



# **Using the Solution Deployment Manager client**

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# Chapter 1: Solution Deployment Manager client overview

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## Solution Deployment Manager client

For the initial System Manager deployment or when System Manager is inaccessible, you can use the Solution Deployment Manager client. The client can reside on the computer of the technician. The Solution Deployment Manager client provides the functionality to install the OVAs on an Avaya-provided server or customer-provided Virtualized Environment.

A technician can gain access to the user interface of the Solution Deployment Manager client from the computer or web browser.

The Solution Deployment Manager client runs on Windows 7 64-bit, Windows 8 64-bit, and Windows 10 64-bit.

Use the Solution Deployment Manager client to:

- Deploy System Manager and Avaya Aura<sup>®</sup> applications on Avaya appliances and Virtualized Environment.
- Upgrade System Platform-based System Manager.
- Install System Manager software patches, service packs, and feature packs.
- Install Appliance Virtualization Platform patches.
- Restart and shutdown the Appliance Virtualization Platform host.
- Start, stop, and restart a virtual machine.
- Change the footprint of Avaya Aura<sup>®</sup> applications that support dynamic resizing. For example, Session Manager and Avaya Breeze<sup>™</sup>.

 **Note:**

You can deploy or upgrade the System Manager virtual machine only by using the Solution Deployment Manager client.

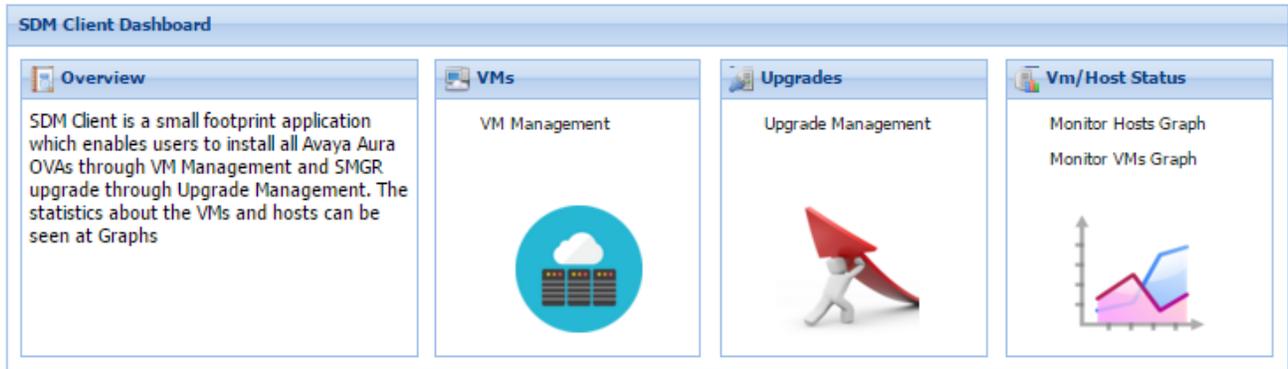


Figure 1: Solution Deployment Manager client dashboard

## Solution Deployment Manager client capabilities

The Solution Deployment Manager client provides the following capabilities and functionality:

- Runs on the technician computer on the following operating systems:
  - Windows 7, 64-bit Professional or Enterprise
  - Windows 8.1, 64-bit Professional or Enterprise
  - Windows 10, 64-bit Professional or Enterprise
- Supports the same web browsers as System Manager Release 7.1.
- Provides the user interface with similar look and feel as the central Solution Deployment Manager in System Manager Release 7.1.
- Supports deploying the System Manager OVA. The Solution Deployment Manager client is the only option to deploy System Manager.
- Supports Flexible footprint feature. The size of the virtual resources depends on the capacity requirements of the Avaya Aura® applications.
- Defines the physical location, Appliance Virtualization Platform or ESXi host, and discovers virtual machines that are required for application deployments and virtual machine life cycle management.
- Manages lifecycle of the OVA applications that are deployed on the ESXi host. The lifecycle includes start, stop, reset virtual machines, and establishing trust for virtual machines.
- Deploys the Avaya Aura® applications that can be deployed from the central Solution Deployment Manager for Avaya Aura® Virtualized Appliance and customer Virtualized Environment. You can deploy one application at a time.
- Configures application and networking parameters required for application deployments.
- Supports the local computer or an HTTP URL to select the application OVA file for deployment. You do not need access to PLDS.

- Supports changing the hypervisor IP address on Appliance Virtualization Platform.
- Supports installing patches for the hypervisor on Appliance Virtualization Platform.
- Supports installing software patches, service packs, and feature packs only for System Manager.

Avaya Aura<sup>®</sup> applications must use centralized Solution Deployment Manager from System Manager to install software patches, service packs, and feature packs.

# Chapter 2: Prerequisites

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## Avaya Aura<sup>®</sup> Release 7.1 applications

With the Solution Deployment Manager client, you can deploy the following Avaya Aura<sup>®</sup> Release 7.1 applications:

- Utility Services 7.0.1
- System Manager 7.0.1
- Session Manager 7.0.1
- Branch Session Manager 7.0.1
- Communication Manager 7.0.1
- Application Enablement Services 7.0.1
- WebLM 7.0.1
- Avaya Breeze<sup>™</sup> 3.1.1
- SAL 2.5
- Communication Manager Messaging 7.0
- Avaya Aura<sup>®</sup> Media Server 7.7.0.292 (SP3)
- Avaya Scopia<sup>®</sup> 8.3.5
- Avaya Proactive Contact 5.1.2

For more information about installing Avaya Proactive Contact and administering Appliance Virtualization Platform with Avaya Proactive Contact, see the Avaya Proactive Contact documentation.

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## Installing the Solution Deployment Manager client on your computer

### About this task

In Avaya Aura<sup>®</sup> Virtualized Appliance offer, when the centralized Solution Deployment Manager on System Manager is unavailable, use the Solution Deployment Manager client to deploy the Avaya Aura<sup>®</sup> applications.

You can use the Solution Deployment Manager client to install software patches and hypervisor patches.

Use the Solution Deployment Manager client to deploy, upgrade, and update System Manager.

**\* Note:**

Click **Next** only once, and wait for the installer to load the next screen.

**Before you begin**

1. If an earlier version of the Solution Deployment Manager client is running on the computer, remove the older version from **Control Panel > Programs > Programs and Features**.

If you are unable to uninstall, see *Uninstalling the Solution Deployment Manager client*.

2. Ensure that Windows 7, Windows 8.1 64-bit, or Windows 10 64-bit operating system is installed on the computer.

**+ Tip:**

On **Computer**, right-click properties, and ensure that Windows edition section displays the version of Windows operating system.

3. Ensure that at least 5 GB of disk space is available at the location where you want to install the client.

**+ Tip:**

Using the Windows file explorer, click **Computer**, and verify that the Hard Disk Drives section displays the available disk space available.

4. To avoid port conflict, stop any application server that is running on your computer.

**+ Tip:**

From the system tray, open the application service monitor, select the application server that you want to stop, and click **Stop**.

5. Ensure that the firewall allows the ports that are required to install the Solution Deployment Manager client installation and use the Solution Deployment Manager functionality.
6. Ensure that ports support Avaya Aura® 7.1 supported browsers.
7. Close all applications that are running on your computer.
8. Do not set CATALINA\_HOME as environment variable on the computer where you install the Solution Deployment Manager client.

**+ Tip:**

On **Computer**, right-click properties, and perform the following:

- a. In the left navigation pane, click **Advanced system settings**.
  - b. On the System Properties dialog box, click Advanced tab, and click **Environment Variables**.
  - c. Verify the system variables.
9. Ensure that the computer on which the Solution Deployment Manager client is running is connected to the network.

Operations that you perform might fail if the computer is not connected to the network.

## Procedure

1. Download the `Avaya_SDMClient_win64_7.1.0.0.05.xxx21574_33.zip` file from the Avaya PLDS website at <https://plds.avaya.com/>.  
On the Avaya PLDS website, at <https://plds.avaya.com/>, click **Support by Products > Downloads**, and provide the product **System Manager**, and version as **7.0.x**.
2. Copy the zip file, and extract to a location on your computer by using the WinZip application.  
You can also copy the zip file to your software library directory, for example, `c:/tmp/Aura`.
3. Right click on the executable, and select **Run as administrator** to run the `Avaya_SDMClient_win64_7.1.0.0.05.xxx21574_33.exe` file.  
The system displays the Avaya Solution Deployment Manager screen.
4. On the Welcome page, click **Next**.
5. On the License Agreement page, read the License Agreement, and if you agree to its terms, click **I accept the terms of the license agreement** and click **Next**.
6. On the Install Location page, perform one of the following:
  - To install the Solution Deployment Manager client in the system-defined folder, click **Restore Default Folder**.
  - To specify a different location for installation, click **Choose** and browse to an empty folder.
7. Click **Next**.
8. On the Preinstallation Summary page, review the information, and click **Next**.
9. On the User Input page, perform the following:
  - a. To start the Solution Deployment Manager client at the start of the system, select the **Automatically start SDM service at startup** check box.
  - b. To change the default directory, in Select Location of Software Library Directory, click **Choose** and select a directory.  
The system saves the artifacts in the specified directory. During deployments, you can select the OVA file from the directory.
  - c. In **Data Port No**, select the appropriate port from the range 1527 through 1627.
  - d. In **Application Port No**, select the appropriate port from the range 443 through 543.
  - e. **(Optional)** Click **Reset All to Default**.
10. On the Summary and Validation page, verify the product information and the system requirements.  
The system performs the feasibility checks, such as disk space and memory. If the requirements are not met, the system displays an error message. To continue with the installation, make the disk space, memory, and the ports available.
11. Click **Install**.
12. To exit the installer, on the Install Complete page, click **Done**.

The installer creates a shortcut on the desktop.

13. To start the client, click the Solution Deployment Manager client icon .

### Next steps

- Configure the laptop to get connected to the services port if you are using the services port to install.
- Connect the Solution Deployment Manager client to Appliance Virtualization Platform through the customer network or services port.

For more information, see “Methods to connect Solution Deployment Manager client to Appliance Virtualization Platform”.

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## Methods to connect the Solution Deployment Manager client to Appliance Virtualization Platform

You can connect the Solution Deployment Manager client to the Appliance Virtualization Platform server through:

- The customer network: When connected through the customers network the Solution Deployment Manager client can support multiple locations and hosts with unique IP address per host.

You must have an IP address on the customer network after the installing the Solution Deployment Manager client.

- The services port on the Appliance Virtualization Platform server: To enable the Solution Deployment Manager client to communicate with the services port of Appliance Virtualization Platform, technician computer must be set to:
  - IP address: 192.168.13.5
  - Netmask: 255.255.255.248
  - Gateway: 192.168.13.1

When connecting through the services port, the Solution Deployment Manager client supports one location and one Appliance Virtualization Platform host. The host IP address is 192.168.13.6 when using the client through the services port.

When using the Solution Deployment Manager client through the services port, after you complete deploying OVAs on a host, remove all virtual machines and the host from the Solution Deployment Manager client.

