



Avaya

Virtual Services Platform 7000 Series

VSP 7000 Hardware Ordering Checklist

Do you have the hardware you need?

Each switch is shipped with two fan trays and can support up to two power supplies.

Important: Power supply and fan tray direction must match. For example, if you require front to back cooling, you must ensure that the switch and power supply is designated for front to back cooling.

For...	Order	Order Code	Quantity
Front-to-Back cooling	√ VSP 7024XLS 24 SFP+ Base Unit, SW, and documentation, includes two fan trays, standard rack mount kits (19in & 23in)	AL700001F-E6	1
	√ VSP 7000 AC Power Supply Front2Back Cooling (No Power Cord*)	AL7000A0F-E6	1 or 2**†
Back-to-Front cooling	√ VSP 7024 XLS 24 SFP+ Base Unit, SW, and documentation, includes two fan trays, standard rack mount kits (19in & 23in)	AL700001B-E6	1
	√ VSP 7000 AC Power Supply Back2Front Cooling (No Power Cord*)	AL7000A0B-E6	1 or 2**†
4-post mounting bracket ‡	√ VSP 7000 Four Post Server Rack Mount Kit (optional)	AL7011001-E6	1
Console cabling	√ AVAYA RJ-45/DB-9 INTEGRATED CONSOLE CABLE Note: 1.5m cable with DB-9 Female for PC and RJ-45 for device console port.	AL2011022-E6	1

Be sure to order Direct Attach cables and SFP or SFP+ Transceivers as required. See Avaya Virtual Services Platform 7000 Series Installation - SFP and SFP+ (NN47202-302) for more information.

* F2B power supply and power cord variants: AL7000B0F-E6 = Europe, AL7000C0F-E6 = UK, AL7000D0F-E6 = Japan, AL7000E0F-E6 = North American, AL7000F0F-E6 = Australia/New Zealand

B2F power supply and power cord variants: AL7000B0B-E6 = Europe, AL7000C0B-E6 = UK, AL7000D0B-E6 = Japan, AL7000E0B-E6 = North American, AL7000F0B-E6 = Australia/New Zealand

** Avaya recommends two power supplies for redundancy, load sharing and full hot-swap replacement of a power supply for uninterrupted operation

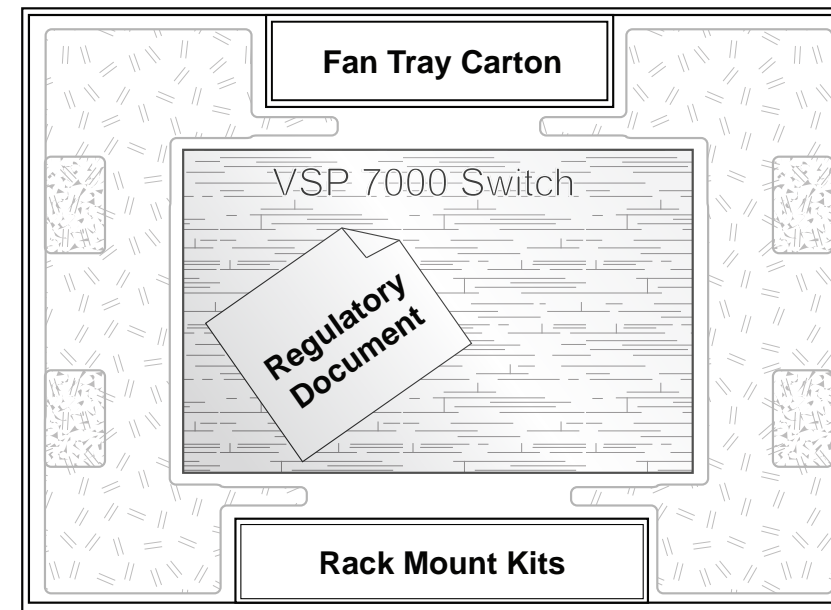
† The VSP 7000 switch supports the following power supply configurations: one AC power supply; one DC power supply; two AC power supplies; two DC power supplies; or one AC power supply and one DC power supply.

‡ Due to the weight of the VSP 7000 switch, a four post rack mount is recommended.

