Oracle® Switch ES1-24

Installation Guide

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Using This Documentation

This guide describes how to install, cable, and power on the Oracle Switch ES1-24.

These instructions are for enterprise system administrators with experience installing network hardware and software.

- "Product Notes" on page vii
- "Related Documentation" on page viii
- "CLI Command Modes" on page viii
- "Feedback" on page ix
- "Support and Accessibility" on page ix

Product Notes

For late-breaking information and known issues about this product, refer to the product notes at:

`http://www.oracle.com/goto/ES1-24/docs`

Related Documentation

Documentation	Links
All Oracle products	http://oracle.com/documentation
Oracle Switch ES1-24	http://www.oracle.com/goto/ES1-24/docs
Oracle Integrated Lights Out Manager (Oracle ILOM) 3.0	http://www.oracle.com/pls/topic/lookup?ctx=ilom30

For detailed information about the commands and options described in this document, refer to the *Sun Ethernet Fabric Operating System CLI Base Reference Manual*.

CLI Command Modes

The following table lists the configuration modes used in this document with their access and exit methods.

Command Mode	Access Method	Prompt	Exit Method
User EXEC	Access SEFOS from Oracle ILOM with read-only rights (privilege level 1).	`SEFOS>`	Use the `logout` or `exit` command to return to the Oracle ILOM prompt.
Privileged EXEC	Access SEFOS from Oracle ILOM with full administrative rights (privilege level 15).	`SEFOS#`	Use the `logout` or `exit` command to return to the Oracle ILOM prompt.
Global Configuration	From User EXEC mode, use the `enable` command.	`SEFOS(config)#`	Use the `end` command to return to Privileged EXEC mode.
Interface Configuration	From Global Configuration mode, use the `interface` *interface-type interface-id* command.	`SEFOS(config-if)#`	Use the `exit` command to return to Global Configuration mode, or use the `end` command to return to Privileged EXEC mode.

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Understanding the Installation

These topics provide an overview of the switch and its installation.

- "Installation Task Overview" on page 1
- "Front Panel Components" on page 3
- "Rear Panel Components" on page 4

Related Information

- "Confirming Specifications" on page 5
- "Understanding Cabling" on page 9
- "Preparing for Installation" on page 19
- "Installing the Switch" on page 31
- "Powering On the Switch" on page 59

Installation Task Overview

This table lists the tasks to perform for switch installation. Before you begin, answer these questions:

- Are you installing one switch or two switches?
- Are you orienting the switches with power supplies on the cold aisle or with data connectors on the cold aisle?
- Is the installation into a Telco form factor rack?

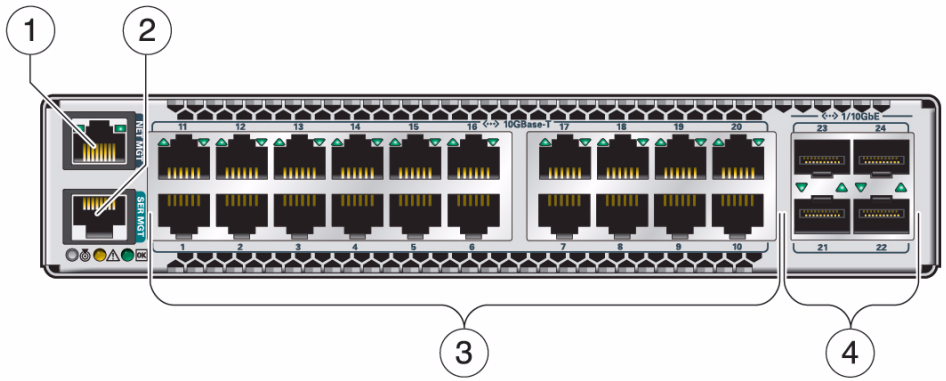
How you answer these questions identifies variances from a standardized installation, and these differences are addressed in the installation procedures.

Step	Description	Links
1.	Familiarize yourself with the front and rear of the switch.	"Front Panel Components" on page 3 and "Rear Panel Components" on page 4
2.	Confirm supplied power and environmental factors.	"Physical Specifications" on page 5, "Electrical Specifications" on page 6, and "Environmental Specifications" on page 6
3.	Understand cabling requirements and handling.	"Understanding Cabling" on page 9
4.	If you are installing one switch, determine where to install it.	"Single-Switch Location Guidelines" on page 18
5.	Heed ESD precautions and gather appropriate tools.	"ESD Precautions" on page 19 and "Tools Needed for Installation" on page 20
6.	Verify the shipped components.	"Verify Switch Kit Contents" on page 21 and "Verify Rack Rail Kit Contents" on page 22
7.	If necessary, assemble the optical data cables.	"Assemble an SFP+ Data Cable" on page 26
8.	Route the data, power, and management cables for installation.	"Route Cables" on page 28
9.	If you are installing one switch, assemble a filler.	"Assemble a Filler" on page 31
10.	Attach rails to the switch.	"Attach the Rails to the Switch" on page 33
11.	If you are installing the switch into a telco rack, attach the adapter.	"Attach Telco Adapters to the Rack Slides" on page 37
12.	Attach rack slides to the rack.	"Attach the Rack Slides to the Rack" on page 39
13.	Install the filler and switch into the rack.	"Install the Switch Into the Rack" on page 43
14.	Attach the power cords.	"Attach Power Cords" on page 47
15.	If you are installing the switch with the data connector on the cold aisle, prepare the small air duct and front support and attach the data and management cables.	"Prepare the Front Support and Small Air Duct" on page 56 and "Attach Data and Management Cables" on page 52
16.	Install the large air duct and front support.	"Install the Air Duct and Front Support" on page 48
17.	Attach the data and management cables.	"Attach Data and Management Cables" on page 52
18.	Power on the switch.	"Power On the Switch" on page 60
19.	Access the SP.	"Powering On the Switch" on page 59

Related Information

- "Oracle ILOM Overview" on page 61
- "Management Connection Overview" on page 10

Front Panel Components

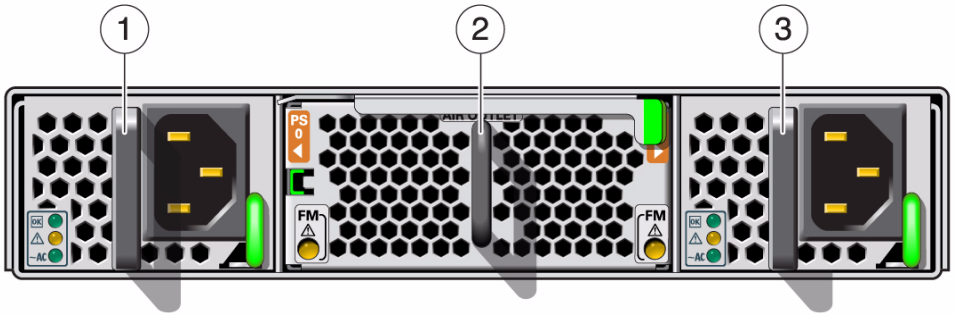


No.	Description	Links
1	NET MGT port	"NET MGT Port" on page 10
2	SER MGT port	"SER MGT Port" on page 12
3	10GBASE-T ports 1-20 (bottom left to right)	"10GBASE-T Data Cable Overview" on page 15
4	SFP+ ports 21-24 (bottom left to right)	"SFP+ Data Cable Overview" on page 15

Related Information

- "Rear Panel Components" on page 4
- "Attach Data and Management Cables" on page 52
- "Powering On the Switch" on page 59

Rear Panel Components



No.	Description	Service Information
1	Power supply 0	*Switch Service*, servicing power supplies
2	Fan module	*Switch Service*, servicing the fan module
3	Power supply 1	*Switch Service*, servicing power supplies

Related Information

- "Front Panel Components" on page 3
- "Power Cord Specifications" on page 13
- "Attach Power Cords" on page 47

Confirming Specifications

These topics provide the specifications and requirements of the switch.

- "Physical Specifications" on page 5
- "Electrical Specifications" on page 6
- "Environmental Specifications" on page 6

Related Information

- "Understanding the Installation" on page 1
- "Confirming Specifications" on page 5
- "Understanding Cabling" on page 9
- "Preparing for Installation" on page 19
- "Installing the Switch" on page 31
- "Powering On the Switch" on page 59

Physical Specifications

Description	U.S.	Metric
Rack units	1U (half-width)	1U (half-width)
Height	1.69 in.	43 mm
Width	8.54 in.	217 mm
Depth	24.0 in.	610 mm
Weight	12.5 lb	5.7 kg

Related Information

- "Electrical Specifications" on page 6
- "Environmental Specifications" on page 6

Electrical Specifications

Description	Value	Notes
Voltage	100-120 VAC / 200-240 VAC	Single phase, 50/60 Hz.
Current	3A	Maximum available per input.

Related Information

- "Physical Specifications" on page 5
- "Environmental Specifications" on page 6
- "Power Cord Specifications" on page 13

Environmental Specifications

This topic includes these specifications:

- Temperature, humidity, and elevation
- Acoustic

TABLE: Temperature, Humidity, and Elevation Specifications

Description	Operating U.S.	Metric	Nonoperating U.S.	Metric
Temperature	59˚F to 89.6˚F	15˚C to 32˚C	-40 to 70°F	-40 to 70°C

TABLE: Temperature, Humidity, and Elevation Specifications *(Continued)*

Description	Operating U.S.	Metric	Nonoperating U.S.	Metric
Humidity	10-90% noncondensing	10-90% noncondensing		
Relative humidity	20% to 80% noncondensing, 80˚F maximum wet bulb	20% to 80% noncondensing, 27˚C maximum wet bulb	5-95% noncondensing	5-95% noncondensing
Elevation	Maximum 10,006 feet at 77˚F 2,953 feet at 89.6˚F Derate maximum ambient 1.8˚F per 984 feet above 2952 feet.	Maximum 3050 meters at 25˚C 900 meters at 32˚C Derate maximum ambient 1˚C per 300 meters above 900 meters.	0-39370 feet	12000 meters

TABLE: Acoustic Specifications

Description	Idling
Acoustic idle power (lwAd)	7.2B
Acoustic operating power (lwAd)	7.1B
Acoustic idle pressure (LpAm)	59.0 dBA
Acoustic operating pressure (LpAm)	58.9 dBA

Related Information

- "Physical Specifications" on page 5
- "Electrical Specifications" on page 6

Understanding Cabling

These topics describe the types, connectors, and handling of cables supported by the switch.

- "Understanding Management and Power Cabling" on page 9
- "Understanding Data Cabling" on page 14
- "Single-Switch Location Guidelines" on page 18

Related Information

- "Understanding the Installation" on page 1
- "Confirming Specifications" on page 5
- "Understanding Cabling" on page 9
- "Preparing for Installation" on page 19
- "Installing the Switch" on page 31
- "Powering On the Switch" on page 59

Understanding Management and Power Cabling

These topics provide management and power cabling information.

- "Management Connection Overview" on page 10
- "NET MGT Port" on page 10
- "SER MGT Port" on page 12
- "Power Cord Specifications" on page 13

Related Information

- "Understanding Data Cabling" on page 14

- "Single-Switch Location Guidelines" on page 18

Management Connection Overview

The switch is managed at the management console, which is either a 10/100 Ethernet connection at the NET MGT port or a serial device attached to the SER MGT port.

The NET MGT connection is the default means of communicating with the SP. The SP has a DHCP client in operation and requires the Ethernet network to have a DHCP server. The DHCP server must be configured with the MAC address of the SP, so the server can provide an IP address to the SP upon booting. If a DHCP server is not available, then the SER MGT connection is used.

The advantage of the NET MGT connection over the SER MGT connection is that administration of the gateway can happen from anywhere on the network. There is no cable length constraint for the network management route because of the re-amplification, filtering, and processing that happens at each hub or switch within the Ethernet network. No network management cable should be any longer than 100 meters.

The SER MGT connection requires a serial connection to a serial device management console. The serial device management console can be a serial terminal, a terminal server, or a serial connection running on a system or laptop.

If no DHCP server is available on the management network, the SER MGT port must be used to configure the NET MGT port. See "Configure Network Management From the CLI (SER MGT)" on page 63. Because of the nature of the serial signal, a serial management cable cannot be used reliably if it is more than 10 meters long.

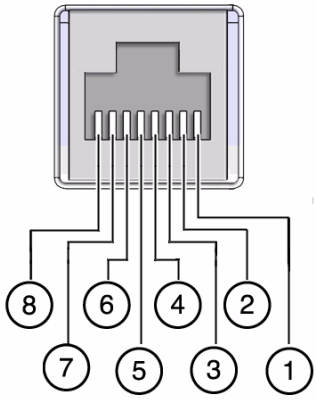
Related Information

- "NET MGT Port" on page 10
- "SER MGT Port" on page 12
- "Powering On the Switch" on page 59

NET MGT Port

The NET MGT port is a 100BASE-T Ethernet RJ45 connector that provides access to the SEFOS and Oracle ILOM CLI and web interfaces running on the SP. The port is located at the upper left corner of the switch rear panel. See "Front Panel Components" on page 3.

The figure and table describe the pinouts of the NET MGT port.



Pin	Signal
1	Transmit Data+ (TXD+)
2	Transmit Data- (TXD-)
3	Receive Data+ (RXD+)
4	Not used
5	Not used
6	Receive Data- (RXD-)
7	Not used
8	Not used

Related Information

- "Management Connection Overview" on page 10
- "SER MGT Port" on page 12
- "Front Panel Components" on page 3
- "Attach Data and Management Cables" on page 52
- "Log Into the Oracle ILOM Web (NET MGT)" on page 65
- "Log Into the Oracle ILOM CLI (NET MGT)" on page 66

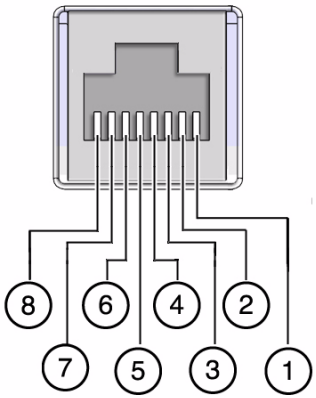
SER MGT Port

The SER MGT port is an RJ45 connector that provides RS-232 access to the SEFOS and Oracle ILOM CLI interfaces running on the SP. The port is located at the lower left corner of the switch rear panel. See "Front Panel Components" on page 3.

