



Q&A

Cisco 1- and 2-Port Multichannel Enhanced Capability Port Adapters

Cisco® 1- and 2-Port Multichannel Enhanced Capability Port Adapters provide hardware offload support of Multilink Point-to-Point Protocol (MLPPP), Multilink Frame Relay (MLFR), link fragmentation and interleaving (LFI), and FRF.12 at T3 line rate.

Q. What products are being released and when?

A. In November of 2006, Cisco Systems® will begin shipping the new Cisco 1- and 2-Port Multichannel Enhanced Capability Port Adapters, which support channelized and clear-channel T3. The release of these new adapters will coincide with Cisco IOS® Software Release 12.4(11)T. They will replace the earlier T3 port adapters (part numbers PA-MC-T3 and PA-MC-2T3+) for the Cisco 7200 Series Routers and Cisco 7301 Router.

Q. When will hardware offload support of MLPPP, MLFR, LFI, and FRF12 be available?

A. Support of these features on the new port adapters will be introduced in March of 2007. The features will be supported in Cisco IOS Software Release 12.4(6)T as well as 12.2SB.

Q. What platforms will support the new port adapters?

A. These port adapters will first be supported on the Cisco 7204VXR and 7206VXR Routers with the NPE-G1 and NPE-G2 network processing engines, starting with Cisco IOS Software Release 12.4(11)T. In Release 12.4(6)T, support will include the Cisco 7200VXR NPE-400, the Cisco 7301 Router, and the jacket card. The jacket card provides the ability to support an additional port adapter in the vacant I/O slot.

Q. Will the current channelized T3 port adapters still be available?

A. The PA-MC-T3 and the PA-MC-2T3+ will reach end of sale one year after the November 2006 announcement of the new port adapters. The end-of-sale announcement will coincide with the release of the new port adapters.

Q. Why should customers migrate to the new Cisco 1- and 2-Port Multichannel Enhanced Capability Port Adapters?

A. These new port adapters use the latest chip technology that supports T3 line rate as well as the ability to offload CPU-intensive features such as MLPPP, LFI, MLFR, and FRF.12.

Q. What features are supported on the new port adapters?

A. The features that will be supported directly on the new port adapters are MLPPP, LFI, MLFR, and FRF.12.

Q. Are these new features processed in the router's main CPU?

A. No. When the Cisco 1- and 2-Port Multichannel Enhanced Capability Port Adapters are configured with MLPPP, LFI, MLFR, and/or FRF.12 enabled, the processing of these features is executed on the port adapter's CPU. For example, the network processing engine will not be involved with any fragmentation and reassembly because this function is done entirely on the port adapter. All member links must terminate on the same port adapter for the features to be processed on the port adapter. If this is not the case, the features will still work but will be processed on the router's main CPU.

Q. Are the new port adapters supported on the Cisco 7304, Cisco 7500 Series, and Cisco 7600 Series Routers?

A. No, the Cisco 7304 and the Cisco 7600 Series both support the 2-port channelized T3 to DS-0 Shared Port Adapter (SPA-2XCT3/DS0). There are no plans to support the new port adapters on the Cisco 7500 Series.

Q. Are the new port adapters able to perform at line rate?

A. Yes, the new port adapters have a new software architecture that allows them to be more proactive and participate more efficiently with the main processor. The new architecture allows the main CPU to push data to the port adapter and also allows the port adapter to pull data from the direct memory access (DMA) engine.

Q. Can the features be offloaded if member links within the same MLPPP bundle terminate on different port adapters?

A. No, all member links within a bundle must terminate on the same port adapter for the feature to be offloaded to the port adapter.

Q. What are the bandwidth points for the 1- or 2-port versions of the new port adapters?

A. The bandwidth points for the new port adapters are the same as the previous adapters (PA-MC-T3 and PA-MC-2T3+). The bandwidth point for the 1-port adapter is 90 and the point for the 2-port adapter is 180.

Q. How many T3 port adapters can I install in a Cisco 7204VXR, 7206VXR, and 7301?

A. Table 1 lists the number of port adapters supported per chassis.

Table 1. Chassis and Processor Compatibility

Chassis	Network Processing Engines and Cisco IOS Software Release	Total Number of T3 Port Adapters Supported per Chassis (not at line rate)
Cisco 7204VXR and 7206VXR	NPE-G1—12.4(11)T NPE-G2—12.4(11)T NPE-400—12.4(6)T, March 2007	6 plus 1 in the jacket card 6 plus 1 in the jacket card 6
Cisco 7301	Phase 2—12.4(6)T, March 2007	1 (1 dual- or 1 single-port adapter)
Cisco Port Adapter Jacket Card	Phase 2—12.4(6)T, March 2007	1 (1 dual- or 1 single-port adapter)

Q. Does the jacket card support these new port adapters?

A. Yes, the jacket card supports one port adapter in the I/O slot.

FOR MORE INFORMATION

For more information about the Cisco 1- and 2-Port Multichannel Enhanced Capability Port Adapters, visit <http://www.cisco.com/en/US/products/hw/modules/ps2033/ps124/index.html> or contact your local account representative.



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