

# **Cisco Edge 300 Series Switch Installation Guide**

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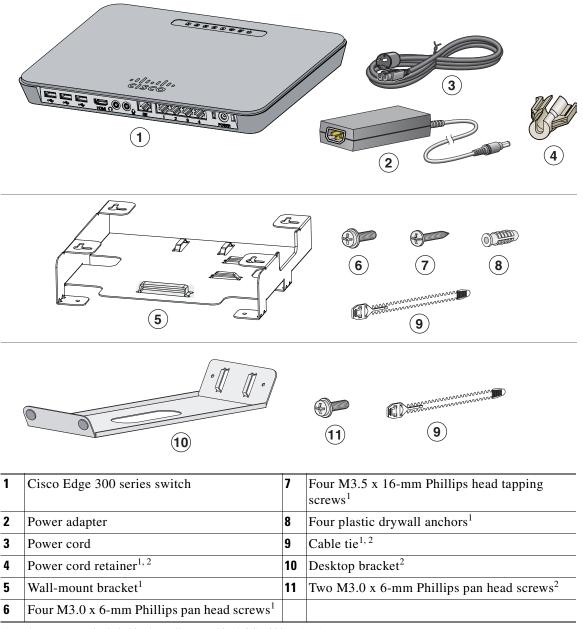
# **About this Guide**

This guide describes how to install the Cisco Edge 300 series switch on a wall or desktop and describes the LEDs and ports.

For configuration information, see the Cisco Edge 300 series switch documentation on Cisco.com. For system requirements, important notes, limitations, open and resolved bugs, and documentation updates, see the release notes on Cisco.com.



# **Box Contents**



1. These parts are included in the wall-mount kit (ACC-E300-WALL).

2. These parts are included in the desktop kit (ACC-E300-DESK).



Verify that you have received these items. If any item is missing or damaged, contact your Cisco representative or reseller.

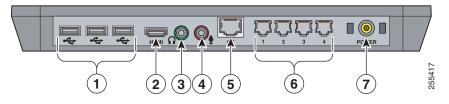
# **Overview**

 Table 1
 Cisco Edge 300 Series Models

Model	Description
CS-E300-AP-K9	Cisco Edge 300 series switch with WiFi and Bluetooth
CS-E300-K9	Cisco Edge 300 series switch
HS-E300-AP-K91	HSJC/Cisco Edge 300 series switch with WiFi and Bluetooth
HS-E300-K9 <sup>1</sup>	HSJC/Cisco Edge 300 series switch

1. This model is available only in China.

#### Figure 1 Cisco Edge 300 Series Switch – Front



1	USB ports	5	Gigabit Ethernet (uplink) port
2	HDMI port	6	Ethernet (downlink) ports
3	Audio out port	7	Power
4	Audio in port		

Figure 2	Cisco Edge 3	300 Series	Switch – Left
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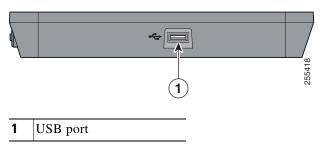


Figure 3 Cisco Edge 300 Series Switch – Rear

			Cisco Edge 300 Series HDMI	
	1 2			255419
1	Power button	2	Reset button	

# **Port Descriptions**

### USB

There are four USB 2.0 Type-A ports. Each USB port can provide up to 5 W of power to a connected device. You can connect a wired USB keyboard and mouse, a wireless USB receiver for a keyboard and mouse, a USB camera, or a USB thumb drive.

### HDMI

The HDMI port supports 1280x960 and 1024x768 (default) video output, and 720p and 1080p high-definition video output.



This product incorporates HDMI technology



HIGH-DEFINITION MULTIMEDIA INTERFACE

HDMI, the HDMI Logo, and High-Definition Multimedia Interface are or registered trademarksregistered trademarks of HDMI Licensing LLC in the United States and other countries.

### Audio In

You can connect a microphone that uses a 3.5 mm connector.

### Audio Out

You can connect headphones or external speakers that use a 3.5 mm connector.

### **Gigabit Ethernet**

The Gigabit Ethernet uplink port provides a 10/100/1000 Mb/s connection to a Catalyst 2000 or Catalyst 3000 series switch.

