

Cisco IOS Software Release 12.4(4)XD

PB3264

Lifespan of Release

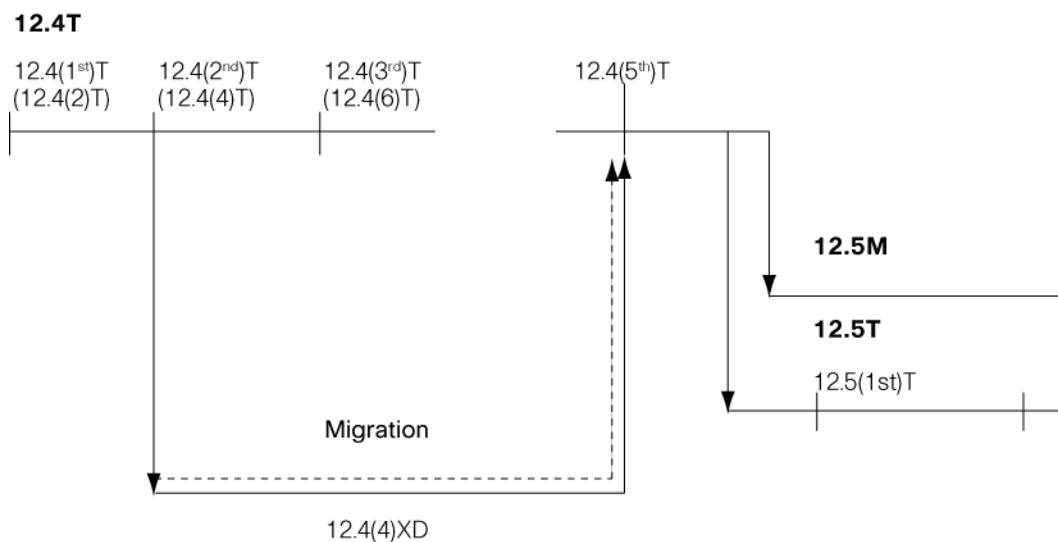
This Cisco IOS® Software Special Release is a short-lived release and will migrate into the fifth release of the Cisco IOS Software Release 12.4T train. 12.4(4)XD will no longer be orderable and no longer be configurable in the Dynamic Configuration Tool (DCT) <https://tools.cisco.com/qtc/config/jsp/configureHome.jsp> (Cisco.com login is required) as of December 28, 2007.

Product Overview

This product bulletin provides content and delivery information for Cisco IOS Software Special Release 12.4(4)XD. It should be used in conjunction with the release notes for Cisco IOS Software Release 12.4T http://www.cisco.com/en/US/products/ps6441/prod_release_notes_list.html, because 12.4(4)T is the parent release of 12.4(4)XD. Cisco IOS Software Special Release 12.4(4)XD supports Cisco® 7200 VXR Series Routers with NPE-G2.

This product bulletin lists only the features in Cisco IOS Software Release 12.4(4)XD that are new to the respective routers; more information is available in the release notes http://www.cisco.com/en/US/products/ps6706/prod_release_note09186a0080678755.html. Customers should be prepared to upgrade using the migration path shown in Figure 1.

Figure 1. Cisco IOS Software Release 12.4(4)XD Release Train and Migration Guide



New Features

Table 1 lists the new features delivered in Cisco IOS Software Release 12.4(4)XD by platform.

Table 1. Features Delivered in Cisco IOS Software Release 12.4(4)XD for Cisco 7200 Series Routers

New Feature	Cisco 7200 VXR Series	
	Network Processing Engines	
Hardware	Cisco 7200 VXR Series NPE-G1 Network Processing Engine	Cisco 7200 VXR Series NPE-G2 Network Processing Engine
Port Adapter Jacket Card for Cisco 7200VXR Series Routers	Yes	Yes

Following are detailed descriptions of the new features supported in Cisco IOS Software Special Release 12.4(4)XD.

