



Installing the Avaya S8800 Server for Avaya Aura[™] Communication Manager

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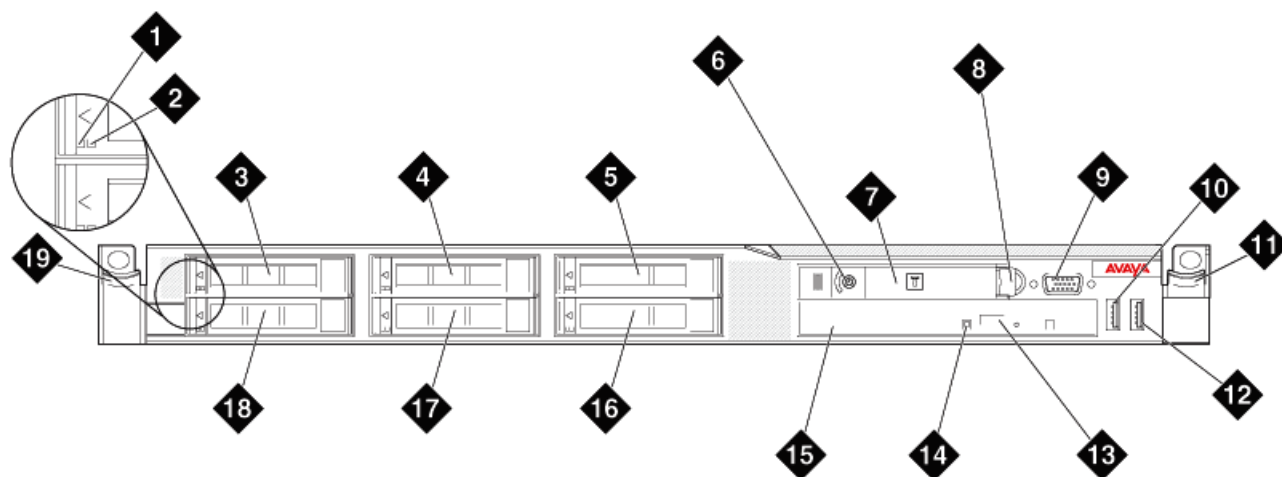
Chapter 1: Overview of server and components

Introduction

The Avaya S8800 Server supports several Avaya software applications. The server is available in a 1U model or 2U model and with various hardware components. The server model and specific hardware components in your server depend on the requirements of the software application that will run on the server.

Communication Manager supports the 1U model of the S8800 Server. While installing Communication Manager in simplex mode on the S8800 Server, you only use 1 S8800 Server, whereas, installing Communication Manager in duplex mode requires you to have 2 S8800 Servers.

Front of server

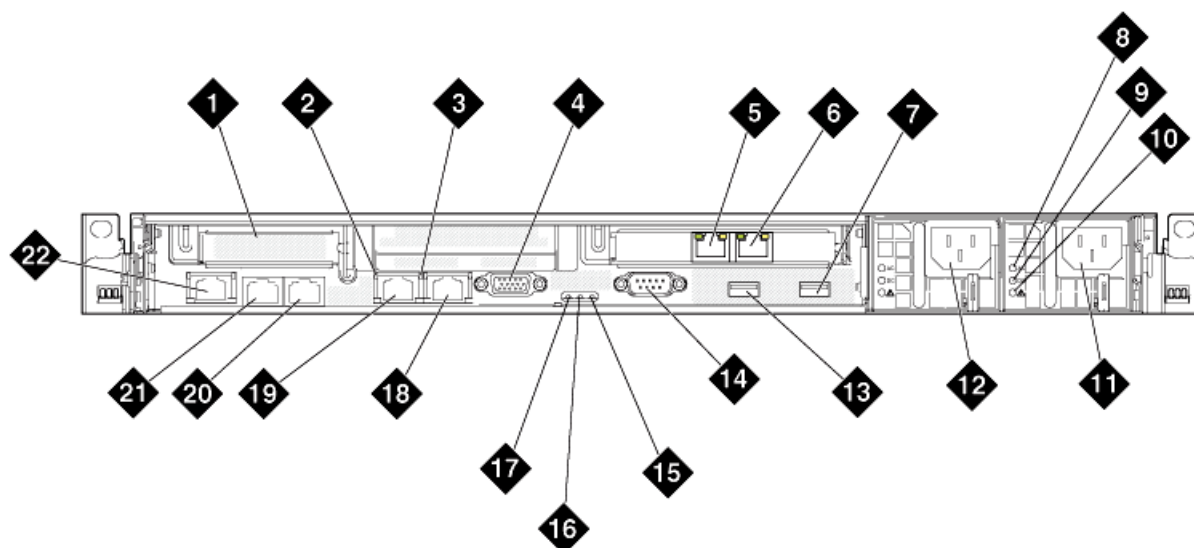


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1	Hard disk drive activity LED (green)
2	Hard disk drive status LED (amber)

3	Drive bay 0
4	Drive bay 2 (unused for Communication Manager)
5	Drive bay 4 (unused for Communication Manager)
6	Power control button and LED
7	Operator information panel  Note: The operator information panel is shown in the pushed in position.
8	Operator information panel release latch
9	Video connector
10	USB connector 1
11	Rack release latch
12	USB connector 2
13	DVD eject button
14	DVD drive activity LED
15	DVD drive
16	Drive bay 5 (Unused for Communication Manager)
17	Drive bay 3 (Unused for Communication Manager)
18	Drive bay 1
19	Rack release latch

Back of server



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1	PCIe slot 1 (unused)
2	Ethernet activity LED
3	Ethernet link LED
4	Video connector
5	Ethernet connector 6 (eth5) (unused)
6	Ethernet connector 5 (eth4) (second NIC for bonding to eth0 for redundancy)
7	USB connector 4
8	AC power LED (green)
9	DC power LED (green)
10	Power supply error LED (amber)
11	Power supply 2 (optional redundant power supply)
12	Power supply 1 (primary power supply)
13	USB connector 3
14	Serial connector
15	System error LED (amber)
16	System locator LED (blue)

17	Power LED (green)
18	Ethernet connector 2 (eth 1) (services port)
19	Ethernet connector 1 (eth 0) (Corporate LAN / processor Ethernet)
20	Ethernet connectors 4 (eth 3) (Duplication link if configuration is duplicated server)
21	Ethernet connectors 3 (eth 2) (not used)
22	System management Ethernet connector (IMM)



Note:

Hardware label for Ethernet ports on the server is called Ethernet connectors. Communication Manager software refers to Ethernet ports as eth.

