

Cisco 4000 Integrated Services Router Family

(Cisco 4400 and 4300 Series Routers)

Ordering Guide

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Cisco 4000 Integrated Services Router Family

The Cisco 4000 Integrated Services Router (ISR) Family revolutionizes WAN communications in the enterprise branch. With new levels of built-in WAN intelligence and convergence, it specifically addresses the growing need for application-aware networking in distributed enterprise sites.

You can order the platform as a base system or as a bundled system for security, unified communications, or application services. This ordering guide focuses on base system configurations and options, but most of the elements are applicable to bundle ordering as well. For a detailed list of advanced technology bundles, please refer to the section, "[Ordering Bundled Systems for Cisco 4000 ISR Routers](#)," of this ordering guide.

Ordering the Cisco 4000 ISR

The Cisco 4000 ISR router family offers the highest performance within the ISR portfolio. The family contains the Cisco 4451-X, 4431, 4351, 4331, and 4321 routers, which differ primarily in performance capabilities and in the number of network interface modules (NIM) and service-module slots supported.

Table 1 lists the part numbers for the Cisco 4000 ISR Family.

Table 1. Cisco 4000 Family Router Platforms

Part Number	Product Description	Technical Service Part Number (Cisco SMARTnet 8x5xNBD Service*)
ISR4451-X/K9	Cisco ISR 4451-X (4 GE, 3 NIM, 2 SM, 8 GB FLASH, 2 GB DRAM (data plane), 4G DRAM (control plane))	CON-SNT-ISR45XK9
ISR4431/K9	Cisco ISR 4451-X (4 GE, 3 NIM, 2 SM, 8 GB FLASH, 2 GB DRAM (data plane), 4 GB DRAM (control plane))	CON-SNT-ISR4431K
ISR4351/K9	Cisco ISR 4351 (3 GE, 3 NIM, 2 SM, 4 GB FLASH, 4 GB DRAM (default memory))	CON-SNT-ISR4351K
ISR4331/K9	Cisco ISR 4351 (3 GE, 2 NIM, 1 SM, 4 GB FLASH, 4 GB DRAM (default memory))	CON-SNT-ISR4331K
ISR4321/K9	Cisco ISR 4321 (2 GE, 2 NIM, 4 GB FLASH, 4 GB DRAM (default memory))	CON-SNT-ISR4321K

* 8x5xNBD service is delivered 8 hours a day, 5 days a week (weekdays), by next business day.

You can order each Cisco 4000 platform with dual power supplies that you can configure for power-supply redundancy or increased power for Power over Ethernet (PoE). The primary and secondary power supplies can be AC, PoE, DC, or any combination of the three. In order to power PoE ports on a switch module integrated into a router, you must order the router with a PoE power supply.

You can order the power supplies listed in Table 2 with the system or as spares. The PoE power supply on the Cisco 4000 ISRs requires a C15-rated power cable to accommodate the higher current rating of these power supplies.

Table 2. Cisco 4000 Router Power Supply Options (Offered with the System and as Spares)

Platform	Part Number	Description
Cisco 4451-X ISR	PWR-4450-AC	Cisco 4451-X AC Power Supply. Ships by default with the system. Spare SKU should be ordered for a Secondary PS of a system already deployed
	PWR-4450-AC/2	Cisco 4451-X AC Power Supply (Secondary PS)
Cisco 4431 ISR	PWR-4430-AC	Cisco 4431 AC Power Supply. Ships default with the system. Spare SKU should be ordered for a Secondary PS of a system already deployed
	PWR-4430-AC/2	Cisco 4431 AC Power Supply (Secondary PS)

Platform	Part Number	Description
Cisco 4351 ISR	PWR-4350-AC	AC Power Supply for Cisco ISR 4351
	PWR-4350-POE-AC	AC Power Supply with POE for Cisco ISR 4351
Cisco 4331 ISR	PWR-4330-AC	AC Power Supply for Cisco ISR 4331
	PWR-4330-POE-AC	AC Power Supply with POE for Cisco ISR 4331
Cisco 4321 ISR	PWR-4320-AC	AC Power Supply for Cisco ISR 4321
	PWR-4320-POE-AC	AC Power Supply with POE for Cisco ISR 4321

Cisco 4400 Series Routers (4451-X and 4431) ship with a default memory of 2 GB of DRAM for the data plane, 4 GB of DRAM for the control plane, and 8 GB of flash memory. The 4-GB DRAM configuration for the control plane is derived by the installation of two symmetrical dual in-line memory modules (DIMMs) of 2 GB in each of the memory slots.