The serial device must be configured to these parameters:

- 9600 baud (default, can be set to any standard rate up to 57600)
- 8N1: eight data bits, no parity, one stop bit
- Software flow control (XON/XOFF) disabled

The figure and table describe the pinouts of the SER MGT connector.



Pin	Signal Description
1	Request To Send (RTS)
2	Data Terminal Ready (DTR)
3	Transmit Data (TXD)
4	Ground
5	Ground
6	Receive Data (RXD)
7	Data Set Ready (DSR)
8	Clear To Send (CTS)

Related Information

- "Management Connection Overview" on page 10

- "NET MGT Port" on page 10
- "Front Panel Components" on page 3
- "Attach Data and Management Cables" on page 52
- "Log Into the Oracle ILOM CLI (SER MGT)" on page 67

Power Cord Specifications

The power supplies are in an N+N redundancy. Line power is provided from two sources, A and B.

The switch accessory kit should contain two power cords that are specific to your country or application. This table describes the power cords available.

Caution – Install and route power cabling only in a manner that complies with federal, state, and local electrical codes.

Cable Part Number	Description
X311L-N (180-1097)	North America/Asia, IEC 320 C13 to NEMA 5-15P - 15A/125V 2.5M Black, RoHS:Y
X312E-N (180-1982)	China, IEC 320 C13 to GB 2099/GB 1002 - 10A/250V 2.0M, RoHS:Y
X312F-N (180-1999)	Argentina, IEC 320 C13 to IRAM 2073 - 10A/250V 2.0M Black, RoHS:Y
X312G-N (180-1662)	Korea, IEC 320 C13 to KSC 8305 - 15A/250V 2.0M Black, RoHS:Y
X312L-N (180-1993)	Continental Europe, IEC 320 C13 to CEE 7/7 10A/250V 2.0M Black, RoHS:Y
X314L-N (180-1994)	Swiss, IEC 320 C13 to SEV 1011 - 10A/250V 2.0M Black, RoHS:Y
X317L-N (180-1997)	U.K., IEC 320 C13 to BS 1363 - 10A/250V 2.0M Black, RoHS:Y
X320A-N	North America/Asia,2.5m,6-15P,10A,C13
X332A-N (180-2121)	Taiwan, IEC 320 C13 to NEMA 5-15P - 10A/125V 2.5M Black, RoHS:Y
X332T-N	INTL,4.0m,IEC309-IP44,10A,C13
X333A-25-10-BR-N	Brazil,2.5m,NBR14136,10A,C13
X333A-25-10-IL-N	Israel,2.5m,SI-32, 10A,C13
X333A-25-10-IN-N	India,2.5m,IS1293,10A,C13
X333A-25-10-ZA-N	South Africa,2.5m,SANS164,10A,C13
X333A-25-15-JP-N	Japan,2.5m,PSE 5-15,15A,C13
X333A-25-15-TW-N	Taiwan,2.5M,CNS10917,15A,C13
X333F-25-15-JP-N	Japan,2.5m,PSE 6-15,15A,C13

Cable Part Number	Description
X333V-20-15-C14-N	Rack Jmpr Cbl,Straight,2.0m,C14,15A,C13
X333V-30-15-C14-N	Rack Jmpr Cbl,Straight,3.0m,C14,15A,C13
X340L-N	North America/Asia,4.0m,L6-20P,15A,C13
X383L-N (180-1995)	Danish, IEC 320 C13 to Asfnit 107 - 10A/250V 2.0M Black, RoHS:Y
X384L-N (180-1996)	Italian, IEC 320 C13 to CEI 23-16/VII - 10A/250V 2.0M Black, RoHS:Y
X386L-N (180-1998)	Australian, IEC 320 C13 to AS 3112 - 10A/250V 2.0M Black, RoHS:Y
X9237-1-A-N	Jumper,1.0m,C13,13A,C14
X9238-1-A-N	Jumper,2.5m,C13,13A,C14
XSR-JUMP-1MC13-N	Jumper Cable,SR2,1.0m,C13,13A,C14RA,QTY 1
XSR-JUMP-2MC13-N	Jumper Cable,SR2,2.0m,C13,13A,C14RA,QTY 1

Related Information

- "Management Connection Overview" on page 10
- "NET MGT Port" on page 10
- "SER MGT Port" on page 12
- "Electrical Specifications" on page 6
- "Attach Power Cords" on page 47

Understanding Data Cabling

These topics provide data cabling information.

- "SFP+ Data Cable Overview" on page 15
- "10GBASE-T Data Cable Overview" on page 15
- "Data Cable Cautions" on page 16
- "Data Cable Guidelines" on page 17

Related Information

- "Understanding Management and Power Cabling" on page 9
- "Single-Switch Location Guidelines" on page 18

SFP+ Data Cable Overview

The switch's SFP+ ports support the following types of cables:

- 10 Gbyte/1 Gbyte dual speed fiber (300m)
- 10 Gbps direct attach copper (5m or 10m)

A passive copper data cable is a single-part unit. The cable and the connectors are a single combined assembly.

An active fiber SFP+ data cable is a three-part unit, where the cable and the optical tranceivers are separate components. You must assemble this type of cable before connecting it. See "Assemble an SFP+ Data Cable" on page 26.

Related Information

- "10GBASE-T Data Cable Overview" on page 15
- "Data Cable Cautions" on page 16
- "Data Cable Guidelines" on page 17
- "Attach Data and Management Cables" on page 52

10GBASE-T Data Cable Overview

Modulation in the host ports uses frequencies of up to 500 MHz to achieve 10Gbps transmission over copper twisted-pair cabling. This modulation requires suppression of both external and internal noise up to 500 MHz.

The 10GBASE-T ports on the switch support the following types of twisted-pair copper cables:

- Category 7, shielded (100m)
- Category 6A, shielded and unshielded (100m)
- Category 6, shielded and unshielded (55m)
- Category 5e, shielded and unshielded (55m)

Related Information

- "SFP+ Data Cable Overview" on page 15
- "Data Cable Cautions" on page 16
- "Data Cable Guidelines" on page 17
- "Attach Data and Management Cables" on page 52

Data Cable Cautions

Caution – Data cables with laser transceivers *must* be Class I.

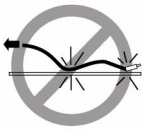
Do not step on the cable or connectors. Plan cable paths away from foot traffic or rolling loads.

Do not pull the cable out of the shipping box, through any opening, or around any corners. Unroll the cable as you lay it down and move it through turns.

Do not bend the cables to a radius tighter than 85 mm (3.4 inches). Ensure that cable turns are as wide as possible.

Do not pack the cable to fit a tight space. Use an alternative cable route.

Do not drop the cable or connectors from any height. Gently set the cable down, resting the cable connectors on a stable surface.



Do not drag the cable or its connectors over any surface. Carry the entire cable to and from the points of connection.

Do not force the cable connector into the receptacle by pushing on the cable. Apply connection or disconnection forces at the connector only.

Related Information

- "SFP+ Data Cable Overview" on page 15
- "10GBASE-T Data Cable Overview" on page 15
- "Data Cable Guidelines" on page 17
- "Route Cables" on page 28

Data Cable Guidelines

Proper data cable installation requires the following:

1. Plan the cable routes and cable length needs.

   See "SFP+ Data Cable Overview" on page 15 and "10GBASE-T Data Cable Overview" on page 15.

2. Ensure that cable route turns are larger than 85 mm (3.4 inches) radius for optical cables.

   Find alternative routes for turns that are tighter.

3. Secure the cable to hard points and bundle it with soft, hook-and-loop fasteners.

4. Mediate the slack between securing points to maintain minimal cable tension and proper support.
5. Label the ends of cables to identify their routes.
6. Rest the cable connectors on a stable surface when they are not connected.

Related Information

- "SFP+ Data Cable Overview" on page 15
- "10GBASE-T Data Cable Overview" on page 15
- "Data Cable Cautions" on page 16
- "Route Cables" on page 28

Single-Switch Location Guidelines

In a single-switch configuration, a switch and a filler are installed side-by-side. Before you install a single switch, you must determine if the switch is to be on the left side or right side of the rack.

Note – The single switch can be installed on either the left or the right. For procedures and illustrations in this document, the switch is installed on the right side.

- The single-switch installation procedure entails many steps that are left- or right-biased. After installation, swapping the left and right mounting is not trivial. Determine your long-term mounting side before installing.
- Determine what other components in the rack must interconnect with the switch. Are the cable paths and connectors left- or right-biased?
- Some racks have cable management hardware to one side. Would it be advantageous to mount the switch on that side of the rack?

Related Information

- "Understanding Management and Power Cabling" on page 9
- "Understanding Data Cabling" on page 14
- "Route Cables" on page 28
- "Installing the Switch" on page 31

Preparing for Installation

These topics describe preliminary information and procedures to complete before installing the switch.

- "ESD Precautions" on page 19
- "Tools Needed for Installation" on page 20
- "Verify Switch Kit Contents" on page 21
- "Verify Rack Rail Kit Contents" on page 22
- "Assemble an SFP+ Data Cable" on page 26
- "Route Cables" on page 28

Related Information

- "Understanding the Installation" on page 1
- "Confirming Specifications" on page 5
- "Understanding Cabling" on page 9
- "Installing the Switch" on page 31
- "Powering On the Switch" on page 59

ESD Precautions

A grounded antistatic wrist strap is shipped with the switch. Electronic equipment is susceptible to damage by static electricity. Use a grounded antistatic wrist strap, foot strap, or equivalent safety equipment to prevent ESD when you install or service the switch.

Caution – To protect electronic components from electrostatic damage, which can permanently disable the switch or require repair by service technicians, place components on an antistatic surface, such as an antistatic discharge mat, an antistatic bag, or a disposable antistatic mat. Wear an antistatic grounding strap connected to a metal surface on the switch when you work on switch components.

Related Information

- "Tools Needed for Installation" on page 20

Tools Needed for Installation

To install the switch, you must have these tools:

- No. 2 Phillips screwdriver
- ESD mat and grounding strap

In addition, you must provide a serial device management console, if you manage the switch from the SER MGT port or you will configure the NET MGT port. The serial device can be a:

- ASCII terminal
- Workstation or laptop with serial port
- Terminal server
- Patch panel connected to a terminal server

The serial device needs serial cables, null modems, and appropriate adapters for operation.

Related Information

- "ESD Precautions" on page 19

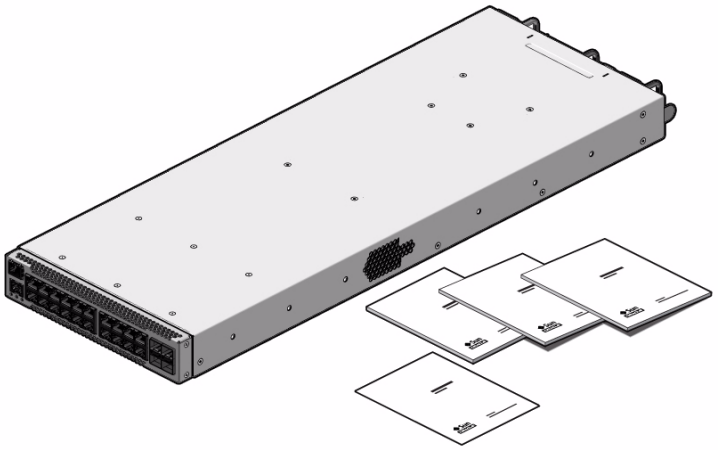
▼ Verify Switch Kit Contents

Note – The switch kit does not include a Rack rail kit. The Rack rail kit must be ordered separately.

1. **Identify the prerequisite and subsequent installation tasks that you must perform in conjunction with this procedure.**

   See "Installation Task Overview" on page 1.

2. **Verify that the switch kit contains one Oracle Switch ES1-24 with power supplies and fan module installed.**



3. **Verify the rackmount rail ship kit contents.**

   See "Verify Rack Rail Kit Contents" on page 22.

Related Information

- "Verify Rack Rail Kit Contents" on page 22
- "Assemble an SFP+ Data Cable" on page 26
- "Route Cables" on page 28

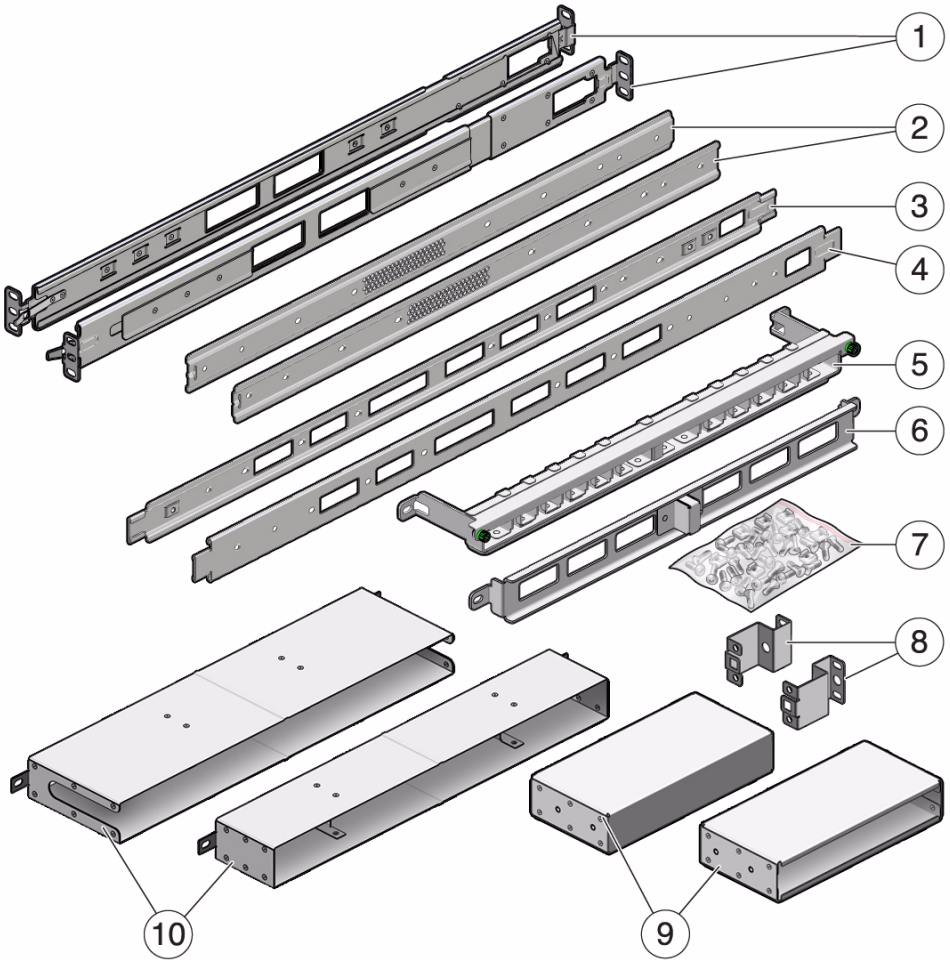
▼ Verify Rack Rail Kit Contents

Note – The Rack rail kit is not included with the switch kit and must be ordered separately.

