit BASE-T half card with RJ-45 connectors
Cisco Enhanced EtherSwitch Service Modules	
SM-D-ES2-48	48 10/100 ports, 2 SFP module slots
SM-D-ES3-48-P	48 10/100 PoE ports, 2 SFP module slots
SM-D-ES3G-48-P	48 10/100/1000 PoE ports, 2 SFP module slots
SM-ES2-16-P	15 10/100 PoE ports, 1 10/100/1000 PoE ports
SM-ES2-24	23 10/100 ports, 1 10/100/1000 port
SM-ES2-24-P	Layer 2-capable, 23 10/100 ports PoE ports, 1 10/100/1000 PoE ports
SM-ES3-16-P	15 10/100 PoE ports, 1 10/100/1000 port PoE ports
SM-ES3-24-P	23 10/100 ports PoE ports, 1 10/100/100 PoE ports
SM-ES3G-16-P	16 10/100/1000 PoE ports
SM-ES3G-24-P	24 10/100/1000 PoE ports

Routers
Cisco 800 Series Small Office Home Office Routers: C-831, C-836, C-837, C-851, C-857, C-876, C-877, C-878, 877M
Cisco 1800 Series Integrated Services Routers: C1801, C1801W, C1802, C1802W, C1803, C1803W, C1811, C1811W, C1812, C1812W, C1841, C1861
Cisco 2600 Series Multiservice Platforms: C2610XM, C2611XM, C2620XM, C2621XM, C2650XM, C2651, C2651XM, C2691
Cisco 2800 Series Integrated Services Routers: C2801, C2811, C2821, C2851
Cisco 3700 Series Multiservice Access Routers: 3725, 3745
Cisco 3800 Series Integrated Services Routers: 3825, 3845
Cisco 1900 branch routers: 1921/K9, 1941/K9, 1941-SEC-SRE/K9, 1941-SEC/K9, 1941W-A/K9, 1941W-E/K9, 1941W-P/K9, 1941W-N/K9, 1941-2.5G/K9, 1921-SEC/K9, 1921-T1SEC/K9, 1921-ADSL2-M/K9, and 1921-ADSL2/K9
Cisco 2900 branch routers: 2901/K9, 2911/K9, 2921/K9, 2951/K9, 2901-SEC/K9, 2911-SEC/K9, 2921-SEC/K9, 2951-SEC/K9, 2901-V/K9, 2911-V/K9, 2921-V/K9, 2951-V/K9, 2901-VSEC/K9, 2911-VSEC/K9, 2921-VSEC/K9, and 2951-VSEC/K9
Cisco 3900 branch routers: 3925/K9, 3945/K9, 3925-SEC/K9, 3925-V/K9, 3925-VSEC-SRE/K9, 3925-VSEC/K9, 3925-CME-SRST/K9, 3945-V/K9, 3945-SEC/K9, 3945-VSEC/K9, 3945-CME-SRST/K9, 3945-VSEC/K9, 3945-CME-SRST/K9, 3945E-V/K9, 3925E-V/K9, 3925-VSEC-CUBE/K9, 3925E-VSEC-CUBE/K9, 3945-VSEC-CUBE/K9, 3945E-VSEC-CUBE/K9, 3945E-SEC/K9, 3925E-SEC/K9, 3945E/K9, and 3925E/K9
Additional Devices
EtherSwitch Service Modules on Cisco 2800 Series and Cisco 3800 Series Integrated Services Routers
Stratix 8000 and 8300 Ethernet Managed Switches
Stratix 5700 Ethernet Managed Switches (1783-BMS06SL, 1783-BMS06SA, 1783-BMS06TL, 1783-BMS06TA, 1783-BMS06SGL, 1783-BMS06SGA, 1783-BMS06TGL, 1783-BMS06TGA, 1783-BMS10CL, 1783-BMS10CA, 1783-BMS10CGL, 1783-BMS10CGA, 1783-BMS10CGP, 1783-BMS10CGN, 1783-BMS20CL, 1783-BMS20CA, 1783-BMS20CGL, 1783-BMS20CGP, 1783-BMS20CGPK, and 1783-BMS20CGN)
Cisco Catalyst 6500 Series Switch with the Cisco Catalyst 6500 Supervisor Engine 32
PIX-501, PIX-506, PIX-506E, PIX-515, PIX-515E, PIX-525, and PIX-535 firewalls
ASA 5505, ASA 5510, ASA 5520, and ASA 5540 Adaptive Security Appliances
All Cisco IP phones
Aironet 350 Series Access Points: AIR-AP350
Aironet 1100 Series Access Points: AIR-AP1120B-E-K9, AIR-AP1120B-I-K9, AP1120B-J-K9, AIR-AP1121G-A-K9, AIR-AP1121G-E-K9, AIR-AP1121G-J-K9, AIR-AP1131AG-A-K9, AIR-AP1131AG-C-K9, AIR-AP1131AG-E-K9, AIR-AP1131AG-J-K9, AIR-AP1131AG-N-K9, AIR-AP1131AG-K-K9, AIR-AP1131AG-P-K9, AIR-AP1131AG-S-K9, AIR-AP1131AG-T-K9
Aironet 1200 Series Access Points: AIR-A12P10B-A-K9, AIR-AP1200, AIR-AP1210, AIR-AP1220, AIR-AP1220A-A-K9, AIR-AP1220A-J-K9, AIR-AP1220B-A-K9, AIR-AP1220B-E-K9, AIR-AP1220B-J-K9, AIR-AP1230A-A-K9, AIR-AP1230A-J-K9, AIR-AP1230A-T-K9, AIR-AP1230B-A-K9, AIR-AP1230B-E-K9, AIR-AP1230B-J-K9, AIR-AP1231G-A-K9, AIR-AP1231G-E-K9, AIR-AP1231G-I-K9, AIR-AP1231G-J-K9, AIR-AP1232AG-A-K9, AIR-AP1232AG-E-K9, AIR-AP1232AG-J-K9, AIR-AP1232AG-N-K9, AIR-AP1232AG-C-K9, AIR-AP1232AG-P-K9, AIR-AP1232AG-S-K9, AIR-AP1232AG-T-K9, AIR-AP1242AG-A-K9, AIR-AP1242AG-E-K9, AIR-AP1242AG-I-K9, AIR-AP1242AG-J-K9, AIR-AP1242AG-N-K9, AIR-AP1242AG-C-K9, AIR-AP1242AG-P-K9, AIR-AP1242AG-S-K9, AIR-AP1242AG-T-K9, AIR-AP1242AG-K-K9, AIR-AP1242G-A-K9, AIR-AP1242G-E-K9, AIR-AP1242G-P-K9, AIR-AP1252AG-A-K9, AIR-AP1252AG-C-K9, AIR-AP1252AG-E-K9, AIR-AP1252AG-I-K9, AIR-AP1252AG-K-K9, AIR-AP1252AG-N-K9, AIR-AP1252AG-P-K9, AIR-AP1252AG-S-K9, AIR-AP1252AG-T-K9, AIR-AP1252G-A-K9, AIR-AP1252G-E-K9, AIR-AP1252G-P-K9
AP-1140 series, AP-1260 series, AP-3500 series, and AP 3600 series
Cisco Aironet Access Points (1600 series, 2600 series, 3500 series, 3600 series, and 1550 series)
Cisco Wireless Controllers: <ul style="list-style-type: none"> Cisco 2500 series (AIR-CT2504-5-K9, AIR-CT2504-15-K9, AIR-CT2504-25-K9, and AIR-CT2504-50-K9) Cisco 4400 series (AIR-WLC4404-12-K9, AIR-WLC4404-25-K9, AIR-WLC4404-50-K9, and AIR-WLC4404-100-K9) Cisco 5500 series (AIR-CT5508-12-K9, AIR-CT5508-25-K9, AIR-CT5508-50-K9, AIR-CT5508-100-K9, AIR-CT5508-250-K9, AIR-CT5508-500-K9, AIR-CT5508-500-2PK, AIR-CT5508-HA-K9, and AIR-CT5508-K9) Cisco 7500 series (AIR-CT7510-300-K9, AIR-CT7510-500-K9, AIR-CT7510-1K-K9, AIR-CT7510-2K-K9, AIR-CT7510-3K-K9, AIR-CT7510-6K-K9, and AIR-CT7510-HA-K9)

Additional Devices

- Cisco Catalyst 6503 Series Switch with the Cisco Catalyst 6500 Supervisor Engine 32
- Cisco PIX® 515E Security Appliance
- Cisco ASA 5505 and ASA 5510 Adaptive Security Appliances
- All Cisco Aironet 350 Series Access Points
- All Cisco Aironet 1100 Series
- All Cisco Aironet 1200 Series
- Cisco IP Phone 7905
- Cisco IP Phone 7910
- Cisco IP Phone 7912
- Cisco IP Phone 7905G
- Cisco IP Phone 7912G
- Cisco IP Phone 7941G
- Cisco IP Phone 7961G
- Cisco IP Phone 7970

Device Limits

Cisco Network Assistant supports up to 80 devices in any combination. The number of access points and IP phones is limited by the number of switch ports in your network.

System Requirements

Table 2 lists the system requirements for Cisco Network Assistant 5.0.

Table 2. System Requirements

System Requirements	
Operating System	<ul style="list-style-type: none">• Windows 2008 Server (64-bit and 32-bit)• Windows 2003 Server (64-bit and 32-bit)• Windows XP Professional, Service Pack 3 (64-bit and 32-bit)• Windows Vista (64-bit and 32-bit)• Windows 7• Macintosh OS X
Disk space	50 MB
Hardware	PC with 1 GHz
Memory	1 GB
PC hardware	1 GHz
Screen Resolution	1024 x 768

Availability

Cisco Network Assistant 5.X is available for free at <http://www.cisco.com/go/cna>.

Support

For all technical issues, please tell the CNA team on the support community at:

<https://supportforums.cisco.com/community/netpro/network-infrastructure/network-management>

Or, send us an email at cs-cna@cisco.com.



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