## Accessing the Solution Deployment Manager client dashboard

### About this task

#### \* Note:

If you perform deploy, upgrade, and update operations from the Solution Deployment Manager client, ignore the steps that instruct you to access System Manager Solution Deployment Manager and the related navigation links.

### Procedure

To start the Solution Deployment Manager client, perform one of the following:

- Click **Start > All Programs > Avaya**, and click **SDM Client > Avaya SDM Client**.
- Click .

## Checklist for Appliance Virtualization Platform initial installation using the Solution Deployment Manager client

Sr No.	Task
1	Download the Solution Deployment Manager client and install the client on your computer. Get the Appliance Virtualization Platform 7.0.1 on a DVD and a USB stick with <code>ks.cfg</code> file.
2	Install the Appliance Virtualization Platform 7.0.1 software on the server. <ul style="list-style-type: none"> <li>• Determine if Appliance Virtualization Platform software is preinstalled.</li> <li>• If not already installed, install the Appliance Virtualization Platform 7.0.1 software.</li> </ul>
3	Ensure that the computer is connected to the services port of the Appliance Virtualization Platform host. On your computer, set the following network parameters: <ul style="list-style-type: none"> <li>• IP address: 192.168.13.5</li> <li>• Subnetmask: 255.255.255.248</li> <li>• Default Gateway: 192.168.13.1</li> </ul>
4	Using the SSH client, log in to the Appliance Virtualization Platform server with 192.168.13.6 as root. <ul style="list-style-type: none"> <li>• For Appliance Virtualization Platform preinstalled on the common server, change the default password Avaya123\$.</li> <li>• Accept the end user license agreement.</li> </ul>

*Table continues...*

Checklist for Appliance Virtualization Platform initial installation using the Solution Deployment Manager client

Sr No.	Task
	<ul style="list-style-type: none"> <li>• If preinstalled, using the Solution Deployment Manager client, change Appliance Virtualization Platform IP address through CLI to the customer-provided IP address.</li> </ul>
5	<p>Start the Solution Deployment Manager client that is connected to services port, and click VM Management.</p> <ol style="list-style-type: none"> <li>1. Add a location.</li> <li>2. Add the Appliance Virtualization Platform host. If you connect the Solution Deployment Manager client to the host through: <ul style="list-style-type: none"> <li>• The services port, the IP address of the host is 192.168.13.6</li> <li>• The customer network, the host will be the IP address assigned through the <code>ks.cfg</code> file.</li> </ul> </li> <li>3. If available in 7.0.1, using the Solution Deployment Manager client, change IP address for preinstalled Appliance Virtualization Platform server.</li> <li>4. Add a new virtual machine for Utility Services OVA as required per host.</li> <li>5. Close the Solution Deployment Manager client.</li> </ol>
6	<ul style="list-style-type: none"> <li>• On your computer, set the following network parameters: <ul style="list-style-type: none"> <li>- IP address: 192.11.13.5</li> <li>- Subnetmask: 255.255.255.252</li> <li>- Default gateway: 192.11.13.6</li> </ul> </li> <li>• Using the SSH client, login to Utility Services with 192.11.13.6.</li> <li>• On Utility Services, run <code>swversion</code> and <code>cat /etc/hosts</code> commands.</li> </ul>
7	<p>Start Solution Deployment Manager client with IP address 192.11.13.5/30 to install other virtual machines on the Appliance Virtualization Platform host.</p>

# Chapter 3: Software library configuration

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## Software library on your computer

To the software library directory that you created while installing the Solution Deployment Manager client on your computer, you must copy:

- Avaya Aura<sup>®</sup> application OVA files
- Appliance Virtualization Platform service packs or feature pack
- System Manager service packs or feature pack

When you deploy an Avaya Aura<sup>®</sup> application OVA file, you must browse to the directory, and upload the OVA file. When you install the service pack or a feature pack to Appliance Virtualization Platform and System Manager, you must provide the complete path to this directory.

# Chapter 4: Virtual machine management

The VM Management link from Solution Deployment Manager provides the virtual machine management.

VM Management provides the following capabilities:

- Defines the physical location of Appliance Virtualization Platform or the ESXi host.
- Supports password change, patch installation, restart, shutdown, and certificate validation of host. Also, enables and disables SSH on the host.
- Manages lifecycle of the OVA applications that are deployed on the ESXi host. The lifecycle includes start, stop, reset virtual machines, and establishing trust for virtual machines.
- Deploys Avaya Aura® application OVAs on customer-provided Virtualized Environment and Avaya Aura® Virtualized Appliance environments.
- Removes the Avaya Aura® application OVAs that are deployed on a virtual machine.
- Configures application and networking parameters required for application deployments.
- Supports flexible footprint definition based on capacity required for the deployment of the Avaya Aura® application OVA.

You can deploy the OVA file on the virtual machine by using the System Manager Solution Deployment Manager and the Solution Deployment Manager client.

## Related links

[Certification validation](#) on page 76

# Chapter 5: Managing the location

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## Viewing a location

### Procedure

1. On the desktop, click the SDM icon () and then click **VM Management**.
2. Click the Locations tab.  
The Locations section lists all locations.

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## Adding a location

### About this task

You can define the physical location of the host and configure the location specific information. You can update the information later.

### Procedure

1. On the desktop, click the SDM icon () and then click **VM Management**.
2. On the Location tab, in the Locations section, click **New**.
3. In the New Location section, perform the following:
  - a. In the Required Location Information section, type the location information.
  - b. In the Optional Location Information section, type the network parameters for the virtual machine.
4. Click **Save**.

The system displays the new location in the VM Management Tree section.

### Related links

[New and Edit location field descriptions](#) on page 24

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## Editing the location

### Procedure

1. On the desktop, click the SDM icon () , and then click **VM Management**.
2. On the Location tab, in the Locations section, select a location that you want to edit.
3. Click **Edit**.
4. In the Edit Location section, make the required changes.
5. Click **Save**.

The Solution Deployment Manager client supports one location, therefore, do not change the location. You must delete all host and virtual machine information associated with the host after you complete your implementation.

### Related links

[New and Edit location field descriptions](#) on page 24

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## Deleting a location

### Procedure

1. On the desktop, click the SDM icon () , and then click **VM Management**.
2. On the Location tab, in the Locations section, select one or more locations that you want to delete.
3. Click **Delete**.
4. On the Delete confirmation dialog box, click **Yes**.

The system does not delete the virtual machines that are running on the host, and moves the host to **Unknown location host mapping > Unknown location**.

---

## VM Management field descriptions

### Locations

Name	Description
Location Name	The location name.
City	The city where the host is located.
Country	The country where the host is located.

Button	Description
<b>New</b>	Displays the New Location section where you can provide the details of the location that you want to add.
<b>Edit</b>	Displays the Edit Location section where you can change the details of an existing location.
<b>Delete</b>	Deletes the locations that you select.  The system moves the hosts associated with the deleted locations to unknown location.

## Hosts

Name	Description
<b>Host Name</b>	The name of the ESXi host.
<b>Host IP</b>	The IP address of the ESXi host.
<b>Host FQDN</b>	FQDN of the ESXi host.
<b>IPv6</b>	The IPv6 address of the ESXi host.  If the IP address of the ESXi host is an IPv4 address, the column does not display any value.
<b>vCenter FQDN</b>	The IP address or FQDN of vCentre.
<b>Current Action</b>	The operation that is currently being performed on the ESXi host.
<b>Last Action</b>	The last completed operation on the ESXi host.
<b>License Status</b>	The status of the license.
<b>Host Version</b>	The ESXi host version. The options are 5.5, 5.1, and 5.0. 6.0 only for VMware ESXi host.
<b>Offer Type</b>	The ESXi host type. The options are: <ul style="list-style-type: none"> <li>• <b>AVP</b>: Appliance Virtualization Platform host</li> <li>• <b>Customer VE</b>: customer-provided VMware ESXi host</li> </ul>
<b>SSH Status</b>	The SSH service status. The values are: <ul style="list-style-type: none"> <li>• <b>enabled</b></li> <li>• <b>disabled</b></li> </ul>
<b>Host Certificate</b>	The certificate status of the Appliance Virtualization Platform host. The values are: <ul style="list-style-type: none"> <li>• : The certificate is added in Solution Deployment Manager and correct.</li> <li>• : The certificate is not accepted or invalid.</li> </ul>

*Table continues...*

Name	Description
	You can click <b>View</b> for details of the certificate status.
<b>vCenter Certificate</b>	<p>The certificate status of the ESXi host. The values are:</p> <ul style="list-style-type: none"> <li>✓: The certificate is correct.</li> </ul> <p>The system enables all the options in <b>More Actions</b> that apply to VMware ESXi host.</p> <ul style="list-style-type: none"> <li>✗: The certificate is not accepted or invalid.</li> </ul> <p>You can click <b>View</b> for details of the certificate status.</p>

**\* Note:**

Depending on the Appliance Virtualization Platform host and vCenter certificate status, the system enables the options in **More Actions**.

Button	Description
<b>Auto Refresh</b>	<p>The option to automatically refresh the page with the latest changes. For example, the page updates:</p> <ul style="list-style-type: none"> <li>The VM state when a virtual machine changes</li> <li>The license status or certificate status of host when host changes</li> </ul> <p>The system refreshes the data every minute.</p>
<b>Add</b>	Displays the New Host section where you can provide the details of the host that you want to add.
<b>Edit</b>	Displays the Host Information section where you can change the details of an existing host.
<b>Remove</b>	<p>Removes the hosts that you select.</p> <p>The system moves the hosts associated with the deleted locations to unknown location.</p>
<b>Change Network Params &gt; Change Host IP Settings</b>	Displays the Host Network/IP Settings section where you can change the host IP settings for the Appliance Virtualization Platform host.
<b>Change Network Params &gt; Change Network Settings</b>	Displays the Host Network Setting section where you can change the network settings for the Appliance Virtualization Platform host.
<b>Refresh</b>	Refreshes the status of the hosts.
<b>More Actions &gt; AVP Update Management</b>	Displays the Update host page where you can select the file for updating the Appliance Virtualization Platform host.

*Table continues...*

Button	Description
<b>More Actions &gt; Change Password</b>	Displays the Change Password section where you can change the password for the Appliance Virtualization Platform host.
<b>More Actions &gt; SSH &gt; Enable SSH</b>	Enables SSH for the Appliance Virtualization Platform host.  When SSH for the Appliance Virtualization Platform host is enabled, the system displays <code>SSH enabled successfully</code> .
<b>More Actions &gt; SSH &gt; Disable SSH</b>	Disables SSH on the Appliance Virtualization Platform host.  When SSH for Appliance Virtualization Platform is disabled, the system displays <code>Disabling SSH for AVP host with &lt;IP address&gt; &lt;FQDN&gt;, &lt;username&gt;</code> .
<b>More Actions &gt; Syslog Config &gt; Push</b>	Displays the Push Syslog Configuration to Host dialog box, where you can select a Syslog profile to push the system log of selected hosts.
<b>More Actions &gt; Lifecycle Action &gt; Host Restart</b>	Restarts the host and virtual machines that are running on the Appliance Virtualization Platform host.
<b>More Actions &gt; Lifecycle Action &gt; Host Shutdown</b>	Shuts down the host and virtual machines that are running on the Appliance Virtualization Platform host.
<b>More Actions &gt; AVP Cert. Management &gt; Generate/Accept Certificate</b>	Displays the Certificate dialog box where you can manage certificates for the host.  Depending on the host type, the options are: <ul style="list-style-type: none"> <li>• <b>Generate Certificate:</b> To generate certificate for Appliance Virtualization Platform host only.</li> <li>• <b>Accept Certificate:</b> To accept a valid certificate for the host or vCenter.</li> <li>• <b>Decline Certificate:</b> To decline the certificate for Appliance Virtualization Platform host only. You must regenerate the certificate and accept if you decline a host certificate.</li> </ul>
<b>More Actions &gt; Push Login Banner</b>	Displays the Message of the Day dialog box from where you can push the login banner text to the selected host.