1. **Identify the prerequisite and subsequent installation tasks that you must perform in conjunction with this procedure.**

   See "Installation Task Overview" on page 1.

2. **Use this illustration and accompaning table to verify that your Rack rail kit is complete.**

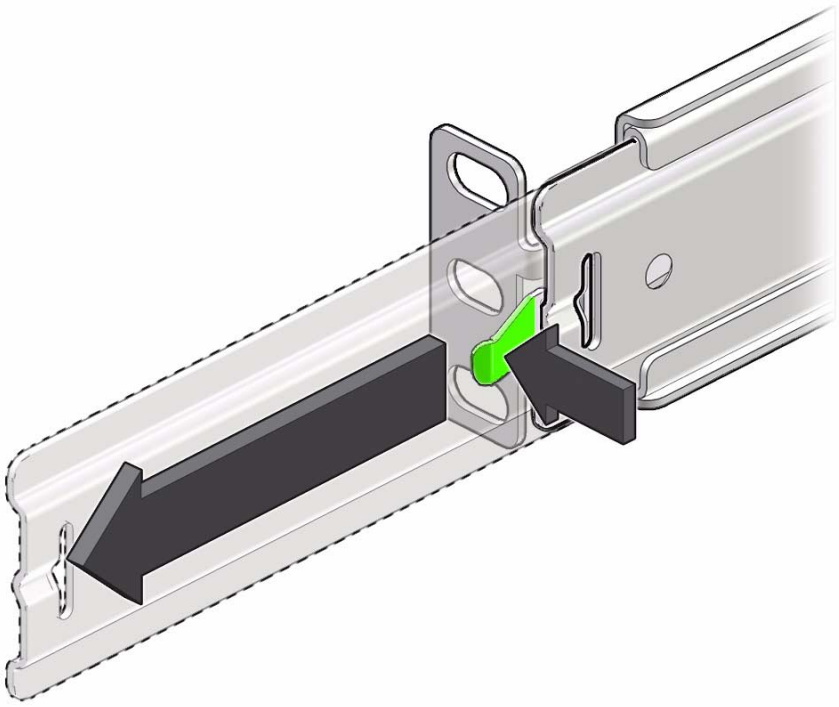


No.	Description
1	Rack slides (2)
2	Chassis rails (2) (might be assembled with rack slides)
3	Center slide
4	Center rail (might be assembled with center slide)
5	CMA and cover (always installed on rear of rack)
6	Front bracket (always installed on front of rack)

No.	Description
7	Assorted screws and cage nuts • M6x14 screws (12) • M5x10 screws (4) • M4x6 flathead screws (24) • M6 cage nuts (14)
8	Telco adapters (2)
9	Filler panels (2) (for single-switch configurations)
10	Large and small air ducts (2)

3. **If the chassis rails are attached to the rack slides, separate them now.**

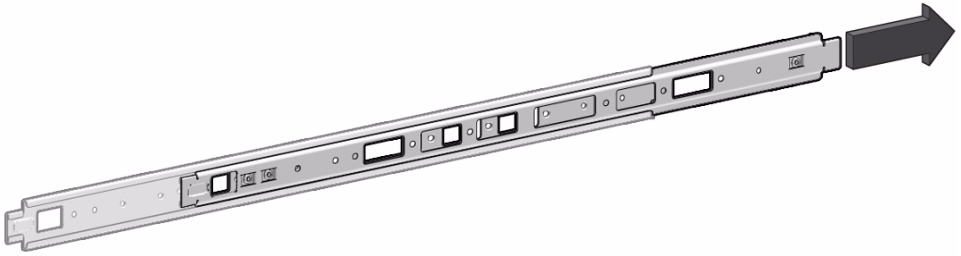
   a. **Press the green tab at the end of the rack slide.**



   b. **Carefully slide the chassis rail all the way out of the rack slide.**

   c. **Repeat** Step a **and** Step b **for the other rack slide.**

4. **If the center rail and center slide are assembled together, separate them now.**



5. **Consider your next step.**
   - If you are using optical data cables that require assembly, assemble them now.

     See "Assemble an SFP+ Data Cable" on page 26.
   - If you are using prewired data cables, route the data, power, and management cables.

     See "Route Cables" on page 28.

Related Information

- "Verify Switch Kit Contents" on page 21
- "Assemble an SFP+ Data Cable" on page 26
- "Route Cables" on page 28

▼ Assemble an SFP+ Data Cable

SFP+ optical data cables might need assembly before installation.

Note – The ends of the optical fiber cable and the receptacles of the transceivers must be clean and optically clear before assembly. Do not remove the protective caps from the optical fiber cable or the plugs from the transceivers until instructed to do so.

---

1. **Identify the prerequisite and subsequent installation tasks that you must perform in conjunction with this procedure.**

   See "Installation Task Overview" on page 1.

2. **Remove the SFP+ optical transceivers and fiber optic cables from their packaging.**

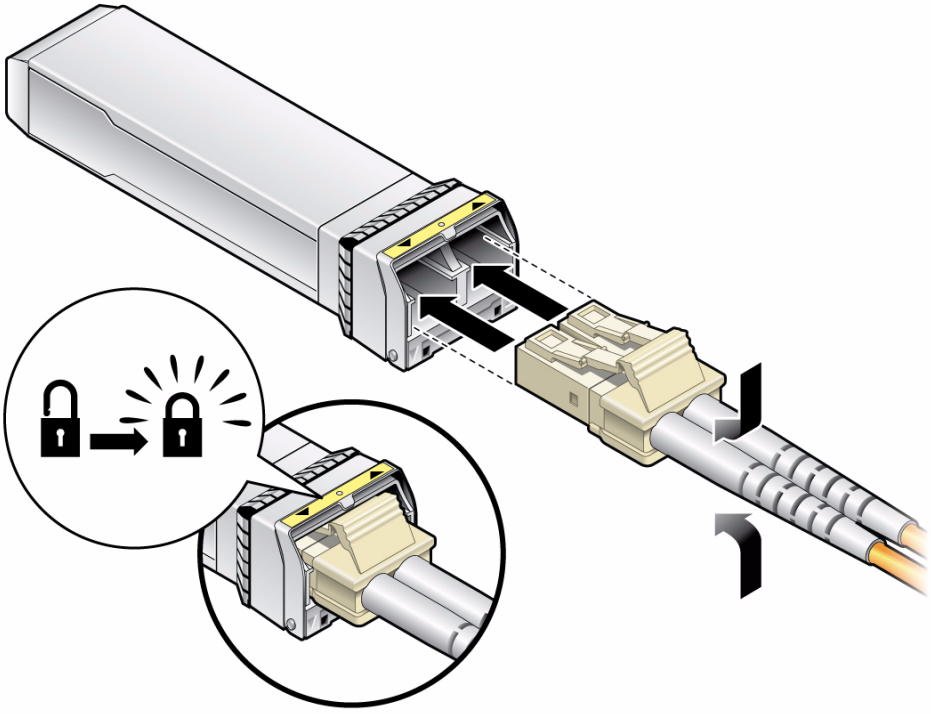
3. **Sort the components into groupings ready for assembly.**

   You need two SFP+ optical transceivers and a fiber optic cable for each cable to be assembled.

4. **Remove the plug from an SFP+ optical transceiver.**

5. **Remove the caps from an LC connector of the fiber optic cable.**

6. **Holding the shafts of the LC connector, insert the LC connector into the receptacles of the SFP+ optical transceiver.**



Note – The LC connector and SFP+ receptacles are keyed for proper fitting.

7. **Push the connector into the transceiver until it clicks.**

8. **Repeat from** Step 4 **for all SFP+ optical transceivers and LC connectors.**

9. **Repeat from** Step 3 **for all data cables to be assembled.**

10. **Route the data, power, and management cables.**

    See "Route Cables" on page 28.

Related Information

- "Verify Switch Kit Contents" on page 21
- "Verify Rack Rail Kit Contents" on page 22
- "Route Cables" on page 28
- "SFP+ Data Cable Overview" on page 15

▼ Route Cables

1. **Identify the prerequisite and subsequent installation tasks that you must perform in conjunction with this procedure.**

   See "Installation Task Overview" on page 1.

2. **At the remote hosts, begin attaching the data cables to the appropriate connectors.**

3. **Route and bundle the data cables to and through the rack, following the appropriate cautions and guidelines.**

   See "Data Cable Cautions" on page 16 and "Data Cable Guidelines" on page 17.

4. **Bring the data cables to the location in the rack where the switch will install.**

5. **Connect the management cables to the appropriate ports of the patch panel or serial device.**

6. **Route the management cables to and through the rack, bundling them with the data cables, if convenient to do so.**

7. **Bring the management cables to the location in the rack where the switch will install.**

8. **Ensure that line power is off at the rack.**

Note – If this is not possible, go to Step 10.

---

9. **Insert the switch power cord plugs into the line power receptacles.**

10. **Route the power cords through the rack, bundling them if necessary.**

11. **Bring the power cords to the location in the rack where the switch will install.**

12. **Consider your next step.**

    - If you are installing one switch, assemble a filler.

See “Assemble a Filler” on page 31.

- If you are installing two switches, attach rails to the switches.
  See “Attach the Rails to the Switch” on page 33.

Related Information

- “Verify Switch Kit Contents” on page 21
- “Verify Rack Rail Kit Contents” on page 22
- “Assemble an SFP+ Data Cable” on page 26
- “Data Cable Cautions” on page 16
- “Data Cable Guidelines” on page 17

Installing the Switch

These topics describe installing the switch into the rack.

- "Assemble a Filler" on page 31
- "Attach the Rails to the Switch" on page 33
- "Attach Telco Adapters to the Rack Slides" on page 37
- "Attach the Rack Slides to the Rack" on page 39
- "Install the Switch Into the Rack" on page 43
- "Attach Power Cords" on page 47
- "Install the Air Duct and Front Support" on page 48
- "Attach Data and Management Cables" on page 52
- "Prepare the Front Support and Small Air Duct" on page 56

Related Information

- "Understanding the Installation" on page 1
- "Confirming Specifications" on page 5
- "Understanding Cabling" on page 9
- "Preparing for Installation" on page 19
- "Powering On the Switch" on page 59

▼ Assemble a Filler

In a single-switch configuration, install a filler next to a switch.

Note – You can install the filler to the left or right of the switch.

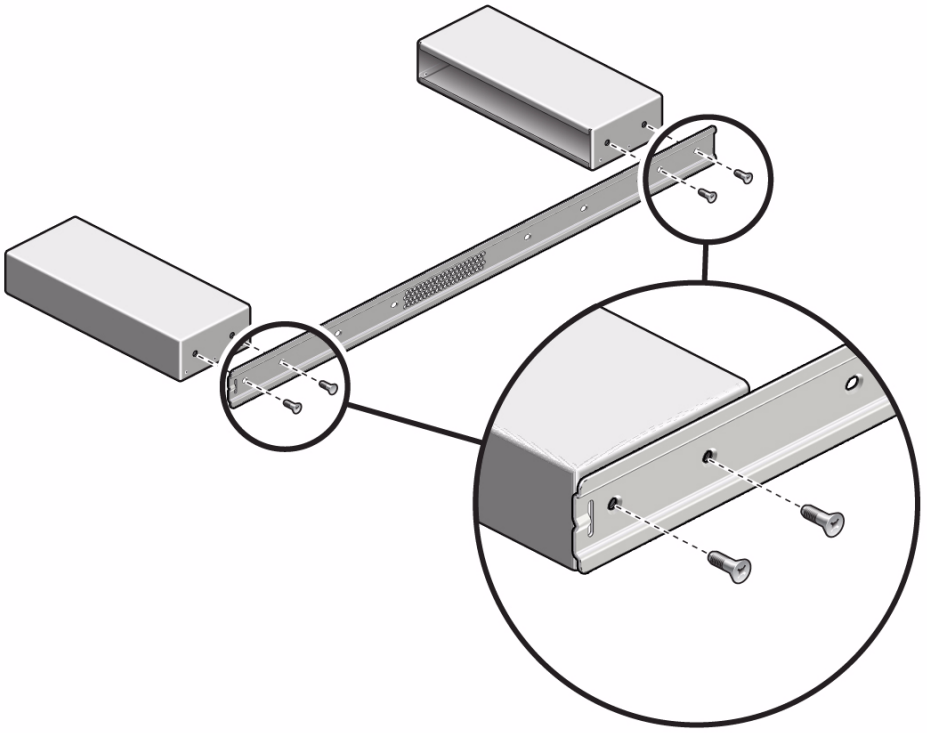
1. **Identify the prerequisite and subsequent installation tasks that you must perform in conjunction with this procedure.**

   See "Installation Task Overview" on page 1.