### Ethernet

The Fast Ethernet ports provide 10/100 Mb/s connections to computers or other devices.

# **Wireless Features**

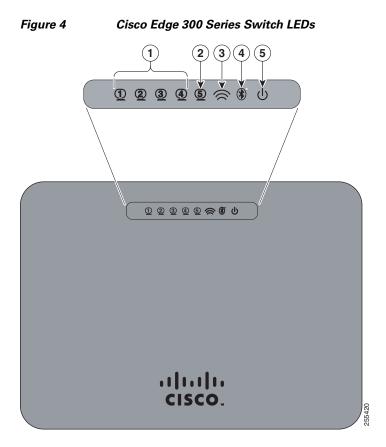
### WiFi

Supports 802.11b/g/n wireless clients.

### Bluetooth

Supports Human Interaction Design Protocol (HIDP) for remote control or input devices.

# LEDs



1	Ethernet downlink	4	Bluetooth <sup>1</sup>
2	Gigabit Ethernet uplink	5	Power
3	WiFi <sup>1</sup>		

1. Only CS-E300-AP-K9 and HS-E300-AP-K9.

LED	Color	Meaning			
Ethernet	Off	No link.			
downlink	Green	Link present, no activity. Port is operating at 100 Mb/s.			
	Blinking green	Activity. Port is sending or receiving data at 100 Mb/s.			
	Amber	Link present, no activity. Port is operating at 10 Mb/s.			
	Blinking amber	Activity. Port is sending or receiving data at 10 Mb/s.			
Gigabit	Off	No link.			
Ethernet	Green	Link up.			
	Blinking green	Activity.			
WiFi	Off	WiFi is disabled.			
	Green	WiFi is enabled and functioning.			
	Blinking green	WiFi is transmitting data.			
Bluetooth	Off	Bluetooth is disabled.			
	Green	Bluetooth is enabled and functioning.			
Power	Off	There is no power or the self test has failed.			
	Green	System is operating normally.			
	Blinking green	System software is being upgraded.			
	Blinking amber	System software download has failed.			

Table 2 LEDs

# **Installing the Switch**

You can install the switch on a wall by using the wall-mount bracket or install the switch on a desk or table by using the desktop bracket. You can also install the switch in a ventilated cabinet using the wall-mount or desktop bracket.

# **Equipment That You Need**

- Phillips screwdriver
- Scratch awl or other sharp pointed object (wall-mount)
- Electric drill with a 6-mm drill bit (wall-mount)

### **Before You Begin**

Before installing the switch, verify that these guidelines are met:

- Front clearance so that the LEDs can be seen.
- AC power cord reaches from the AC power outlet to the rear-panel connector.
- Cabling is away from sources of electrical noise, such as radios, power lines, and fluorescent lighting. Make sure that the cabling is safely away from other devices that might damage the cables.
- Airflow around the switch is unrestricted.
- Temperature around the unit does not exceed  $104^{\circ}F$  ( $40^{\circ}C$ ).
- Humidity around the switch does not exceed 85 percent.
- Altitude at the installation site is below 10,000 feet.
- For Ethernet ports, cables from the switch to connected devices are not longer than 328 feet (100 meters).

### **Warning Statements**

Statement 1071



#### IMPORTANT SAFETY INSTRUCTIONS

This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. Use the statement number provided at the end of each warning to locate its translation in the translated safety warnings that accompanied this device. Statement 1071

#### SAVE THESE INSTRUCTIONS

Statement 332



In order to comply with FCC radio frequency (RF) exposure limits, antennas should be located at a minimum of 7.9 inches (20 cm) or more from the body of all persons. Statement 332

#### Statement 1005



This product relies on the building's installation for short-circuit (overcurrent) protection. Ensure that the protective device is rated not greater than: 20A Statement 1005

#### Statement 1019



The plug-socket combination must be accessible at all times, because it serves as the main disconnecting device. Statement 1019

#### Statement 1030



**Only trained and qualified personnel should be allowed to install, replace, or service this equipment.** Statement 1030

