# **Cisco Catalyst Blade Switch 3040 for Fujitsu Siemens Computer**

# **OVERVIEW**

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

**A.** The Cisco Catalyst Blade Switch 3040 for Fujitsu Siemens Computer (FSC) is an integrated switch for Fujitsu Siemens PRIMERGY BX600 Advanced Blade Ecosystem that reduces cable complexity and helps optimize rack space. The Cisco Catalyst Blade Switch 3040 extends Cisco infrastructure services to the server edge and uses existing network equipment to help reduce operational expenses. The Cisco Catalyst Blade Switch 3040 helps ensure consistency across the network for advanced services such as security and resiliency. It also allows customers to use the end-to-end Cisco management framework to simplify ongoing operations.

## **Q.** Was this product developed jointly?

- A. Yes, the Cisco Catalyst Blade Switch 3040 was developed jointly with Fujitsu Siemens.
- **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 Fujitsu Siemens PRIMERGY BX600, cable complexity can be dramatically reduced.
  - 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 3040?
- **A.** Fujitsu Siemens manages sales and fulfillment of the Cisco Catalyst Blade Switch 3040 because the switch is dedicated to the Fujitsu Siemens PRIMERGY BX600 and, in most cases, will be factory installed by FSC.

# FEATURES AND CAPABILITIES

- **Q.** What features and capabilities does the Cisco Catalyst Blade Switch 3040 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 3040?

- **A.** The Cisco Catalyst Blade Switch 3040 provides the following hardware port configurations:
  - 10 internal 1000BASE-T ports
  - 4 external 10/100/1000 Small Form-Factor Pluggable (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 3040 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 3040 support?

**A.** The Cisco Catalyst Blade Switch 3040 supports Cisco IOS Software running LAN base software. The image that runs on the Cisco Catalyst Blade Switch 3040 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 3040 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 3040?

**A.** Yes, Cisco is committed to maintaining the best possible quality and will release new software for the Cisco Catalyst Blade Switch 3040.

## **Q.** How is network security managed?

A. The Cisco Catalyst Blade Switch 3040 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 3040 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 3040 support?

A. The Cisco Catalyst Blade Switch 3040 offers a standard Cisco command-line interface (CLI), support for standard SNMP, and tools such as CiscoWorks.

## **FUTURE PLANS**

- **Q.** Will Cisco offer Layer 3 services on the Cisco Catalyst Blade Switch 3040?
- **A.** At this time, Layer 3 services are not part of the Catalyst Blade Switch 3040 feature set. Feedback received from customers indicates that Layer 3 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 plans for the blade switch might change accordingly.

## **Q.** Will Cisco offer Layer 4 through 7 services on the Cisco Catalyst Blade Switch 3040?

**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 3040 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 Fujitsu Siemens Computer contacts?
- A. Please visit <u>http://www.fujitsu-siemens.com</u> to locate purchasing information for the Cisco Catalyst Blade Switch 3040.

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

**A.** Service and support are available either from FSC or Cisco. Customers can buy the FSC service option from FSC directly. If customers want 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 3040, visit <u>http://www.cisco.com/go/cbs3040</u> or contact your local account representative.



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