2. **Gather these components to assemble a filler.**
   - Chassis rail
   - Filler panel (2)
   - Center rail
   - M4x6 flathead screws (8)

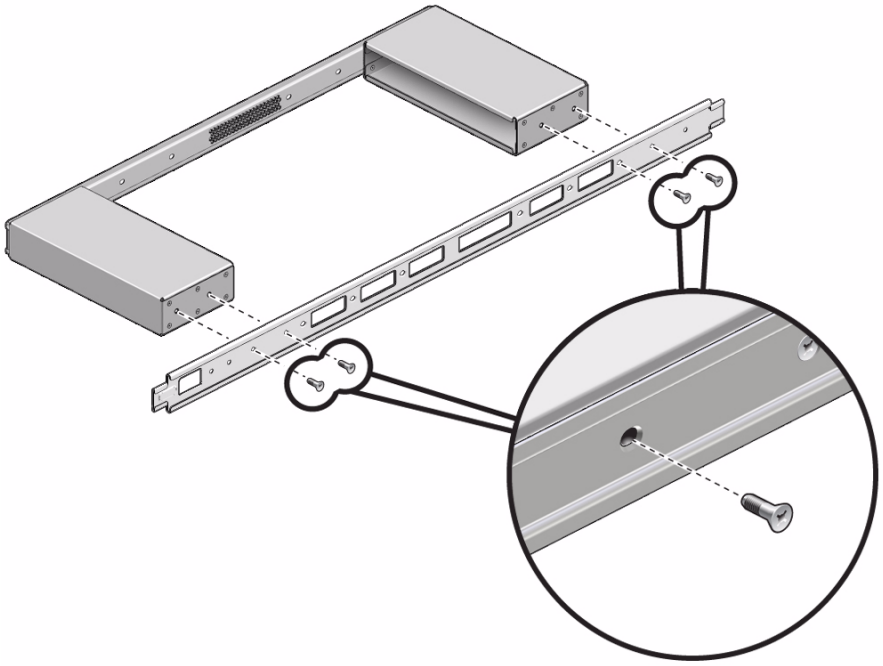
   See "Verify Rack Rail Kit Contents" on page 22.

3. **Align the filler panels with their openings towards each other and to the screw holes at the ends of the chassis rail.**



4. **Using a No. 2 Philips screwdriver, attach the filler panels to the chassis rail with four screws.**

5. **Align the center rail so that its rectangular opening at one end is farthest away from the bump on the chassis rail, and the screw holes of the filler panels align to the inner-most screw holes of the center rail.**



6. **Attach the center rail to the filler panels with four screws.**
7. **Attach the rails to the switch.**

   See "Attach the Rails to the Switch" on page 33.

Related Information

- "Attach the Rails to the Switch" on page 33
- "Install the Switch Into the Rack" on page 43

▼ Attach the Rails to the Switch

This procedure describes attaching rails to one switch. For dual-switch configurations, repeat the procedure for the second switch.

1. **Identify the prerequisite and subsequent installation tasks that you must perform in conjunction with this procedure.**

   See "Installation Task Overview" on page 1.

2. **Gather these components according to the number of switches you are installing.**

   See "Verify Rack Rail Kit Contents" on page 22.

Single-Switch Configuration	Dual-Switch Configuration
Chassis rail	Chassis rail (2)
Center slide	Center slide
	Center rail
M4x6 flathead screws (12)	M4x6 flathead screws (24)

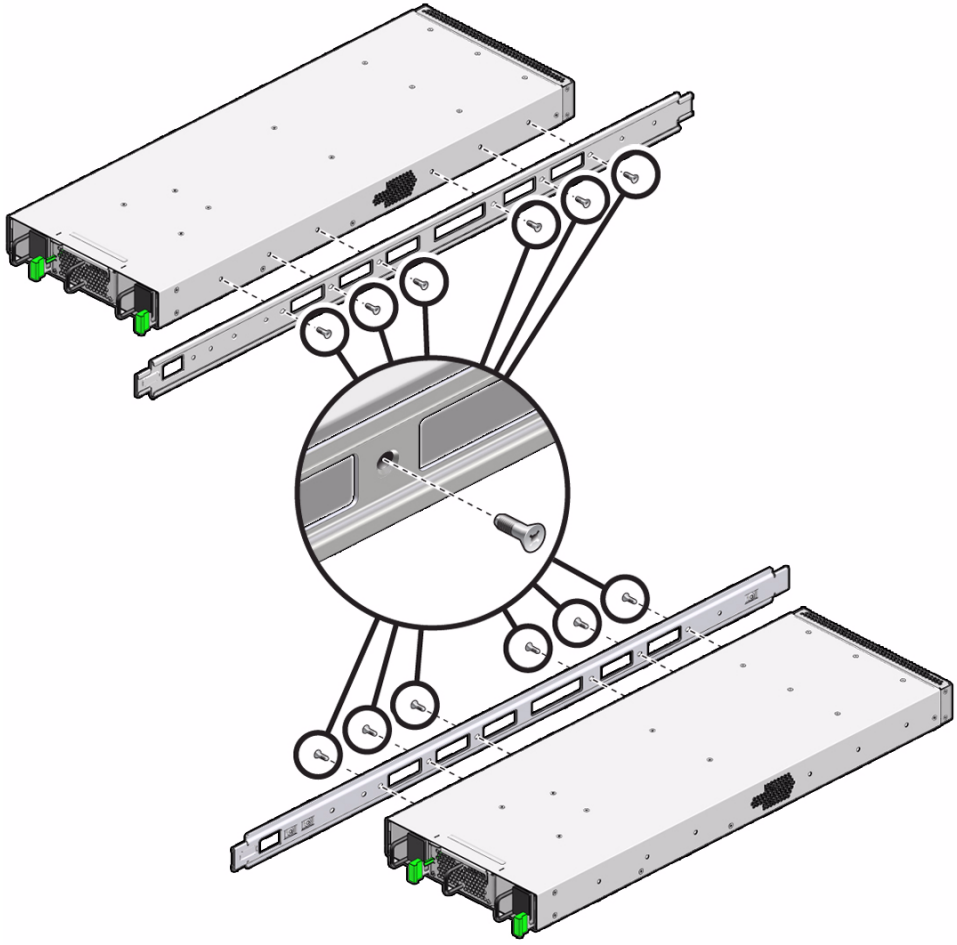
3. **Set the switch chassis down in front of you.**
   - If the power supplies are going on the cold aisle, turn the chassis so that the power supplies face you.
   - If the data connectors are going on the cold aisle, turn the chassis so that the data connectors face you.

4. **Align the rails and slides to the switch chassis.**

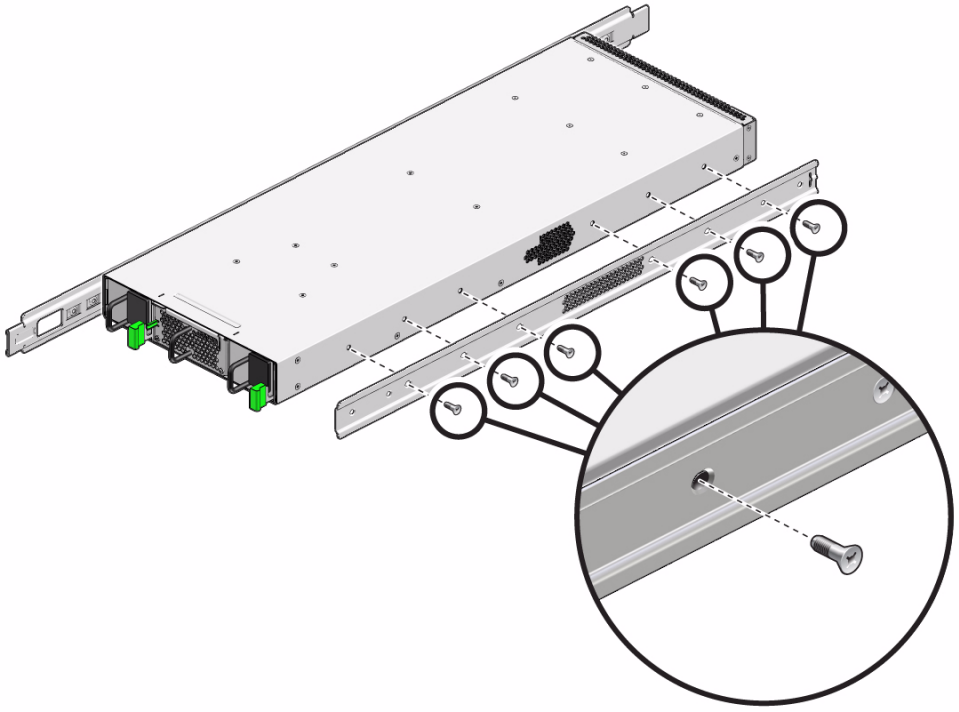
   - If you are installing the switch on the left side of the rack, position the parts this way:
     - Place the chassis rail to the left of the chassis and the center rail to the right.
     - Align the bump at the end of the chassis rail away from you. The chassis rail fits flush to the length of the chassis, and six screw holes match up.
     - Align the rectangular opening at the end of the center rail toward you. The rectangular holes along the center rail have six screw holes that will match up to the holes along the chassis.
   - If you are installing the switch on the right side of the rack, position the parts this way:
     - Place the center slide to the left of the chassis and the chassis rail to the right.
     - Align the rectangular opening at the end of the center slide toward you. The rectangular holes along the center slide have six screw holes that will match up to the holes along the chassis.

- Align the bump at the end of the chassis rail away from you. The chassis rail fits flush to the length of the chassis, and six screw holes match up.

5. **Consider your next step.**
   - If you are installing the switch on the left side, use a No. 2 Philips screwdriver to secure the center rail to the chassis with six M4x6 flathead screws.
   - If you are installing the switch on the right side, use a No. 2 Philips screwdriver to secure the center slide to the chassis with six M4x6 flathead screws.



6. **Secure the chassis rail to the chassis with six M4x6 flathead screws.**



7. **If you have a dual-switch configuration, repeat** Step 3 **through** Step 6 **for the second switch.**

8. **Consider your next step.**
   - If you are installing the switch into a telco rack, attach the telco adapters to the rack slides.

     See "Attach Telco Adapters to the Rack Slides" on page 37.
   - If you are not installing the switch into a telco rack, attach the rack slides to the rack.

     See "Attach the Rack Slides to the Rack" on page 39.

Related Information

- "Assemble a Filler" on page 31
- "Install the Switch Into the Rack" on page 43

▼ Attach Telco Adapters to the Rack Slides

If you are installing the switch into a telco rack, you must install the telco adapters to the rack slides.

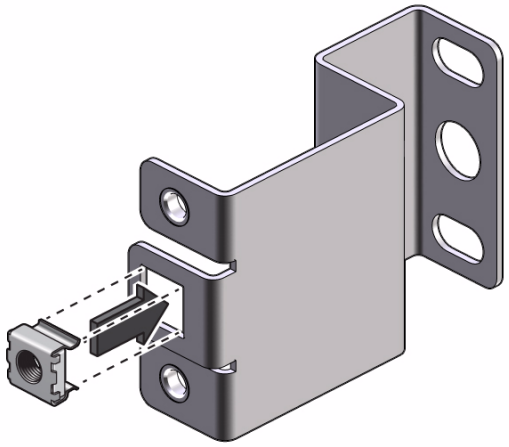
1. **Identify the prerequisite and subsequent installation tasks that you must perform in conjunction with this procedure.**

   See "Installation Task Overview" on page 1.

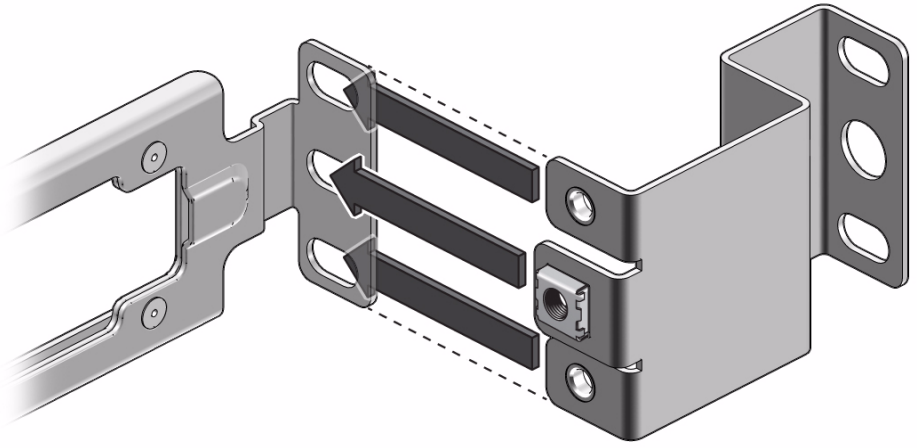
2. **Gather these components.**
   - Rack slide assembly (2)
   - Telco adapters (2)
   - M6 cage nuts (2)
   - M5x10 mm Philips screws (4)

   See "Verify Rack Rail Kit Contents" on page 22.

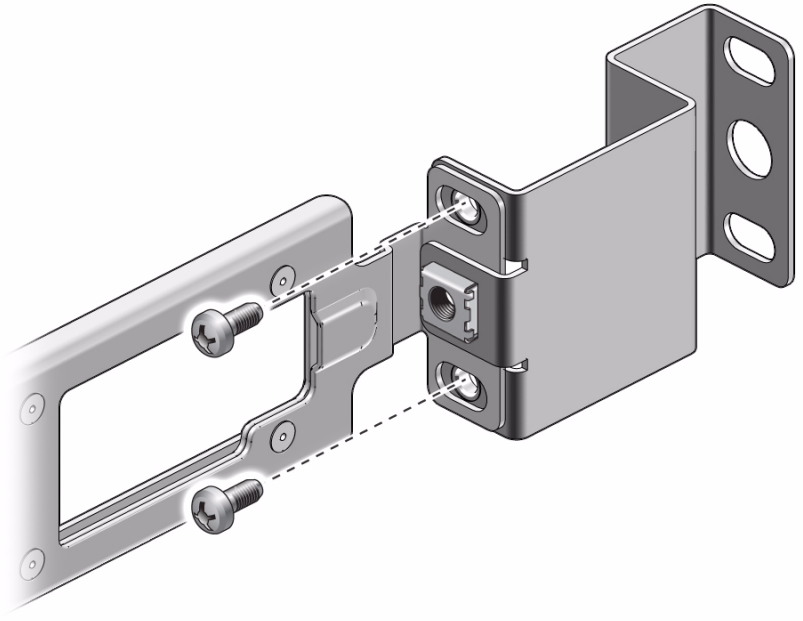
3. **Insert a cage nut into the square hole of the telco adapter from the outside in.**



4. **Slide the fingers of the telco adapter over the flange at the rectangular opening end of the rack slide.**



5. **Using a No. 2 Philips screwdriver, secure the telco adapter to the rack slide with two M5x10 screws.**



6. **Repeat** Step 3 **through** Step 5 **for the other telco adapter and rack slide.**
7. **Attach the rack slides to the rack.**

   See "Attach the Rack Slides to the Rack" on page 39.