Cisco7201 Series Router

- Part number: CISCO7201.
- Integrated NPE-G2.
- Compact, power-efficient 1-RU chassis.
- Cisco IOS Software Release support:
 - Minimum Cisco IOS Software Release: Release 12.4(4)XD, specifically 12.4(4)XD7, which is based on 12.4(4)T (Note: This is a short-lived release, and customers should be prepared to migrate to 12.4(fifth release)T.)
 - 12.4(sixth release)T: in future
 - 12.5 Mainline: in future
 - 12.2SB: in future
- Provides double the performance compared to the Cisco 7301 or Cisco 7200 VXR Series with NPE-G1 Network Processing Engine: up to 2 million packets per second (pps) in Cisco Express Forwarding.
- Offers four, built-in Gigabit Ethernet (GE) ports
- Provides one dedicated 10/100-Mbps copper Ethernet port for management.
- Provides one Universal Serial Bus (USB) ports for general storage and security token storage.
- Offers 1 GB of DRAM memory by default; upgradeable to 2 GB of DRAM.
- Offers greatly improved price-performance ratio.
- Provides a single Cisco 7000 Series port adapter slot
- Integrates pluggable GE optics (Small Form-Factor Pluggable [SFP] optics)

Cisco7200 VXR Series NPE-G2 Network Processing Engine

- Part number: NPE-G2.
- Supported on Cisco 7200 VXR Series: chassis for Cisco 7204VXR and 7206VXR Routers.
- Cisco IOS Software Release support:
 - Minimum Cisco IOS Software Release: Release 12.4(4)XD, which is based on 12.4(4)T (Note: This is a short-lived release, and customers should be prepared to migrate to 12.4(fifth release)T.)

- 12.4(fifth release)T: in future
- 12.5 Mainline: in future
- 12.2SB: in future
- Provides double the performance compared to the Cisco 7200 VXR Series with NPE-G1 Network Processing Engine: up to 2 million packets per second (pps) in Cisco Express Forwarding.
- Offers three 10/100/1000-Mbps copper Ethernet ports and optical ports that do not consume any bandwidth points.
- Provides one dedicated 10/100-Mbps copper Ethernet port for management.
- Provides two Universal Serial Bus (USB) ports for general storage and security token storage.
- Offers 1 GB of DRAM memory by default; after first customer shipment (FCS), the option will be offered to upgrade to 2 GB of DRAM.
- Eliminates the requirement for an I/O controller.
- Extends the use of the available I/O slot for a single port adapter or a Cisco 7200 VXR Series VPN Services Adapter (VSA).
- Offers greatly improved price-performance ratio.
- Provides investment protection through backward compatibility. Most port and service adapters are supported on the Cisco 7200 VXR Series NPE-G2 Network Processing Engine with the exception of a few end-of-sale components:
 - Fibre Channel over IP Port Adapter (PA-FC-1G; this port adapter reached its end-of-sale date on December 3, 2004)
 - One-Port OC-12, dual width DPT Port Adapter (PA-SRP-OC12; this port adapter reached its end-of-sale date on July 15, 2005)
 - VPN Acceleration Module (SA-VAM; this service adapter will reach its end-of-sale date on April 28, 2006)
 - Cisco VPN Acceleration Module 2 (SA-VAM2; this service adapter will reach its end-of-sale date on April 28, 2006)

Cisco 7200VXR Series Routers Port Adapter Jacket Card

- Part number: C7200-JC-PA.
- Supported on:
 - Cisco 7200 Series: chassis for Cisco 7204VXR and 7206VXR Routers
 - Cisco 7200 VXR Series NPE-G1 Network Processing Engine and Cisco 7200 VXR Series NPE-G2 Network Processing Engine (Note: The Cisco 7200 VXR Series NPE-G1 Network Processing Engine with the Port Adapter Jacket Card is **not** supported in 12.4(4)XD.).
- Cisco IOS Software Release support:
 - Minimum Cisco IOS Software Release: 12.4(4)XD, which is based on 12.4(4)T (Note: This is a short-lived release, and customers should be prepared to migrate to 12.4(fifth release)T.)
 - First rebuild of 12.4(6)T: the first rebuild of the third release of 12.4T