The Cisco 4300 Series Routers (4351, 4331, and 4321) ship with a default memory of 4 GB of DRAM for both the control plane and data plane and 4 GB of flash memory. In the 4351 and 4331, the 4-GB DRAM configuration is derived by the installation of two symmetrical DIMMs of 2 GB in each of the memory slots of the Cisco 4351 and 4331 platforms.

When upgrading memory to higher densities, both memory slots must be populated with DIMMs of the same type and density for high system performance. The Cisco 4000 Series platform does not support the use of different DRAM densities in the two available DIMM slots or the use of only one slot.

The memory type and part numbers are listed in Table 3.

Table 3. Cisco 4400 Series Router DRAM (Factory Upgrades and Spares)

Platform	Part Number	Description
Cisco 4400 Series Routers (4451-X and 4431 ISRs)	MEM-4400-2G=	2G DRAM (1 DIMM) for Cisco ISR 4400, Spare
	MEM-4400-DP-2G=	2G DRAM (1 DIMM) for Cisco ISR 4400 Data Plane, Spare
	MEM-4400-4G=	4G DRAM (1 DIMM) for Cisco ISR 4400, Spare
	MEM-4400-8G=	8G DRAM (1 DIMM) for Cisco ISR 4400, Spare
	MEM-4400-DP-2G	2G DRAM (1 DIMM) for Cisco ISR 4400 Data Plane (Default)
	MEM-4400-4G	4G DRAM (2G+2G) for Cisco ISR 4400 (Default)
	MEM-4400-4GU8G	4G to 8G DRAM Upgrade (4G+4G) for Cisco ISR 4400
	MEM-4400-4GU16G	4G to 16G DRAM Upgrade (8G+8G) for Cisco ISR 4400
Cisco 4300 Series Routers (4351, 4331, and 4321 ISRs)	MEM-4300-2G=	2G DRAM (1 DIMM) for Cisco ISR 4331,4351 Spare
	MEM-4300-4G=	4G DRAM (1 DIMM) for Cisco ISR 4321,4331,4351 Spare
	MEM-4300-8G=	8G DRAM (1 DIMM) for Cisco ISR 4331,4351 Spare
	MEM-4300-4G	4G DRAM (2G+2G) for Cisco ISR 4331,4351
	MEM-4300-4GU8G	4G to 8G DRAM Upgrade (4G+4G) for Cisco ISR 4331, 4351
	MEM-4300-4GU16G	4G to 16G DRAM Upgrade (8G+8G) for Cisco ISR 4331, 4351
	MEM-4320-4G	4G DRAM (4G) for Cisco ISR 4321
	MEM-4320-4GU8G	4G to 8G DRAM Upgrade (4G+4G) for Cisco ISR 4321

The Cisco 4451-X and 4431 ship with a default of 8 GB of flash memory. The part numbers are listed in Table 4.

Table 4. Cisco 4000 Router Flash Memory (Factory Upgrades and Spares)

Product Series	Part Number	Description
Cisco 4000 Family: 4400 Series	MEM-FLASH-8G=	8 G Flash Memory for Cisco ISR 4400, Spare
	MEM-FLASH-16G=	16 G Flash Memory for Cisco ISR 4400, Spare
	MEM-FLASH-32G=	32 G Flash Memory for Cisco ISR 4400, Spare
	MEM-FLASH-8U16G	8 G to 16G Flash Memory Upgrade for Cisco ISR 4400
	MEM-FLASH-8U32G	8 G to 32G Flash Memory Upgrade for Cisco ISR 4400
	MEM-FLASH-8G	8 G Flash Memory for Cisco ISR4400
Cisco 4000 Family: 4300 Series	MEM-FLSH-8G=	8 G Flash Memory for Cisco ISR 4431, 4351, 4331, 4321 Spare
	MEM-FLSH-16G=	16 G Flash Memory for Cisco ISR 4431, 4351, 4331, 4321 Spare
	MEM-FLSH-4U8G	4 G to 8G Flash Memory Upgrade for Cisco ISR 4351, 4331, 4321
	MEM-FLSH-4U16G	4 G to 16G Flash Memory Upgrade for Cisco ISR 4351, 4331
	MEM-FLSH-4G	4 G Flash Memory for Cisco ISR 4351, 4331, 4321
	MEM-FLSH-16G=	16 G Flash Memory for Cisco ISR 4431, 4351, 4331, 4321 Spare

Cisco 4000 family of routers ships with a default fan assembly that drives "business-to-bezel" airflow in the router chassis. In addition, the cover for the redundant power supply (RPS) on the Cisco 4000 can be ordered as a spare. Table 5 lists the part numbers for Cisco 4000 fan-related products.