Server specifications

Type	Description
Dimensions	Height: 43 mm (1.69 inches, 1U) Depth: 711 mm (28 inches) Width: 440 mm (17.3 inches)
Weight	Maximum weight: 15.4 kg (34 lb.) when fully configured.
Heat output	Approximate heat output: • Minimum configuration: 662 Btu per hour (194 watts) • Maximum configuration: 1400 Btu per hour (400 watts) Heat output varies depending on the number and type of optional features that are installed and the power-management optional features that are in use.
Acoustic noise emissions	Declared sound power, operating: 6.1 bel The sound levels were measured in controlled acoustical environments according to the procedures specified by the American National Standards Institute (ANSI) S12.10 and ISO 7779 and are reported in accordance with ISO 9296. Actual sound-pressure levels in a given location might exceed the average values stated because of room reflections and other nearby noise sources. The declared sound-power levels indicate an upper limit, below which a large number of computers will operate.
Electrical input requirements	• Sine-wave input (47 - 63 Hz) required • Input voltage low range: - Minimum: 100 V AC

Type	Description
	- Maximum: 127 V AC • Input voltage high range: - Minimum: 200 V AC - Maximum: 240 V AC • Input kilovolt-amperes (kVA), approximately: - Minimum: 0.194 kVA - Maximum: 0.700 kVA
Front connectors	• Two USB • Video
Back connectors	• Six Ethernet (RJ— 45 connectors). • Serial • Two USB • Video • Systems management Ethernet (IMM)

Server components

Component	Minimum specification	Upgrade options based on product requirements
Microprocessor	One Intel E5520 quad core, 2.26 GHZ processor	No additional options
Memory	S8510 Server — 8 GB of DRAM (Install an additional 1 GB DRAM DIMMS to achieve 8GB of DRAM) S8800 Server — 12GB DRAM S8330D — 8GB DRAM	No additional options
Media drive	DVD-R/W SATA slimline	No additional options
Hard disk drive expansion bays	Six 2.5-inch hot-swap SAS hard disk drive bays	No additional options

Component	Minimum specification	Upgrade options based on product requirements
Hard disk drive	S8510 Server – 2 drives each 3.5" 250GB SATA drives configured as a RAID 1 array yielding 232 GB of usable disk space or 3 drives each 2.5" 146 GB SAS drives configured as a RAID 5 array yielding 272 GB of usable disk space S8800 Server — 3 each 2.5" 146 GB SAS hard drives configured in a RAID 5 array yielding 272 GB of usable disk space  Note: For an upgrade from Communication Manager R 5.2.1 on an S8800 server to Communication Manager R 6.0 on an S8800 Server, you need to install four additional 2 GB DRAM DIMMS. Thus there is a total of 12 GB of DRAM installed in the server. When installing additional DRAM, the DIMMs are to be installed in accordance with the instructions found in the "Sequence for populating DIMM connectors" section on page 20 of the <i>Maintaining the Avaya S8800 Server for Avaya Aura™ Communication Manager</i>, doc # 03-603446, Issue 1, November 2009. S8300D Server — Single 250GB drive	No additional options
RAID controllers	ServeRAID-MR10i RAID SAS adapter that provides RAID level 1 or 5. Includes 256 MB cache	No additional options

Component	Minimum specification	Upgrade options based on product requirements
	module and battery for write cache	
PCI expansion slots	Two PCI Express x16 Gen 2 slots: - Slot 1 supports a low profile DUAL NIC card (half height, half-length cards) - Slot 2 supports full height, half-length cards	No additional options
Hot-swap fans	Six	No additional options
Power supply	One 675W, 12V AC power supply  Note: The second (redundant) power supply is required if you desire to have the Communication Manager system meet or exceed an availability requirement of 99.99%.	Redundant 675W, 12V AC power supply
Video controller	Integrated Matrox G200 (two analog ports, one front and one back, that can be connected at the same time) The maximum video resolution is 1280 x 1024 at 75 Hz. - SVGA compatible video controller - DDR2 250 MHz SDRAM video memory controller - Avocent Digital Video Compression - Video memory is not expandable	No additional options

Component	Minimum specification	Upgrade options based on product requirements
		NA



Note:

You must remove the SAMP board (only applicable for an S8510 Server) before installing Communication Manager R6.0 on the server.

Environmental requirements

Server status	Air temperature	Maximum Altitude	Relative humidity
Server on	10 to 35° C (50 to 95° F) at altitude of up to 914.4 m (3,000 feet)	2,133 m (7,000 feet)	8% to 80%
	10 to 32° C (50 to 90° F) at altitude of 914.4 m to 2,133 m (3,000 to 7,000 feet)		
Server off	10°C to 43°C (50.0°F to 109.4°F)	2,133 m (7,000 feet)	8% to 80%

Chapter 2: Server rack installation

Safety instructions

Use the following safety guidelines to ensure your own personal safety and to help protect your system and working environment from potential damage.

Observe the following precautions for rack stability and safety. Also refer to the rack installation documentation accompanying the rack for specific caution statements and procedures.

Systems are considered to be components in a rack. Thus, *component* refers to any system as well as to various peripherals or supporting hardware.



Danger:

- Before installing systems in a rack, install front and side stabilizers on stand-alone racks or the front stabilizer on racks that are joined to other racks. Failure to install stabilizers before installing systems in a rack could cause the rack to tip over, potentially resulting in bodily injury.
- After installing components in a rack, never pull more than one component out of the rack on its slide assemblies at one time. The weight of more than one extended component could cause the rack to tip over and may result in serious injury.
- Use caution when pressing the component rail release latches and sliding a component into or out of a rack because the slide rails can pinch your fingers.