- 12.4(7) Mainline: the fourth release of 12.4 Mainline (Note: The combination of the Cisco 7200 VXR Series NPE-G1 Network Processing Engine with the Port Adapter Jacket Card is **not** supported in the 12.4(4)XD.)
- Provides one additional slot for single port/service adapters:
 - SA-VAM2, SA-VAM2+, PA-POS-2OC3, PA-MC-2T3+, and PA-MC-STM1
 - Note: SAM-VAM2 is only supported with the Port Adapter Jacket Card in combination with the NPE-G1
- Allows a high-bandwidth port adapter (for example, SA-VAM2+ and PA-POS-2OC3) to be moved to onto a dedicated peripheral component interconnect (PCI) bus that the Cisco 7200 VXR Series NPE-G1 Network Processing Engine and Cisco 7200 VXR Series NPE-G2 Network Processing Engine provide.
- Reduces PCI contention among other port adapters.
- Provides a cost-effective way to increase the slot density in parallel to the increased switching capacity of the platform's newest engine, the Cisco 7200 VXR Series NPE-G2 Network Processing Engine.

Upgrade Paths

Cisco IOS Software Special Release 12.4(4)XD is a short lived release. It is based on the second release of 12.4T: Release 12.4(4)T. It will migrate into the fifth release of 12.4T. Customers should be prepared to migrate to the fifth release of 12.4T when it is available.

Availability

Cisco IOS Software Special Release 12.4(4)XD is currently available..

Ordering Information

Table 2 gives ordering information for Cisco IOS Software Release 12.4(4)XD feature sets, including part numbers for ordering and memory recommendations.

Table 2. Ordering Information for Cisco IOS Software Release 12.4(4)XD Feature Sets

Cisco 7201 Feature Sets					Recommended Memory	
Platform	Network Processing Engine	Software Product Description	Image Name	Product Code	Flash	DRAM
Cisco 7201	Cisco 7201 Router with NPE-G2	Cisco 7200 NPE-G2/7201 IOS IP BASE W/O CRYPTO	c7200p-ipbase-mz	S72PIPB-12404XD	64 MB	1 GB
Cisco 7201	Cisco 7201 Router with NPE-G2	Cisco 7200 NPE-G2/7201 IOS IP BASE	c7200p-ipbasek9-mz	S72PIPBK9-2404XD	64 MB	1 GB
Cisco 7201	Cisco 7201 Router with NPE-G2	Cisco 7200 NPE-G2/7201 IOS SP SERVICES	c7200p-spservicesk9-mz	S72PSPSK9-12404XD	64 MB	1 GB
Cisco 7201	Cisco 7201 Router with NPE-G2	Cisco 7200 NPE-G2/7201 IOS ADVANCED SECURITY	c7200p-advsecuritk9-mz	S72PASK9-12404XD	64 MB	1 GB
Cisco 7201	Cisco 7201 Router with NPE-G2	Cisco 7200 NPE-G2/7201 IOS ADVANCED IP SERVICES	c7200p-advipservicesk9-mz	S72PAISK9-12404XD	64 MB	1 GB

