Quick Install Guide
Virtual Services Platform
2 Unpack the equipment and verify package content

Note: Observe ESD precautions when unpacking.

1. Avaya Virtual Services Platform (VSP) 4000 Series switch with one power supply installed.
2. Rack-mounting hardware that includes:
   - Phillips #2 screwdriver
   - Console cable to match the console connector on the switch (DB-9 or RJ-45)
   - ESD cable

3. Verify power supply unit (PSU) specifications

   Optionally order a redundant PSU to provide redundancy, load sharing, and add Power over Ethernet Plus (PoE+) budget power on PWR+ models.

   **VSP 4000 AC power specifications (VSP 4850GTS and VSP 4850GTS-PWR+):**

   **VSP model** | **Primary PSU** | **Redundant PSU**
   --- | --- | ---
   VSP 4850 GTS | 300W AC power supply (replacement order code: AL1905708-E5) | 300W AC power supply (replacement order code: AL1905708-E5)
   **Note:** The seventh character (T) of the switch order number must be replaced with the proper letter to indicate desired product nationalization.
   - **A:** No power cord included.
   - **B:** Includes European “Schuko” power cord common in Austria, Belgium, Finland, France, Germany, The Netherlands, Norway, and Sweden.
   - **C:** Includes power cord commonly used in the United Kingdom and Ireland.
   - **D:** Includes power cord commonly used in Japan.
   - **E:** Includes North American power cord.
   - **F:** Includes Australian power cord.

4. (Optional) Install redundant power supply unit

   The VSP 4000 Series switch supports two field-replaceable power supplies. One power supply is installed. You can optionally install a redundant power supply. The VSP 4000 switch comes in AC and DC power variants.

   **Use this procedure to install a redundant power supply:**

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

   - 1. If a blanking plate covers the required power supply slot, remove the blanking plate before attempting to insert the power supply.
   - 2. Insert the power supply into a rear power supply slot as shown below:

   ![Power Supply Insertion](image)

   - 3. Verify that each power supply is fully seated in the slot.
   - Secure the power supply with the two thumb screws.
   - **Note:** The switch chassis can prevent an incorrect installation of a power supply. If you insert a power supply upside down, it will not fully insert and the thumb screws will not engage.

   - 4. After you install a power supply, proceed with connecting AC power.

5. Mount the VSP 4000 switch

   **a. Table or Shelf mounting**

   If you mount the VSP 4000 switch on a table or shelf, attach the rubber feet to the device as indicated. The surface must support the combined weight of the switch and attached cables (from 15 to 20 pounds [7 to 9 kilograms]).

   Set the device on a flat surface near an AC power source, making sure there is at least 2 inches (5.1 cm) of space on all sides for proper airflow, and at least 5 inches (12.7 cm) at the back for power cord clearance.

   **b. Rack mounting**

   Prepare the rack:

   1. Provide the equivalent of one RU of vertical space for each switch in an EIA or IEC-standard 19-inch (48.2-centimeter) equipment rack.
   2. Ground the rack to the same grounding electrode used by the power service in the area. The ground path must be permanent and must not exceed 1 ohm of resistance from the rack to the grounding electrode. AVAYA recommends using a filter or surge suppressor.

   **Mount the switch:**

   1. Remove the screws that hold the USB cover for rack mounting, but do not remove the USB cover.
   2. Attach a bracket to each side of the switch using the #2 Phillips screw-driver as illustrated. The bracket goes over the USB cover.
   3. Slide the switch into the rack as illustrated. Insert and tighten the rack-mount screws.

For more details on installing the VSP 4000 Series, see Installing the Avaya Virtual Services Platform 4000 VSP4850GTS Series (NN46251-300).
6 Power Up

Connect the console cable to the VSP 4000

Console port cabling specifications:

Ensure the use of Category 5E or higher specification cabling for 1 Gbps/1000 Mbps operation. RJ-45 console port cables are as follows:

<table>
<thead>
<tr>
<th>PEC Code</th>
<th>Name</th>
<th>Short Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL2011020-E6</td>
<td>Avaya RJ-45 DB-9 CONSOLE CABLE</td>
<td>The VSP 4000 has an RJ-45 female connector, so a serial cable with RJ-45 connectors, or a serial cable with a DB-9 female connector on one end and an RJ-45 on the other is appropriate. The maximum length for the console port cable is 25 feet (8.3 meters).</td>
</tr>
<tr>
<td>AL2011021-E6</td>
<td>Avaya BLUE DB-9 MALE TO RJ-45 ADAPTOR</td>
<td>Converts DB-9 MALE to RJ-45 serial port. The adapter can be used to provide console connection.</td>
</tr>
</tbody>
</table>

On your VSP 4000 switch, the console port is the RJ-45 port outlined with a blue border on the front of your switch (note orientation). Use an RJ-45 to DB-9 cable to connect the switch console port to your management terminal. Use adapters to provide different connection options. The maximum length of a console cable is 25 feet (8.3 meters). The following tables describe the RJ-45 and DB-9 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.