## Virtual Machines

Name	Description
<b>VM Name</b>	The name of the virtual machine.
<b>VM IP</b>	The IP address of the virtual machine.

*Table continues...*

Name	Description
<b>VM FQDN</b>	FQDN of the virtual machine.
<b>VM IPv6</b>	The IPv6 address of the virtual machine, if any.
<b>VM App Name</b>	The name of the application virtual machine . For example, Session Manager.
<b>VM App Version</b>	The version of the application virtual machine. For example, 7.0.0.0.
<b>VM State</b>	The state of the virtual machine. The states are <b>Started</b> and <b>Stopped</b> .
<b>Current Action Status</b>	<p>The status of the current operation. The statuses are:</p> <ul style="list-style-type: none"> <li>• <b>Deploying</b></li> <li>• <b>Starting</b></li> <li>• <b>Stopping</b></li> </ul> <p>The <b>Status Details</b> link provides the details of the operation in progress.</p>
<b>Last Action</b>	The last action performed on the virtual machine.
<b>Host Name</b>	The hostname of the VMware host or Appliance Virtualization Platform host
<b>Trust Status</b>	<p>The status of the connection between System Manager and the virtual machine.</p> <p>The status can be <b>Success</b> or <b>Failed</b>.</p> <p>When the connection between System Manager and the virtual machine establishes, <b>Trust Status</b> changes to <b>Success</b>.</p> <p>Only when the trust status is <b>Success</b>, you can perform other operations.</p>
<b>Data Store</b>	The data store with the available size.

Button	Description
<b>New</b>	Displays the VM Deployment section where you can provide the host and deploy an application.
<b>Edit</b>	Displays the VM Deployment section where you can change the details of a virtual machine.
<b>Delete</b>	Turns off the virtual machines and deletes the selected virtual machines.
<b>Start</b>	Starts the selected virtual machines.
<b>Stop</b>	Stops the selected virtual machines.
<b>Show Selected</b>	Displays only the selected virtual machines.

*Table continues...*

Button	Description
<b>More Actions &gt; Restart</b>	Starts the selected virtual machines that were stopped earlier.
<b>More Actions &gt; Refresh VM</b>	Updates the status of the virtual machines.
<b>More Actions &gt; Update VM</b>	Displays the System Manager VM section where you can install the software patches and service packs for System Manager virtual machine.
<b>More Actions &gt; Installed Patches</b>	Refreshes and displays the latest information of the software patch.
<b>More Actions &gt; Reestablish Connection</b>	Establishes the connection between System Manager and the virtual machine.  When the connection between System Manager and the virtual machine establishes, the <b>Trust Status</b> changes to <b>Success</b> .
<b>More Actions &gt; Update Static Routing</b>	Displays the VM Update Static Routing section where you can update the IP address of Utility Services for static routing.
	Displays the Push Syslog Configuration section where you can push the syslog configuration of the virtual machine.
	Displays the View Syslog Configuration section where you can view all configured syslog profiles.

## New and Edit location field descriptions

### Required Location Information

Name	Description
<b>Name</b>	The location name.
<b>Avaya Sold-To #</b>	The customer contact number.  Administrators use the field to check entitlements.
<b>Address</b>	The address where the host is located.
<b>City</b>	The city where the host is located.
<b>State/Province/Region</b>	The state, province, or region where the host is located.
<b>Zip/Postal Code</b>	The zip code of the host location.
<b>Country</b>	The country where the host is located.

**Optional Location Information**

<b>Name</b>	<b>Description</b>
<b>Default Gateway</b>	The IP address of the virtual machine gateway. For example, 172.16.1.1.
<b>DNS Search List</b>	The search list of domain names.
<b>DNS Server 1</b>	The DNS IP address of the primary virtual machine. For example, 172.16.1.2.
<b>DNS Server 2</b>	The DNS IP address of the secondary virtual machine. For example, 172.16.1.4.
<b>NetMask</b>	The subnetwork mask of the virtual machine.
<b>NTP Server</b>	The IP address or FQDN of the NTP server. Separate the IP addresses with commas (,).

<b>Button</b>	<b>Description</b>
<b>Save</b>	Saves the location information and returns to the Locations section.
<b>Edit</b>	Updates the location information and returns to the Locations section.
<b>Delete</b>	Deletes the location information, and moves the host to the Unknown location section.
<b>Cancel</b>	Cancels the add or edit operation, and returns to the Locations section.

# Chapter 6: Managing the host

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## Adding an ESXi host

### About this task

Use the procedure to add an Appliance Virtualization Platform or ESXi host. You can associate an ESXi host with an existing location.

### Before you begin

A location must be available.

### Procedure

1. On the desktop, click the SDM icon () and then click **VM Management**.
2. In VM Management Tree, select a location.
3. On the Host tab, in the Hosts for Selected Location <location name> section, click **New**.
4. In the New Host section, provide the following:
  - a. Host name, IP address, user name, and password.
  - b. If you are connected through the services port, set the host IP address to 192.168.13.6.
5. Click **Save**.
6. On the Certificate dialog box, click **Accept Certificate**.

The system generates the certificate and adds the Appliance Virtualization Platform host. For the ESXi host, you can only accept the certificate. If the certificate is invalid, to generate certificate, see the VMware documentation.

In the VM Management Tree section, the system displays the new host in the specified location. The system also discovers applications.

### Related links

[New and Edit host field descriptions](#) on page 38

[Generating and accepting certificates](#) on page 77

---

## Editing an ESXi host

### Procedure

1. On the desktop, click the SDM icon () , and then click **VM Management**.
2. In VM Management Tree, select a location.
3. On the Host tab, in the Hosts for Selected Location <location name> section, select an ESXi host that you want to update.
4. Change the ESXi host information.

If you connect the Solution Deployment Manager client to Appliance Virtualization Platform through the services port, the host IP address must be 192.168.13.6.

5. Click **Save**.

The system updates the ESXi host information.

### Related links

[New and Edit host field descriptions](#) on page 38

---

## Installing the Appliance Virtualization Platform patch from the Solution Deployment Manager client

### About this task

Install the Release 7.1 feature pack on the existing Appliance Virtualization Platform Release 7.1 by using the Solution Deployment Manager client or System Manager Solution Deployment Manager.

#### **Note:**

From System Manager Solution Deployment Manager, you cannot update an Appliance Virtualization Platform that hosts this System Manager.

Do not use this procedure for installing the Appliance Virtualization Platform patch on an S8300D server.

### Before you begin

1. Install the Solution Deployment Manager client on your computer.
2. Add a location.
3. Add a host.
4. Enable the SSH service on the Appliance Virtualization Platform host.
5. Stop all virtual machines that are running on the Appliance Virtualization Platform host.

**\* Note:**

Install only Avaya-approved service packs or software patches on Appliance Virtualization Platform. Do not install the software patches that are downloaded directly from VMware®.

**Procedure**

1. On the desktop, click the SDM icon () and then click **VM Management**.
2. In VM Management Tree, select a location.
3. On the **Host** tab, in the Hosts for Selected Location <location name> section, select the Appliance Virtualization Platform host, and click **More Actions > AVP Update/Upgrade Management**.
4. On the Update Host page, click **Select patch from local SDM client machine**.
5. In **Select patch file**, provide the absolute path to the patch file of the host, and click **Update Host**.

For example, the absolute path on your computer can be /tmp/avp/avaya-avp-7.0.0.1.0.5.zip.

In the Hosts for Selected Location <location name> section, the system displays the update status in the **Current Action** column.

6. To view the details, in the **Current Action** column, click **Status Details**.

Host Create/Update Status window displays the details. The patch installation takes some time. When the patch installation is complete, the **Current Action** column displays the status.

**Next steps**

If virtual machines that were running on the Appliance Virtualization Platform host does not automatically start, manually start the machines.

**Related links**

[Update field descriptions](#) on page 41

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## Changing the network parameters for an Appliance Virtualization Platform host

**About this task**

Use this procedure to change the network parameters of Appliance Virtualization Platform after deployment. You can change network parameters only for the Appliance Virtualization Platform host.

**\* Note:**

If you are connecting to Appliance Virtualization Platform through the public management interface, you might lose connection during the process. Therefore, after the IP address changes, close the Solution Deployment Manager client, and restart the client by using the new IP address to reconnect.

**Before you begin**

Install the Solution Deployment Manager client on your computer.

**Procedure**

1. On the desktop, click the SDM icon () and then click **VM Management**.
2. In VM Management Tree, select a location.
3. On the Host tab, in the Hosts for Selected Location <location name> section, select an ESXi host and click **Change Network Params > Change Host IP Settings**.
4. In the Host Network/ IP Settings section, change the IP address, subnetmask, and other parameters as appropriate.
5. To change the gateway IP address, perform the following:
  - a. Click **Change Gateway**.  
The **Gateway** field becomes available for providing the IP address.
  - b. In **Gateway**, change the IP address.
  - c. Click **Save Gateway**.
6. Click **Save**.

The system updates the Appliance Virtualization Platform host information.

**Related links**

[Change Network Parameters field descriptions](#) on page 38

---

## Changing the network settings for an Appliance Virtualization Platform host from Solution Deployment Manager

**About this task**

With Appliance Virtualization Platform, you can team NICs together to provide a backup connection when the server NIC or the Ethernet switch fails. You can also perform NIC teaming from the command line on Appliance Virtualization Platform.

Appliance Virtualization Platform supports Active-Standby and Active-Active modes of NIC teaming. For more information, see “NIC teaming modes”.