Note:

- Your system is safety-certified as a free-standing unit and as a component for use in a rack cabinet using the customer rack kit. It is your responsibility to ensure that the final combination of system and rack complies with all applicable safety standards and local electric code requirements.
- System rack kits are intended to be installed in a rack by trained service technicians.



Important:

- Always load the rack from the bottom up, and load the heaviest item in the rack first.
- Make sure that the rack is level and stable before extending a component from the rack.
- Do not overload the AC supply branch circuit that provides power to the rack. The total rack load should not exceed 80 percent of the branch circuit rating.

- Ensure that proper airflow is provided to components in the rack:
 - Do not block any air vents. Usually 15 cm (6 in.) of space provides proper airflow.
 - Install the server only in a rack cabinet with perforated doors.
 - Do not leave open spaces above or below an installed server in your rack cabinet. To help prevent damage to server components, always install a blank filler panel to cover the open space and to help ensure proper air circulation.
- Do not step on or stand on any component when servicing other components in a rack.
- Do not place any object on top of rack-mounted components.

Avaya-provided equipment

Avaya provides the following equipment:

- Server and power cord
- Slide rails
- Cable management arm assembly
- Cable management arm stop bracket
- Cable management arm mounting bracket
- Cable management support arm
- Two 10–32 screws
- Four M6 screws
- Five small cable ties
- One large cable tie
- Compact flash reader, USB cable, and flashcard (for backing up files. Included when required by the product ordered.)
- Modem and USB or serial cable (for remote maintenance. Included when required by the product ordered.)
- Other hardware as ordered, such as uninterruptible power source (UPS).

Customer-provided equipment

The customer must provide the following equipment:

- Standard 19-inch four-post equipment rack that is properly installed and solidly secured. The rack must meet the following standards:

- American National Standards Institute and Electronic Industries Association standard ANSI/EIA-310–D-92.
- International Electrotechnical Commission standard IEC 297
- Deutsche Industrie Norm standard DIN 41494
- Screws that come with the racks for installing the rails
- #2 cross-point (Phillips) screwdriver or 3/8 inch flathead screwdriver
- USB keyboard, USB mouse, and monitor must be available on the site for advanced installation or troubleshooting.
- Power from a nonswitched electrical outlet
- Access to the network

Clearance requirements

Install the server in a rack that meets the following requirements:

- Minimum depth of 70 mm (2.76 inches) between the front mounting flange and inside of the front door if the server is installed in a cabinet.
- Minimum depth of 157 mm (6.18 inches) between the rear mounting flange and inside of the rear door if the server is installed in a cabinet.
- Minimum depth of 718 mm (28.27 inches) and maximum depth of 762 mm (30 inches) between the front and rear mounting flanges to support the use of the cable-management arm.

Server installation checklist

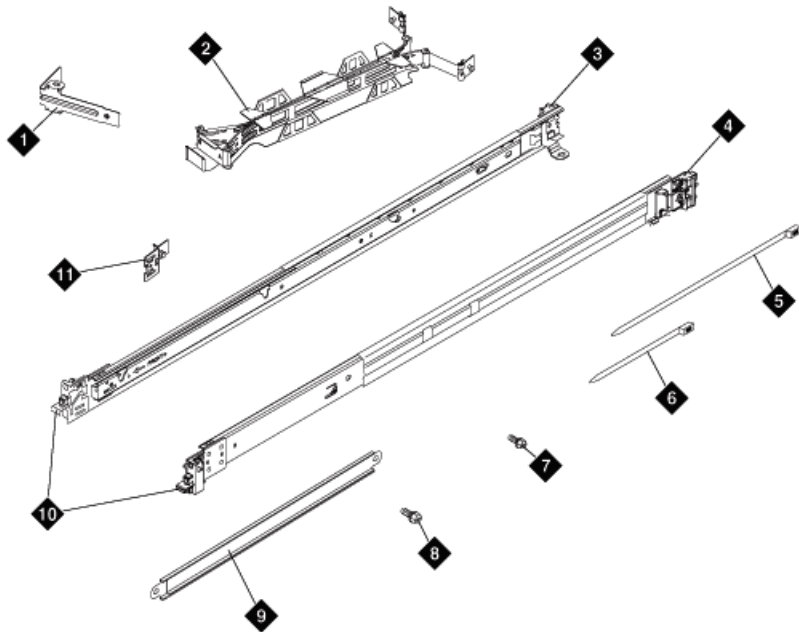
No.	Task	Notes	✓
1	Verify that all equipment is on site.	Compare the list of items that were ordered to the contents of the boxes. Use the inventory list provided by your project manager. Do not rely on the packing slips inside the boxes for the correct information.	
2	Verify that the rack is installed according to the manufacturer's instructions and in accordance with all local codes and laws.		

No.	Task	Notes	✓
3	Verify that the rack is grounded in accordance with local electrical code.	See <i>Approved Grounds</i> (555–245–772), available at http://support.avaya.com .	
4	Remove the cabinet doors, if necessary.	See the cabinet manufacturer's documentation.	
7	Attaching the rails to the rack on page 17		
8	Installing the server in the rack on page 19		
	Installing the cable management arm on page 21 (optional)		
9	Replace the cabinet doors, if necessary.	See the cabinet manufacturer's documentation.	
10	Turning on the server on page 24		
11	Troubleshoot the installation.		

Installing the Avaya S8800 Server

Rack installation components

The following figure shows the items that you need to install the server in the rack cabinet.



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1	Cable-management arm stop bracket (1)
2	Cable-management arm assembly
3	Slide rail (left)
4	Slide rail (right)
5	Large cable tie (1)
6	Cable ties (5)
7	M6 screws (4)
8	10–32 screws (2)
9	Cable-management support arm
10	Front of rails
11	Cable-management arm mounting bracket (1)

Attaching the rails to the rack

Prerequisites

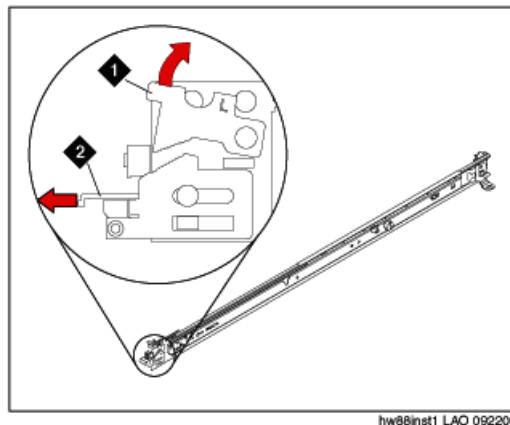
If the slide rails in your rack installation kit came with thumbscrews installed, remove them before you begin the following installation procedure.