Installing the VSP 7000 Series

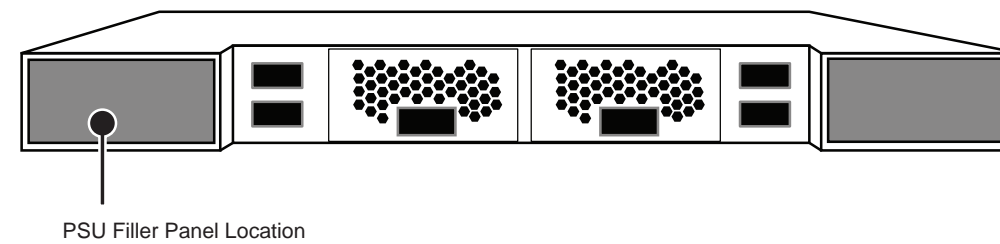
1. Unpack equipment

Unpack the Virtual Services Platform 7000.

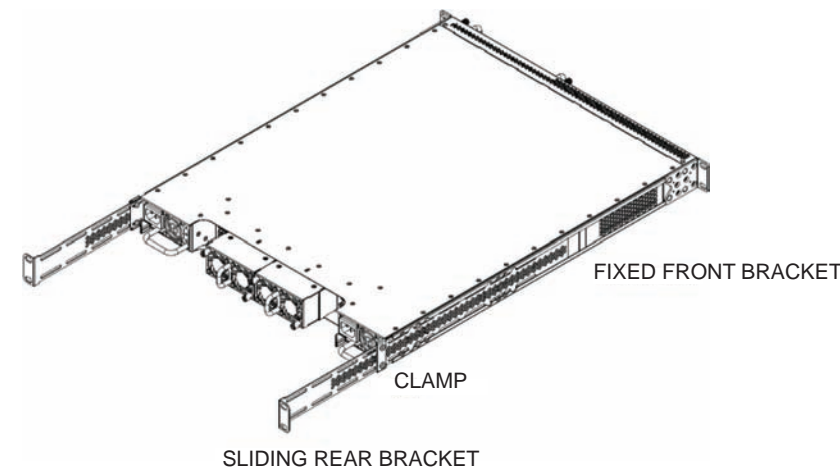


Observe ESD precautions when unpacking.

The switch ships with a filler panel in the second power supply position. This filler panel should stay in place if you do not intend to install a second power supply



2. Install the VSP 7000 switch in a rack



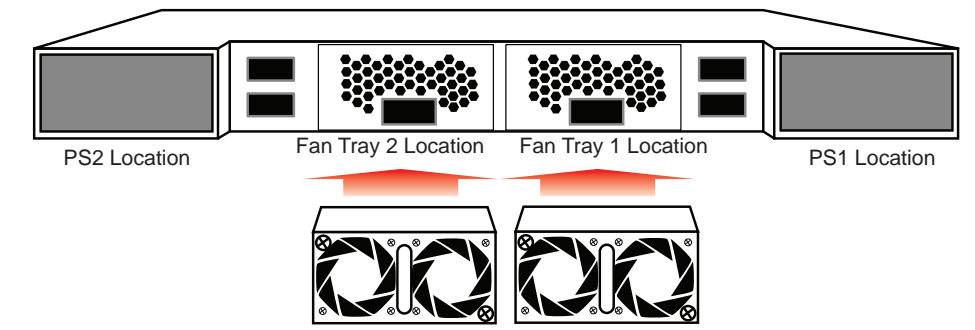
To install using the standard 19" or 23" rack mount brackets included with the switch:

- Using the mounting brackets included with the switch, attach a bracket to the front of each side of the switch with the included screws.
- Fasten the switch to the equipment rack with rack mount screws.

To install using the optional 4-port rack mount bracket:

- Attach a front bracket to each guide bracket with four M2 x 3mm long flat head machine screws.
- Attach the guide brackets to the switch chassis, using four M4 flat head Phillips machine screws to attach the front of each guide bracket to the switch chassis, and using two M4 low profile undercut flat head hex machine screws to attach the rear of each guide bracket to the switch chassis. Verify that the rear screws seat flush in the guide brackets.
- Install the switch into the equipment rack, temporarily using only the front rack mounts and screws.
- Slide the adjustable rear brackets into channels of the front brackets and then fasten the rear mount brackets to the rack.
- Secure and tighten the rear bracket with the included clamps (this is easier to perform without the power supplies or fan trays installed).