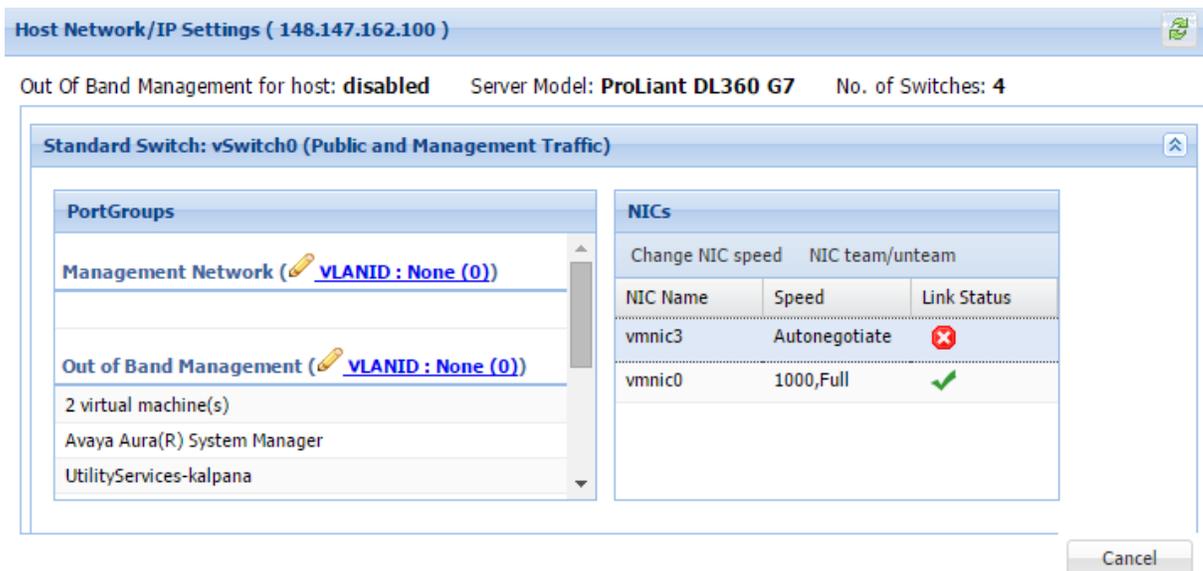
**\* Note:**

- If you add a host with service port IP address in Solution Deployment Manager and change the IP address of the host to the public IP address by using Host Network/ IP Settings, the system updates the public IP address in the database. Any further operations that you perform on the host fails because public IP address cannot be reached with the service port. To avoid this error, edit the host with the service port IP address again.
- If FQDN of the Appliance Virtualization Platform host is updated by using Host Network/IP setting for domain name, refresh the host to get the FQDN changes reflect in Solution Deployment Manager.

Use this procedure to change network settings, such as changing VLAN ID, NIC speed, and NIC team and unteaming for an Appliance Virtualization Platform host.

**Procedure**

1. On the desktop, click the SDM icon () , and then click **VM Management**.
2. In VM Management Tree, select a location.
3. On the Host tab, in the Host for Selected Location <location name>, select an Appliance Virtualization Platform host.
4. Click **Change Network params > Change Network Settings**.



The Host Network/ IP Settings page displays the number of switches as 4.

You can configure port groups for the following switches:

- **vSwitch0**, reserved for the Public and Management traffic.
- **vSwitch1**, reserved for services port. You cannot change the values.
- **vSwitch2**, reserved for Out of Band Management.
- **vSwitch3**. No reservations.

5. To change VLAN ID, perform the following:

- a. To expand the Standard Switch: vSwitch<n> section, click .

The section displays the vSwitch details.

- b. Click on the VLANID link or the edit icon ().

The system displays the Port Group Properties page where you can edit the VLAN ID port group property.

- c. In **VLAN ID**, select an ID from the available values.

For more information about the value, see NIC teaming.

- d. Click **OK**.

The system displays the new VLAN ID.

 **Note:**

You can change the services port VLAN ID for S8300D servers only through Solution Deployment Manager.

6. To change the NIC speed, perform the following:

- a. Ensure that the system displays a vmnic in the **NIC Name** column.

- b. Click **Change NIC speed**.

The system displays the selected vmnic dialog box.

- c. In **Configured speed, Duplex**, click a value.

- d. Click **OK**.

For more information, see VLAN ID assignment.

The system displays the updated NIC speed in the **Speed** column.

If the NIC is connected, the system displays  in **Link Status**.

 **Note:**

You can change the speed only for common servers. You cannot change the speed for S8300D and S8300E servers.

7. To change the NIC teaming, perform the following:

- a. Select a vmnic.

- b. Click **NIC team/unteam**.

The system displays the Out of Band Management Properties page.

- c. To perform NIC teaming or unteaming, select the vmnic and click **Move Up** or **Move Down** to move the vmnic from **Active Adapters**, **Standby Adapters**, or **Unused Adapters**.

For more information, see NIC teaming modes.

- d. Click **OK**.

The vmnic teams or unteams with **Active Adapters**, **Standby Adapters**, or **Unused Adapters** as required.

- e. To check the status of the vmnic, click **NIC team/ unteam**.

8. To get the latest data on host network IP settings, click **Refresh** .

The system displays the current status of the vmnic.

 **Note:**

You cannot perform NIC teaming for S8300D and S8300E servers.

**Related links**

[Host Network / IP Settings field descriptions](#) on page 40

---

## Changing the password for an Appliance Virtualization Platform host

### About this task

You can change the password only for the Appliance Virtualization Platform host. This is the password for the user that you provide when adding the Appliance Virtualization Platform host.

### Procedure

1. On the desktop, click the SDM icon () and then click **VM Management**.
2. In VM Management Tree, select a location.
3. On the Host tab, in the Hosts for Selected Location <location name> section, select an ESXi host and click **More Actions > Change Password**.
4. In the Change Password section, enter the current password and the new password.  
For more information about password rules, see “Password policy”.
5. Click **Change Password**.

The system updates the password of the Appliance Virtualization Platform host.

**Related links**

[Password policy](#) on page 33

[Change Password field descriptions](#) on page 41

## Password policy

The password must meet the following requirements:

- Must contain at least eight characters.
- Must contain at least one of each: an uppercase letter, a lowercase letter, a numerical, and a special character.
- Must not contain an uppercase letter at the beginning and a digit or a special character at the end.

Examples of invalid passwords:

- Password1: Invalid. Uppercase in the beginning and a digit at the end.
- Password1!: Uppercase in the beginning and a special character at the end.

Example of a valid password: myPassword!1ok

If the password does not meet the requirements, the system prompts you to enter a new password. Enter the existing password and the new password in the correct fields.

Ensure that you keep the root password safe. You need the password while adding the host to Solution Deployment Manager and for troubleshooting.

### Related links

[Changing the password for an Appliance Virtualization Platform host](#) on page 32

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# Enabling and disabling SSH on Appliance Virtualization Platform from Solution Deployment Manager

## About this task

For security purpose, SSH access to Appliance Virtualization Platform shuts down in the normal operation. You must enable the SSH service on Appliance Virtualization Platform from Solution Deployment Manager.

You can also enable SSH from Utility Services.

## Procedure

1. On the desktop, click the SDM icon () and then click **VM Management**.
2. In VM Management Tree, select a location.
3. Select an Appliance Virtualization Platform host.
4. To enable SSH, click **More Actions > SSH > Enable SSH**.  
The system displays `enabled` in the **SSH status** column.
5. To disable SSH, click **More Actions > SSH > Disable SSH**.

The system displays `disabled` in the **SSH status** column.

---

## Activating SSH from Utility Services

### About this task

For security purpose, SSH access to Appliance Virtualization Platform shuts down in the normal operation. You must activate SSH on Appliance Virtualization Platform.

When you install or preinstall Appliance Virtualization Platform on a server, SSH is enabled. After you accept the license terms during Appliance Virtualization Platform installation, SSH shuts down within 24 hours. After SSH shuts down, you must reactivate SSH by using the `AVP_SSH enable` command from Utility Services.

### Before you begin

Start an SSH session.

### Procedure

1. Log in to the Utility Services virtual machine running on Appliance Virtualization Platform with an admin account.
2. Type `cd /opt/avaya/common_services`.
3. Type the following:

```
ls
AVP_SSH enable
```

Within 3 minutes, from Utility Services, the SSH service starts on Appliance Virtualization Platform and runs for two hours. After two hours, you must reactivate SSH from Utility Services.

When SSH is enabled, you can use an SSH client such as PuTTY to gain access to Appliance Virtualization Platform on customer management IP address or the services port IP address of 192.168.13.6.

4. **(Optional)** To find the status of SSH, type `AVP_SSH status`.
5. To disable SSH, type `AVP_SSH disable`.

---

## Changing the IP address and default gateway of the host

### About this task

When you change the default gateway and IP address from the vSphere, the change might be unsuccessful.

You cannot remotely change the IP address of the Appliance Virtualization Platform host to a different network. You can change the IP address remotely only within the same network.

To change the Appliance Virtualization Platform host to a different network, perform Step 2 or Step 3.

### Before you begin

Connect the computer to the services port.

### Procedure

1. Using an SSH client, log in to the Appliance Virtualization Platform host.
2. Connect the Solution Deployment Manager client to services port on the Appliance Virtualization Platform host, and do the following:
  - a. To change the IP address, at the command prompt of the host, type the following:

```
esxcli network ip interface ipv4 set -i vmk0 -I <old IP address of the host> -N <new IP address of the host> -t static
```

For example:

```
esxcli network ip interface ipv4 set -i vmk0 -I 135.27.162.121 -N 255.255.255.0 -t static
```

- b. To change the default gateway, type `esxcfg-route <new gateway IP address>`.

For example:

```
esxcfg-route 135.27.162.1
```

3. Enable SSH on the Appliance Virtualization Platform host and run the `./serverInitialNetworkConfig` command.

For more information, see *Configuring servers preinstalled with Appliance Virtualization Platform*.

---

## Shutting down the Appliance Virtualization Platform host

### About this task

You can perform the shutdown operation on one Appliance Virtualization Platform host at a time. You cannot schedule the operation.

### Procedure

1. On the desktop, click the SDM icon () and then click **VM Management**.
2. In VM Management Tree, select a location.
3. On the Host tab, in the Host for Selected Location <location name>, select an Appliance Virtualization Platform host.
4. Click **More Actions > Lifecycle Action > Host Shutdown**.

The Appliance Virtualization Platform host and virtual machines shut down.

---

## Restarting the Appliance Virtualization Platform host

### About this task

The restart operation fails if you restart the host on which this System Manager is running.

### Procedure

1. On the desktop, click the SDM icon () and then click **VM Management**.
2. In VM Management Tree, select a location.
3. On the Host tab, in the Host for Selected Location <location name>, select an Appliance Virtualization Platform host.
4. Click **More Actions > Lifecycle Action > Host Restart**.

The system restarts the Appliance Virtualization Platform host and virtual machines.

---

## Removing an ESXi host

### Procedure

1. On the desktop, click the SDM icon () and then click **VM Management**.
2. On the Host tab, in the Hosts for Selected Location <location name> section, select one or more hosts that you want to delete.
3. Click **Remove**.
4. On the Delete page, click **Yes**.

---

## Configuring the login banner for the Appliance Virtualization Platform host

### About this task

You can configure a login banner message on one or more Appliance Virtualization Platform hosts at a time.

## Procedure

1. On the desktop, click the SDM icon () and then click **VM Management**.
2. In VM Management Tree, select a location.
3. On the Host tab, in Hosts for Selected Location <location name>, select one or more Appliance Virtualization Platform hosts on which you want to configure the message.
4. Click **More Actions > Push Login Banner**.  
The system gets the message from System Manager. You can change the login banner text only on the Security Settings page from **Security > Policies** on System Manager.
5. On the Message of the Day window, click **Push Message**.  
The system updates the login banner on the selected Appliance Virtualization Platform hosts.