Each slide rail is marked with either an R (right) or an L (left).

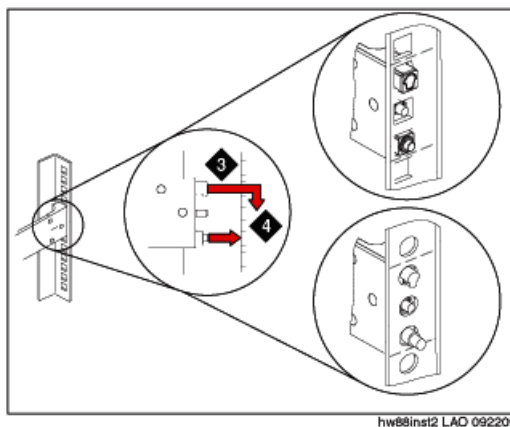
! Important:

The slide rails that come with the server are compatible with standard 19-inch, 4-post racks that have *square* holes. If you are installing the server in any other type of rack, Avaya requires that the customer provide the appropriate rails or shelf for their rack. Rack Solutions has numerous rail kits and shelf options. See <http://rs.innovationfirst.com/ibm-x3x50-m2-slide-rail-kit.shtml>. This slide rail kit or a shelf would replace the Avaya-supplied slide rail kit that ships with the server .

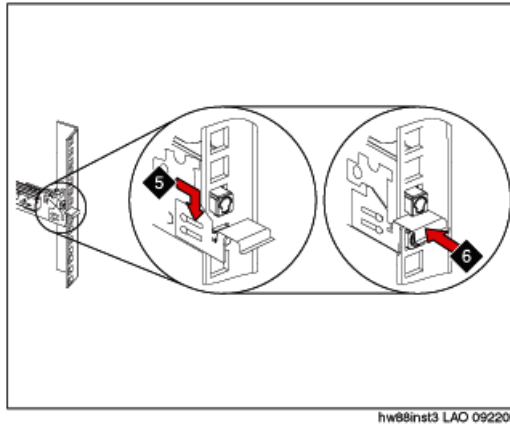
1. Select one of the slide rails and push up on the front moveable tab (1). See the following figure.



2. Pull out the front latch (2) to slide out the front side rail. See the preceding figure.
3. From the front of the rack, line up the three pins on the rear of the slide rail with the three holes in the selected U on the rear of the rack. Push the rails so that the pins go into the holes (3). See the following figure.



4. Drop the slide rail down (4) until it latches into place. See the preceding figure.
5. Pull the slide rail forward, and insert the two pins (5) on the front of the rail into the two lower holes in the U on the front of the rack. See the following figure. Drop the rail into place until it clicks.



6. Push the front latch (6) in all the way. See the preceding figure.
7. Repeat this procedure to install the other rail onto the rack.
8. Make sure that each front latch is fully engaged.

Next steps

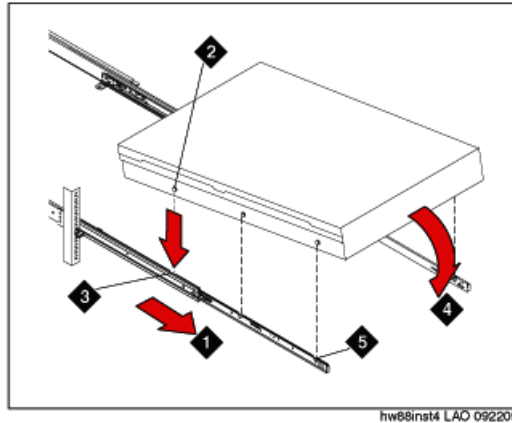
Install the server in the rack.

Installing the server in the rack

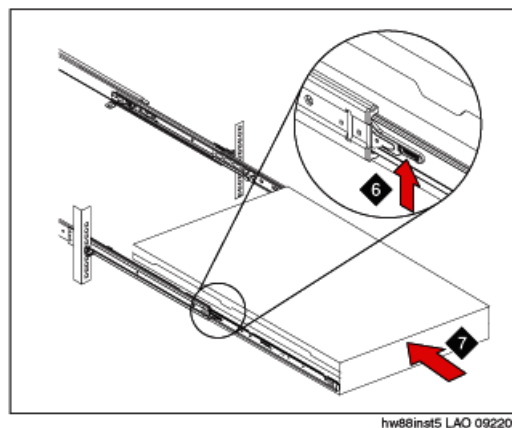
Prerequisites

Attach rails to the rack.

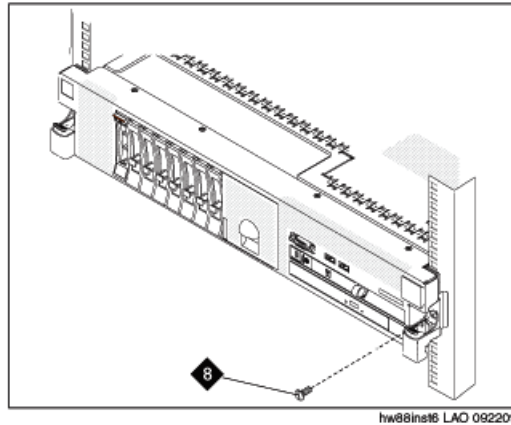
-
1. Pull the slide rails forward (1) until they click, two times, into place. See the following figure.



2. Carefully lift the server and tilt it into position over the slide rails so that the rear rail heads (2) on the server line up with the rear slots (3) on the slide rails. See the preceding figure.
3. Slide the server down until the rear rail heads slip into the two rear slots.
4. Slowly lower the front of the server (4) until the other rail heads slip into the other slots on the slide rails. See the preceding figure.
5. Make sure that the front latch (5) slides over the rail heads. See the preceding figure.
6. Lift the locking levers (6) on the slide rails. See the following figure.