Cisco 7201 Feature Sets					Recommended Memory	
Platform	Network Processing Engine	Software Product Description	Image Name	Product Code	Flash	DRAM
Cisco 7201	Cisco 7201 Router with NPE-G2	Cisco 7200 NPE-G2/7201 IOS ADVANCED ENTERPRISE SERVICES	c7200p-adventerpr isek9-mz	S72PAESK 9-12404XD	64 MB	1 GB
Cisco 7201	Cisco 7201 Router with NPE-G2	Cisco 7200 NPE-G2/7201 IOS ADV IP SERVICES W/LAWFUL INTERCEPT	c7200p-advipservi cesk9_li- mz	S72PAISK9 U-12404XD	64 MB	1 GB
Cisco 7201	Cisco 7201 Router with NPE-G2	Cisco 7200 NPE-G2/7201 IOS ADV ENTERPRISE SVCES W/SNA SWITCH	c7200p- adventerpr isek9_sna- mz	S72PSNAK 9-12404XD	64 MB	1 GB
Cisco 7204VXR Cisco 7206VXR	Cisco 7200 VXR Series NPE-G2 Network Processing Engine	Cisco 7200 NPE-G2/7201 IOS IP BASE W/O CRYPTO	c7200p- ipbase-mz	S72PIPB- 12404XD	48 MB	128 MB
Cisco 7204VXR Cisco 7206VXR	Cisco 7200 VXR Series NPE-G2 Network Processing Engine	Cisco 7200 NPE-G2/7201 IOS IP BASE	c7200p- ipbasek9- mz	S72PIPBK9 2404XD	48 MB	128 MB
Cisco 7204VXR Cisco 7206VXR	Cisco 7200 VXR Series NPE-G2 Network Processing Engine	Cisco 7200 NPE-G2/7201 IOS SP SERVICES	c7200p- spservices k9-mz	S72PSPSK 9-12404XD	48 MB	256 MB
Cisco 7204VXR Cisco 7206VXR	Cisco 7200 VXR Series NPE-G2 Network Processing Engine	Cisco 7200 NPE-G2/7201 IOS ADVANCED SECURITY	c7200p- advsecurit yk9-mz	S72PASK9 -12404XD	48 MB	256 MB
Cisco 7204VXR Cisco 7206VXR	Cisco 7200 VXR Series NPE-G2 Network Processing Engine	Cisco 7200 NPE-G2/7201 IOS ADVANCED IP SERVICES	c7200p- advipservi cesk9-mz	S72PAISK9 -12404XD	48 MB	256 MB
Cisco 7204VXR Cisco 7206VXR	Cisco 7200 VXR Series NPE-G2 Network Processing Engine	Cisco 7200 NPE-G2/7201 IOS ADVANCED ENTERPRISE SERVICES	c7200p- adventerpr isek9-mz	S72PAESK 9-12404XD	48 MB	256 MB
Cisco 7204VXR Cisco 7206VXR	Cisco 7200 VXR Series NPE-G2 Network Processing Engine	Cisco 7200 NPE-G2/7201 IOS ADV IP SERVICES W/LAWFUL INTERCEPT	c7200p- advipservi cesk9_li- mz	S72PAISK9 U-12404XD	48 MB	256 MB
Cisco 7204VXR Cisco 7206VXR	Cisco 7200 VXR Series NPE-G2 Network Processing Engine	Cisco 7200 NPE-G2/7201 IOS ADV ENTERPRISE SVCES W/SNA SWITCH	c7200p- adventerpr isek9_sna- mz	S72PSNAK 9-12404XD	48 MB	256 MB

Table 3 gives ordering information for new hardware features in Cisco IOS Software Release 12.4(4)XD.

Table 3. Ordering Information for New Hardware Features in Cisco IOS Software Release 12.4(4)XD

Part Number	Description
CISCO7201	NPE-G2 in a compact, 1-RU chassis, including 1 GB default DRAM and 256 MB default Flash memory
NPE-G2	Cisco 7200 VXR Series NPE-G2 Network Processing Engine, including 1 GB default DRAM and 256 MB default Flash memory
NPE-G2=	Cisco 7200 VXR Series NPE-G2 Network Processing Engine, including 1 GB default DRAM and 256 MB default Flash memory, spare
C7200-JC-PA	Cisco 7200VXR Series Port Adapter Jacket Card
C7200-JC-PA=	Cisco 7200VXR Series Port Adapter Jacket Card – Spare

For More Information

For more information about Cisco IOS Software Special Release 12.4(4)XD, visit <http://www.cisco.com/go/7200>, contact your local account representative, or refer to the 12.4(4)XD release notes http://www.cisco.com/en/US/products/ps6706/prod_release_note09186a0080678755.html.



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