



Cisco Catalyst 9000 Switches

Overview



What are the Cisco Catalyst 9000 switches?



The Cisco® Catalyst® 9000 switches are the next generation of enterprise-class switches built for security, Internet of Things (IoT), mobility, and cloud. These switches form the foundational building block for Cisco Software-Defined Access (SD-Access), the company's lead enterprise architecture. The Cisco Catalyst 9000 switches are based on x86 CPU and Cisco Unified Access Data Plane (UADP) Version 2.0, which support full programmability and serviceability as well as convergence between wired and wireless over a single platform. The switches provide superior high availability and unmatched security features for the next-generation enterprise network designs. Wired and wireless security and application visibility are natively built into the switches.

The Cisco Catalyst 9000 switches also support full IEEE 802.3at Power over Ethernet Plus (PoE+), and Universal Power over Ethernet (UPoE). These switches enhance productivity by enabling applications such as IP telephony, wireless, IoT, and video for a true borderless network experience.

These switches also provide segmentation options with new, innovative Cisco Locator/ID Separation Protocol (LISP)- and Virtual Extensible LAN (VXLAN)-based segmentation called campus fabric- and Multiprotocol Label Switching (MPLS)-based segmentation. They also support all the foundational high-availability capabilities such as patching, Graceful Insertion and Removal (GIR), Non-Stop Forwarding/Stateful Switchover (NSF/SSO), redundant platinum-rated power supplies, and fans. Additionally, all Cisco Catalyst 9000 switches:

- Deliver IoT convergence with industry-leading scale and capabilities such as service discovery and “Thing” classification
- Are based on the UADP 2.0 Application-Specific Integrated Circuit (ASIC) technology with programmable pipeline and tables that ensure platform longevity
- Run a modern operating system, open Cisco IOS® XE Software, that supports model-driven programmability, streaming telemetry, and patching
- Use X86-based multicore CPUs and local Solid-State-Disk (SSD) storage for third-party container-based application hosting
- Provide unprecedented application visibility and control with Network-Based Application Recognition (NBAR) Version2

Q **What are the Cisco Catalyst 9300 Series switches?**

A The Cisco® Catalyst® 9300 Series switches are the next generation of enterprise-class stackable access-layer switches that are part of the new Cisco Catalyst 9000 Family. These switches also support full IEEE 802.3at PoE+, UPoE, modular and field-replaceable network modules, redundant fans, and power supplies. In addition, the Cisco Catalyst 9300-based models support a variety of uplink modules for both copper and fiber uplink support. These models add even more flexibility to the interface choices that you can make in a single Cisco Catalyst 9300 Switch or in a stack of Cisco Catalyst 9300 Series switches.

Q **What are the Cisco Catalyst 9400 Series switches?**

A The Cisco Catalyst 9400 Series switches are the next generation of enterprise-class modular access switches that are part of the new Cisco Catalyst 9000 Family. These switches provide unparalleled investment protection with a centralized switching architecture that is capable of supporting up to 9-Tbps system bandwidth and unmatched PoE power delivery. The family of switches delivers state-of-the-art high availability with capabilities such as NSF/SSO, In-Service Software Upgrade (ISSU), uplink resiliency, and N + 1/N + N redundancy with modular power supplies. A single system can scale up to 384 ports with a wide choice of PoE+, UPoE and data options. With several unique innovations such as modular power supply, dual serviceable fan tray, the new Cisco Catalyst 9400 sets a new bar for enterprise modular access network deployments.

Q **What are the Cisco Catalyst 9500 Series switches?**

A The Cisco Catalyst 9500 Series switches are the next generation of enterprise-class core and aggregation layer switches that are part of the new Cisco Catalyst 9000 Family. These switches come with 4-core 2.4-GHz CPU, 16-GB DDR4 memory, and 16-GB internal storage.

The Cisco Catalyst 9500 is industry’s first 40 Gigabit Ethernet switch targeted for the enterprise campus, delivering unmatched table scales (MAC, route, and Access Control List [ACL]) and buffering for enterprise applications. The platform offers nonblocking 40 Gigabit Ethernet Quad SFP (QSFP), and 10 Gigabit Ethernet (SFP+) switches with granular port densities that fit diverse campus needs. The Catalyst 9500 supports advanced routing and infrastructure services (MPLS Layer 2 and 3 VPNs, IP Multicast VPN [MVPN], and Network Address Translation [NAT]), SD-Access border capabilities (host tracking database, cross-domain connectivity, and Virtual Route Forwarding [VRF]-aware LISP), and network system virtualization with StackWise® virtual technology that are critical for its placement in the campus core.