Related Information

- "Attach the Rails to the Switch" on page 33
- "Attach the Rack Slides to the Rack" on page 39
- "Install the Air Duct and Front Support" on page 48
- "Prepare the Front Support and Small Air Duct" on page 56

▼ Attach the Rack Slides to the Rack

Note – The rack slides might have a telco adaptor attached, and so would look different than those in these illustrations. However, the procedure to attach the rack slides is the same.

1. **Identify the prerequisite and subsequent installation tasks that you must perform in conjunction with this procedure.**

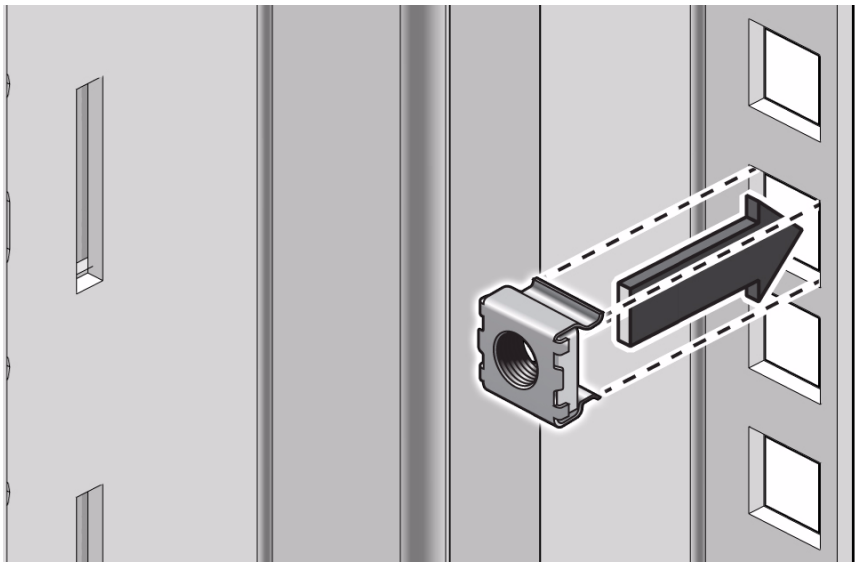
   See "Installation Task Overview" on page 1.

2. **Gather these components.**
   - Rack slide assembly (2)
   - CMA assembly
   - M6 cage nuts (12)
   - M6x14 mm Philips screws (10)

   See "Verify Rack Rail Kit Contents" on page 22.

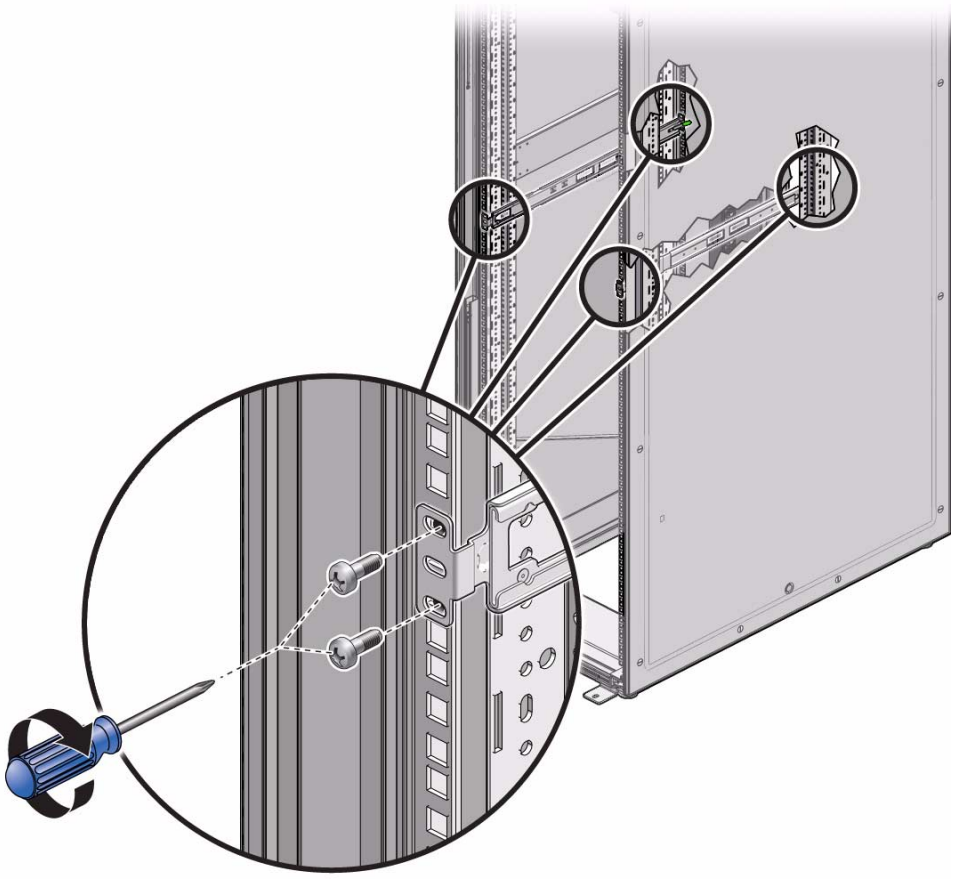
3. **Install the cage nuts to the inside of the rack posts where the rack slide assemblies are to install.**

Note – On the hot aisle, install three cage nuts on each post. On the cold aisle, install two cage nuts on each post for telco racks, or three cage nuts on each post for any other rack

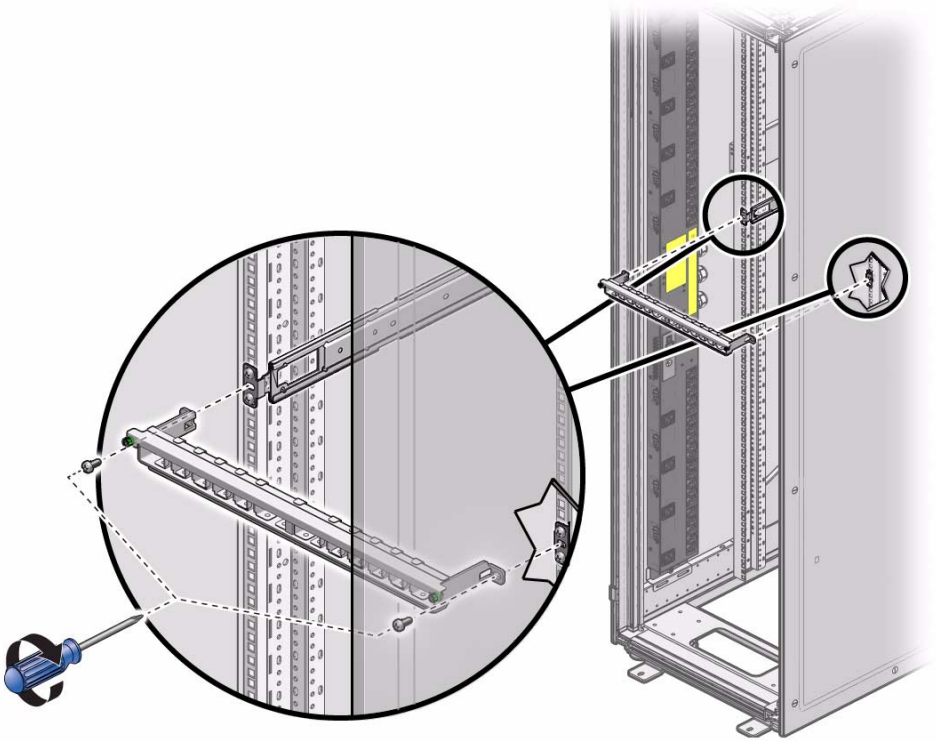


4. **Orient a rack slide assembly with the rectangular hole at one end toward the cold aisle.**

   The green tab is toward the hot aisle.



5. **Using a No. 2 Philips screwdriver, secure the rack slide assembly to the rack with four M6x14 screws.**
6. **Repeat** Step 4 **and** Step 5 **for the other rack slide assembly.**
7. **Attach the CMA assembly to the hot aisle end of the rack slide assemblies with two M6x14 screws.**



8. **Install the switch into the rack.**

   See "Install the Switch Into the Rack" on page 43.

Related Information

- "Assemble a Filler" on page 31
- "Attach the Rails to the Switch" on page 33
- "Attach Telco Adapters to the Rack Slides" on page 37
- "Install the Switch Into the Rack" on page 43
- "Install the Air Duct and Front Support" on page 48
- "Prepare the Front Support and Small Air Duct" on page 56

▼ Install the Switch Into the Rack

Note – For single-switch configurations, follow these steps to install the filler as well.

1. **Identify the prerequisite and subsequent installation tasks that you must perform in conjunction with this procedure.**

   See "Installation Task Overview" on page 1.

2. **Consider your next step.**

   - If this is a single-switch configuration, install the filler.

     Go to Step 3.

   - If this is a dual-switch configuration, install the first switch.

     Go to Step 4.

3. **Lift the filler to the rack on the cold aisle.**

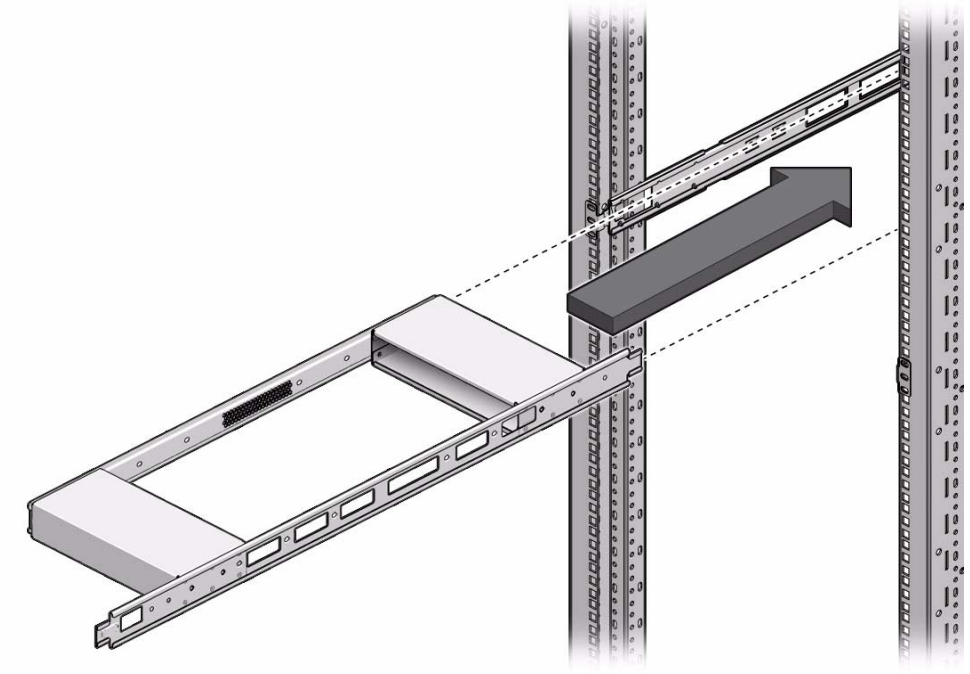
   The rectangular opening at the end of the center rail should be toward you.

   Then go to Step 5.

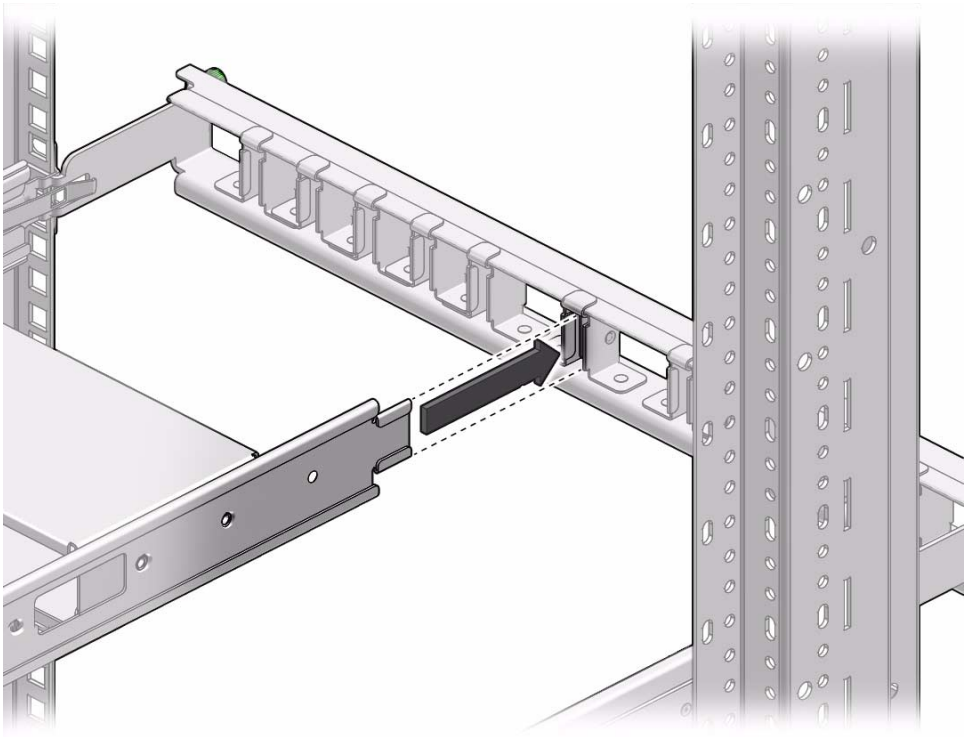
4. **Consider your next step.**

   - If you are installing the switch with the power supplies on the cold aisle, with the power supply end of the switch facing you, lift the switch to the rack on the cold aisle.
   - If you are installing the switch with the data connectors on the cold aisle, with the data connector end of the switch facing you, lift the switch to the rack on the cold aisle.