---

## Mapping the ESXi host to an unknown location

### About this task

When you delete a location, the system does not delete the virtual machines running on the host, and moves the host to **Unknown location host mapping > Unknown location**. You can configure the location of an ESXi host again.

### Procedure

1. On the desktop, click the SDM icon () and then click **VM Management**.
2. In the left navigation pane, click the **Unknown location host mapping** link.
3. In the Host Location Mapping section, select an ESXi host and click **Edit**.  
The system displays the Host Information page.
4. Select a location to which you want to map the ESXi host.
5. Click **Submit**.  
The system displays the ESXi host in the selected location.

## New and Edit host field descriptions

Name	Description
Location	The location where the host is available. The field is read only.
Host Name	The hostname of Appliance Virtualization Platform or the ESXi host. For example, smgrdev.
Host FQDN or IP	The IP address or FQDN of Appliance Virtualization Platform or the ESXi host.  If you connect the Solution Deployment Manager client to Appliance Virtualization Platform through the services port, the host IP address must be 192.168.13.6.
User Name	The user name to log in to Appliance Virtualization Platform or the ESXi host.   <b>Note:</b> For Appliance Virtualization Platform, provide the root login and password that you configured in the spreadsheet.
Password	The password to log in to Appliance Virtualization Platform or the ESXi host.

Button	Description
Save	Saves the host information and returns to the Hosts for Selected Location <location name> section.

## Change Network Parameters field descriptions

### Network Parameters

Name	Description
Name	The name of the Appliance Virtualization Platform host. The field is display-only.
IPv4	The IPv4 address of the Appliance Virtualization Platform host.
Subnet Mask	The subnet mask the Appliance Virtualization Platform host.
IPv6	The IPv6 address of the Appliance Virtualization Platform host (if any).

*Table continues...*

Name	Description
<b>Host Name</b>	The host name the Appliance Virtualization Platform host
<b>Domain Name</b>	The domain name the Appliance Virtualization Platform host
<b>Preferred DNS Server</b>	The preferred DNS server
<b>Alternate DNS Server</b>	The alternate DNS server
<b>NTP Server1 IP/FQDN</b>	The NTP Server1 IP address of the Appliance Virtualization Platform host.
<b>NTP Server2 IP/FQDN</b>	The NTP Server2 IP address of the Appliance Virtualization Platform host.
<b>IPv4 Gateway</b>	The gateway IPv4 address.  The field is available only when you click <b>Change IPv4 Gateway</b> .
<b>IPv6 Default Gateway</b>	The default gateway IPv6 address (if any).  The field is available only when you IPv6 has been configured for the system. The user, also needs to click <b>Change IPv6 Gateway</b> .

Button	Description
<b>Change IPv4 Gateway</b>	Makes the <b>IPv4 Gateway</b> field available, and displays <b>Save IPv4 Gateway</b> and <b>Cancel IPv4 Gateway Change</b> buttons.
<b>Change IPv6 Gateway</b>	Makes the <b>IPv6 Default Gateway</b> field available, and displays <b>Save IPv6 Default Gateway</b> and <b>Cancel IPv6 Default Gateway Change</b> buttons.
<b>Save IPv4 Gateway</b>	Saves the gateway IPv4 address value that you provide.
<b>Cancel IPv4 Gateway Change</b>	Cancels the changes made to the IPv4 gateway.
<b>Save IPv6 Default Gateway</b>	Saves the default IPv6 gateway address value that you provide.
<b>Cancel IPv6 Default Gateway Change</b>	Cancels the changes made to the IPv6 default gateway.

Button	Description
<b>Save</b>	Saves the changes that you made to network parameters.

## Host Network / IP Settings field descriptions

### Port Groups

Standard Switch vSwitch <n> displays the Port Groups and NICs sections.

Name	Description
 or VLAN ID link	Displays the Port Group Properties page where you configure VLAN ID.
VLAN ID	Displays the VLAN ID. The options are: <ul style="list-style-type: none"> <li>• <b>None (0)</b></li> <li>• <b>1 to 4093</b></li> </ul> The field displays only unused IDs.
OK	Saves the changes.

### NIC speed

Button	Description
Change NIC speed	Displays the vmnic<n> dialog box.

Name	Description
Configured speed, Duplex	Displays the NIC speed. The options are: <ul style="list-style-type: none"> <li>• <b>Autonegotiate</b></li> <li>• <b>10,Half</b></li> <li>• <b>10,Full</b></li> <li>• <b>100,Half</b></li> <li>• <b>100,Full</b></li> <li>• <b>1000,Full</b></li> </ul>
OK	Saves the changes.

### NIC teaming

Button	Description
NIC team/unteam	Displays the Out of Band Management Properties vSwitch<n> dialog box.

Button	Description
Move Up	Moves the VMNIC from unused adapters to standby or active adapters or from standby to active adapter.
Move Down	Moves the VMNIC from active to standby adapter or from standby to unused adapter.
Refresh	Refreshes the page.
OK	Saves the changes.

## Change Password field descriptions

Name	Description
<b>Current Password</b>	The password for the user you input when adding the host.
<b>New Password</b>	The new password
<b>Confirm New Password</b>	The new password

Button	Description
<b>Change Password</b>	Saves the new password.

## Update field descriptions

Name	Description
<b>Patch location</b>	The location where the Appliance Virtualization Platform patch is available. The options are: <ul style="list-style-type: none"> <li>• <b>Select Patch from Local SMGR:</b> To use the Appliance Virtualization Platform patch that is available on the local System Manager.</li> <li>• <b>Select Patch from software library:</b> To use the Appliance Virtualization Platform patch that is available in the software library.</li> </ul>
<b>Select patch file</b>	The absolute path to the Appliance Virtualization Platform patch file.

Button	Description
<b>Update Host</b>	Installs the patch on the Appliance Virtualization Platform host.

# Chapter 7: Managing the virtual machine

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## Deploying the Utility Services OVA file

### About this task

Use the procedure to create a virtual machine on the ESXi host, and deploy Utility Services OVA on the Avaya-provided server.

To deploy Utility Services, you can use Solution Deployment Manager from System Manager or the Solution Deployment Manager client, when System Manager is unavailable. Deploy Utility Services first, install the Release 7.1 feature pack, and then deploy all other applications one at a time.

### Before you begin

- Complete the deployment checklist.

For information about the deployment checklist, see *Deploying Avaya Aura® applications from System Manager*.

- Add a location.
- Add Appliance Virtualization Platform or an ESXi host to the location.
- Download the required OVA file to System Manager.

### Procedure

1. In VM Management Tree, select a host.
2. On the Virtual Machines tab, in the VMs for Selected Location <location name> section, click **New**.

The system displays the VM Deployment section.

3. In the Select Location and Host section, do the following:
  - a. In **Select Location**, select a location.
  - b. In **Select Host**, select a host.
  - c. In **Host FQDN**, type the virtual machine name.

4. In **Data Store**, select a data store.

The page displays the capacity details.

5. Click **Next**.

6. In the Deploy OVA section, perform the following:

- a. In **Select Software Library**, select the local or remote library where the OVA file is available.

If you are deploying the OVA from the Solution Deployment Manager client, you can use the default software library that is set during the client installation.

- b. In **Select OVAs**, select the OVA file that you want to deploy.
- c. In **Flexi Footprint**, select the footprint size that the application supports.
  - **S8300D**: Due to the limited resources available on S8300D, the only footprint option is minimal
  - **Default**: For all other server platforms.

7. Click **Next**.

In Configuration Parameters and Network Parameters sections, the system displays the fields that are specific to the application that you deploy.

8. In the Network Parameters section, ensure that the following fields are preconfigured:

- **Public**
- **Services**: Only for Utility Services
- **Out of Band Management**: Only if Out of Band Management is enabled

For more information, see “VM Deployment field descriptions”.

9. In the Configuration Parameters section, complete the fields.

For more information about Configuration Parameters, see Network Parameters and Configuration Parameters field descriptions.

10. Click **Deploy**.

11. Click **Accept the license terms**.

In the Hosts for Selected Location <location name> section, the system displays the deployment status in the **Current Action Status** column.

The system displays the virtual machine on the VMs for Selected Location <location name> page.

12. To view details, click the **Status Details** link.

For information about VM Management field descriptions, see *Deploying Avaya Aura<sup>®</sup> applications from System Manager*.

13. Install the Release 7.1 feature pack.

14. Reboot the Utility Services virtual machine.

## Next steps

1. Deploy System Manager and install the Release 7.1 feature pack.
2. To activate the serviceability agent registration, reset the Utility Services virtual machine.

3. Deploy all other Avaya Aura® applications one at a time.

#### Related links

[VM Deployment field descriptions](#) on page 52

[Network Parameters and Configuration Parameters field descriptions](#) on page 87

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## Deploying an OVA file for an Avaya Aura® application

### About this task

Use the procedure to create a virtual machine on the ESXi host, and deploy OVA for an Avaya Aura® application on the virtual machine.

To deploy an Avaya Aura® application, you can use Solution Deployment Manager from System Manager or the Solution Deployment Manager client if System Manager is unavailable.

Deploy Utility Services first, and then deploy all other applications one at a time.

### Before you begin

- Add a location.
- Add Appliance Virtualization Platform or an ESXi host to the location.
- Ensure that the certificate is valid on the Appliance Virtualization Platform host or vCentre if used.
- Download the required OVA file to System Manager.

### Procedure

1. In VM Management Tree, select a host.
2. On the Virtual Machines tab, in the VMs for Selected Location <location name> section, click **New**.

The system displays the VM Deployment section.

3. In the Select Location and Host section, do the following:
  - a. In **Select Location**, select a location.
  - b. In **Select Host**, select a host.
  - c. In **Host FQDN**, type the virtual machine name.

4. In **Data Store**, select a data store.

The page displays the capacity details.

5. Click **Next**.

6. In the Deploy OVA section, do the following:
  - a. In **Select Software Library**, select the local or remote library where the OVA file is available.

To deploy the OVA by using the Solution Deployment Manager client, you can use the default software library that is set during the client installation.

- b. In **Select OVAs**, select the OVA file that you want to deploy.
  - c. In **Flexi Footprint**, select the footprint size that the application supports.
7. Click **Next**.
- In Configuration Parameters and Network Parameters sections, the system displays the fields that are specific to the application that you deploy.
8. In the Network Parameters section, ensure that the following fields are preconfigured:
- **Public**
  - **Services**: Only for Utility Services
  - **Out of Band Management**: Only if Out of Band Management is enabled
- For more information, see “VM Deployment field descriptions”.
9. In the Configuration Parameters section, complete the fields.
- For each application that you deploy, fill the appropriate fields. For more information, see “VM Deployment field descriptions”.
10. Click **Deploy**.
11. Click **Accept the license terms**.
- In the Hosts for Selected Location <location name> section, the system displays the deployment status in the **Current Action Status** column.
- The system displays the virtual machine on the VMs for Selected Location <location name> page.
12. To view details, click **Status Details**.

### Next steps

Install the Release 7.1 patch file for the Avaya Aura® application.

Perform the following:

1. From the Manage Elements link on System Manager, update the username password.
2. Before the synchronization and after deployment, add an SMNP profile on Communication Manager.