Table 5. Cisco 4000 Router Family Fan-Related Products

Part Number	Description
ACS-4450-FANASSY	Cisco ISR4451 and 4351 Fan Assembly, System
ACS-4450-FANASSY=	Cisco ISR4451 and 4351 Fan Assembly, Spare
ACS-4330-FANASSY=	Cisco ISR4331 Fan Assembly, Spare
ACS-4320-FANASSY=	Cisco ISR4321 Fan Assembly, Spare

Ordering Optional Items for the Cisco 4000 Router Platform

Each Cisco 4000 ships with a default accessory kit consisting of:

- 19-inch rack-mount brackets
- Regulatory and Compliance Safety Information (RCSI) guide

The default accessory kit does not include any Category 5 RJ-45 Ethernet cables or cables for the router console or auxiliary port. You can order the console and auxiliary cables as an option during router configuration or as spares.

You can order the 23-inch rack-mount brackets, the blank faceplates for module slots, and slot dividers as spares (Table 6).

Opacity shields are not required for the Cisco 4000 product family because the router ships with a solid cover and the router interior is not exposed. Table 6 lists the part numbers for cables, rack-mount brackets, blank faceplates, and storage drives.

Table 6. Cables, Rack-Mount Brackets, and Blank Faceplates for the Cisco 4000 Product Family

Part Number	Description
CAB-CONSOLE-RJ45	Console Cable 6ft with RJ45 and DB9F (Both system and spare)
CAB-AUX-RJ45	Auxiliary Cable 8ft with RJ45 and DB25M (Both system and spare)
CAB-CONSOLE-USB	Console Cable 6 ft with USB Type A and mini-B connectors (Both system and spare)
ACS-4450-RM-19=	19-inch rack mount kit for Cisco ISR4450
ACS-4450-RM-23=	23-inch rack mount kit for Cisco ISR4451
ACS-4330-RM-19=	19-inch rack mount kit for Cisco ISR4331
ACS-4320-RM-19=	19-inch rack mount kit for Cisco ISR4321
SM-S-BLANK=	Removable faceplate for SM slot on Cisco ISR 4400, 4300 (only as spare)
SM-BLANK-KIT=	Blank faceplate for SM slot with divider on Cisco 4400, 4300 (only as spare)
NIM-BLANK=	Blank faceplate for NIM slot on Cisco ISR4000
NIM-SLOT-DIVIDER=	NIM Slot Divider (Guide) for Cisco ISR4000
SM-SLOT-DIVIDER=	SM Slot Divider (Guide) for Cisco ISR 4400, 4300 (only as spare)
NIM-SSD	NIM Carrier Card for SSD drives
NIM-SSD=	NIM Carrier Card for SSD drives, Spare
SSD-SATA-200G	200 GB, SATA Solid State Disk
SSD-SATA-200G=	200 GB, SATA Solid State Disk

Ordering Cisco IOS Software Images and Licenses

Cisco ISRs deliver innovative technologies running on the industry-leading Cisco IOS® Software network operating system.

The Cisco 4000 ISR Family ships with a universal Cisco IOS Software image that contains all the features available for use on the router. A specific feature set is activated by using technology package licenses such as Security, Unified Communications, and Application Experience licenses.

The Cisco 4000 ISR supports two types of universal images:

- Universal images with **universalk9** in the image name: This universal image offers all the Cisco IOS Software features, including strong payload cryptography features such as IP Security VPN (IPsec VPN) and Secure Unified Communications.
- Universal images with **universalk9_npe** in the image name: The strong control of encryption capabilities by Cisco Software Activation helps meet U.S. export control requirements for cryptography. However, some countries have import requirements that require that the platform **not** support any strong payload cryptography. To satisfy the import requirements of those countries, Cisco allows you to order the router with an Non-Payload Encryption ("NPE") universal image. The NPE image does support security features such as zone-based firewall and intrusion prevention through the SECNPE-K9 license.