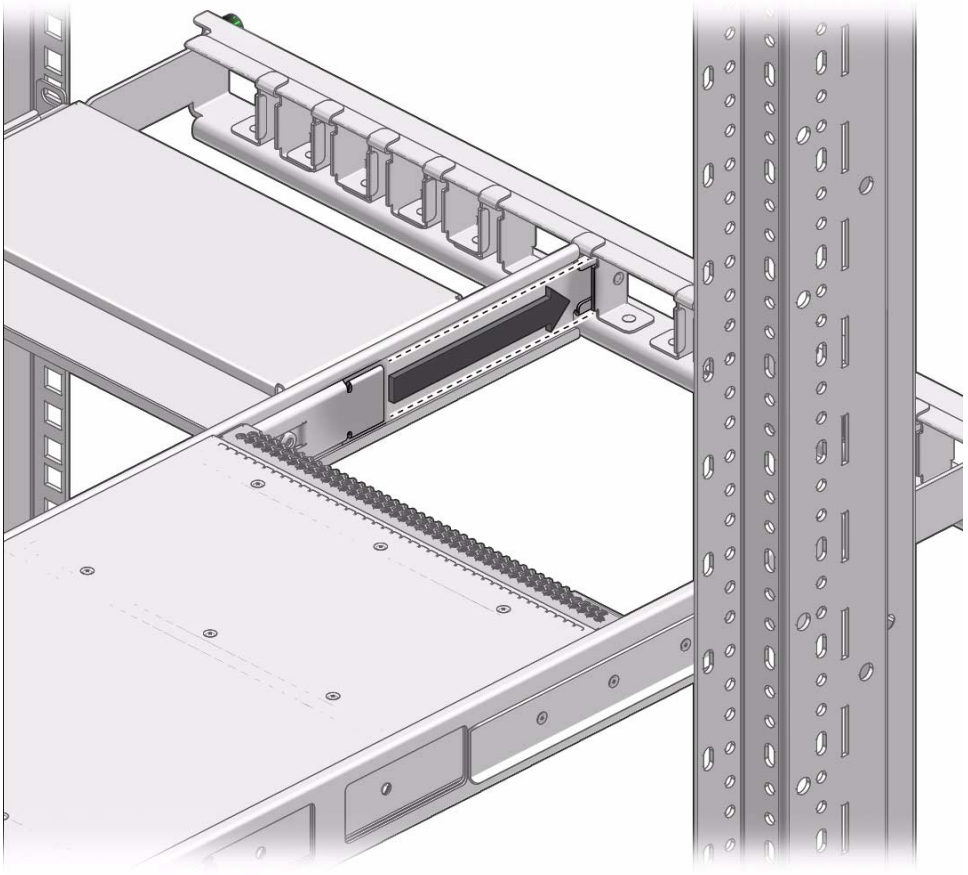
5. **Align the chassis rail on the switch or filler to the rack slide on the rack.**



6. **If a filler or switch is already installed, align the center rail or center slide with the complementary component on the switch or filler.**
7. **Supporting the weight of the switch or filler, slide the switch or filler into the rack.**
8. **Continue to slide the switch or filler in all the way, so that the center slide or rail fits into the pocket in the CMA.**



9. Repeat Step 4 **through** Step 8 **to install the switch or second switch.**



10. **Attach the power cords.**

    See "Attach Power Cords" on page 47.

Related Information

- "Assemble a Filler" on page 31
- "Attach the Rails to the Switch" on page 33
- "Attach the Rack Slides to the Rack" on page 39
- "Attach Power Cords" on page 47

▼ Attach Power Cords

1. **Identify the prerequisite and subsequent installation tasks that you must perform in conjunction with this procedure.**

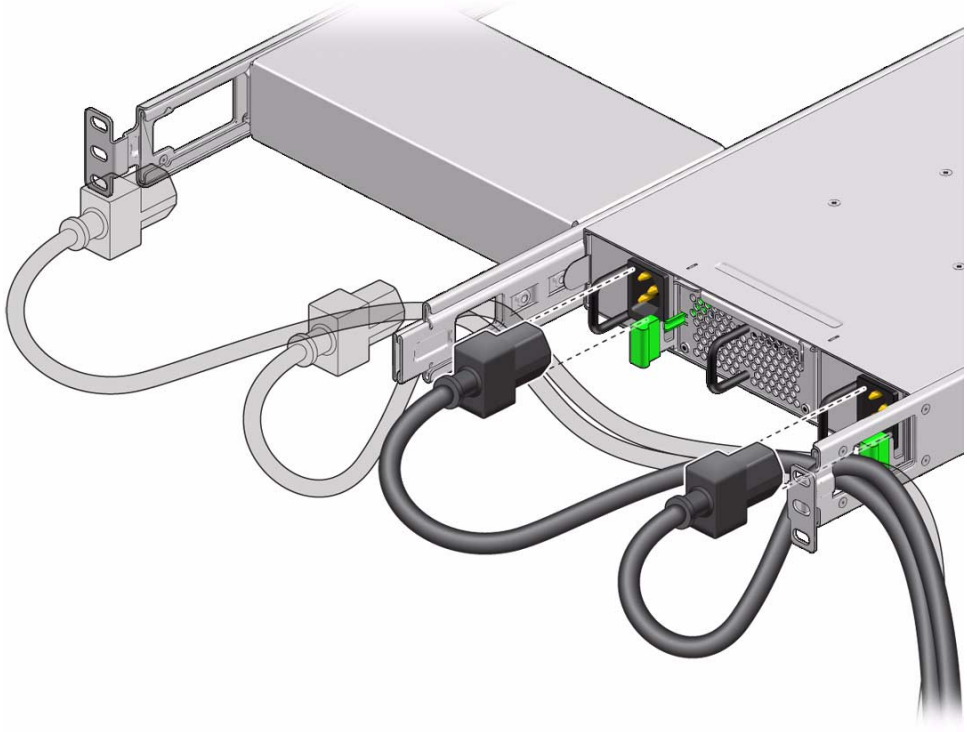
   See "Installation Task Overview" on page 1.

2. **Ensure that the power cords are not energized.**

3. **Consider your next step.**

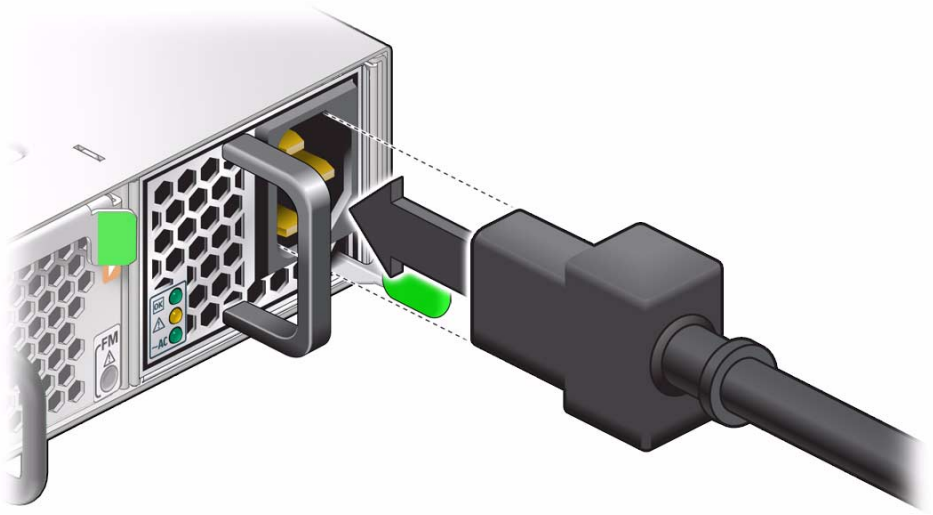
   - If the power supplies are on the cold aisle, go to Step 4.
   - If the power supplies are on the hot aisle, go to Step 6.

4. **Pass the power cords from the sides of the rack slides through the rectangular openings.**



5. **If necessary, pass the power cords through the rectangular openings at the end of the center rail and slide.**

6. **Plug the power cords into the appropriate power supplies.**



7. **Consider your next step.**
   - If you are installing the switch with the power supplies on the cold aisle, install the large air duct and front support.

     See "Install the Air Duct and Front Support" on page 48.
   - If you are installing the switch with the data connectors on the cold aisle, prepare the front support and small air duct.

     See "Prepare the Front Support and Small Air Duct" on page 56.

Related Information

- "Install the Switch Into the Rack" on page 43
- "Install the Air Duct and Front Support" on page 48
- "Attach Data and Management Cables" on page 52
- "Power On the Switch" on page 60

▼ Install the Air Duct and Front Support

Note – The air duct and front support must install into the rack on the cold aisle.

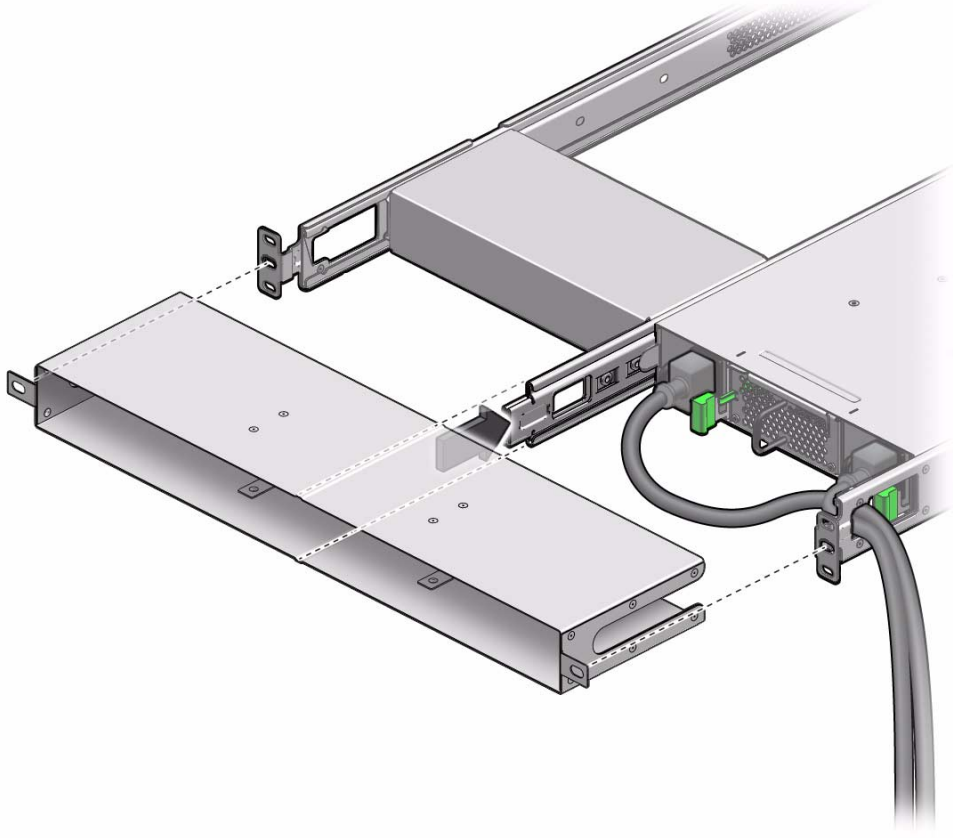
Note – If you are installing the switch with the data cables on the cold aisle, the procedure is the same, however the illustrations differ slightly from your situation.

1. **Identify the prerequisite and subsequent installation tasks that you must perform in conjunction with this procedure.**

   See "Installation Task Overview" on page 1.

2. **Align the air duct to where it installs on the switch.**

   The mounting tabs of the air duct orient away from the switch.

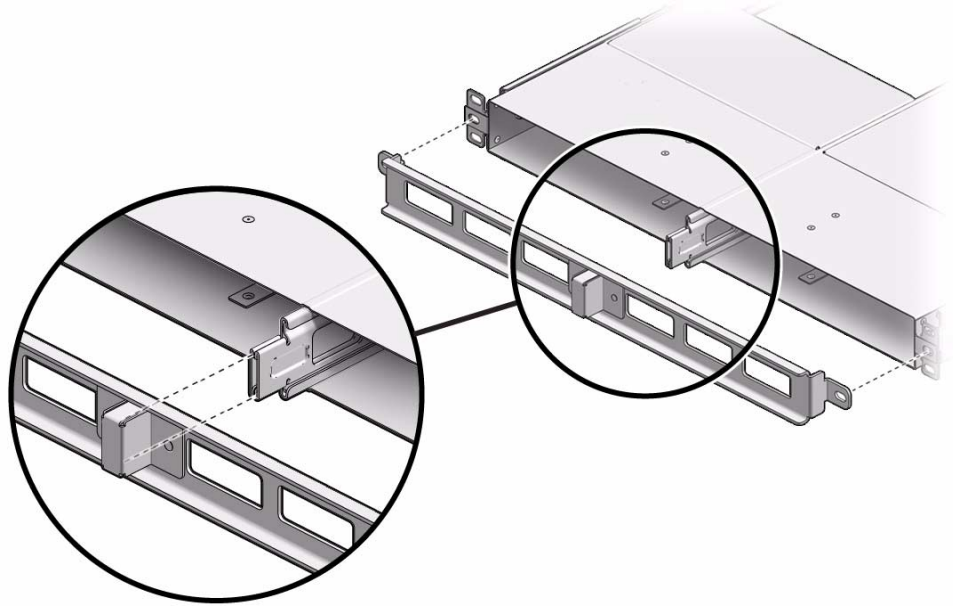


3. **Move the air duct over the center slide and rail, so that the mounting tabs contact the end of the rack slide assembly.**

Note – If you are installing the large air duct, ensure that the power cords enter the cutouts on the sides of the air duct as you move it into place.

4. **Align the front support to where it installs on the switch.**

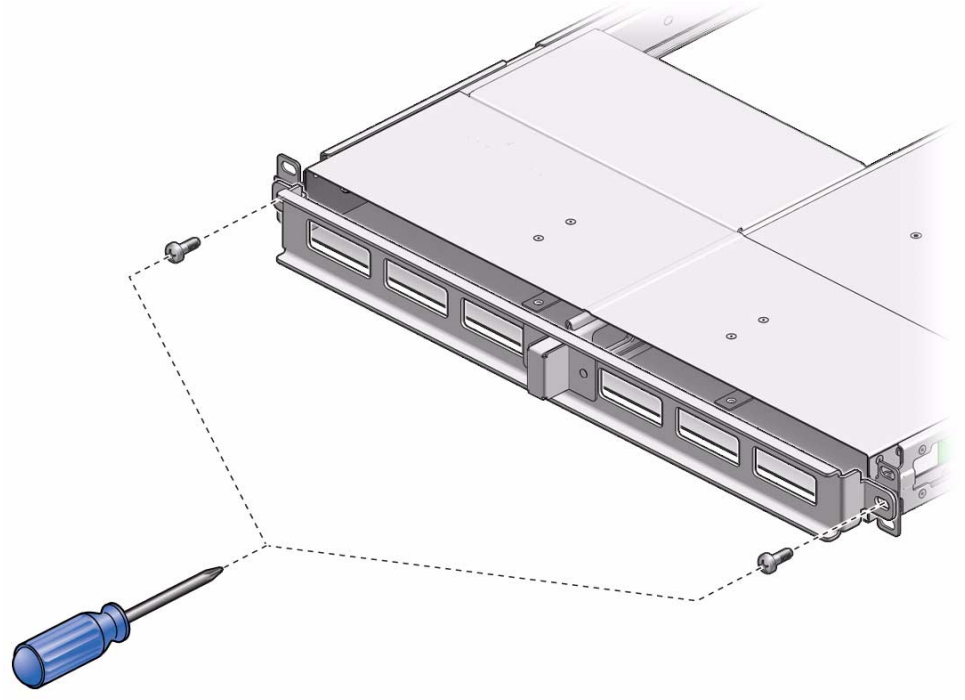
   The rolled top and bottom edges of the front support point away from the switch.