#### Statement 1040

Warning

**Ultimate disposal of this product should be handled according to all national laws and regulations.** Statement 1040

#### Statement 1044



For connections outside the building where the equipment is installed, the following ports must be connected through an approved network termination unit with integral circuit protection: 10/100/1000 Ethernet Statement 1044

#### Statement 1047



To prevent the system from overheating, do not operate it in an area that exceeds the maximum recommended ambient temperature of: 104°F (40°C) Statement 1047

#### Statement 1074



Installation of the equipment must comply with local and national electrical codes. Statement 1074

#### Statement 1076



To prevent airflow restriction, allow clearance around the ventilation openings to be at least: 3 inches (7.6 cm) Statement 1076



Be aware of the size and weight of the switch when mounting. Ensure that the mounting location has a stable flat surface and can safely support the weight of the switch.

# Installing the Switch on a Wall

#### Statement 378

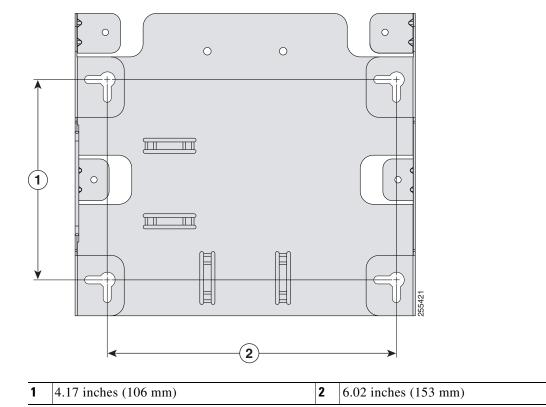
Warning

Read the wall-mounting instructions carefully before beginning installation. Failure to use the correct hardware or to follow the correct procedures could result in a hazardous situation to people and damage to the system. Statement 378

You can mount the switch horizontally or vertically on a wall.

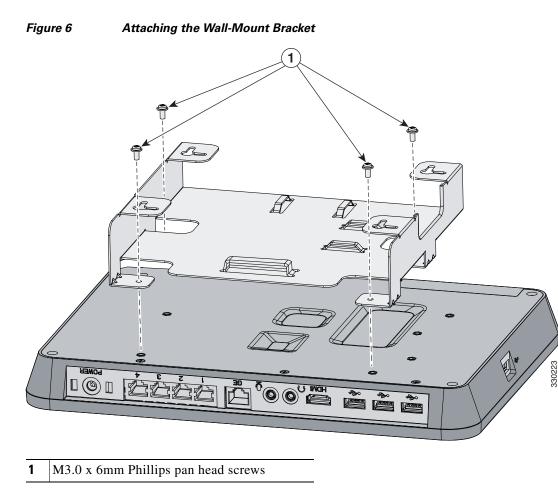


The wall-mount bracket has four slots (in two pairs) on its bottom panel (see Figure 5).



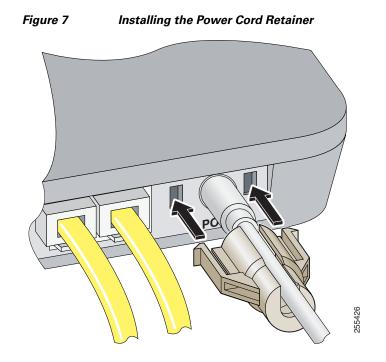
#### Figure 5 Bracket Slot Distances for Wall-Mounting

**Step 1** Use the four M3.0 x 6-mm Phillips pan head screws to attach the wall-mount bracket to the bottom of the switch (see Figure 6).