3. Install two Fan Trays in the VSP 7000 switch

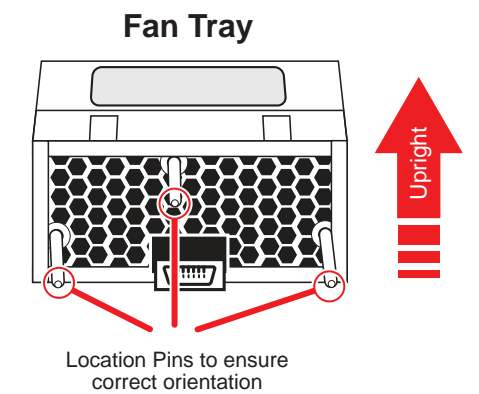


3b

- For correct switch operation, install both Fan Trays so that the airflow direction matches the primary Power Supply (PS1).

- Fan trays can only be inserted in one direction

- Use the three location pins on the Fan Tray to ensure correct orientation in the chassis. The Fan Tray is upright if the two location pins are at the bottom.



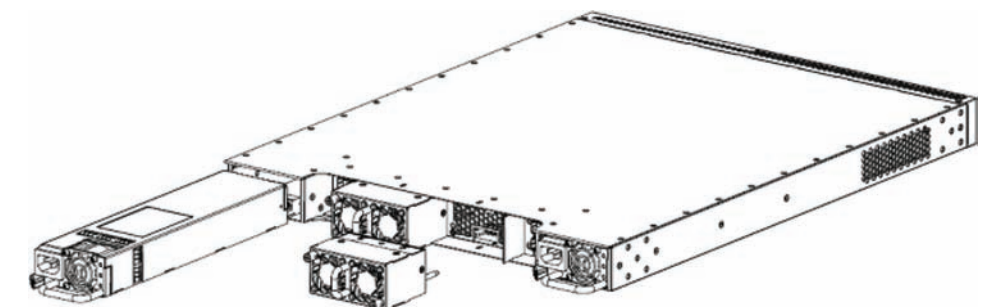
- Once the Fan Tray is installed, tighten the thumbscrews

4. Install Power Supply(s)

The first power supply should be installed in the PS1 location (see step 3). The power supply is location independent; you can install an AC or DC power supply into either power supply slot in the switch.

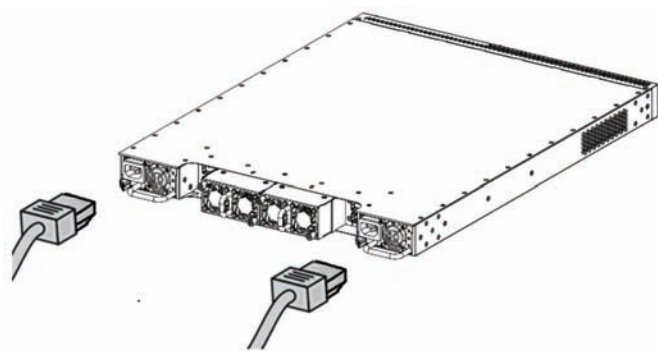
The airflow direction of the power supply in PS1 determines the primary airflow direction for the switch.

- Insert the first power supply into the rear PS1 power supply slot. If a blanking plate covers the required power supply slot, remove the plate before inserting the power supply. A small angle on the top corner of the power supply ensures that the power supply can only be installed in one orientation in the switch.
- Verify that the power supply is fully seated in the slot and securely clipped in place.
- Optional: Install the second power supply into the rear PS2 power supply slot. The switch ships with a filler panel in PS2 position. Leave the filler panel in place if you do not intend on installing a second power supply.



5 Connect AC power to the VSP 7000 switch

Connect AC power cord(s) to the back of the switch, and then plug the other end of the cord into an AC power outlet.



The switch will power on immediately once connected to a suitable AC power source. The switch does not have a power switch. Refer to the Avaya VSP 7000 Installation Guide for instructions on connecting DC power connections. The VSP 7000 boot sequence is shown below

```
7024XLS Boot-Loader 10.1.0.6
Testing main memory -PASSED
Serial Number: 11JP246V1004
Mac Address: 3C-B1-5B-FE-F4-00
Resets: 55

Starting Diagnostic Code Vers: 10.1.0.6
(to interrupt Diagnostics, type control-C and wait..)
7024XLS Diagnostics 10.1.0.6
Test 101 Flash IO Read -PASSED
Test 121 System SROM Labels -PASSED
Test 127 CBM SROM Labels -PASSED
Test 131 DTS Temperatures -PASSED
Test 141 RTC Clock -PASSED
Test 151 FANS Status -PASSED
Test 161 Power Supplies -PASSED
Test 171 POLS Status -PASSED
Test 173 RDACS Registers -PASSED
Trst 175 PPACS Status -PASSED
Test 211 TSEC Internal Loopback -PASSED
Test 271 Ports Internal Loopback -PASSED

Starting [ Agent-1 ] Vers: 10.2.0.000
Decompressing the image done.
Intilizing.....
Broadcom Command Monitor: Copyright (c) 1998-2010 Broadcom Corporation
Completing initialization...
```