Note – Ensure that the ends of the center rail and slide fit into the pocket of the front support.

---

5. **Using a No. 2 Philips screwdriver, install two M6x14 screws to secure the front support into the ends of the rack slides.**



6. **Consider your next step.**
   - If you have not already done so, attach the data and management cables.

     See "Attach Data and Management Cables" on page 52.
   - If you have already attached the data and management cables, power on the switch.

     See "Power On the Switch" on page 60.

Related Information

- "Attach Power Cords" on page 47
- "Attach Data and Management Cables" on page 52
- "Prepare the Front Support and Small Air Duct" on page 56

▼ Attach Data and Management Cables

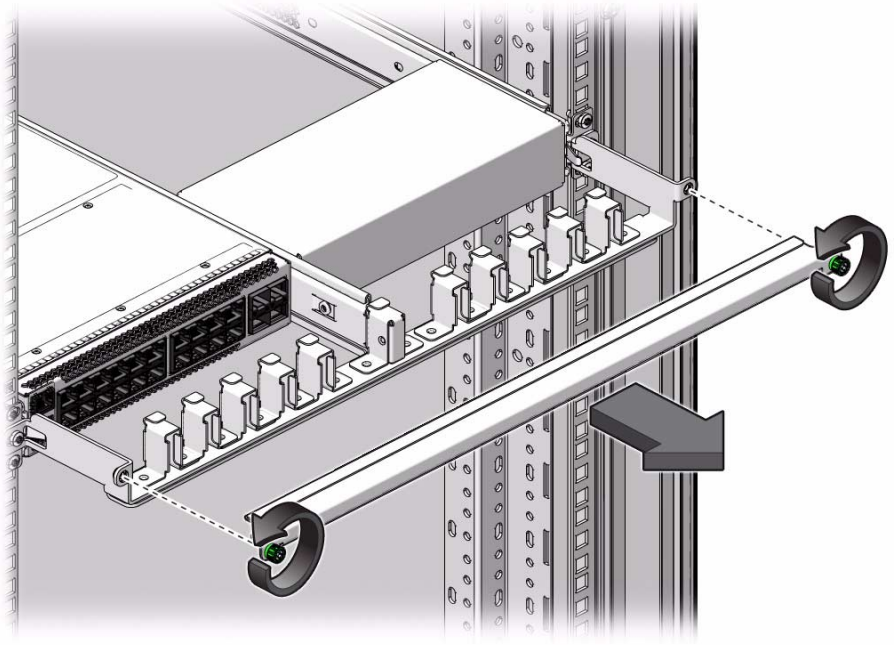
Note – This procedure primarily describes attaching data cables, however the procedure is the same for the management cables.

1. **Identify the prerequisite and subsequent installation tasks that you must perform in conjunction with this procedure.**

   See "Installation Task Overview" on page 1.

2. **Consider your next step.**
   - If you are installing the switch with the data connectors on the hot aisle, go to Step 3.
   - If you are installing the switch with the data connectors on the cold aisle, go to Step 4.

3. **Loosen the green captive thumbscrews and remove the cover from the CMA.**

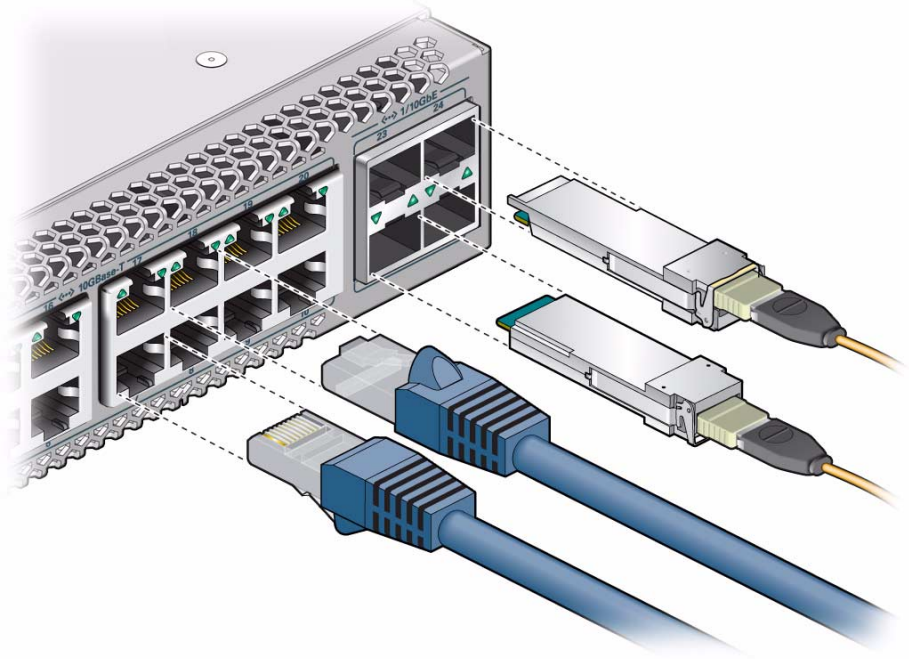


4. **Identify where the cable installs.**

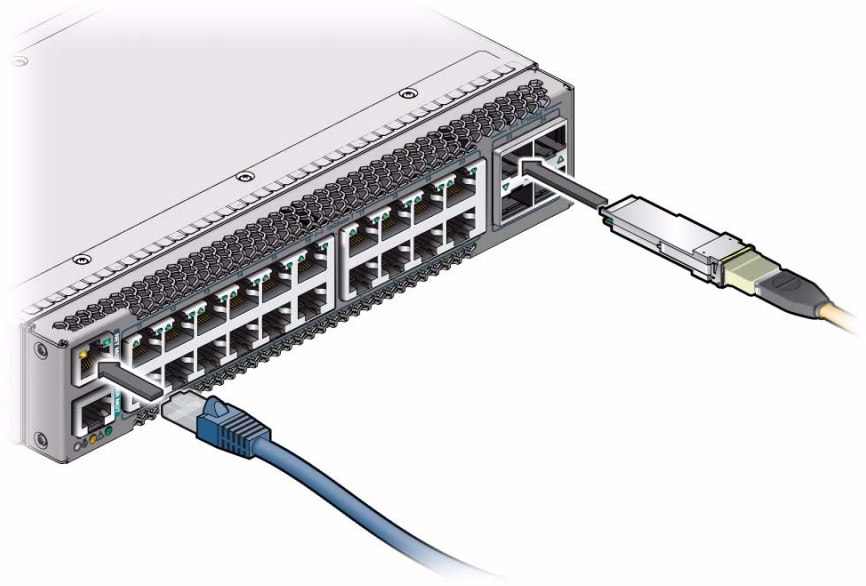
   See "Front Panel Components" on page 3.

5. **If installed, remove the protective dust cap on the cable.**
6. **Inspect the cable connector.**

   The shell should not be bent and should be parallel to the inner boards. If the connector is bent or damaged, use a different cable.
7. **Align the cable to the receptacle according to the connector location.**
   - **Upper row** - Connector tab is up.
   - **Lower row** - Connector tab is down.

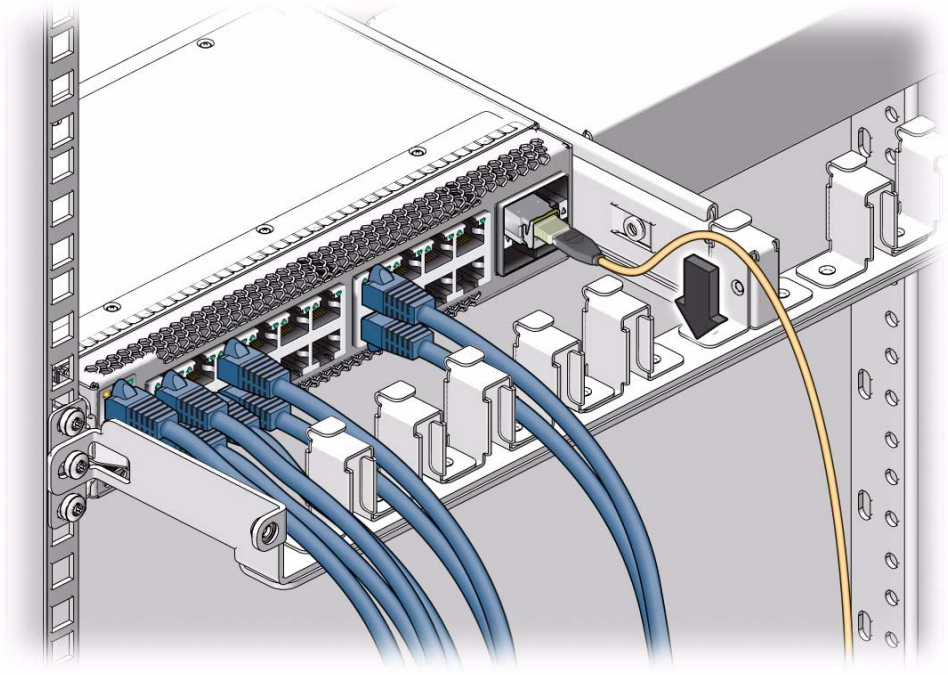


8. **Hold the transceiver or connector, and slide it into the opening.**

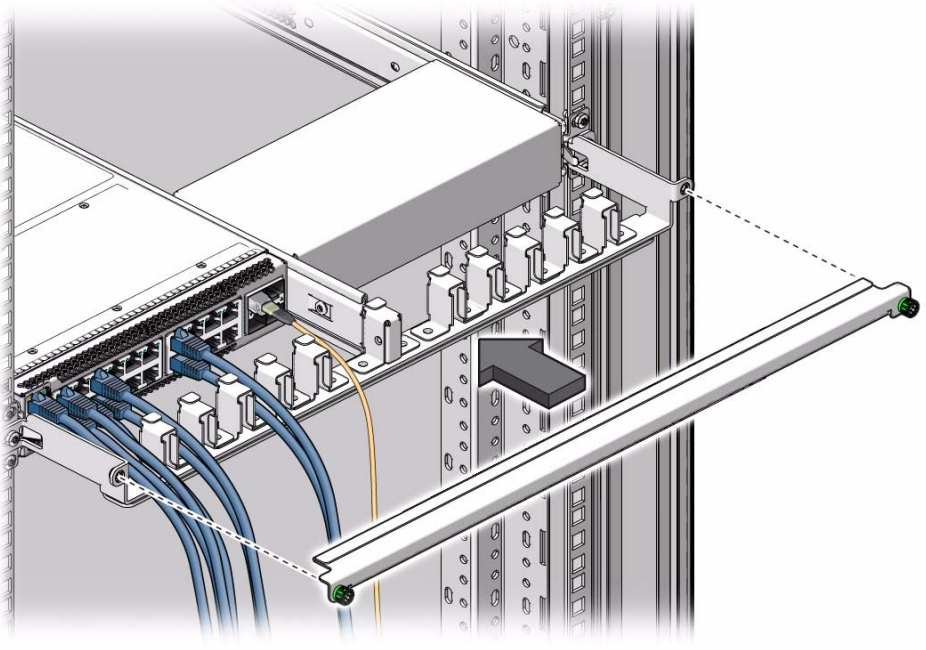


9. **Applying even pressure to both sides of the cable, push the cable in until it is firmly seated and clicks in the slot.**
10. **Repeat** Step 4 **through** Step 9 **for all connectors.**
11. **Consider your next step.**
    - If you are installing the switch with the data connectors on the hot aisle, go to Step 12.
    - If you are installing the switch with the data connectors on the cold aisle, return to "Prepare the Front Support and Small Air Duct" on page 56.
12. **Place the cable into the open slot in the CMA.**

    Four cables fit into each slot in the CMA.



13. **Replace the CMA cover, and tighten the green captive thumbscrews.**



14. **Power on the switch.**

    See "Power On the Switch" on page 60.

Related Information

- "Attach Power Cords" on page 47
- "Install the Air Duct and Front Support" on page 48
- "Prepare the Front Support and Small Air Duct" on page 56

▼ Prepare the Front Support and Small Air Duct

Note – Perform this procedure only if you are installing the switch with the data connectors on the cold aisle and the power supplies on the hot aisle.

1. **Identify the prerequisite and subsequent installation tasks that you must perform in conjunction with this procedure.**

   See "Installation Task Overview" on page 1.

2. **Bring the data cables connectors that are to attach to the switch to the data connector end of the switch.**

Note – Do not attach the cables at this time.

3. **Sort the cables into two side-by-side groups (four groups for dual-switch configurations) that approximate the locations where the data cables attach on the data connector end of the switch.**

   Use hook and loop straps to bundle the cables.

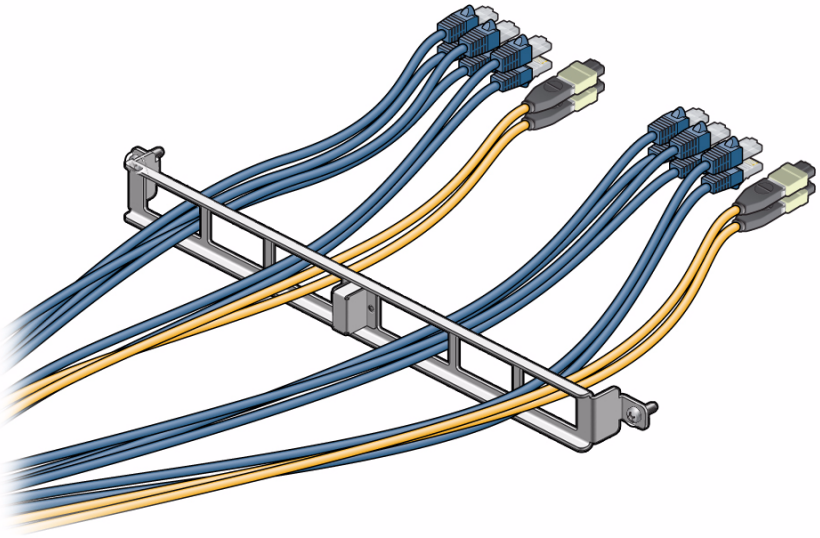
4. **Pass the data cables through the front support.**

   a. **Align the front support to the data connector end of the switch.**

      The rolled top and bottom edges of the front support point away from the switch.

