Cisco Enhanced Power over Ethernet (PoE)

Q. What is Cisco® Enhanced PoE?

A. Cisco Enhanced Power over Ethernet is Cisco's extension to the IEEE 802.3af standard that delivers up to 20 Watts per port.

Q. Why is Cisco offering Cisco Enhanced PoE?

A. Cisco Enhanced PoE meets the needs of customers with an immediate requirement for Power over Ethernet in excess of 15.4W per port to enable them to install new technologies that require it, such as IEEE 802.11n wireless infrastructure.

Q. Is Cisco Enhanced PoE a substitute for IEEE 802.3at (PoE+)

A. Not at all. It is simply a means of delivering PoE in excess of 15.4W per port to those customers who must immediately implement technologies requiring it, and cannot wait for the IEEE 802.3at standard to be finalized.

Q. Will Cisco support the IEEE 802.3at (PoE+) standard when it is finalized?

A. Absolutely. Cisco is a proponent of and major contributor to the IEEE 802.3at standard. Cisco Enhanced PoE does not replace or compete with the IEEE 802.3at (PoE+) standard. Cisco will support the standard after it is ratified, which is currently scheduled for 2009.

Q. How does Cisco Enhanced PoE negotiate power requirements with powered devices (PDs)?

A. Switches supporting Cisco Enhanced PoE use Cisco Discovery Protocol (CDP) to autonegotiate a power level in excess of 15.4W per port. The Cisco Enhanced PoE switch informs the powered device of the power level it is capable of providing, and the powered device then selects the appropriate power level.

Q. How does Cisco implement Cisco Enhanced PoE?

A. Cisco® Enhanced PoE is implemented by software upgrade.

Q. Which Cisco Catalyst® 3000 Series Switches currently support Cisco Enhanced PoE?

A. Cisco Enhanced PoE support will first be offered in the Catalyst 3750-E Series Switches and Catalyst 3560-E Series Switches beginning in February 2008.

Q. Which additional Cisco Catalyst® switches will support Cisco Enhanced PoE and when?

A. Cisco Enhanced PoE will be supported in a range of switches across the Catalyst switching portfolio by mid-CY 2008, with the exception of Catalyst 3750, 3560, 2960 and Catalyst Express 500.

Q. Which Cisco Catalyst® 6500 Series Switches currently support Cisco Enhanced PoE?

A. Cisco Enhanced PoE support is currently offered on all 10/100/1000 PoE linecards on the Catalyst 6500 Series Switches with software release 12.2(33)SXH2 or later.

Q. Which Cisco Catalyst® 4500 Series Switches currently support Cisco Enhanced PoE?

A. Cisco Enhanced PoE support is currently offered on all E series linecards on the Catalyst 4500 Series platform with software release 12.2(44)SG or later.

Q. **Do any Cisco Catalyst® products currently support IEEE 802.3at(PoE+)?**

A. The WS-X4648-RJ45V+E linecard on the Catalyst 4500 Series switch is ready to support the IEEE 802.3at(PoE+) standard with a software-only upgrade expected to be announced with standard ratification in 2009.

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