 **Note:**

If you fail to update the password, the synchronization operation fails.

### Related links

[Installing software patches](#) on page 46

[VM Deployment field descriptions](#) on page 52

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## Installing software patches

### About this task

Use the procedure to install software patches, service packs, and feature packs that are entitled for an Avaya Aura® application, and commit the patches that you installed.

### Before you begin

- Perform the preupgrade check.
- If you upgrade an application that was not deployed from Solution Deployment Manager:
  1. Select the virtual machine.
  2. To establish trust, click **More Actions > Re-establish Connection**.
  3. Click **Refresh VM**.

### Procedure

1. On the System Manager web console, click **Services > Solution Deployment Manager**.
2. In the left navigation pane, click **Upgrade Management**.
3. Select an Avaya Aura® application on which you want to install the patch.
4. Click **Upgrade Actions > Upgrade/Update**.
5. On the Upgrade Configuration page, click **Edit**.
6. In the General Configuration Details section, in the **Operation** field, click **Update**.
7. In **Upgrade Source**, select the software library where you have downloaded the patch.
8. **(Optional)** Click the **Auto Commit** check box, if you want the system to automatically commit the patch.

#### **Note:**

If an application is unreachable, the auto commit operation might fail and the Update Patch Status window displays a warning message. You must wait for some time, select the same patch in the Installed Patches section, and perform the commit operation again.

9. In the Upgrade Configuration Details section, in the Select patches for update table, select the software patch that you want to install.
10. Click **Save**.
11. On the Upgrade Configuration page, ensure that the **Configuration Status** field displays .  
If the field displays , review the information on the Edit Upgrade Configuration page.
12. Click **Upgrade**.
13. On the Job Schedule page, click one of the following:
  - **Run Immediately**: To perform the job.
  - **Schedule later**: To perform the job at a scheduled time.

14. Click **Schedule**.

On the Upgrade Management page, the **Update status** and **Last Action Status** fields display .

15. To view the update status, click .

The **Upgrade Job Details** page displays the detailed update checks that are in progress. Click **Done** to close the window.

When the update is complete, the **Update status** and **Last Action Status** fields displays .

16. Click **Upgrade Actions > Installed Patches**.

17. On the Installed Patches page, in the Patch Operation section, click **Commit**.

The page displays all software patches that you can commit.

You can use **Rollback** and **Uninstall** options if you must rollback and uninstall the software patch.

18. Select the patch that you installed, in the Job Schedule section, click **Run Immediately**.

You can schedule to commit the patch at a later time by using the **Schedule later** option.

19. Click **Schedule**.

The Upgrade Management page displays the last action as **Commit**.

20. Ensure that **Update status** and **Last Action Status** fields display .

---

## Editing a virtual machine

### Before you begin

- Install the Solution Deployment Manager client.
- An ESXi host must be available.
- When you change the IP address or FQDN:
  - Utility Services must be available and must be discovered.
  - If Utility Services is discovered, the system must display Utility Services in the **VM App Name** column. If the application name in **VM App Name** is empty, perform the following to establish trust between the application and System Manager:
    - Click **More Actions > Re-establish connection**.
    - Click **More Actions > Refresh VM**.

### Procedure

1. To start the Solution Deployment Manager client, click **Start > All Programs > Avaya > Avaya SDM Client** or the SDM icon () on the desktop.

2. In VM Management Tree, select a location.
3. On the Virtual Machines tab, in the VMs for Selected Location <location name> section, select a virtual machine, and click **Edit**.

The system displays the Edit VMs section.

4. **(Optional)** Click **Change Flexi Footprint** and do the following:
  - a. Click **Change flexi foot print value**.
  - b. In **Flexi Footprint**, select a foot print that the application supports.

**!** **Important:**

Each application must ensure that only the supported flexible footprint is selected.

5. To update the IP address and FQDN of the virtual machine, perform the following:
  - a. Click **More Actions > Re-establish connection**.

**\*** **Note:**

To update IP address or FQDN for Utility Services, establish trust on all virtual machines that are running on the host on which Utility Services resides.

- b. Click **More Actions > Refresh VM**.

**\*** **Note:**

To update IP address or FQDN for Utility Services, refresh all virtual machines that are running on the host on which Utility Services resides.

- c. Click **Update IP/FQDN in Local Inventory**.
- d. Click **Update VM IP/FQDN**.
- e. Provide the IP address and FQDN of the virtual machine.

**Update IP/FQDN in Local Inventory** updates the IP address or FQDN only in the local database in System Manager. The actual IP address or FQDN of the host does not change. Use **Update Network Params** in the Host tab to update the IP address or FQDN of the host.

6. Click **Save**.

---

## Deleting a virtual machine

### Procedure

1. In VM Management Tree, select a location.
2. On the right navigation pane, click **Virtual Machines**.
3. On the Virtual Machines page, select one or more virtual machines.
4. On the Delete page, click **Delete**, and click **Yes** to confirm the deletion.

The system turns off the virtual machines, and deletes the selected virtual machines from the host.

---

## Changing the network parameters of Appliance Virtualization Platform and Avaya Aura® applications

### About this task

Change the network parameters for Appliance Virtualization Platform and each Avaya Aura® application from the application, and then change the IP address and FQDN of Avaya Aura® applications and Appliance Virtualization Platform from Solution Deployment Manager.

### Before you begin

- Connect the system on which Solution Deployment Manager is running to the new network for changing network parameters.
- When many Avaya Aura® applications are running on an Appliance Virtualization Platform host, ensure that you change the network parameter in the following order:
  1. Appliance Virtualization Platform
  2. Avaya Aura® applications that are running on the host except Utility Services.
  3. Utility Services

#### **Note:**

If you fail to follow the order, Utility Services network parameter update might fail.

### Procedure

1. In VM Management Tree, select a location.
2. On the Host tab, in the Hosts for Selected Location <location name> section, select an ESXi host and click **Change Network Params > Change Host IP Settings**.
3. In the Network Parameters section, change the following as appropriate, and click **Save**:
  - IP address, subnetmask, and other parameters
  - Gateway IP address

For more information, see “Change Network Parameters field descriptions”.

4. Change the network parameters first for each Avaya Aura® application on the host, and then for Utility Services.

For more information, see *Administering Avaya Aura® application* available for each application. Also, see “Network Parameters for Avaya Aura® applications”.

5. On the Virtual Machines tab, in the VMs for Selected Location <location name> section, do the following first for all Avaya Aura® applications except Utility Services, and then for Utility Services:
  - a. In the Edit VMs section, select a virtual machine and click **Edit**.

- b. Click **Update IP/FQDN in Local Inventory**.
- c. Click **Update VM IP/FQDN**.
- d. Provide the IP address and FQDN of the virtual machine.

**Update IP/FQDN in Local Inventory** updates the IP address or FQDN only in the local database in System Manager. The actual IP address or FQDN of the host does not change. Use **Update Network Params** in the Host tab to update the IP address or FQDN of the host.

6. Click **Save**.
7. Do the following first for all Avaya Aura<sup>®</sup> applications except Utility Services, and then for Utility Services:
  - a. Click **More Actions > Re-establish connection**.

**\* Note:**

To update IP address or FQDN for Utility Services, establish trust on all virtual machines that are running on the host on which Utility Services resides.

- b. Click **More Actions > Refresh VM**.

**\* Note:**

To update IP address or FQDN for Utility Services, refresh all virtual machines that are running on the host where Utility Services resides.

When you update the IP address and FQDN for Utility Services, the system also updates the Services Port static route for each application.

#### Related links

[Change Network Parameters field descriptions](#) on page 38

[Changing the network parameters for an Appliance Virtualization Platform host](#) on page 28

[Network parameter update for Avaya Aura applications](#) on page 61

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## Updating Services Port Static Routing on an Avaya Aura<sup>®</sup> application

### About this task

You might have to change the static routing if the Avaya Aura<sup>®</sup> application that is running on the Appliance Virtualization Platform host is:

- Deployed by using the vSphere client and does not have the route.
- Non-operational or unreachable when you start the Avaya Aura<sup>®</sup> application update.

### Before you begin

- Update network parameters of Utility Services if applicable.

- Ensure that the Avaya Aura® application resides on the same subnetwork as Utility Services.

### Procedure

1. On the Virtual Machines tab, in the VMs for Selected Location <location name> section, select an Avaya Aura® application.
2. Click **More Actions** > **Update Static Routing**.

The VM Update Static Routing page displays the details of Avaya Aura® application and Utility Services. The fields are read-only.

3. Click **Update**.
4. On the Success dialog box, click **OK**.

The system updates the Avaya Aura® application with the new IP address of Utility Services for Services Port static routing.

### Related links

[Update Static Routing field descriptions](#) on page 59

---

## Starting a virtual machine from Solution Deployment Manager

### Procedure

1. From the virtual management tree, select a host to which you added virtual machines.
2. On the Virtual Machines tab, select one or more virtual machines that you want to start.
3. Click **Start**.

In **VM State**, the system displays *Started*.

---

## Stopping a virtual machine from Solution Deployment Manager

### About this task

System Manager is operational and ESXi or vCenter is added to the VM Management page to deploy Avaya Aura® Application OVA on ESXi virtual machines.

### Procedure

1. From the virtual management tree, select a ESXi or vCentre host to which you added virtual machines.
2. On the Virtual Machines tab, select one or more virtual machines that you want to stop.

3. Click **Stop**.

In **VM State**, the system displays *Stopped*.

---

## Restarting a virtual machine from Solution Deployment Manager

### Before you begin

- System Manager is operational, and ESXi or vCenter is added to the VM Management page to deploy Avaya Aura® Application OVA on ESXi virtual machines.
- Virtual machines must be in the running state.

### Procedure

1. From the virtual management tree, select a host to which you added virtual machines.
2. On the Virtual Machines tab, select one or more virtual machines that you want to restart.
3. Click **Restart**.

In **VM State**, the system displays *Stopped* and then *Started*.

---

## VM Deployment field descriptions

### Select Location and Host

Name	Description
Select Location	The location name. The field is display-only.
Select Host	The hostname of the ESXi host. For example, smgrdev. The field is display-only.
Host FQDN	FQDN of the ESXi host.
Data Store	The data store with the available size. The page populates the Capacity Details section.
Next	Displays the Deploy OVA section in the Location & Host Details screen where you provide the details required for deployment.

### Capacity Details

The system displays the CPU and memory details of the host. The fields are read-only.

**\* Note:**

If the host is in a cluster, the system does not display the capacity details of CPU and memory. Ensure that the host resource requirements are met before you deploy the virtual machine.

Name	Description
Name	The name
Full Capacity	The maximum capacity
Free Capacity	The available capacity
Reserved Capacity	The reserved capacity
Status	The configuration status

### Deploy OVA on System Manager Solution Deployment Manager

Name	Description
ME Deployment	The option to perform the Midsize Enterprise deployment.
Enable enhanced security	The option to enable GTEC mode deployment.
Select Software Library	The software library where the .ova file is available.
Select OVAs	The .ova file that you want to deploy.
Flexi Footprint	<p>The footprint size supported for the selected host.</p> <p><b>!</b> <b>Important:</b></p> <ul style="list-style-type: none"> <li>• Ensure that the required memory is available for the footprint sizes that you selected. The upgrade operation might fail due to insufficient memory.</li> <li>• Ensure that the application contains the footprint size values that are supported.</li> </ul>
Next	Displays the Configuration Parameters tab in the OVA Details screen where you provide the OVA details.

### Deploy OVA on the Solution Deployment Manager client

Name	Description
ME Deployment	The option to perform the Midsize Enterprise deployment.
Enable enhanced security	The option to enable GTEC mode deployment.

The system displays the following options for deployment by providing OVA path.

Name	Description
<b>Provide OVA path</b>	The option to enter the full/absolute path of the <code>.ova</code> file to install it as a virtual machine on the system that hosts the Solution Deployment Manager client.
<b>OVA File</b>	The absolute path to the <code>.ova</code> file on the system that hosts the Solution Deployment Manager client.  The field is available only when you click <b>Provide OVA path</b> .
<b>Submit File</b>	Selects the <code>.ova</code> file of System Manager that you want to deploy.

With the **SW Library** option you can select a `.ova` file that is available in the local software library of the system that hosts the Solution Deployment Manager client.

The system displays the following options for deployment using local software library.

Name	Description
<b>File Name</b>	The file name of the <code>.ova</code> file that is to be installed on the system that hosts the Solution Deployment Manager client.  The field is available only when you click <b>SW Library</b> .

With the **URL** option you can enter the URL of the `.ova` file to be installed as a virtual machine.

The system displays the following options for deployment using URL of the `.ova` file.

Name	Description
<b>URL</b>	The URL of the <code>.ova</code> file that is to be installed on the system that hosts the Solution Deployment Manager client.  The field is available only when you click <b>URL</b> .
<b>Submit</b>	Selects the <code>.ova</code> file to be deployed that is extracted from the URL.

The system displays the following common options for all the three types of deployment.

Name	Description
<b>Flexi Footprint</b>	The footprint size supported for the selected host.  The field is available is common for all three types of deployment.   <b>Important:</b> Ensure that the required memory is available for the footprint sizes that you selected. The

*Table continues...*

Name	Description
	upgrade operation might fail due to insufficient memory.
<b>Next</b>	Displays the Configuration Parameters tab in the OVA Details screen where you provide the OVA details.

## Configuration Parameters

The system populates most of the fields depending on the OVA file.

### \* Note:

For configuration parameter fields, for Communication Manager Messaging and Utility Services, see [VM Deployment Configuration and Network Parameters field descriptions](#) on page 57.

Name	Description
<b>VM Name</b>	The name of the virtual machine.
<b>Product</b>	The name of the Avaya Aura <sup>®</sup> application that is being deployed. The field is read-only.
<b>Version</b>	Release number of the Avaya Aura <sup>®</sup> application that is being deployed. The field is read-only.
<b>ME Deployment</b>	The option to perform the Midsize Enterprise deployment. The option is available only while deploying Communication Manager simplex OVA.

**Table 1: Configuration Parameters for Communication Manager simplex OVA deployment**

Name	Description
<b>CM IPv4 Address</b>	The IP address of the Communication Manager virtual machine.
<b>CM IPv4 Netmask</b>	The network mask of the Communication Manager virtual machine.
<b>CM IPv4 Gateway</b>	The default gateway of the Communication Manager virtual machine.
<b>Out of Band Management IPv4 Address</b>	The IP address of the Communication Manager virtual machine for out of band management. The field is optional network interface to isolate management traffic on a separate interface from the inband signaling network.
<b>Out of Band Management Netmask</b>	The subnetwork mask of the Communication Manager virtual machine for out of band management.
<b>CM Hostname</b>	The hostname of the Communication Manager virtual machine.

*Table continues...*

Name	Description
<b>NTP Servers</b>	The IP address or FQDN of the NTP server. Separate the IP addresses with commas (,).
<b>DNS Servers</b>	The DNS IP address of the Communication Manager virtual machine.
<b>Search Domain List</b>	The search list of domain names. For example, mydomain.com. Separate the search list names with commas (,).
<b>WebLM Server IPv4 Address</b>	The IP address of WebLM. The field is mandatory.
<b>CM Privileged Administrator User Login</b>	The login name for the privileged administrator. You can change the value at any point of time.
<b>CM Privileged Administrator User Password</b>	The password for the privileged administrator. You can change the value at any point of time.
<b>Confirm Password</b>	The password required to be confirmed.

### Network Parameters

Name	Description
<b>Public</b>	The port number that is mapped to public port group.  You must configure Public network configuration parameters only when you configure Out of Band Management. Otherwise, Public network configuration is optional.
<b>Services</b>	The port number that is mapped to the services port group when Utility Services is deployed in the solution.  Utility Services provides routing from the services port to the virtual machines and additional functions, such as alarm conversion.
<b>Duplication Link</b>	The connection for server duplication.  The field is available only when you deploy duplex Communication Manager.
<b>Out of Band Management</b>	The port number that is mapped to the out of band management port group.

Button	Description
<b>Deploy</b>	Displays the EULA acceptance screen where you must click <b>Accept</b> to start the deployment process.

### Related links

[VM Deployment Configuration and Network Parameters field descriptions](#) on page 57

## VM Deployment Configuration and Network Parameters field descriptions

Table 2: Configuration Parameters for Communication Manager Messaging deployment

Name	Description
<b>Messaging IPv4 address</b>	The IP address of the Communication Manager Messaging virtual machine.
<b>Messaging IPv4 Netmask</b>	The network mask of the Communication Manager Messaging virtual machine.
<b>Messaging IPv4 Gateway</b>	The default gateway of the Communication Manager Messaging virtual machine. For example, 172.16.1.1.
<b>Out of Band Management IPv4 Address</b>	The IP address of the Communication Manager Messaging virtual machine for out of band management.  The field is optional network interface to isolate management traffic on a separate interface from the inbound signaling network.
<b>Out of Band Management IPv4 Netmask</b>	The subnetwork mask of the Communication Manager Messaging virtual machine for out of band management.
<b>Messaging Hostname</b>	The hostname of the Communication Manager Messaging virtual machine.
<b>NTP Servers</b>	The IP address or FQDN of the NTP server.  Separate the IP addresses with commas (.). The field is optional.
<b>DNS Server(s)</b>	The DNS IP address of the Communication Manager Messaging virtual machine. Separate the IP addresses with commas(.). The field is optional.
<b>Search Domain List</b>	The search list of domain names. For example, mydomain.com. Separate the search list names with commas (.).
<b>WebLM Server IPv4 Address</b>	The IP address of WebLM. The field is mandatory.
<b>Messaging Privileged Administrator User Login</b>	The login name for the privileged administrator.  You can change the value at any point of time.
<b>Messaging Privileged Administrator User Password</b>	The password for the privileged administrator.  You can change the value at any point of time.
<b>Confirm Password</b>	The password required to be confirmed.

### Configuration and Network Parameters for Utility Services deployment

Name	Description
Configuration Parameters	
<b>Communication Manager IP</b>	IP address of Communication Manager.

*Table continues...*

Name	Description
	<p> <b>Note:</b></p> <p>A unique Communication Manager IP address is required for each Utility Services. If you are not associated with a Communication Manager server, specify a static IP that is in your network range.</p>
<b>Hostname</b>	Linux hostname or fully qualified domain name for Utility Services virtual machine.
<b>Timezone setting</b>	The selected timezone setting for the Utility Services virtual machine.
<b>NTP Server IP</b>	IP address of a server running Network Time Protocol that Communication Manager can use for time synchronization.
<b>Out of Band Management Mode</b>	<p>The Out of Band Management mode in which you want to deploy. The options are as follows:</p> <ul style="list-style-type: none"> <li>• <b>OOBM_Enabled:</b> To enable Out of Band Management.</li> <li>• <b>OOBM_Disabled:</b> To disable Out of Band Management.</li> </ul> <p> <b>Note:</b></p> <p><b>OOBM_Disabled</b> is the default setting. If the mode is set to <b>OOBM_Disabled</b>, then you do not need to configure Out of Band Management.</p>
<b>Utility Services Mode</b>	<p>The mode in which you want to deploy Utility Services. The options are:</p> <ul style="list-style-type: none"> <li>• <b>Services Port Only:</b> Deploys Services Port only. Use when the customer already has Utility Services running on another virtual machine and providing the services.</li> </ul> <p>With the services port feature, through a laptop connected to the services port of Appliance Virtualization Platform, you can gain access to Avaya virtual machines and the hypervisor that are deployed.</p> <ul style="list-style-type: none"> <li>• <b>Utility Servers Only:</b> Use to disable routing. Set this mode only for Virtualized Environment. If you set this mode for an Avaya appliance, the services port becomes non-operational.</li> <li>• <b>Full Functionality:</b> Utility Services and services port enabled. The default mode for Appliance Virtualization Platform.</li> </ul> <p>You can set the mode only during the deployment. You cannot change the mode after the virtual machine is deployed.</p> <p> <b>Note:</b></p> <p>For the Solution Deployment Manager client to connect to the services port features of Utility Services, change the IP address to 192.11.13.5 on the computer of the technician</p>

*Table continues...*

Name	Description
	Utility Services can gain access to the hypervisor and all virtual machines. Utility Services provides application routing between the physical port and virtual applications.
<b>Primary System Manager IP address for application registration</b>	The IP address of System Manager that is required for application registration.
<b>Enrollment Password</b>	The enrollment password.
<b>Confirmation password</b>	The confirmation password.
Network Parameters	
<b>Default Gateway</b>	The IP address of the default gateway. Required field unless you use DHCP.
<b>DNS</b>	The IP address of domain name servers for the Utility Services virtual machine. Separate each IP address by a comma. Required field unless you use DHCP.
<b>Public IP address</b>	The IP address for this interface. Required field unless you use DHCP.
<b>Public Netmask</b>	The netmask for this interface. Required field unless you use DHCP.
<b>Out of Band Management IP Address</b>	The IP address for this interface.
<b>Out of Band Management Netmask</b>	The netmask for this interface.

---

## Update Static Routing field descriptions

Name	Description
<b>VM Name</b>	The virtual machine name
<b>VM IP/FQDN</b>	The IP address or FQDN of the virtual machine
<b>Utility Services IP</b>	The IP address of Utility Services

Button	Description
<b>Update</b>	Updates the static IP address for routing.

## Installed Patches field descriptions

Button	Description
Action to be performed	The operation that you want to perform on the software patch, service pack, or feature pack that you installed. The options are: <ul style="list-style-type: none"> <li>• <b>All</b>: Displays all the software patches.</li> <li>• <b>Commit</b>: Displays the software patches that you can commit.</li> <li>• <b>Rollback</b>: Displays the software patches that you can rollback.</li> </ul>
Get Info	Displays software patches, service packs, and feature packs that you installed.
Commit	Commits the selected software patch.
Rollback	Rolls back the selected software patch.