Product portfolio and positioning

Q **What is the relative positioning among the Cisco Catalyst 9300, 9400, and 9500?**

A Refer to Table 1.

Table 1. Platform Positioning

Platform	Positioning
Cisco Catalyst 9300	Lead fixed access series
Cisco Catalyst 9400	Lead modular access series
Cisco Catalyst 9500	Lead fixed core and aggregation series

Q What is the portfolio transition from the Cisco Catalyst 3000 and 4000 Series to the Cisco Catalyst 9000 Series?

A Refer to Table 2.

Table 2. Cisco Catalyst 9000 Platform transitions

	Current Platforms	Transition to Cisco Catalyst 9000 Series
Access switching	Cisco Catalyst 3850 Copper	Cisco Catalyst 9300
	Cisco Catalyst 4500E	Cisco Catalyst 9400
Backbone switching	Cisco Catalyst 4500X	Cisco Catalyst 9500
	Cisco Catalyst 3850-10G Fiber (48P)	Cisco Catalyst 9500

Cisco Catalyst 9000 network features and services (common to all Cisco Catalyst 9000 Switches)

Q What feature sets do the Cisco Catalyst 9000 Switches support?

A The Cisco Catalyst 9000 switches support the packaging of features into Essentials and Advantage packages. The details of the features in each package are listed in the data sheets – link provided below in the [Pricing and Ordering section](#).

Q What programmability capabilities are available on the Catalyst 9000 switches?

A Cisco Catalyst 9000 switches opens a completely new paradigm in network configuration, operation, and monitoring through network automation. The Cisco automation solution is open, standards-based, and extensible across the entire network lifecycle of a network device.

- Device provisioning: Through Plug-and-Play (PnP), Zero-Touch Provisioning (ZTP), and Preboot Execution (PXE)
- Configuration: Model-driven operation through open Application Programming Interfaces (APIs) over NETCONF, Python Scripting
- Customization and monitoring: Streaming telemetry
- Upgrade and manageability: In-Service Software Upgrade (ISSU), patchability, and config/replace

Q What management capabilities are available for the Cisco Catalyst 9000?

A You can manage it using the Cisco IOS software Command-Line Interface (CLI), using Cisco Prime® Infrastructure 3.1.7 DP13, Cisco Application Policy Infrastructure Controller Enterprise Module (APIC-EM), onboard Cisco IOS XE Software Web User Interface (WebUI), Simple Network Management Protocol (SNMP), or Netconf/YANG. Catalyst 9000 switches have been designed to work with Cisco DNA Center, using the DNA Center Appliance.

Q Is there an onboard web GUI on the Cisco Catalyst 9000?

A Yes. An onboard web GUI is available.

Q What is the purpose of the blue beacon LED on Cisco Catalyst 9000 switches?

A The blue beacon LED is common across the Cisco Catalyst 9000 switches to simplify the operations. It makes chassis identification easier when several such switches are mounted on racks. A remote administrator can enable the LED to blink to help the local operator quickly locate the chassis. The local operator presses the mode button to acknowledge.

Q What is the maximum number of VRF instances that I can configure on a Cisco Catalyst 9000?

A The maximum number of VRFs that you can configure on a Cisco Catalyst 9000 is 256.

Q What is Cisco's direction for wireless?

A Cisco believes that the best solution for a wired or wireless network is achieved when integrated into SD-Access, Cisco's lead architecture for the next-generation enterprise network. This solution delivers consistency with wired infrastructure around policy, segmentation, orchestration and automation, and assurance. This new architecture delivers the best experience for mobility, guest, IoT, multicast services, and overall network performance with its distributed data plane and centralized control-plane architecture.

Q What wireless support is provided with the Cisco Catalyst 9000 platforms?

A Cisco Catalyst 9000 products are instrumental in supporting the following wireless capabilities in the SD-Access architecture:

- Connect access points and integrate them into the SD-Access fabric. The switch integrates with the fabric control plane (LISP), thereby providing reachability for the access points and clients in the fabric.

- Deliver macro (VRF) and micro (Scalable Group Tag (SGT) [SGT] group-based) segmentation to the access points to deliver end-to-end policies.
- Can terminate guest VXLAN traffic, so there is no need for a dedicated guest anchor controller.

The support for wireless capability at launch will be together with the AireOS 8.5 Controller running on an Cisco 8540 Wireless Controller, Cisco 5520 Wireless Controller, or Cisco 3504 Wireless Controller appliance with the Cisco Catalyst platforms functioning as Fabric Edge and Fabric Border nodes.

Q What are the SD-Access wireless capabilities?

A The new Cisco Catalyst 9000 switches provide a complete solution for Campus with Cisco AireOS Controllers and Wave 2 access points.

Q What are the advantages of integrating wireless in the SD-Access fabric architecture?

- A**
- Highest performance and scale: Distributed data-plane forwarding in hardware distributed in the network paired with the large control-plane scale offered by the dedicated controller appliances.
 - Best guest: You don't need a dedicated guest anchor controller in the Demilitarized Zone (DMZ): Traffic is sent directly to the fabric border to exit the fabric. Also, there is no sub-optimal traffic forwarding such as from an access point to a foreign controller and on to a guest anchor controller.
 - Best mobility: IP addressing is simpler; there is one subnet for the entire wireless SSID across the network, and no hairpin of traffic when roams occur.
 - Simple operation: Operation is simple because wired and wireless are treated the same and operated together; they have common policies and controller-based automation.

- Wired innovations applied to wireless: First-hop security innovations available for wired can also be applied to wireless; for example, Dynamic ARP Inspection (DAI), IP Source Guard (IPSG), and DHCP Snooping.
- Segmentation across wired and wireless:
 - The virtual network now passes all the way to wired as well as wireless devices.
 - This segmentation is important for separation of certain devices from others, such as IoT and building automation devices connected over wireless.
 - It is also important for security reasons to reduce attack the surface; if someone gets into a segment, the person can move only within that segment.
 - Because segmentation is handled by the fabric, the number of SSIDs can be limited.
- Best multicast:
 - The solution offers the best performance of distributed replication in hardware across the network.

These switches truly deliver the best of wired and wireless together.

Cisco Catalyst 9300 Series

Q Can I stack Cisco Catalyst 9300 with the 3850?

A These switches do not stack together. Features are packaged differently between these platforms, they use different CPU architectures, and the platforms do not have the same scaling, making stacking with them impossible.

Q Are the network modules shared between the Cisco Catalyst 9300 and 9500?

A No, the network modules are not shared between the Catalyst 9300 and 9500 because the ASIC, depth, and form factors are different for these product lines.

Q Can the Cisco Catalyst 9300 act as a wired switch?

A

The Catalyst 9300 switch provides connectivity for wired endpoints and wireless endpoints by connecting wireless access points. With the SD-Access architecture, the wired and wireless endpoints gets the same experience.

Q What are the supported uplink modules in the Cisco Catalyst 9300?

A

The Catalyst 9300 supports the following new uplink modules. All modules are supported across all 9300 platforms:

- 4 x 1 Gigabit Ethernet network module
- 4 x 1, 2.5, 5, or 10 Gigabit Ethernet network module
- 8 x 10 Gigabit Ethernet network module
- 2 x 40 Gigabit Ethernet network module

Q Are the uplinks between the Cisco Catalyst 9300 and the 3850 interchangeable?

A

All existing 3850 uplink modules may be used in the Catalyst 9300 platforms. However, the new 9300 uplinks modules are not supported on the 3850 platforms.

Q What about service modules for the Cisco Catalyst 9300?

A

There are no service modules for the Catalyst 9300. All functions are embedded into the platform.

Q Where can I purchase an SSD module for the Cisco Catalyst 9300?

A

Cisco-approved SSD modules will be made available in the future.

Q What management ports are available on the Cisco Catalyst 9300?

A This switch comes with a 10/100/1000 Ethernet dedicated management port on the backside of the switch right above the console port. This port is in a separate VRF instance called “Mgmt-vrf” in order to segment the management traffic from the global routing table of the switch.

Q Can I use both console ports on Cisco Catalyst 9300 simultaneously?

A No. When you use the USB console, the RJ-45 console receives the output of the USB console as well. This design allows the administrator to see when the USB console port is in use. This capability is useful for remote administrators.

Q Does the Cisco Catalyst 9300 Switch support auto-baud on the console port?

A No.

Q What type of airflow do the Cisco Catalyst 9300 Series switches support?

A The airflow on the Catalyst 9300 is “front and sides” to back airflow.

Q What pluggable transceiver modules do the Cisco Catalyst 9300 Series switches support?

A Refer to the Cisco Transceiver Module Compatibility Matrixes for a complete list: <https://www.cisco.com/c/en/us/support/interfaces-modules/transceiver-modules/products-device-support-tables-list.html>.

Q What are the power consumptions for Cisco Catalyst 9300 SKUs?

A Power consumption by SKU will be provided at a later time. The information will be published on the data sheet.

Cisco Catalyst 9400 Series

Q What is the system architecture on the Cisco Catalyst 9400?

A The Catalyst 9400 system is based on centralized architecture using the Cisco UADP ASIC 2.0 running open Cisco IOS XE Software. This architecture has several key benefits including simplicity of upgrades, investment protection, and superior high availability.

Q What are the different chassis models available on the Cisco Catalyst 9400?

A The Catalyst 9400 Series supports two chassis types, 7-slot and 10-slot, and both support redundant supervisor slots. The 7-slot chassis has 5 line-card slots that can serve up to 240 line-card ports and the 10-slot chassis has 8 line-card slots that can serve up to 384 line-card ports.

Q What are the different datasheets and SKUs on the Cisco Catalyst 9400?

A Refer to the Cisco Catalyst 9400 Series data sheets that provide the technical and product details of the series:

- [Catalyst 9400 Chassis data sheet](#)
- [Catalyst 9400 Supervisor data sheet](#)
- [Catalyst 9400 Line Card data sheet](#)
- [Cisco Catalyst 9500 Latest Datasheet Version](#)

Q What uplink combination is available on the Cisco Catalyst 9400 Supervisor?

A The Cisco Catalyst 9400 Series offers a flexible uplink architecture for both 10 and 40 Gigabit Ethernet deployments, helping ensure your investment will be protected for the future.

The supervisor supports one of the following combinations of uplink ports in a standalone configuration:

- Native 40 Gigabit Ethernet uplinks: 2x QSFP
- Native 10 Gigabit Ethernet uplinks: 8x SFP+
- Mixed uplink deployment: 1x QSFP+ and 4x SFP+

Q On the Cisco Catalyst 9400, what is the uplink combination with redundant supervisors?

A In redundant supervisor configuration, one of the following combination of uplinks ports is supported:

- 1x QSFP on each supervisor
- 4x SFP+ on each supervisor

Q What are the SSD onboard storage options on the Cisco Catalyst 9400?

A On the supervisor module, you can order an optional SSD for onboard storage. The supervisor module supports 240-, 480-, or 960-GB configurations. It is recommended to configure this module on both supervisors (active and redundant) at the time of order. For dual-supervisor configuration, it is recommended that you order the same size of SSD module on both supervisors.

Q What line cards are available on the Cisco Catalyst 9400?

A The Cisco Catalyst 9400 Series supports the following line-card modules to serve the diverse needs of modular campus deployments:

- 48-port UPoE RJ-45 (All 10/100/1000-Mbps)
- 48-port data RJ-45 (All 10/100/1000-Mbps)

Q What is the airflow design on the Cisco Catalyst 9400?

A The Catalyst 9400 Series supports a side-to-side airflow design that is most common in campus modular access deployments.

Q What is unique about the Cisco Catalyst 9400 fan-tray design?

A The Catalyst 9400 Series has an innovative fan-tray design that allows you to service the fan tray from the front or the back using the same fan tray. In certain rack deployments, this design allows you to retain your cable connectivity to the modules while servicing the fan tray from the rear.

Q What is unique about the Cisco Catalyst 9400 power design?

A The Catalyst 9400 power-design architecture is unique and superior in many ways. The novel design supports:

- Modular power supply
- Superior high-availability capabilities to support N + 1 or N + N modes of operation
- Combined mode of operation
- Ability to mix-and-match inputs from 110V and 220V sources
- Platinum rated efficient power supplies
- Power shared across data, PoE and system components

Q How many power supplies can the 7- and 10-slot chassis hold?

A Both 7- and 10-slot chassis support up to 8 modular power supplies.

Q How do I decide the number of power supplies I need on the Cisco Catalyst 9400?

A Use the Cisco Power Calculator to estimate the power requirements on the Catalyst 9400. This tool allows you to configure current and future power needs based on the devices, line cards, and access endpoints and recommends the number of power supplies you need for your deployment: <https://www.cisco.com/c/en/us/support/web/tools-catalog.html>.

Q Do the power supplies separate the power into data and inline (POE) categories?

A No. The power from the power supplies is shared between data, PoE and other system components.

Q What redundant mode does the Cisco Catalyst 9400 system support?

A The Catalyst 9400 system supports N + N redundant mode and N+1 redundant mode. The system allows changing of the power supply modes with a simple CLI. For N + N mode, N power supplies are active and N are in standby. For N+1 mode, N power supplies are active and 1 is in standby.

Q On the Cisco Catalyst 9400, what is the default power supply mode?

A The default mode is a combined mode; User can change the mode of operation either N+N or N+1 mode.

Q Do the Cisco Catalyst 9400 Series switches come with built-in RFID?

A Yes, the Catalyst 9400 Series switches come with built-in passive RFID tags on all the components so that you have an inventory of the different components, including separated RFID tags for the supervisor, all line-card modules, the power supplies, the fan tray, and the chassis.

Q What management ports are available on the Cisco Catalyst 9400?

A The Catalyst 9400 Series comes with a mini-B type USB console port and a 10/100/1000 Ethernet (RJ-45) dedicated management port on the front panel of the switch. The Ethernet port is in a separate VRF instance called "Mgmt-vrf". This setup segments the management traffic from the global routing table of the switch.

Q Can I use both console ports simultaneously on the Cisco Catalyst 9400?

A No. The RJ-45 port is the default and console switches to USB when the USB cable is connected.

Q Do the Cisco Catalyst 9400 Series switches support Online Insertion and Removal (OIR)?

A Yes, OIR is supported on all the modules and power supplies.

Q What pluggable transceiver modules do the Cisco Catalyst 9400 Series switches support?

A Refer to the Cisco Transceiver Module Compatibility Matrixes for the supported list <https://www.cisco.com/c/en/us/support/interfaces-modules/transceiver-modules/products-device-support-tables-list.html>.

Cisco Catalyst 9500

Q What are the SKUs in the Cisco Catalyst 9500 Series?

A The Cisco Catalyst 9500 Series has three SKUs:

- 24 ports x 40 Gigabit Ethernet QSFP
- 12 ports x 40 Gigabit Ethernet QSFP
- 40 ports x10 Gigabit Ethernet SFP+ option with 8x 10 Gigabit Ethernet SFP+ and 2x 40 Gigabit Ethernet QSFP uplinks

Q Are the uplink modules of the Cisco Catalyst 9500 Series switches the same as those for the Cisco Catalyst 3850 uplink modules?

A No, uplink modules of the Cisco Catalyst 9500 Series switches have different SKUs from those of the 3850.

Q How many Rack Unit (RUs) do the Cisco Catalyst 9500 Series switches have?

A The Cisco Catalyst 9500 Series switches are 1RU switches; 40 Gigabit Ethernet QSFP SKUs are completely fixed and the 10 Gigabit Ethernet SFP+ SKU has two uplink options.

Q Do the Cisco Catalyst 9500 Series switches come with built-in RFID?

A Yes, they come with a built-in passive RFID tag.

Q What management ports are available on the Cisco Catalyst 9500?

A The Catalyst 9500 Series comes with a mini-B type USB console port and a 10, 100, or 1000 Ethernet (RJ-45) dedicated management port on the front panel of the switch. The Ethernet port is in a separate VRF instance called “Mgmt-vrf” in order to segment the management traffic from the global routing table of the switch.

Q Can I use both console ports simultaneously on the Cisco Catalyst 9500?

A No. The RJ-45 port is default and the console switches to USB when USB cable is connected.

Q Do Cisco Catalyst 9500 Series switches support Trivial File Transport Protocol (TFTP) to boot the software image?

A Yes, you can use TFTP to boot the application image over the network with the following parameters set up:

- MAC_ADDR: The switch default MAC address
- IP_ADDR: The IP address or netmask of the switch
- DEFAULT_ROUTER: The IP address of the default router in the local network

Example:

- Switch: set DEFAULT_ROUTER 10.4.2.1
- Switch: set IP_ADDR 10.4.2.140/255.255.255.0
- Switch: boot tftp://<tftp server ip addr>/<filename>

Q Do the Cisco Catalyst 9500 Series switches support OIR?

A Yes, the 5 fans and the 2 power supply units support OIR. Also, uplink modules on the 10 Gigabit Ethernet SKU support OIR.

Q How many fans can fail on the Cisco Catalyst 9500 without interrupting the system?

A One. The Cisco Catalyst 9500 Series switches are designed to support a single fan failure. We always recommended that you replace fans as soon as possible when they fail.

Q Do the Cisco Catalyst 9500 Series switches support 802.1ae?

A The Catalyst 9500 Series switches are hardware-capable for 802.1ae on all ports on the switch.

Q What type of airflow do the Cisco Catalyst 9500 Series switches support?

A The airflow on the Catalyst 9500 is “front-to-back” airflow.

Q What pluggable transceiver modules do the Cisco Catalyst 9500 Series switches support?

A Refer to the Cisco Transceiver Module Compatibility Matrixes for a complete list: <https://www.cisco.com/c/en/us/support/interfaces-modules/transceiver-modules/products-device-support-tables-list.html>.

Q Can the Cisco Catalyst 9500 Series switches support redundant power supplies?

A Yes, the Catalyst 9500 Series switches come with 2 950-watt AC power supplies.

Pricing and ordering

Q **Where can I find the complete SKU list or data sheets for the Cisco Catalyst 9000 Series (9300, 9400, and 9500)?**

A A complete list of PIDs is available in the platform-specific data sheets:

- Cisco Catalyst 9300: [Latest data sheet version](#)
- Cisco Catalyst 9400:
 - Chassis: [Latest Datasheet Version for Chassis](#)
 - Supervisor: [Latest Datasheet Version for Supervisor](#)
 - Line cards: [Latest Datasheet Version for Line cards](#)
- Cisco Catalyst 9500: [Latest Datasheet Version](#)

Q **What is the SKU mapping between the Cisco Catalyst 3850 and 9300?**

A Refer to Table 3.

Table 3. Mapping Between Cisco Catalyst 3850 and 9300

3850 PIDs	9300 PID	Short description
WS-C3850-24T	C9300-24T	Catalyst 9300 24-port data only switch
WS-C3850-24P	C9300-24P	Catalyst 9300 24-port PoE+ switch
WS-C3850-24U	C9300-24U	Catalyst 9300 24-port UPOE switch
WS-C3850-24XU	C9300-24UX	Catalyst 9300 24-port mGig and UPOE switch

3850 PIDs	9300 PID	Short description
WS-C3850-48T	C9300-48T	Catalyst 9300 48-port data only switch
WS-C3850-48P	C9300-48P	Catalyst 9300 48-port PoE+ switch
WS-C3850-48U	C9300-48U	Catalyst 9300 48-port UPOE switch

Q **What is the SKU mapping between the Cisco Catalyst 4500E and 9400?**

A Refer to Table 4.

Table 4. Mapping Between Cisco Catalyst 4500E and 9400

C4500E PID	C9400 PID	Short description
WS-C4506-E	C9407R	Cisco Catalyst 9400 Series 7 slot chassis
WS-C4507R+E	C9407R	Cisco Catalyst 9400 Series 7 slot chassis
WS-C4510R+E	C9410R	Cisco Catalyst 9400 Series 10 slot chassis
WS-X45-SUP6-E	C9400-SUP-1	Cisco Catalyst 9400 Series Supervisor 1
WS-X45-SUP6L-E	C9400-SUP-1	Cisco Catalyst 9400 Series Supervisor 1
WS-X45-SUP7-E	C9400-SUP-1	Cisco Catalyst 9400 Series Supervisor 1