Table 7 lists part numbers for universal Cisco IOS Software images for the Cisco 4000 product family.

Table 7. Part Numbers for Universal Cisco IOS Software Images for the Cisco 4000 Product Family (for Cisco IOS XE Software Release 3.9)

Platform	Part Number	Description
ISR4451-X and 4431	SISR4400UK9-313S	Cisco IOS universal Image for 4451-X and 4431
ISR4451-X and 4431	SISR4400NPEK9-313S	Cisco IOS univ. Image (No Payload Encryption) for 4451-X and 4431
ISR4351, 4331 and 4321	SISR4300UK9-313S	Cisco IOS universal Image for 4351, 4331 and 4321
ISR4351, 4331 and 4321	SISR4300NPEK9-313S	Cisco IOS univ. Image (No Payload Encryption) for 4351, 4331 and 4321

By default, you need to select an IP Base license. You can order the routers from the factory with technology licenses preinstalled using the paper license part numbers (those that start with the keyword **SL**). Alternately, if you plan to deploy the advanced technology features later, you can order the required licenses as spares. You can order spares for technology licenses as paper licenses or e-delivery licenses (those that start with keyword **SL**).

The part numbers are listed in Table 8.

Table 8. IP Base Licenses for Cisco 4000 Product Family (Maps to Both Types of Universal Images)

Part Number	Description
SL-44-IPB-K9	IP Base License (Paper) for Cisco 4451-X and 4431
SL-4350-IPB-K9	IP Base License (Paper) for Cisco 4351
SL-4330-IPB-K9	IP Base License (Paper) for Cisco 4331
SL-4320-IPB-K9	IP Base License (Paper) for Cisco 4321

You can use the security licenses in Table 9 to activate the advanced security features offered on the Cisco 4000 platform. You can order these part numbers only for the universal image that supports payload cryptography.

Table 9. Security Licenses for Cisco 4000 Product Family (Maps to universalk9 Image)

Platform	Part Number	Description
Cisco 4451-X ISR	SL-44-SEC-K9	Security License (Paper) for Cisco 4451-X and 4431 (System)
Cisco 4451-X ISR	SL-44-SEC-K9=	Security PAK (E-Delivery/Paper) for Cisco 4451-X and 4431 (only as Spare)
Cisco 4451-X ISR	SL-4350-SEC-K9	Security License (Paper) for Cisco 4351 (System)
Cisco 4451-X ISR	SL-4350-SEC-K9=	Security PAK (E-Delivery/Paper) for Cisco 4351 (only as Spare)
Cisco 4331 ISR	SL-4330-SEC-K9	Security License (Paper) for Cisco 4331 (System)
Cisco 4331 ISR	SL-4330-SEC-K9=	Security PAK (E-Delivery/Paper) for Cisco 4331 (only as Spare)
Cisco 4321 ISR	SL-4320-SEC-K9	Security License (Paper) for Cisco 4321 (System)
Cisco 4321 ISR	SL-4320-SEC-K9=	Security PAK (E-Delivery/Paper) for Cisco 4321 (only as Spare)

For activating security features on the universal image with no payload encryption, the security license part numbers are unique, as listed in Table 10.

Table 10. Security Licenses (No Payload Encryption) for the Cisco 4000 Product Family (Maps to **universalk9_npe** Image)

Part Number	Description
SL-44-SECNPE-K9	Security No Payload Encryption License (Paper) for Cisco 4451-X and 4431 (System)
SL-44-SECNPE-K9=	Security No Payload Encryption (E-Delivery/Paper) License for Cisco 4451-X and 4431 (only as Spare)
SL-4350-SECNPE-K9	Security No Payload Encryption License (Paper) for Cisco 4351 (System)
SL-4350-SECNPE-K9=	Security No Payload Encryption (E-Delivery/Paper) License for Cisco 4351 (only as Spare)

Part Number	Description
SL-4330-SECNPE-K9	Security No Payload Encryption License (Paper) for Cisco 4331 (System)
SL-4330-SECNPE-K9=	Security No Payload Encryption (E-Delivery/Paper) License for Cisco 4331 (only as Spare)
SL-4320-SECNPE-K9	Security No Payload Encryption License (Paper) for Cisco 4321 (System)
SL-4320-SECNPE-K9=	Security No Payload Encryption (E-Delivery/Paper) License for Cisco 4321 (only as Spare)

The Unified Communications license is used to activate unified communications features on the Cisco 4000 platforms; Table 11 lists the part numbers.