7. Push the server (7) all the way into the rack until it clicks into place. See the preceding figure.
8. Insert the optional M6 screws (8) in the front of the server when you move the rack cabinet or if you install the rack cabinet in a vibration-prone area. See the following figure.



Next steps

Install the cable management arm if desired.

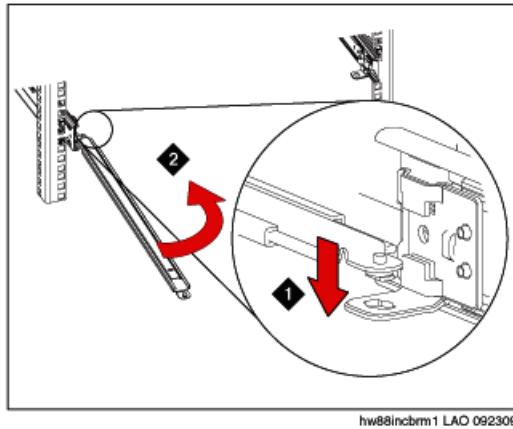
Installing the cable management arm

Prerequisites

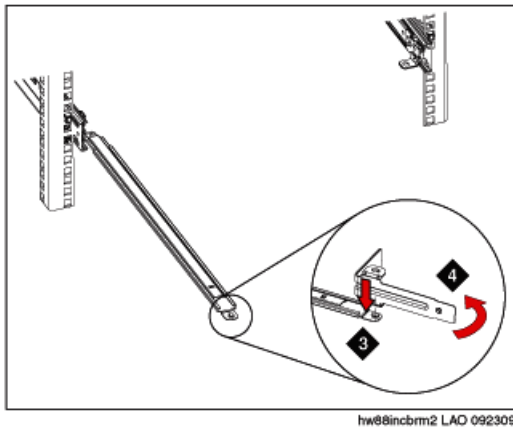
Attach rails to the rack and install the server in the rack.

The cable-management arm can be installed on either side of the server. This procedure shows it being installed on the left side. To install the cable-management arm on the right side, follow the instructions and install the hardware on the opposite side.

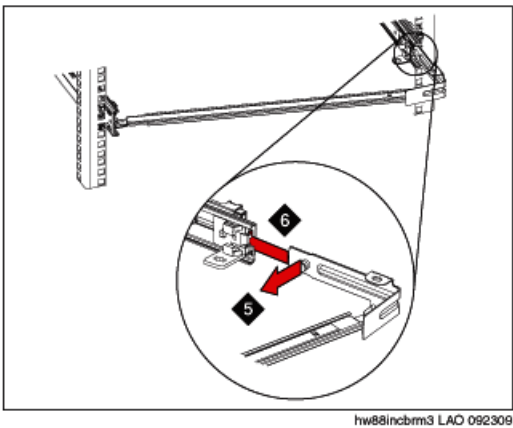
-
1. Connect one end of the support arm (1) to the same slide rail to which you plan to attach the cable-management arm so that you can swing the other end of the support arm (2) toward the rack. See the following figure.



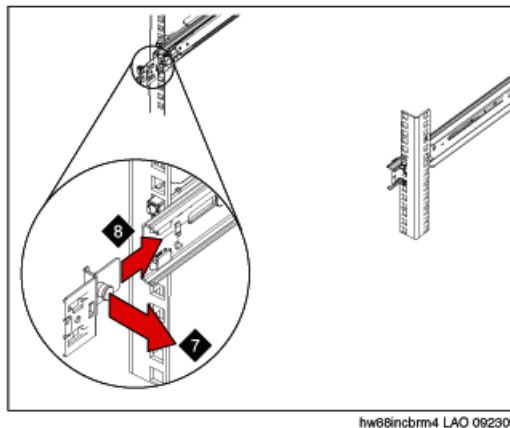
2. Install the L-shaped cable-management stop bracket (3) on the unattached end of the support arm. See the following figure



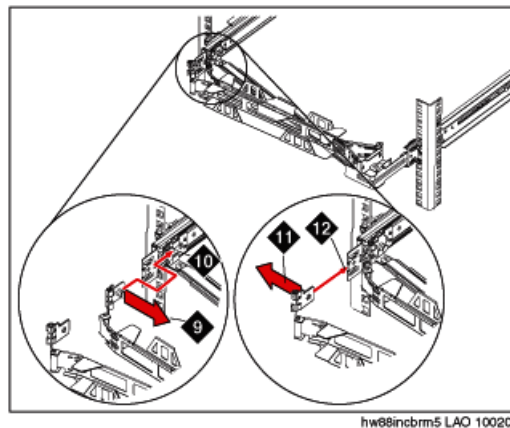
3. Turn the bracket (4) to secure it to the support arm. See the preceding figure.
4. To attach the other side of the support arm to the backside of the slide rail, pull the pin out (5), and then slide the bracket (6) into the slide rail. See the following figure.



5. Pull out the mounting bracket pin (7) and slide the mounting bracket (8) into the slide rail onto which you are installing the cable-management arm. See the following figure.



6. Push the bracket into the slide rail until the spring-loaded pin snaps into place.
7. Place the cable-management arm on the support arm.
8. Pull out the cable-management arm pin (9), and then slide the cable-management arm tab (10) into the slot on the inside of the slide rail. See the following figure.

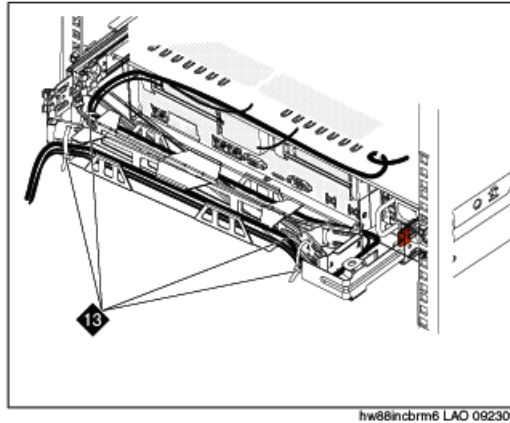


9. Push the tab until it snaps into place.
10. Pull out the other cable-management arm pin (11), and then slide that cable management arm tab into the slot (12) on the outside of the slide rail. See the preceding figure.
11. Push the tab until it snaps into place.
12. Attach the power cords and other cables to the rear of the server (including keyboard, monitor, and mouse cables, if required).
13. Route the cables and power cords on the cable-management arm (13) and secure them with cable ties or hook-and-loop fasteners. See the following figure.