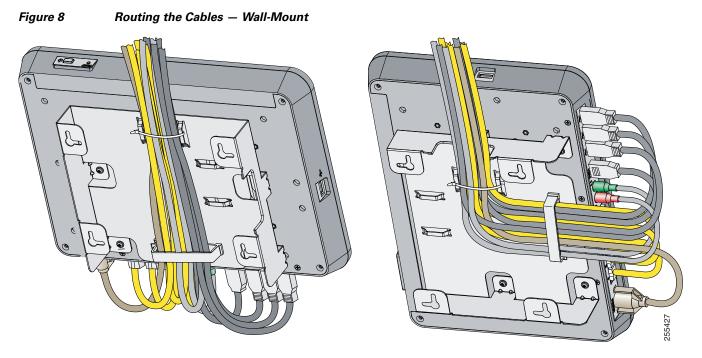


**Step 2** Connect all the cables that are necessary for your installation.

**Step 3** Slide the power cord retainer along the power cord, and snap it into the chassis (see Figure 7).

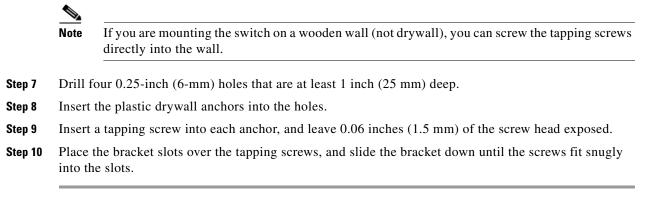


**Step 4** Use the supplied cable tie and built-in cable clip to secure the cables to the bracket (see Figure 8).



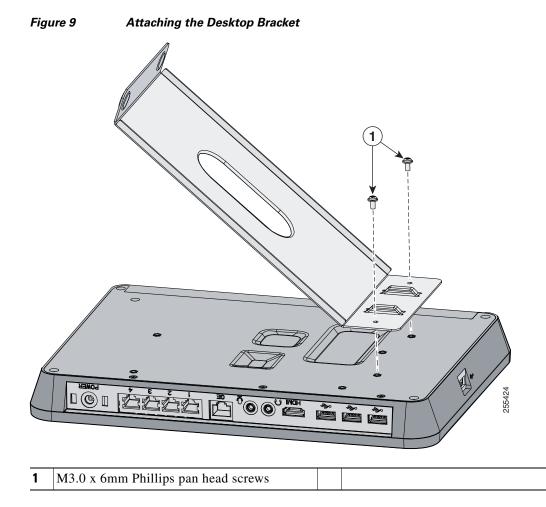
**Step 5** Determine where you want to mount the switch and its orientation. Make sure that the wall is smooth, flat, dry, and sturdy. Make sure that the location is within reach of an electrical outlet.

**Step 6** Mark the locations on the wall for the mounting screws. Make sure that the holes are the proper distance apart, depending on the switch orientation.



### Install the Switch on a Desk or Table

**Step 1** Use the two M3.0 x 6-mm Phillips pan head screws to attach the desktop bracket to the bottom of the switch (see Figure 9).



- Step 2 Connect all the cables that are necessary for your installation.
- Step 3 Slide the power cord retainer along the power cord, and snap it into the chassis (see Figure 10).

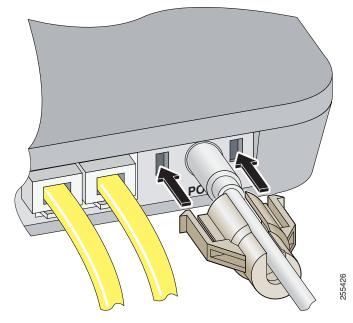
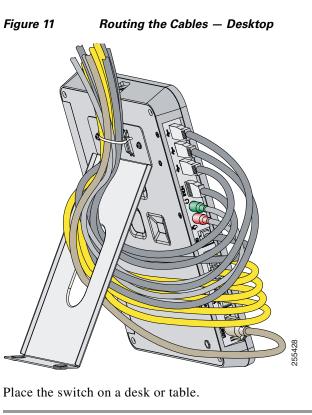
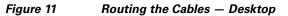


Figure 10 Installing the Power Cord Retainer

Step 4 Use the supplied cable tie to secure the cables to the bracket (see Figure 11).