Check LED status of the power supplies and fans. Status LEDs are on the front left side of the switch. For information on all status LEDs, see Avaya VSP 7000 Series Installation (NN47202-300).

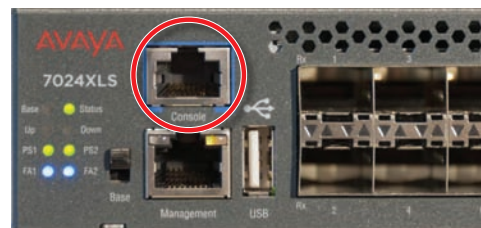
Your Setup		Status	
All setups	Status LED (Blinks) Green until agent software is loaded, then goes (Solid) Green	Base Up	PS1 PS2
Two Power supplies	Power Supply 1 (PS1) and Power Supply 2 (PS2) Green (Solid)	FA1 FA2	FA1 FA2
Front-to-Back fans	Fan Tray 1 (FA1) and Fan Tray 2 (FA2) Blue (Solid)		
One power supply	PS1 - Green (Solid) PSU2 - Not lit		
Back-to-Front fans	FA1 and FA2 Amethyst (Solid)		

6 Install SFP and SFP+ transceivers

Before installing, ensure the switch is up and running, and operating normally. Verify that the SFP or SFP+ transceivers and network cabling support your network configuration.

- If you are using direct attach cables, remove packaging, insert the transceiver connector into a switch port and insert the cable end into the required network device.
OR
If you are not using direct attach cables, remove packaging and insert the pluggable transceiver connector into a switch port. Ensure that the device clicks and locks into place. Proceed with steps 2 and 3.
- Remove the network interface cover from the transceiver connector (if applicable) and insert an appropriate network interface cable into the transceiver.
- Connect the opposite end of the network interface cable to your network.

1 Connect the console cable to the VSP 7000



The Console port is the RJ-45 port shown with a blue border outline on the front left side of the VSP 7000 switch. Use the console cable (AL2011022-E6) to connect the switch console port to your management terminal. The maximum length of the console cable is 25 feet (8.3 meters). The following table describes the RJ-45 console port pin-out information. You can use the pin-out information to verify or create a console cable for use with your maintenance terminal.

RJ-45 Jack	Name	Requirement	RJ-45 8-Pin Female Jack
1	RTS (ready to send)	Optional (can be swapped with pin 8)	
2	DTR (data terminal ready)	Optional	
3	TXD (transmit data)	Mandatory	
4	DCD (carrier detect)	Optional	
5	GND (ground)	Mandatory	
6	RXD (receive data)	Mandatory	
7	DSR (data set ready)	Optional	
8	CTS (clear to send)	Optional (can be swapped with pin 1)	

- Connect the console cable from the terminal to the console port of the switch to allow initial configuration. Any terminal or PC with the appropriate terminal emulator can be used as the management station. The table below lists the parameters that must be used with any terminal emulation software used to connect to the switch.
- Set the terminal protocol on the terminal or terminal emulation program to VT100 or VT100/ANSI.
- Connect to the switch using the terminal or terminal emulation application.
- Enter <CTRL-Y> to obtain a prompt.