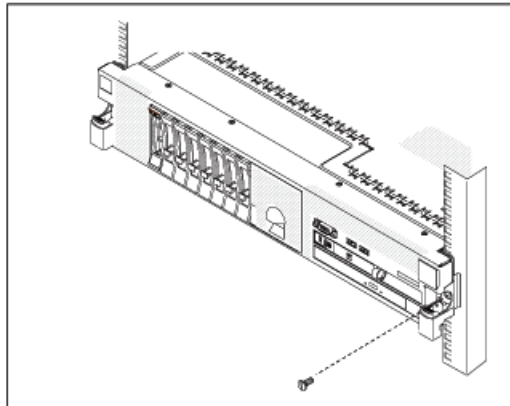
Note:

Allow slack in all cables to avoid tension in the cables as the cable-management arm moves.



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14. Slide the server into the rack until it snaps into place.
15. Insert the optional M6 screws in the front of the server when you move the rack cabinet or if you install the rack cabinet in a vibration-prone area. See the following figure.



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Turning on the server

After the server is installed in the rack, turn it on to make sure that it works. Once you determine that it works, turn it off before you start any software installation procedure.

**Important:**

You must wait for the power-on LED to blink slowly (one flash per second) before pressing the power button. If you press the power button while the power-on LED is blinking quickly (three flashes per second), the server will not turn on.

-
1. Plug one end of the power cord into the server power supply and the other end into a UPS or nonswitched outlet.
Approximately 5 seconds after the server is connected to power, one or more fans might start running to provide cooling, and the power-on LED will blink quickly (three flashes per second). Approximately 3 minutes after the server is connected to power, the power-on LED will blink slowly (one flash per second), and one or more fans might start running.
 2. Once the power-on LED begins to blink slowly, press the power button on the front of the server.
The power-on LED will stop blinking and stay lit. After you press the power button, the server takes approximately 5 minutes to initialize.
-

Next steps

See the specific product documentation for information on installing the operating system and software.

Chapter 3: Installing and connecting peripheral equipment

Installing peripheral equipment

Overview

You require peripheral equipment to complete the installation and connectivity for Communication Manager on an S8800 Server.

- UPS to improve the availability of the system and protect the equipment from electrical surges.
- Ethernet switch to connect the server to the data network.
- SAL Gateway to report alarms generated for Communication Manager and the server.
- USB card reader to back up data (optional).
- USB modem as an optional method to report alarms for the Communication Manager and the server.



Note:

Avaya recommends the use of SAL to provide remote access and alarm reporting for Communication Manager.

- Laptop for initial administration on the server.
- Cables to connect the server to the Ethernet switch and for a port network configuration.

Installing UPS

UPS provides an input voltage of 110 V or 220 V auto-sensing to the internal power supply of the server.

1. Place the UPS at the bottom of rack.
2. Connect one end of power-cord connector of the S8800 Server power supply to the UPS.
3. Connect the power cord of the UPS to a properly grounded electrical outlet.

 Important:

Avaya recommends that the SAL gateway use a separate UPS than the UPS used to supply power to the S8800 Server. It is also recommended to use separate UPS units for each S8800 Server in a duplex system.

Installing the Ethernet switch

1. Place the Ethernet switch on the rack.
2. Connect one end of the power cord to the Ethernet switch and the other end to an outlet on UPS.
3. Use a straight-CAT 5 cable to connect the appropriate Ethernet port on the S8800 Server to the Ethernet switch.

S8800 Ethernet port assignments

The following ethernet port assignments are the physical assignments on the server and the respective functionality. All Communication Manager templates use only eth0 as the interface to configure the server except for the Duplex main/survivable core template that uses eth0 and eth1 software interfaces to configure the server. eth1 is used for configuring the duplication parameters.

	Duplex main/ survivable core	simplex main/ survivable core	Embedded main (Federal market only)	simplex survivabl e remote	embedded survivable remote	NIC Locatio n
Ethernet 1	Corporate LAN / processor Ethernet	Corporate LAN / processor Ethernet	Corporate LAN / processor Ethernet	Corporate LAN / processor Ethernet	Corporate LAN / processor Ethernet	Located on motherb oard

	Duplex main/ survivable core	simplex main/ survivable core	Embedded main (Federal market only)	simplex survivabl e remote	embedded survivable remote	NIC Locatio n
Ethernet 2	services port	services port	services port	services port	services port	Located on motherb oard
Ethernet 3	Not Used	Not Used	Not Used	Not Used	Not Used	Located on the special daughte r board
Ethernet 4	Duplication link	Not used	Not used	Not used	Not used	Located on the special daughte r board
Ethernet 5	Corporate LAN / NIC bonding if configured This ethernet port is used as the second NIC for bonding to Ethernet Connector 1 for redundancy.	Corporate LAN / NIC bonding if configured This ethernet port is used as the second NIC for bonding to Ethernet Connector 1 for redundancy.	Corporate LAN / NIC bonding if configure d This ethernet port is used as the second NIC for bonding to Ethernet Connecto r 1 for redundan cy.	Corporate LAN / NIC bonding if configure d This ethernet port is used as the second NIC for bonding to Ethernet Connector 1 for redundan cy.	Corporate LAN / NIC bonding if configured This ethernet port is used as the second NIC for bonding to Ethernet Connector 1 for redundanc y.	Located on the PCI Dual NIC board
Ethernet 6	Not Used	Not Used	Not Used	Not Used	Not Used	Located on the PCI Dual NIC board

SAL gateway installation

Customer provided hardware

Personal computer

For more information about installing SAL, see the *Secure Access Link 1.8 SAL Gateway Implementation Guide*, available as part of the software download from the Product Licensing and Delivery System (PLDS) Web site: <http://plds.avaya.com>.