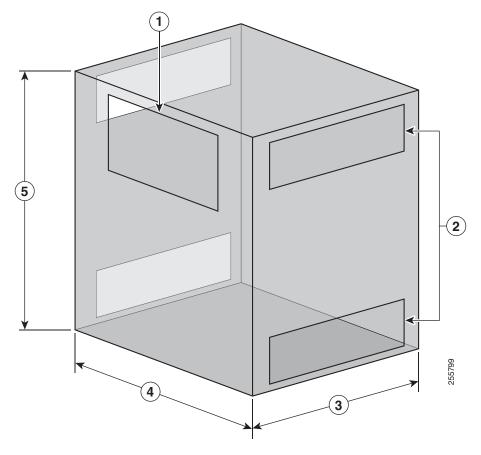
Step 5

### Installing the Switch in a Cabinet

You can install the switch in a ventilated cabinet. To ensure adequate ventilation, make sure that the cabinet meets the following specifications:

- Minimum dimensions (H x W x D): 19.69 x 19.69 x 15.75 inches (50 x 50 x 40 cm)
- Ventilation openings:
  - The front panel must have one ventilation opening measuring at least 11.81 x 5.91 inches (30 x 15 cm). The ratio of the ventilation openings should be greater than 30%.
  - Each side panel must have two ventilation openings (one along the top, and one along the bottom) measuring at least 12.60 x 3.54 inches (32 x 9 cm). The ratio of the ventilation openings should be greater than 30%.
- Switch placement:
  - For wall-mount placement, install the switch at the rear of the cabinet.
  - For desktop placement, place the switch at the center of the cabinet.





1	11.81 x 5.91 inches (30 x 15 cm)	4	19.69 inches (50 cm)
2	12.60 x 3.54 inches (32 x 9 cm)	5	19.69 inches (50 cm)
3	15.75 inches (40 cm)		

# **Powering on the Switch**

Connect the power cord to an electrical outlet. Press the Power button to power on the switch. See Table 2 on page 6 for a description of the LED colors and their meanings.

# **Resetting to Factory Mode**

To reboot the Cisco Edge 300 to factory mode and force an image upgrade through the Smart Install network, press and hold the Reset button for more than 5 seconds.



If the Cisco Edge 300 is unable to connect to the Smart Install director, you can use the Cisco Edge USB SmartInstall tool to upgrade or restore the system firmware using a USB flash drive. Refer to the "Troubleshooting" appendix in the *Cisco Edge 300 Series Switch Software Configuration Guide*.

# **Technical Specifications**

Table 3	Cisco Edge 300 Series Switch Environmental and Physical Specifications
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Environmental Ranges				
Operating temperature	23 to 104°F (-5 to 40°C)			
Storage temperature $-13$ to $158^{\circ}$ F (-25 to $70^{\circ}$ C)				
Relative humidity	Operating and nonoperating: 10 to 90% (noncondensing)			
Operating altitude	Up to 10,000 ft (3000 m)			
Storage altitude Up to 15,000 ft (4570 m)				
Physical Specifications				
Weight (without bracket)	2.43 lb (1.1 kg)			
Dimensions (H x W x D)	8.27 x 11.42 x 1.22 in. (21 x 29 x 3.1 cm)			

# **Regulatory Standards Compliance**

This section includes all regulatory, safety, and EMC standards.

Specification	Description
Safety	IEC 60950-1 Second Edition EN 60950-1 Second Edition GB4943 2001 UL 60950-1 Second Edition CCC (China compulsory certification) CAN/CSA-C22.2 No. 60950-1 Second Edition
EMC	FCC Part 15 (CFR 47) China EMC Certifications ICES-003 AS/NZS CISPR22 EN550222006 + A1 CISPR222005 + A1 EN61000-3-2:2006 EN61000-3-3:2008 EN300386 KN22 KN24 EN55024 CISPR24:2010
Bluetooth	BQB
WIFI	802.11b/g/n Mark
Wireless	SRRC
Radio	FCC Part 15.247 (CFR 47) FCC Part 15.407 RSS-210 EN 300 328 V1.7.1 EN 301-489-1 EN 301-489-17 COFETEL Anatel's Resolution #506 EN 50385 FCC Bulletin OET-65C Canada RSS-102 Rev 4 (Dec 2010)

# **EMC Class A Notices and Warnings**

### Statement 2017—Class A Notice for FCC

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case users will be required to correct the interference at their own expense.

Modifying the equipment without Cisco's authorization may result in the equipment no longer complying with FCC requirements for Class A digital devices. In that event, your right to use the equipment may be limited by FCC regulations, and you may be required to correct any interference to radio or television communications at your own expense.