C4500E PID	C9400 PID	Short description
WS-X45-SUP7L-E	C9400-SUP-1	Cisco Catalyst 9400 Series Supervisor 1
WS-X45-SUP8-E	C9400-SUP-1	Cisco Catalyst 9400 Series Supervisor 1
WS-X45-SUP8L-E	C9400-SUP-1	Cisco Catalyst 9400 Series Supervisor 1
WS-X4748-RJ45V+E	C9400-LC-48U	Cisco Catalyst 9400 Series 48-Port UPOE 10/100/1000 (RJ-45)
WS-X4648-RJ45V+E	C9400-LC-48U	Cisco Catalyst 9400 Series 48-Port UPOE 10/100/1000 (RJ-45)
WS-X4748-UPOE+E	C9400-LC-48U	Cisco Catalyst 9400 Series 48-Port UPOE 10/100/1000 (RJ-45)
WS-X4748-RJ45+E	C9400-LC-48T	Cisco Catalyst 9400 Series 48-Port 10/100/1000 (RJ-45)
WS-X4648-RJ45+E	C9400-LC-48T	Cisco Catalyst 9400 Series 48-Port 10/100/1000 (RJ-45)
PWR-C45-1300ACV	C9400-PWR-3200AC	Cisco Catalyst 9400 Series 3200W AC Power Supply

C4500E PID	C9400 PID	Short description
PWR-C45-2800ACV	C9400-PWR-3200AC	Cisco Catalyst 9400 Series 3200W AC Power Supply
PWR-C45-4200ACV	C9400-PWR-3200AC	Cisco Catalyst 9400 Series 3200W AC Power Supply
PWR-C45-6000ACV	C9400-PWR-3200AC	Cisco Catalyst 9400 Series 3200W AC Power Supply
PWR-C45-9000ACV	C9400-PWR-3200AC	Cisco Catalyst 9400 Series 3200W AC Power Supply



What is the SKU mapping between the Cisco Catalyst 4500X and 9500?



Refer to Table 5.

Table 5 Mapping Between Cisco Catalyst 4500X and 9500

4500X PIDs	9500 PID	Short description
WS-C4500X-16SFP+	C9500-12Q	Catalyst 9500 12-port 40GE QSFP switch
	C9500-40X	Catalyst 9500 40+ port 10GE SFP+ Switch

4500X PIDs	9500 PID	Short description
WS-C4500X-32SFP+	C9500-40X	Catalyst 9500 40+ port 10GE SFP+ Switch
	C9500-48X	Catalyst 9500 convenience bundle - 40P x 10G + 8P x 10G
	C9500-40X-2Q	Catalyst 9500 convenience bundle - 40P x 10G + 2P x 40G
	C9500-24Q	Catalyst 9500 24-port 40GE QSFP switch
	C9500-12Q	Catalyst 9500 12-port 40GE QSFP switch
WS-C4500X-40X-ES	C9500-40X	Catalyst 9500 40+ port 10GE SFP+ Switch
	C9500-48X	Catalyst 9500 convenience bundle - 40P x 10G + 8P x 10G
	C9500-40X-2Q	Catalyst 9500 convenience bundle - 40P x 10G + 2P x 40G
	C9500-24Q	Catalyst 9500 24-port 40GE QSFP switch
	C9500-12Q	Catalyst 9500 12-port 40GE QSFP switch

Warranty and support



How does SMARTnet® pricing compare between the Cisco Catalyst 9000 and Cisco Catalyst 3850, 4500, and 4500X?



SMARTnet pricing for the Cisco Catalyst 9000 is at parity with the existing Cisco Catalyst 3850, 4500, and 4500X.



Does SMARTnet support include support for all the different licenses?



Smart Net Total Care™ supports hardware and network essentials and network advantage perpetual licenses. All term-based subscription licenses, such as DNA Essentials and DNA Advantage, are covered by SWSS, which is included by default in the price of the license.



Does the Cisco Catalyst 9000 support Enhanced Limited Time Warranty (E-LLW)?



Yes, All Cisco Catalyst 9000 Switches support E-LLW. E-LLW provides 90-day 8 x 5 Cisco Technical Assistance Center (TAC) support, next-business-day hardware replacement, and guest access to the knowledge base. The business unit software policy provides free software updates for Cisco IOS software in the network stack.



What is the software support model with E-LLW on the Cisco Catalyst 9000?



The E-LLW warranty does not include ongoing software support. For the first 90 days, you are entitled to configuration help for Cisco IOS software-related questions. Software updates to the Cisco IOS software will be supported by the business unit software policy. Problems with DNA term-based licenses is supported by SWSS, not the warranty.