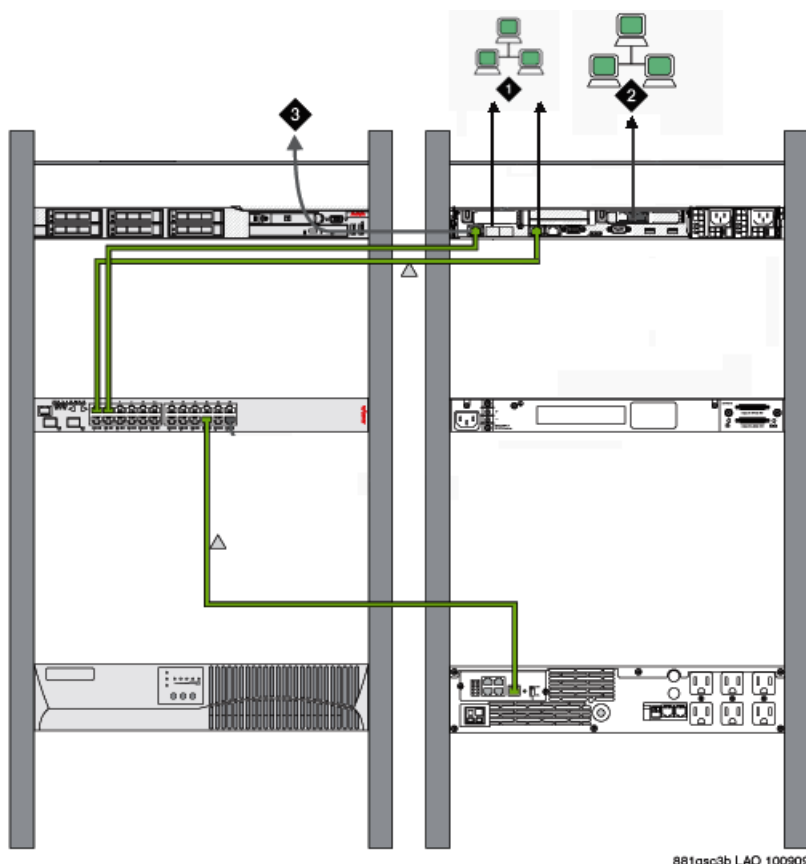
Connectivity

Connecting Ethernet cables

Use standard CAT5 cables with RJ-45 connectors on each end to connect the server, Ethernet switch, and port network (if there is any).

The S8800 Server can be connected to H.248 gateways as well as port networks.

1. Connect the Ethernet connector 1 to the Ethernet switch (customer LAN / processor Ethernet)
2. Connect the System management Ethernet connector (IMM) to the Ethernet switch.
3. Connect a bridged interface (Ethernet Connector 1(eth0) or Ethernet Connector 5) to the customer LAN. Ethernet Connector 5 is used as the second NIC for bonding to Ethernet Connector 1 for network redundancy.
4. Connect the Ethernet connector on UPS unit to the Ethernet switch.



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1	Bridged network interface (NIC bonding)
2	Customer LAN
3	System management Ethernet connector (IMM)

Connecting the USB card reader

1. Connect the USB card reader to one of the USB ports on the server.
2. Insert the compact flash card in the card reader.

Note:

You can hot swap the USB card reader. The USB card reader uses a 128 MB or higher capacity flash card to back up data.

Connecting laptop for initial administration

1. Connect a crossover CAT5 Ethernet cable to the network port of laptop.
2. Connect the other end of the Ethernet cable to the services port (Ethernet 2 (eth1)) of the S8800 Server.

Connecting to customer network

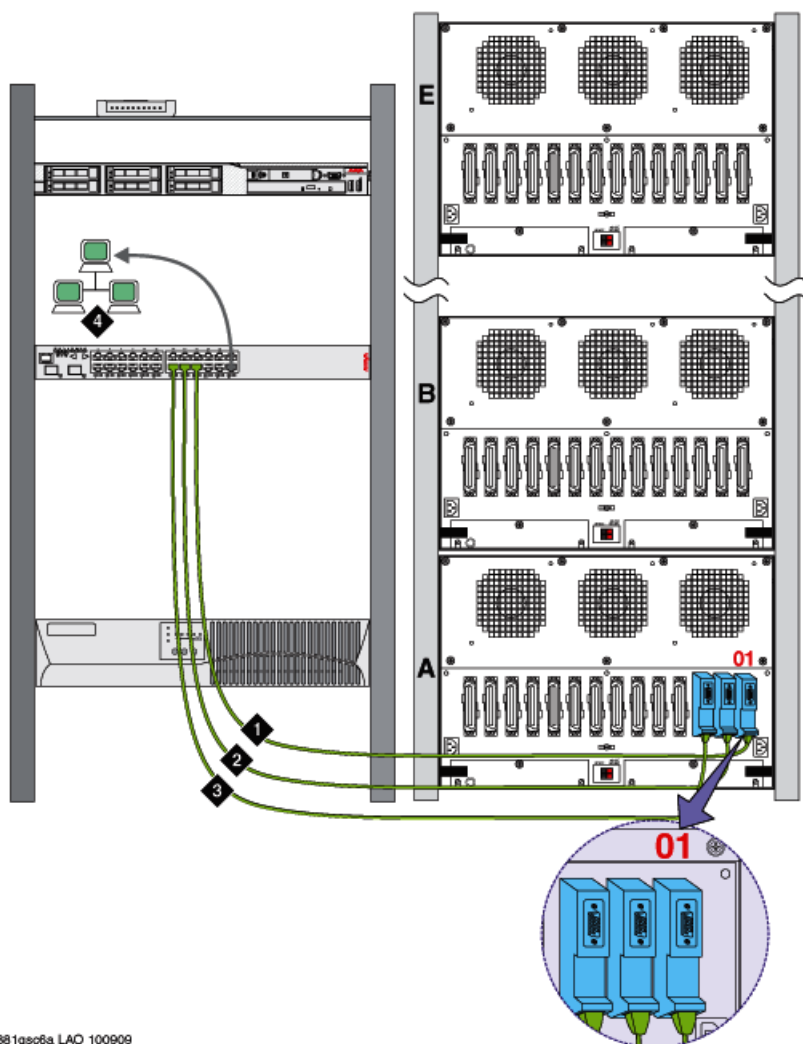
Use standard CAT5 cables with RJ45 connectors on each end to connect to the various ports. The S8800 server has 4 Ethernet ports (2 ports on the motherboard and 2 on the Dual NIC card) and a dedicated Ethernet port for the System management Ethernet connector (IMM) (also known as Baseboard Management Controller, BMC). BMC reports alarms to SAL.

eth0 is the interface used for all the Communication Manager templates except for the Duplex template which uses eth0 and eth1 to connect to the customer network / processor Ethernet / Corporate LAN.