Table 11. Unified Communications License for the Cisco 4000 Product Family (Maps to Both Images)

Part Number	Description
SL-44-UC-K9	Unified Commn. License (Paper) for Cisco 4451-X and 4431 (System)
SL-44-UC-K9=	Unified Commn. License (E-Delivery/Paper) for Cisco 4451-X and 4431 (Spare)
SL-4350-UC-K9	Unified Commn. License (Paper) for Cisco 4351 (System)
SL-4350-UC-K9=	Unified Commn. License (E-Delivery/Paper) for Cisco 4351 (Spare)
SL-4330-UC-K9	Unified Commn. License (Paper) for Cisco 4331 (System)
SL-4330-UC-K9=	Unified Commn. License (E-Delivery/Paper) for Cisco 4331 (Spare)
SL-4320-UC-K9	Unified Commn. License (Paper) for Cisco 4321 (System)
SL-4320-UC-K9=	Unified Commn. License (E-Delivery/Paper) for Cisco 4321 (Spare)

You can use the Application Experience license in Table 12 to activate the application experience features offered on the Cisco 4000 product family.

Table 12. Application Experience (AppX) Licenses for the Cisco 4000 Product Family (Maps to Both Universal Images)

Part Number	Description
SL-44-APP-K9	AppX License (Paper) for Cisco 4451-X and 4431 (System)
SL-44-APP-K9=	AppX License (Paper) for Cisco 4451-X and 4431 (Spare)
SL-4350-APP-K9	AppX License (Paper) for Cisco 4351 (System)
SL-4350-APP-K9=	AppX License (Paper) for Cisco 4351 (Spare)
SL-4330-APP-K9	AppX License (Paper) for Cisco 4331 (System)
SL-4330-APP-K9=	AppX License (Paper) for Cisco 4331 (Spare)
SL-4320-APP-K9	AppX License (Paper) for Cisco 4321 (System)
SL-4320-APP-K9=	AppX License (Paper) for Cisco 4321 (Spare)

The Cisco 4000 family also offers a wide variety of feature licenses for unified communications functions such as Cisco Unified Communications Manager Express (Unified CME), Survivable Remote Site Telephony (SRST), and Cisco Unified Border Element (CUBE). You need these licenses in addition to the technology license for a given solution deployment.

Ordering Bundled Systems for Cisco 4000 ISRs

You can also order the Cisco 4000 as prepackaged bundled systems for deploying advanced technologies such as security, unified communications, and application services in the branch office.

Security Bundles

Cisco router security bundles deliver security features such as Cisco IOS Software Zone-Based Firewall, VPN, and infrastructure security services over numerous WAN access technologies, offering high levels of performance, scalability, and availability to meet today's growing business requirements. Table 13 lists the security bundle for the Cisco 4000 ISRs that ships with the Security technology license activated and the advanced security features available for use. By default, this bundle ships with the universal Cisco IOS Software image that supports payload cryptography.

Table 13. Security Bundle for Cisco 4000 ISRs (Includes **universalk9** Image and Security License)

Part Number	Description	Technical Service Part Number (SMARTnet 8x5xNBD*)
ISR4451-X-SEC/K9	Cisco ISR 4451-X Security Bundle w/SEC license	CON-SNT-ISX451-X
ISR4431-SEC/K9	Cisco ISR 4431 Security Bundle w/SEC license	CON-SNT-CISCO 4431 ISRCISCO 4431 ISRS
ISR4351-SEC/K9	Cisco ISR 4351 Security Bundle w/SEC license	CON-SNT-ISR4351S
ISR4331-SEC/K9	Cisco ISR 4331 Security Bundle w/SEC license	CON-SNT-ISR4331S
ISR4321-SEC/K9	Cisco ISR 4321 Security Bundle w/SEC license	CON-SNT-ISR4321S

* 8x5xNBD service is delivered 8 hours a day, 5 days a week (weekdays), by next business day.