Note – Do not attach the front support at this time.

b. Pass the left-most bundle of data cables through the left-most opening of the front support.



c. Pass the left-of-center bundle of data cables through the left-of-center opening of the front support.

d. Pass the right-of-center bundle of data cables through the right-of-center opening of the front support.

e. Pass the right-most bundle of data cables through the right-most opening of the front support.

5. Pass the data cables through the smaller air duct.

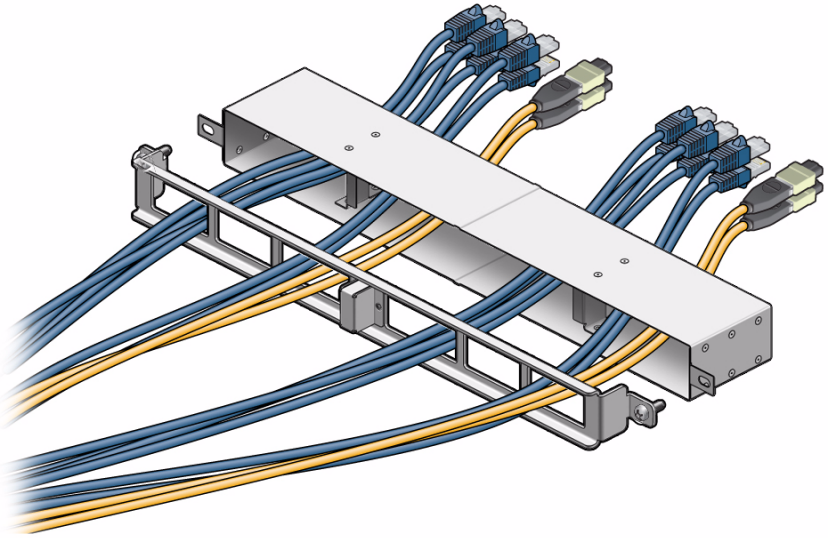
a. Align the air duct to the data connector end of the switch.

The mounting tabs of the air duct orient away from the switch.

Note – Do not attach the air duct at this time.

---

b. Pass the left-most bundle of data cables through the left opening of the air duct.



c. **Pass the left-of-center and right-of-center bundles of data cables through the center opening of the air duct.**

d. **Pass the right-most bundle of data cables through the right opening of the air duct.**

6. **Connect the data and management cables.**

   See "Attach Data and Management Cables" on page 52

7. **Attach the small air duct and front support.**

   See "Install the Air Duct and Front Support" on page 48.

Related Information

- "Install the Air Duct and Front Support" on page 48
- "Attach Data and Management Cables" on page 52
- "Power On the Switch" on page 60

Powering On the Switch

These topics describe different methods to access the SP.

Description	Links
Communicate with the SP through the CLI using DHCP.	"Power On the Switch" on page 60 "Oracle ILOM Overview" on page 61 "Verify the DHCP-Assigned IP Address and Host Name" on page 62 "Log Into the Oracle ILOM CLI (NET MGT)" on page 66
Communicate with the SP through the CLI using a static IP address.	"Power On the Switch" on page 60 "Oracle ILOM Overview" on page 61 "Log Into the Oracle ILOM CLI (SER MGT)" on page 67 "Configure Network Management From the CLI (SER MGT)" on page 63 "Log Into the Oracle ILOM CLI (NET MGT)" on page 66

Description	Links
Communicate with the SP through the CLI (SER MGT).	"Power On the Switch" on page 60 "Oracle ILOM Overview" on page 61 "Log Into the Oracle ILOM CLI (SER MGT)" on page 67
Communicate with the SP through the web interface using DHCP.	"Power On the Switch" on page 60 "Oracle ILOM Overview" on page 61 "Verify the DHCP-Assigned IP Address and Host Name" on page 62 "Log Into the Oracle ILOM Web (NET MGT)" on page 65
Communicate with the SP through the web interface using a static IP address.	"Power On the Switch" on page 60 "Oracle ILOM Overview" on page 61 "Log Into the Oracle ILOM CLI (SER MGT)" on page 67 "Configure Network Management From the CLI (SER MGT)" on page 63 "Log Into the Oracle ILOM Web (NET MGT)" on page 65

Related Information

- "Understanding the Installation" on page 1
- "Confirming Specifications" on page 5
- "Understanding Cabling" on page 9
- "Preparing for Installation" on page 19
- "Installing the Switch" on page 31
- "Powering On the Switch" on page 59

▼ Power On the Switch

1. **Identify the prerequisite and subsequent installation tasks that you must perform in conjunction with this procedure.**

   See "Installation Task Overview" on page 1.

2. **Perform one or both of the following to energize the power supplies.**
   - Plug the power cords into the line power receptacles.
   - Energize the circuit breakers so that the line power receptacles are live.

3. **Verify that the status LEDs for each power supply indicate normal operation.**

   The AC LED lights and in a moment, the OK LED should light. The Attention LED should be unlit.

Note – At this time, power is being supplied to the SP. The SP is effectively on and booting up. You might see the boot sequence on the management console.

---

4. **Verify that the fans are spinning.**

   You should feel air at the fan module, and the fan Attention LEDs should be unlit.

5. **Verify that the switch System OK LED lights.**

6. **Access the SP.**

   See "Powering On the Switch" on page 59.

Related Information

- "Attach Power Cords" on page 47

Oracle ILOM Overview

Oracle ILOM enables you to actively manage the switch, providing the same administrative look and feel found on Oracle servers. Oracle ILOM enables you to:

- Connect to SEFOS.
- View the current status of sensors and indicators on the system.
- Determine the hardware configuration of your system.
- Receive generated alerts about system events in advance by using IPMI PETs or SNMP traps.
- Manage SEFOS users.
- Upgrade firmware for all components on the switch through either CLI or web interface.
- Configure standard Oracle ILOM services, such as:
  - Clock/NTP
  - Serial port
  - Network
  - Syslog
  - SNMP

- SMTP
- Email alert notification
- Web server
- SSH
- IPMI
- CLI

Note – For details on how to configure these services, refer to the *Oracle Integrated Lights Out Manager (ILOM) 3.0 Daily Management – CLI Procedures Guide* at: `http://www.oracle.com/pls/topic/lookup?ctx=ilom30`

Oracle ILOM does not support the following features on the switch.

- Advanced user account management features:
  - Active directory
- Server-oriented features, such as:
  - Power management
  - Storage redirection
  - Remote console

Related Information

- "Installation Task Overview" on page 1
- "Management Connection Overview" on page 10

▼ Verify the DHCP-Assigned IP Address and Host Name

Note – By default, the switch is configured to use DHCP to automatically obtain an IP address.

Note – You must configure an externally accessible IP address on the switch to use SNMP. Refer to the following documentation for more information on using SNMP with the switch: *Sun Integrated Lights Out Manager (ILOM) 3.0 Management Protocols Reference Guide* and *Oracle Switch ES1-24 Configuration Guide*.

1. **Log into the DHCP server and obtain the IP address assigned to the switch.**
2. **Consider your next step.**
   - Log into the Oracle ILOM web interface.
     See "Log Into the Oracle ILOM Web (NET MGT)" on page 65.
   - Log into the Oracle ILOM CLI.
     See "Log Into the Oracle ILOM CLI (NET MGT)" on page 66.

Related Information

- "Configure Network Management From the CLI (SER MGT)" on page 63

▼ Configure Network Management From the CLI (SER MGT)

1. **Log into the Oracle ILOM CLI.**
   See "Log Into the Oracle ILOM CLI (SER MGT)" on page 67.
2. **Change to the `network` directory.**

```
-> cd SP/network
```

3. **(Optional) Change to static IP discovery mode.**

Note – By default, the switch uses DHCP as the IP discovery mode. To use `static` as the IP discovery mode, use the following command.

```
-> set ipdiscovery = static
```

4. **Configure an externally accessible IP address on the switch.**

a. Set the pending service processor IP address.

```
-> set pendingipaddress=IP_address
Set 'pendingipaddress' to 'IP_address'
```

b. Set the pending gateway IP address.

```
-> set pendingipgateway=IP_address
Set 'pendingipgateway' to 'IP_address'
```

c. Set the pending IP netmask.

```
-> set pendingipnetmask=netmask
Set 'pendingipnetmask' to 'n.n.n.n'
```

d. Commit the changes.

```
-> set commitpending=true
Set 'commitpending' to 'true'
```

e. Verify that the state is `enabled`**.**

```
-> set state=enabled
Set 'state' to 'enabled'
```

5. Verify the configuration information that you entered.

The `show` command information about the switch, including its IP address.

For example:

```
-> show

 /SP/network
    Targets:

    Properties:
        type = Network Configuration
        commitpending = (Cannot show property)
        ipaddress = 10.7.59.97
        ipdiscovery = static
        ipgateway = 10.7.59.254
        ipnetmask = 255.255.255.0
        macaddress = 00:14:4f:6C:5D:E8
        pendingipaddress = 10.7.59.97
        pendingipdiscovery = static
```

```
        pendingipgateway = 10.7.59.254
        pendingipnetmask = 255.255.255.0
        state = enabled

    Commands:
        cd
        set
        show

->
```

6. **When you are done, exit Oracle ILOM.**
7. **Consider your next step.**
   - Log into the Oracle ILOM web interface.
     See "Log Into the Oracle ILOM Web (NET MGT)" on page 65.
   - Log into the Oracle ILOM CLI.
     See "Log Into the Oracle ILOM CLI (NET MGT)" on page 66.

Related Information

- "Verify the DHCP-Assigned IP Address and Host Name" on page 62
- "Log Into the Oracle ILOM Web (NET MGT)" on page 65
- "Log Into the Oracle ILOM CLI (NET MGT)" on page 66

▼ Log Into the Oracle ILOM Web (NET MGT)

1. **Obtain the IP address or host name of your SP.**
   See:
   - "Verify the DHCP-Assigned IP Address and Host Name" on page 62
   - "Configure Network Management From the CLI (SER MGT)" on page 63
2. **Type the IP address of the switch into your web browser.**
   The login screen appears.
3. **Type your user name and password.**
   The default user is `root` and the default password is `changeme`.

4. **Click Log In.**

   The web interface appears.

5. **Consider your next step.**

   - Perform administrative tasks
   - Create SEFOS users

   Refer to the *Oracle Switch ES1-24 Configuration Guide* for additional information.

Related Information

- "Log Into the Oracle ILOM CLI (NET MGT)" on page 66

▼ Log Into the Oracle ILOM CLI (NET MGT)

1. **Obtain the IP address or host name of your SP.**

   See:

   - "Verify the DHCP-Assigned IP Address and Host Name" on page 62
   - "Configure Network Management From the CLI (SER MGT)" on page 63

2. **Start your SSH client.**

3. **Log into the switch Oracle ILOM.**

```
$ ssh -l root ipaddress
```

   where *ipaddress* is the IP address of the switch.

4. **Type your password when prompted.**

   The default is `changeme`.

   The CLI command prompt appears.

```
->
```

5. **Consider your next step.**

   - Perform administrative tasks
   - Create SEFOS users

   Refer to the *Oracle Switch ES1-24 Configuration Guide* for additional information.

Related Information

- "Log Into the Oracle ILOM Web (NET MGT)" on page 65
- "Log Into the Oracle ILOM CLI (SER MGT)" on page 67

▼ Log Into the Oracle ILOM CLI (SER MGT)

1. **Verify that the serial device has the correct settings.**

   See "SER MGT Port" on page 12.

2. **If you have not already done so, connect the serial device to the SER MGT port of the switch.**

   See "Front Panel Components" on page 3 for the location of the port.

3. **Press Enter on the serial device.**

   This action establishes the connection between the terminal device and Oracle ILOM.

   The Oracle ILOM login prompt appears.

```
SUNSPnnnnnnnnnn login:
```

4. **Enter the user name and password when prompted.**

   The default user is `root` and the default password is `changeme`.

   Once you have successfully logged in, the Oracle ILOM prompt appears.

```
->
```

5. **Consider your next step.**

   - Configure network management.

     See "Configure Network Management From the CLI (SER MGT)" on page 63.
   - Perform administrative tasks.
   - Create SEFOS users.

   Refer to the *Oracle Switch ES1-24 Configuration Guide* for additional information.

Related Information

- "Configure Network Management From the CLI (SER MGT)" on page 63

- "Log Into the Oracle ILOM Web (NET MGT)" on page 65
- "Log Into the Oracle ILOM CLI (NET MGT)" on page 66

Glossary

10

10GbE 10 Gigabit Ethernet.

A

ACL Access control list.

G

GMRP GARP Multicast Registration Protocol.

GVRP GARP VLAN Registration Protocol.

L

LA Link aggregation.

O

Oracle ILOM Oracle Integrated Lights Out Manager. ILOM provides advanced server processor hardware and software to manage and monitor servers.

OSPF Open Shortest Path First protocol.

R

RIP Routing Information Protocol.

RSTP Rapid Spanning tree protocol.

S

SEFOS Sun Ethernet Fabric Operating System. A full-featured fabric and switch management software package for configuring and monitoring the switches network infrastructure.

SEL System event log. The switch includes a number of replaceable component sensors that generate entries in the SEL when the sensor crosses a threshold. Many of these readings are used to adjust the fan speeds and perform other actions, such as illuminating LEDs and powering off the switch.

SFP+ Small form-factor, pluggable. A transceiver module specification for several physical layer technologies. In this document, SFP+ refers to Gigabit Ethernet, or 10GE, modules.

SR Short range. A short range SFP+ optical transceiver module.

STP Spanning-Tree Protocol.

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