The Part 15 radio device operates on a non-interference basis with other devices operating at this frequency. Any changes or modification to said product not expressly approved by Cisco, including the use of non-Cisco antennas, could void the user's authority to operate this device.

# **Declaration of Conformity for RF Exposure**

This section contains information on compliance with guidelines related to RF exposure.

### This Device Meets International Guidelines for Exposure to Radio Waves

The Cisco Edge 300 series device includes a radio transmitter and receiver. It is designed not to exceed the limits for exposure to radio waves (radio frequency electromagnetic fields) recommended by international guidelines. The guidelines were developed by an independent scientific organization (ICNIRP) and include a substantial safety margin designed to ensure the safety of all persons, regardless of age and health.

As such the systems are designed to be operated as to avoid contact with the antennas by the end user. It is recommended to set the system in a location where the antennas can remain at least a minimum distance as specified from the user in accordance to the regulatory guidelines that are designed to reduce the overall exposure of the user or operator.

Separation Distance					
MPE	Distance	Limit			
0.107 mW/cm <sup>2</sup>	20.00 cm (7.87 inches)	$1.00 \text{ mW/cm}^2$			

The World Health Organization has stated that present scientific information does not indicate the need for any special precautions for the use of wireless devices. They recommend that if you are interested in further reducing your exposure then you can easily do so by reorienting antennas away from the user or placing the antennas at a greater separation distance then recommended.

### This Device Meets FCC Guidelines for Exposure to Radio Waves

The Cisco Edge 300 series device includes a radio transmitter and receiver. It is designed not to exceed the limits for exposure to radio waves (radio frequency electromagnetic fields) as referenced in FCC Part 1.1310. The guidelines are based on IEEE ANSI C 95.1 (92) and include a substantial safety margin designed to ensure the safety of all persons, regardless of age and health.

As such the systems are designed to be operated as to avoid contact with the antennas by the end user. It is recommended to set the system in a location where the antennas can remain at least a minimum distance as specified from the user in accordance to the regulatory guidelines that are designed to reduce the overall exposure of the user or operator.

The device has been tested and found compliant with the applicable regulations as part of the radio certification process.

Separation Distance					
MPE	Distance	Limit			
0.107 mW/cm <sup>2</sup>	20.00 cm (7.87 inches)	1.00 mW/cm <sup>2</sup>			

The US Food and Drug Administration has stated that present scientific information does not indicate the need for any special precautions for the use of wireless devices. The FCC recommends that if you are interested in further reducing your exposure then you can easily do so by reorienting antennas away from the user or placing the antennas at a greater separation distance than recommended or lowering the transmitter power output.

# This Device Meets the Industry Canada Guidelines for Exposure to Radio Waves

The Cisco Edge 300 series device includes a radio transmitter and receiver. It is designed not to exceed the limits for exposure to radio waves (radio frequency electromagnetic fields) as referenced in Health Canada Safety Code 6. The guidelines include a substantial safety margin designed into the limit to ensure the safety of all persons, regardless of age and health.

The systems are designed to be operated as to avoid contact with the antennas by the end user. It is recommended to set the system in a location where the antennas can remain at least a minimum distance as specified from the user in accordance to the regulatory guidelines that are designed to reduce the overall exposure of the user or operator.

Separation Distance		
MPE	Distance	Limit
0.107 mW/cm <sup>2</sup>	20.00 cm (7.87 inches)	1.00 mW/cm <sup>2</sup>

Health Canada states that present scientific information does not indicate the need for any special precautions for the use of wireless devices. They recommend that if you are interested in further reducing your exposure you can easily do so by reorienting antennas away from the user, placing the antennas at a greater separation distance than recommended, or lowering the transmitter power output.

# **Obtaining Documentation and Submitting a Service Request**

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html

Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS Version 2.0.

### **For More Information**

These documents provide complete information about the switch and are available from this Cisco.com site:

www.cisco.com/go/cisco\_edge\_300

- Cisco Edge 300 Series Switch Software Configuration Guide
- Release Notes for the Cisco Edge 300 Series Switch



Before installing, configuring, or upgrading the switch, refer to the release notes for the latest information.

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