Unified Communications Bundles

The Cisco 4000 Voice and Voice Security bundle enables unified communications through a comprehensive signaling and media-processing infrastructure. It includes a variety of protocols, media interworking, signal and media security, transcoding, conferencing, and quality-of-service (QoS) capabilities. You can order these bundles with optional licenses for SRST.

All the Unified Communications bundles include the new Cisco Packet Voice DSP Module 4 (PVDM4), which has been optimized for concurrent voice support. The PVDM4 modules support all voice gateway functions of earlier generations of PVDMs.

Table 14 lists the voice bundle for Cisco 4000 routers that comes with PVDM4, UC technology license, and the unified communications features available for use. By default, this bundle ships with the universal Cisco IOS Software image that supports payload cryptography.

Table 14. Unified Communications (UC) Bundles for Cisco 4000 Family Routers (Includes **universalk9** image, Unified Communications License, and Cisco PVDM4)

Part Number	Description	Technical Service SKU (SMARTnet 8x5xNBD*)
ISR4451-X-V/K9	Cisco ISR 4451-X UC Bundle, PVDM4-64 w/ UC License	CON-SNT-ISR4451-X
ISR4431-V/K9	Cisco ISR 4431 UC Bundle, PVDM4-64, UC License	CON-SNT-ISR4431V
ISR4351-V/K9	Cisco ISR 4351 UC Bundle, PVDM4-64, UC License	CON-SNT-ISR4351V
ISR4331-V/K9	Cisco ISR 4331 UC Bundle, PVDM4-32, UC License	CON-SNT-ISR4331V
ISR4321-V/K9	Cisco ISR 4321 UC Bundle, UC License	CON-SNT-ISR4321V

* 8x5xNBD service is delivered 8 hours a day, 5 days a week (weekdays), by next business day.

Table 15 lists the voice security bundles for the Cisco 4000 routers. The bundles ship with a PVDm4, UC, and Security (SEC) technology license and unified communications features available for use. By default, the bundles ship with the universal Cisco IOS Software image that supports payload cryptography.

Table 15. Voice Security Bundles for Cisco 4000 ISR Family Routers
(Include **universalk9** image, UC and SEC License, and Cisco PVDm4)

Part Number	Description	Technical Service Part Number (SMARTnet 8x5xNBD)
ISR4451-X-VSEC/K9	Cisco ISR 4451-X Voice Sec. Bundle, PVDm4-64 w/ UC and SEC License PAK	CON-SNT-ISR41-X
ISR4431- VSEC/K9	Cisco ISR 4431 Voice Sec. Bundle, PVDm4-64 w/ UC and SEC License PAK	CON-SNT-ISR44SEC
ISR4351-VSEC/K9	Cisco ISR 4351 VSEC Bundle, PVDm4-64 w/ UC, SEC Lic, CUBE-25	CON-SNT-ISR4351VS
ISR4331-VSEC/K9	Cisco ISR 4331 VSEC Bundle, PVDm4-32 w/ UC, SEC Lic, CUBE-10	CON-SNT-ISR4331VS
ISR4321-VSEC/K9	Cisco ISR 4321 VSEC Bundle, PVDm4-32 w/ UC, SEC Lic, CUBE-10	CON-SNT-ISR4321VS

* 8x5xNBD service is delivered 8 hours a day, 5 days a week (weekdays), by next business day.

Information about the Cisco 4000 Application Experience Bundle is available in the [Cisco Application Experience \(AX\) ordering guide](#).

AX Bundles

Cisco router AX bundles deliver a combination of security features along with Cisco Wide Area Application Services (WAAS) features. The security features include the Cisco IOS Software Zone-Based Firewall, VPN, and infrastructure security services over numerous WAN access technologies. The WAAS features include Application Visibility and Control (AVC), Cisco Performance Routing (PFRv3), and application optimization. Table 16 lists the AX bundle for the Cisco 4000 Routers that comes with the security technology and the WAAS license activated. By default, this bundle ships with the universal Cisco IOS Software image that supports payload cryptography.