Terminal emulation settings

Property	Value
Baud Rate	9600 bps
Data Bits	8
Stop Bits	1
Parity	None
Flow Control	None

Using Avaya Command Line Interface (ACLI)

Command Mode	Description	Entrance commands	Exit commands
User Executive (Exec mode) 7024XLS>	<ul style="list-style-type: none"> Default mode and Initial access mode Requires only Read access Used for basic commands such as show, ping, and logoff 	Default mode - no entrance command	exit or logoff
Privileged Executive (PrivExec mode) 7024XLS #	<ul style="list-style-type: none"> Used for basic switch level management tasks; e.g., downloading software images, setting passwords, starting the switch Requires Read-Write access 	enable or ena	exit or logoff
Global Configuration (Config mode) 7024XLS(config)#	<ul style="list-style-type: none"> Used to set and display general switch parameters such as IP address, SNMP parameters, Telnet access and VLANs Requires Read-Write access 	From PrivExec mode, enter configure or config	To return to PrivExec mode, enter end or exit. To exit ACLI completely, enter logout.
Interface Configuration (ifconfig mode) 7024XLS(config-if)#	<ul style="list-style-type: none"> Used to configure parameters for each port or VLAN such as speed, duplex mode, and rate limiting Requires Read-Write access 	From Config mode: To configure a port enter interface <port number>. To configure a VLAN, enter interface vlan <vlan number>	To return to Config mode, enter exit. To return to PrivEXEC mode, enter end. To exit ACLI completely, enter logout

2 Configure the Management IP Address

There are three methods to configure the management IP address:

- When you first log on if the switch is still in the factory default mode, it will automatically run the install script, which prompts for IP configuration information.
- If the switch is connected to a network, it can obtain an IP address via bootp or DHCP (not shown).
- Alternatively, you can manually run the installation script from Privileged EXEC mode with the following ACLI command: `install`

Install Script

When prompted, enter the management IP address, sub-net mask, and default gateway (shown in bold below).

```
#####
Welcome to the VSP7000 setup utility.
You will be requested to provide the switch basic connectivity settings.
After entering the requested info, the configuration will be applied and
stored into the switch NVRAM.

Once the basic connectivity settings are applied, additional configuration
can be done using the available management interfaces.
Use Ctrl+C to abort the configuration at any time.
#####

Please provide the Quick Start VLAN <1-4094> [1]:
Please provide the in-band IP Address[192.0.2.1]:
Please provide the in-band sub-net mask[255.255.255.0]:
Please provide the Default Gateway[192.0.2.0]:
Please provide the management IP Address[0.0.0.0]:
Please provide the management sub-net mask[0.0.0.0]:
Please provide the management Default Gateway[0.0.0.0]:
Please provide the Read-Only Community String[*****]:
Please provide the Read-Write Community String[*****]:
Please provide the in-band IPV6 Address/Prefix Length[:/0]:
Please provide the in-band IPV6 Default Gateway[:]:

#####
Basic stack parameters have now been configured and saved
#####
```

Manual Configuration

You can manually configure the in-band management IP address at any time with the following ACLI command:

```
ip address <A.B.C.D> [netmask <A.B.C.D>] [default-gateway <A.B.C.D>]
```

Example

```
1. Enter PrivExec mode:
7024XLS>enable

2. Enter the Global Config mode:
7024XLS#config terminal

3. Manually configure in-band management IP information
7024XLS(config)# ip address 192.0.2.1 netmask 255.255.255.0 default-gateway 192.0.2.0

4. Verify the information
7024XLS(config)#show ip
Bootp/DHCP Mode: BootP When Needed

-----
Configured      In Use      Last BootP/DHCP
-----
Stack IP Address: 0.0.0.0
Switch IP Address: 192.0.2.1 192.0.2.1 0.0.0.0
Switch Subnet Mask: 255.255.255.0 255.255.255.0 0.0.0.0
Mgmt Stack IP Address: 0.0.0.0
Mgmt Switch IP Address: 0.0.0.0
Mgmt Subnet Mask: 0.0.0.0
Mgmt Def Gateway: 0.0.0.0
Default Gateway: 192.0.2.0 192.0.2.0 0.0.0.0
```

ACLI boot and factory-default commands:

```
boot - reboot the switch
boot default - reboot and use the factory default configuration
boot partial-default - reboot and use the partial factory default configuration
restore factory-default - reset the switch to factory default configuration
```

Recommended reading

For more information, go to <http://support.avaya.com> and download the following VSP 7000 guides:
Regulatory Information (NN47202-102)
Documentation Roadmap (NN47202-103)
Installation (NN47202-300)
Getting Started (NN47202-303)
Release Notes (NN47202-400)



<http://support.avaya.com>
1-800-242-2121 (U.S.A.)
1-866-GO-AVAYA
1-866-462-8292 (US Sales)

Poster part number: 700506073
NN47202-304, 01.02