DB–9 Console port pin assignments

<table>
<thead>
<tr>
<th>Connector</th>
<th>Pin Number</th>
<th>Signal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Carrier detect (not used)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Transmit Data (TXD)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Receive Data (RXD)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Data terminal ready (not used)</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Signal ground (GND)</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Not used</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Request to send (not used)</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Not used</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Ring indicator (not used)</td>
<td></td>
</tr>
</tbody>
</table>

RJ–45 Console port pin assignments

<table>
<thead>
<tr>
<th>Connector</th>
<th>Pin Number</th>
<th>Signal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ready to send (RTS) — optional</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Data terminal ready (DTR) — optional, can swap with pin 8</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Transmit data (TXD) — mandatory</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Carrier detect (DCD) — optional</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Ground (GND) — mandatory</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Receive data (RXD) — mandatory</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Data set ready (DSR) — optional</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Clear to send (CTS) — optional, can swap with pin 1</td>
<td></td>
</tr>
</tbody>
</table>

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.

2. Set the terminal protocol on the terminal or terminal emulation program to VT100 or VT100/ANSI.

3. Connect to the switch using the terminal or terminal emulation application.

Terminal emulation settings

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baud Rate</td>
<td>9600 bps</td>
</tr>
<tr>
<td>Data Bits</td>
<td>8</td>
</tr>
<tr>
<td>Stop Bits</td>
<td>1</td>
</tr>
<tr>
<td>Parity</td>
<td>None</td>
</tr>
<tr>
<td>Flow Control</td>
<td>None</td>
</tr>
</tbody>
</table>

Recommended reading

For more information, go to [http://support.avaya.com](http://support.avaya.com) and download the following VSP 4000 guides:

- Regulatory Information and Locating the Document (NN46251-105)
- Documentation Roadmap (NN46251-100)
- Installation (NN46251-300)
- Quick Start (NN46251-102)
- Release Notes (NN46251-401)
- Administration (NN46251-600)

Shutting down the VSP 4000

Caution: Before you unplug the AC power cord, always perform the following shutdown procedure. This procedure flushes any pending data to ensure data integrity.

1. Enter the Privileged EXEC command mode: enable
2. Shutdown the VSP 4000: sys shutdown
3. Before you unplug the power cord, wait until you see the following message:

System halted, OK to turn off power.

For more information on this and other administration procedures, see Avaya Virtual Services Platform 4000 Administration (NN46251-600).

Recommended reading

- Administration (NN46251-600)
- Release Notes (NN46251-401)
- Quick Start (NN46251-102)
- Installation (NN46251-300)
- Documentation Roadmap (NN46251-100)
- Regulatory Information and Locating the Document (NN46251-105)

3 Configure an in-band VLAN and a management IP interface for the VLAN

Note: In the following procedure you create a VLAN with ID 20 and name Avaya.

1. Create a VLAN:

   ```
   VSP-4850GTS-PWR+:1(config)#ip address 47.17.123.85 255.255.255.0
   VSP-4850GTS-PWR+:1(config)#interface vlan 20
   VSP-4850GTS-PWR+:1(config)#vlan members add 20 1/4
   VSP-4850GTS-PWR+:1(config)#vlan 20 name Avaya type port
   ```

2. Add VLAN members:

   ```
   VSP-4850GTS-PWR+:1(config)#ip address 47.17.123.85 255.255.255.0
   VSP-4850GTS-PWR+:1(config)#interface vlan 20
   ```

3. Configure a management IP interface for the VLAN (for example, 47.17.123.85)

   ```
   VSP-4850GTS-PWR+:1(config)#ip address 47.17.123.85 255.255.255.0
   VSP-4850GTS-PWR+:1(config)#ip address 47.17.123.85 255.255.255.0
   ```

4. Connect the VSP 4000 to the Internet: