Q&A

# **Cisco Catalyst Blade Switch 3030 for Dell**

#### OVERVIEW

**Q.** What does the Cisco<sup>®</sup> Catalyst<sup>®</sup> Blade Switch offer to customers?

**A.** The Cisco Catalyst Blade Switch 3030 for Dell is an integrated switch for Dell's PowerEdge Blade Server Enclosure that reduces cable complexity and optimizes rack space. The Cisco Catalyst Blade Switch 3030 extends Cisco infrastructure services to the server edge and uses existing network equipment to help reduce operational expenses. The Cisco Catalyst Blade Switch 3030 helps ensure consistency across the network for advanced services such as security and resiliency. It also allows customers to take advantage of the end-to-end Cisco management framework to simplify ongoing operations.

- **Q.** Was this product developed jointly?
- A. Yes, the Cisco Catalyst Blade Switch 3030 was developed jointly with Dell.
- **Q.** What are the advantages of integrating switching into blade servers? What are the benefits of embedding a switch inside a blade server chassis?
- **A.** The following benefits can be achieved as a result of embedding a switch in a blade server chassis:
- Minimized number of cables typically required to connect servers—with Dell's PowerEdge Blade Server Enclosure, cable complexity can be reduced up to 90 percent
- Minimized space allocation by replacing external rack switch with integrated switching
- Increased reliability because network interface cards (NICs) are connected to the access-layer switch through the backplane
- Consolidated systems management

# ORDERING

Q. How can I purchase the Cisco Catalyst Blade Switch 3030?

**A.** Dell manages sales and fulfillment of the Cisco Catalyst Blade Switch 3030 because the switch is dedicated to the Dell PowerEdge Blade Server Enclosure and, in most cases, will be factory-installed by Dell.

# FEATURES AND CAPABILITIES

Q. What features and capabilities does the Cisco Catalyst Blade Switch 3030 offer?

**A.** The switch offers intelligent switching for the blade server environment, including capabilities such as Cisco EtherChannel<sup>®</sup> technology in gigabit speeds; industry-leading spanning tree for resiliency and network availability; and IP-based quality of service (QoS), multicast, and security.

- **Q.** What are the hardware capabilities of the Cisco Catalyst Blade Switch 3030?
- **A.** The Cisco Catalyst Blade Switch 3030 provides the following hardware port configurations:
- 10 internal 1000BASE-T ports
- 4 external 10/100/1000 SFP-based ports (support for copper and fiber 1000BASE-SX SFP modules)
- 2 external 10/100/1000BASE-T ports
- 1 external console port

From a software standpoint, the Cisco Catalyst Blade Switch 3030 is an intelligent Gigabit Ethernet switch module with more capabilities than basic Ethernet switches. It supports Cisco IOS<sup>®</sup> Software, providing sophisticated intelligent services features for availability and resiliency, integrated security, delivery optimization, and enhanced manageability.

Q. What software images does the Cisco Catalyst Blade Switch 3030 support?

**A.** The Cisco Catalyst Blade Switch 3030 supports Cisco IOS Software running LAN base software. The image that runs on the Cisco Catalyst Blade Switch 3030 is based on Cisco IOS Software Release 12.2(25)SEE.

# **Q.** Where can I get the software image?

**A.** As with standalone Cisco switches, the software image for the Cisco Catalyst Blade Switch 3030 will be available on Cisco.com. Customers need to have entitlement to obtain the latest software image.

- **Q.** Will Cisco release software updates for the Cisco Catalyst Blade Switch 3030?
- A. Yes, Cisco is committed to maintaining the best possible quality and will release new software for the Catalyst Blade Switch 3030.
- **Q.** How is network security managed?

**A.** The Cisco Catalyst Blade Switch 3030 enhances data security through a wide range of features including Secure Shell (SSH) Protocol and Simple Network Management Protocol Version 3 (SNMPv3), access control lists (ACLs), 802.1x, port security, private VLAN edge, Dynamic Host Configuration Protocol (DHCP) Trusted Boundary, MAC address notification, and RADIUS and TACACS+.

**Q.** How can I protect my network against unauthorized users?

**A.** The Cisco Catalyst Blade Switch 3030 provides the ability to restrict portions of the network by using ACLs. Access can be denied based on MAC addresses, IP addresses, or Transmission Control Protocol (TCP)/User Datagram Protocol (UDP) ports. An additional protection method is to use port security, which allows only authorized users on the network by limiting access to the port based on MAC address.

Q. What network management tools does the Cisco Catalyst Blade Switch 3030 support?

A. The Cisco Catalyst Blade Switch 3030 offers standard Cisco CLI, support for standard SNMP, and tools such as CiscoWorks.

# ROADMAP

**Q.** Will Cisco offer Layer 3 services on the Cisco Catalyst Blade Switch 3030?

**A.** At this time, Layer 3 services are not part of the Catalyst Blade Switch 3030 feature set. Feedback received from customers indicates that L3 services currently are not widely deployed at the server edge. If in the future, feedback from our customers indicates that this practice is changing, the roadmap for the blade switch may change accordingly.

Q. Will Cisco offer Layer 4 through 7 services on the Cisco Catalyst Blade Switch 3030?

**A.** In response to customer feedback, Cisco plans to apply Layer 4 through 7 services outside the blade server chassis at the aggregation layer. Aggregation of content, firewall, and other services at a single point helps improve management, configuration, and control. It also increases flexibility, which could be lost if, for example, the blade server chassis is full, yet another computing resource (in another blade server) is required. It is also more cost-effective to deploy Layer 4 through 7 services at the aggregation layer.

- **Q.** Will the Cisco Catalyst Blade Switch 3030 support 10 Gigabit Ethernet?
- A. Cisco is monitoring customer needs and requirements and will continue to evaluate 10 Gigabit Ethernet for blade servers.

# SERVICE AND SUPPORT

- **Q.** Where can I find my local Dell contacts?
- **A.** Please visit <u>http://www.dell.com/cbs3030</u> to locate purchasing information on the Cisco Catalyst Blade Switch 3030.

**Q.** What is the support structure for this product?

**A.** Service and support are available either from Dell or Cisco. Customers can buy the Dell service option from Dell directly. If customers wish to purchase the Cisco service option, they will need to buy it directly from Cisco or one of its resellers.

#### FOR MORE INFORMATION

For more information about the Cisco Catalyst Blade Switch 303 for Dell, visit <u>http://www.cisco.com/go/cbs3030</u> or contact your local account representative or <u>http://www.dell.com/cbs3030</u>.



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