Table 16. AX Bundle for Cisco 4000 (Includes **universalk9** Image, WAAS, and Security License)

Part Number	Description	Technical Service Part Number (SMARTnet 8x5xNBD)
ISR4451-X-AX/K9	Cisco ISR 4451-X AX Bundle w/APP, SEC license	CON-SNT-ISR4X51-X
ISR4431-AX/K9	Cisco ISR 4431 AX Bundle w/APP, SEC license	CON-SNT-ISR4431A
ISR4351-AX/K9	Cisco ISR 4351 AX Bundle w/APP, SEC license	CON-SNT-ISR4351AX
ISR4331-AX/K9	Cisco ISR 4331 AX Bundle w/APP, SEC license	CON-SNT-ISR4331AX
ISR4321-AX/K9	Cisco ISR 4321 AX Bundle w/APP, SEC license	CON-SNT-ISR4321AX

* 8x5xNBD service is delivered 8 hours a day, 5 days a week (weekdays), by next business day.

AXV Bundles

Cisco router AXV bundles deliver a combination of security features along with Cisco Unified Communications (UC) and Cisco WAAS features. The security features include the Cisco IOS Software Zone-Based Firewall, VPN, and infrastructure security services over numerous WAN access technologies, offering high levels of performance, scalability, and availability to meet today's growing business requirements. The WAAS features include Application Visibility and Control (AVC), Cisco Performance Routing (PFRv3) and application optimization. The bundles also ship with a Cisco PVDm4, UC technology license, and unified communications features available for use.

Table 17 lists the AXV bundle for the Cisco 4000 Routers that comes with the security, UC, and WAAS licenses activated. By default, this bundle ships with the universal Cisco IOS Software image that supports payload cryptography.

Table 17. AXV Bundle for Cisco 4000 (Includes universalk9 Image, WAAS and SEC License)

Part Number	Description	Technical Service Part Number (SMARTnet 8x5xNBD*)
ISR4451-X-AXV/K9	Cisco ISR 4451-X AXV Bundle w/APP, UC, SEC license	CON-SNT-ISR4451
ISR4431-AXV/K9	Cisco ISR 4431 AXV Bundle w/APP, UC, SEC license	CON-SNT-ISR4431AX
ISR4351-AXV/K9	Cisco ISR 4351 AXV Bundle w/APP, UC, SEC license	CON-SNT-ISR4351XV
ISR4331-AXV/K9	Cisco ISR 4331 AXV Bundle w/APP, UC, SEC license	CON-SNT-ISR4331XV
ISR4321-AXV/K9	Cisco ISR 4321 AXV Bundle w/APP, UC, SEC license	CON-SNT-ISR4321XV

* 8x5xNBD service is delivered 8 hours a day, 5 days a week (weekdays), by next business day.

Cisco and Partner Services for the Branch Office

Transform the branch-office experience and accelerate business innovation and growth using intelligent, personalized services from Cisco and our partners. We have the depth and breadth of expertise to create a clear, replicable, optimized branch-office footprint across technologies. Planning and design services align technology with business goals and can increase the accuracy, speed, and efficiency of deployment. Technical services help improve operational efficiency, save money, and mitigate risk. Optimization services are designed to continuously improve performance and help your team succeed with new technologies.

Technical Services Available for Cisco 4000 ISRs

- Cisco SMARTnet® Services provide comprehensive technical support services for the Cisco 4000 ISRs (both base systems and bundled systems), Cisco IOS Software and feature licenses, and modules that include the Cisco Unified Computing System™ (Cisco UCS®) E-Series Module. Cisco SMARTnet Services include advance hardware replacement, OS updates, online tools and resources, and Cisco Technical Assistance Center (TAC) support.
- Cisco Application Support plus Upgrades (SASU) provides technical support services including updates and upgrades for any Cisco software application running on the Cisco UCS E-Series Module.

Table 18 lists part numbers for Cisco technical services use cases.

Table 18. Technical Services Use Cases

If You Buy a Cisco4000 Base or Bundled System with:	You Need:
Any Cisco IOS Software, including technology or feature licenses for Cisco IOS Software	Cisco SMARTnet Service
Any modules, including Cisco UCS E-Series Modules	Cisco SMARTnet Service
An application running on a Cisco UCS E-Series Module	Cisco SMARTnet Service + SASU
A security feature set and you do not require intrusion-prevention-system (IPS) signature updates	Cisco SMARTnet Service

Additional Information and Contacts

To obtain current information about prices for products in the Cisco 4000 Router Family portfolio, please refer to the Cisco price list at: <http://www.cisco.com/en/US/ordering/index.shtml>.

For more information about the Cisco 4000 Router Family, visit <http://www.cisco.com/go/ISR4000>.

For more information about Cisco Technical Services, visit <http://www.cisco.com/go/ts>.



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