Connecting to port networks

The S8800 Server can use port network(s) to connect to the customer network. A single port network can be composed of media gateways such as G650 (1 to 5 gateway units) that are connected by TDM cables.

There are other supported H.248 media gateways, such as G430, G450, G250, and G700 Media Gateways and so on that use Processor Ethernet to connect to the customer network. For a network configuration comprising entirely of H.248 gateways that use Processor Ethernet, there is no necessity to use port network(s).

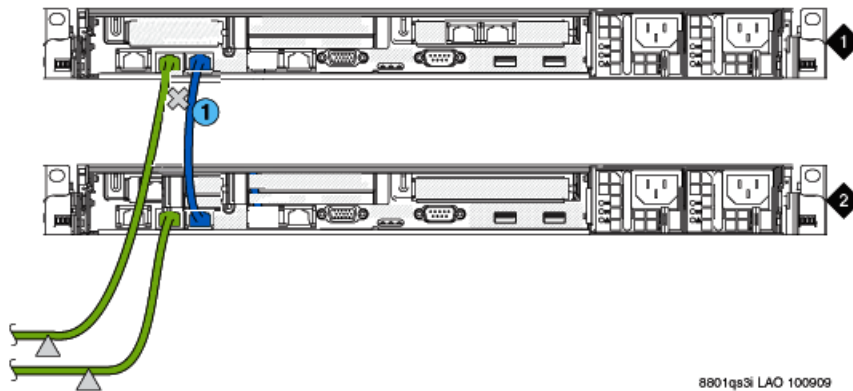


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1	IPSI card to Ethernet switch
2	MedPro card to Ethernet switch
3	C-LAN card to Ethernet switch
4	Non-dedicated network

Connecting the cables for software memory duplication

The S8800 server in duplex mode can only use software memory duplication as the duplication method. Ethernet connector 4 (eth 3) is the dedicated NIC port that is used for duplicated configuration.

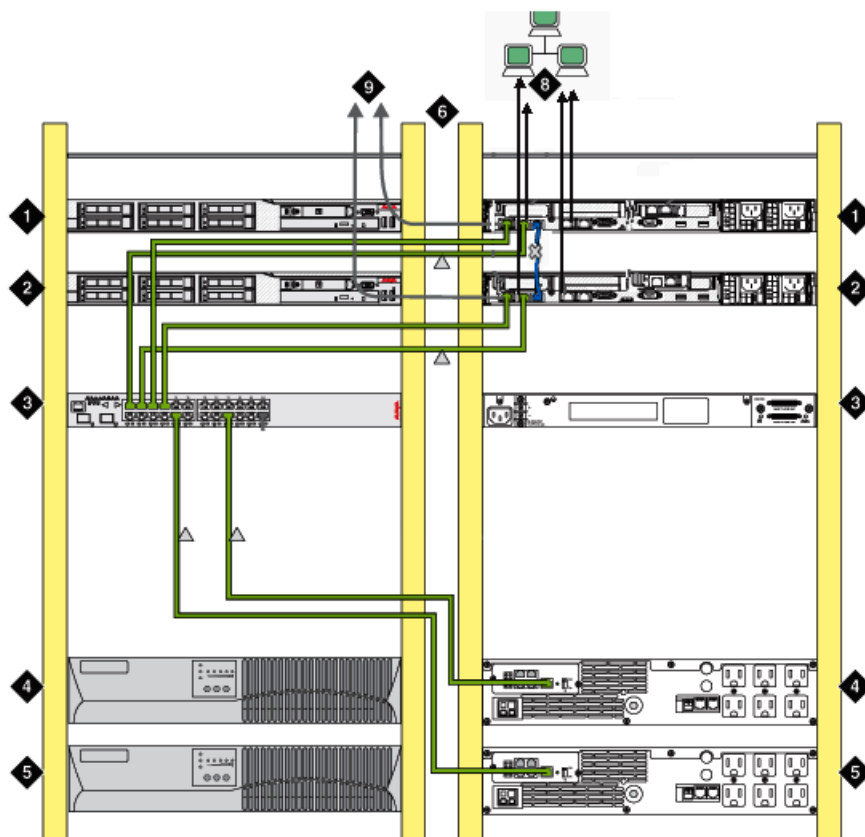


1,2	Rear view of the S8800 Server
X	No need to connect cable for memory duplication (only software memory duplication supported)

 Note:

After physical installation and connectivity of the S8800 Server and peripheral equipment for Communication Manager, refer to *Installing and Configuring Avaya Aura™ Communication Manager* Release 6.0 for installing and configuring Communication Manager on the S8800 Server.

Connecting for duplication reliability using software memory duplication



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1,2	Front and back view of server
3, 4	Front and back view of Ethernet switch
4, 5	Front and back view of UPS units
8	Bridged network interface (Two physical ports are bonded to form a bridge. The virtual NIC provides network redundancy and helps in better network performance)
9	System management Ethernet connector (IMM)

Chapter 4: Troubleshooting equipment

Troubleshooting the hardware installation

Avaya and customer equipment is missing

Troubleshooting steps

Contact your project manager.

The server has no power

Troubleshooting steps

- Make sure that the power cord is plugged into the back of the server and into a nonswitched outlet or UPS. If the server has a redundant power supply, make sure that power cords are plugged into both power supplies.
- If the server has a single power supply, it must be installed in power-supply bay 1. See “Back of server.”
- Make sure that the UPS is plugged into a nonswitched outlet.
- Make sure that the outlet has power.
- Push the power button on the front of the server. See [Turning on the server](#) on page 24.
- Check the power supply LEDs on the back of the server. During normal operation, the AC LED and DC LED are both lit.

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