Name	Description
VM Name	The name of the System Manager virtual machine on which you want to install the patch.
VM IP	The IP address of System Manager on which you want to install the patch.
Patch Name	The software patch name that you want to install.
Patch Type	The patch type. The options are service pack and software patch.
Patch Version	The software patch version.
Patch State	The software patch state. The states are: <ul style="list-style-type: none"> <li>• Activated</li> <li>• Deactivated</li> <li>• Removed</li> <li>• Installed</li> </ul>
Patch Status	The software patch status.

## Update VM field descriptions

Name	Description
VM Name	The System Manager virtual machine name

*Table continues...*

Name	Description
<b>VM IP</b>	The IP address of System Manager
<b>VM FQDN</b>	FQDN of System Manager
<b>Host Name</b>	The host name
<b>Select bin file from Local SMGR</b>	<p>The option to select the software patch or service pack for System Manager.</p> <p>The absolute path is the path on the computer on which the Solution Deployment Manager client is running. The patch is uploaded to System Manager.</p> <p>This option is available only on the Solution Deployment Manager client.</p>
<b>Auto commit the patch</b>	<p>The option to commit the software patch or service pack automatically.</p> <p>If the check box is clear, you must commit the patch from <b>More Actions &gt; Installed Patches</b>.</p>

Button	Description
<b>Install</b>	Installs the software patch or service pack on System Manager.

---

## Reestablish Connection field descriptions

Name	Description
<b>VM Name</b>	The virtual machine name
<b>VM IP/FQDN</b>	The IP address or FQDN of the virtual machine
<b>User Name</b>	The user name
<b>Password</b>	The password

Button	Description
<b>Reestablish Connection</b>	Establishes connection between System Manager and the virtual machine.

---

## Network parameter update for Avaya Aura<sup>®</sup> applications

You can change the network parameters for Avaya Aura<sup>®</sup> applications that run on an Appliance Virtualization Platform server.

The commands listed might change. Therefore, from the Avaya Support website at <https://support.avaya.com>, get the latest command update for an Avaya Aura® application from the appropriate document.

**+ Tip:**

On the Avaya Support website navigate to **Support by Product > Documents > <Avaya Aura application>**, type the release number, click **Installation, Upgrades & Config**, click **Enter**, and search for the updates.

Avaya Aura® application	Command	Interface where you perform the task
Appliance Virtualization Platform	<code>serverInitialNetworkConfig</code>	CLI
System Manager	<code>changeIPFQDN -IP &lt;IP address&gt; -FQDN &lt;FQDN&gt; -GATEWAY &lt;Gateway address&gt; -NETMASK &lt;Netmask address&gt; -DNS &lt;DNS address&gt; -SEARCH &lt;search list of domain names&gt;</code>	CLI or vSphere client
Communication Manager	-	The Network Configuration page from <b>Administration &gt; server(Maintenance) &gt; ServerConfiguration</b> on Communication Manager SMI.
Session Manager	<code>SMnetSetup</code>	vSphere client
Avaya Breeze™ and all installed snap-ins	-	vSphere client
Utility Services	<code>VMware_conf.sh</code>	CLI
Avaya Aura® Media Server	-	See the Avaya support website.
SAL Gateway	-	Currently, you cannot change Network Parameters for SAL Gateway

# Chapter 8: System Manager upgrade management

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## Upgrading System Manager on a different server by using Solution Deployment Manager client

### About this task

You can upgrade System Manager on the same server or a different server.

The procedure describes the steps to upgrade System Platform-based System Manager on a different server.

### Before you begin

- Add a location.
- Install the Appliance Virtualization Platform host.
- Add the Appliance Virtualization Platform host from the VM Management page.
- Install the Solution Deployment Manager client.
- Obtain the following System Manager software:
  - OVA file, `SMGR-7.1.5.0.21526-e55-38.ova`
  - Data migration utility, `Data_Migration_Utility_7.0.1.0_r96.bin`
  - Release 7.0.1 bin file, `System_Manager_7.0.1.0_r701064859.bin`
- Create the System Manager backup and copy the file to the same computer where Solution Deployment Manager client is installed.

### Procedure

1. To start the Solution Deployment Manager client, click **Start > All Programs > Avaya > Avaya SDM Client** or the SDM icon () on the desktop.
2. Click **VM Management**.
3. In the lower pane, click **Upgrade Management**.  
The system displays the Upgrade Elements page
4. **(Optional)** If System Manager element is not present, do the following:
  - a. Click **Add Elements**, add the System Manager element and console domain information.

- b. Click **Save**.
5. If System Manager element is present, select the required element.
6. Click **Upgrade**.
7. **(Optional)** In **Host FQDN**, select the host.

On the SMGR Upgrade dialog box, the system might preselect and disable **Host FQDN**.
8. Select the datastore on the host.

The system populates the network parameters and configuration parameters from the System Platform-based virtual machine.
9. Click **Next**.
10. Select the **OVA** tab.
11. For **URL**based deployment, do the following:
  - a. Click **URL**.
  - b. In **OVA File**, enter the absolute path to the System Manager OVA file, and click **Submit**.
  - c. Select **ME Deployment**, if required.
  - d. Select the flexi footprint.
12. For **SW Library** based deployment, perform the following steps:
  - a. Click **SW Library**.
  - b. In **File Name**, select the System Manager OVA file.
  - c. Select **ME Deployment**, if required.
  - d. Select the flexi footprint.
13. For **Browse** based deployment, perform the following steps:
  - a. Click **Browse** and select the required OVA file.
  - b. Click **Submit File**.
  - c. Select **ME Deployment**, if required.
  - d. Select the flexi footprint.
14. Select the **Data Migration** tab, do one of the following:
  - For URL, do the following:
    - a. Click **URL** and provide the absolute path to the data migration utility.

Provide the latest datamigration bin that is available for the System Manager release.
  - For SW Library, do the following:
    - a. Click **SW Library** and select the System Manager data migration utility file.

- For Browse, do the following:
  - a. Click **Browse** and select the required `bin` file.
- 15. Select the **Service or Feature Pack** tab.
  - ★ **Note:**
    - For upgrades from System Manager 6.3.14 or earlier, the bin patch file is optional.  
If you provide the service pack or feature pack, the datamigration utility automatically deploys the service pack or feature pack on System Manager Release 7.0.0.0 after data migration.
  - For URL, do the following:
    - a. Click **URL** and provide the absolute path to the service or feature pack.
  - For SW Library, do the following:
    - a. Click **SW Library** and select the System Manager service or feature pack deployment file.
  - For Browse, do the following:
    - a. Click **Browse** and select the required `bin` file.
- 16. Click **Next**.
- 17. In the Config Parameters section, provide FQDN, Timezone, and SNMP passwords.
  - ★ **Note:**  
Use the same IP address and FQDN as that on the old System Manager.
- 18. In the Network Parameters section, provide the Public and Out of Band Management details.
  - ★ **Note:**  
Use the same IP address and FQDN as that on the old System Manager.
- 19. Click **Upgrade** and accept the license terms.

The existing virtual machine shuts down, deploys OVA, and restores the data on the new virtual machine.
- 20. To view the status, in the **Upgrade Status** column, click **Status Details**.

The complete process takes about 3 hours depending on the data on System Manager.

#### Related links

[Installing the Solution Deployment Manager client on your computer](#) on page 10

[Upgrade Management field descriptions](#) on page 69

[Add Element field descriptions](#) on page 69

[Install on Same ESXi field descriptions](#) on page 75

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# Upgrading System Manager on the same server by using Solution Deployment Manager client

## About this task

You can upgrade System Manager on the same server or a different server.

The procedure describes the steps to upgrade System Platform-based System Manager on the same server.

## Before you begin

- Add a location.
- Install the Solution Deployment Manager client.
- Obtain the following System Manager software:
  - OVA file, `SMGR-7.1.5.0.21526-e55-38.ova`
  - Data migration utility, `Data_Migration_Utility_7.0.1.0_r96.bin`
  - Release 7.0.1 bin file, `System_Manager_7.0.1.0_r701064859.bin`
- Create the System Manager backup and copy the file to the same computer where Solution Deployment Manager client is installed.

## Procedure

1. To start the Solution Deployment Manager client, click **Start > All Programs > Avaya > Avaya SDM Client** or the SDM  on the desktop.
2. Click **VM Management**.
3. In the lower pane, click **Upgrade Management**.
4. Click **Save**.
5. If System Manager element is present, select the required element.
6. Click **Upgrade**.
7. On the Upgrade Management page, select the **Install on Same ESXi** check box.
8. Click **Continue**.

The system shuts down the virtual machine and reaches the paused state.

You must add the Appliance Virtualization Platform host from VM Management.
9. Install the Appliance Virtualization Platform host on the server on which System Platform was running.
10. To resume the upgrade operation, click **Upgrade Elements > Resume from Upgrade elements** list.
11. **(Optional)** In **Host FQDN**, select the host.

On the SMGR Upgrade dialog box, the system might preselect and disable **Host FQDN**.
12. Select the datastore on the host.

The system populates the network parameters and configuration parameters from the System Platform-based virtual machine.

13. Select the **OVA** tab.

14. In the Config Parameters section, provide FQDN, Timezone, and SNMP passwords.

**\* Note:**

Use the same IP address and FQDN as that on the old System Manager.

15. In the Network Parameters section, provide the Public and Out of Band Management details.

**\* Note:**

Use the same IP address and FQDN as that on the old System Manager.

16. Click **Upgrade** and accept the license terms.

The existing virtual machine shuts down, deploys OVA, and restores the data on the new virtual machine.

17. To view the status, in the **Upgrade Status** column, click **Status Details**.

The complete process takes about 3 hours depending on the data on System Manager.

#### Related links

[Installing the Solution Deployment Manager client on your computer](#) on page 10

[Upgrade Management field descriptions](#) on page 69

[Add Element field descriptions](#) on page 69

[Install on Same ESXi field descriptions](#) on page 75

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## Installing service packs and software patches on System Manager by using the Solution Deployment Manager client

### About this task

Use the procedure to install service packs, feature packs, or software patches on System Manager by using Solution Deployment Manager client.

### Before you begin

Install the Solution Deployment Manager client.

### Procedure

1. To start the Solution Deployment Manager client, click **Start > All Programs > Avaya > Avaya SDM Client** or the SDM icon () on the desktop.
2. Click **VM Management**.
3. In VM Management Tree, select a location.

4. On the Virtual Machines tab, in the VMs for Selected Location <location name> section, select System Manager on which you want to install the patch.
5. **(Optional)** If updating from a different client, perform the following:
  - a. Click **More Actions > Re-establish connection**.
  - b. Click on **Refresh VM**.
  - c. To view the status, in the **Current Action** column, click **Status Details**.
  - d. Proceed with the next step.
6. Click **More Actions > Update VM**.

The system displays the System Manager Update dialog box.
7. In **Select bin file from Local SDM Client**, provide the absolute path to the software patch or service pack.

**\* Note:**

The absolute path is the path on the computer on which the Solution Deployment Manager client is running. The patch is uploaded to System Manager.

8. **(Optional)** Click the **Auto commit the patch** check box.
9. Click **Install**.

In the VMs for Selected Location <location name> section, the system displays the status.
10. To view the details, in the **Current Action** column, click **Status Details**.

SMGR Patching Status window displays the details. The system displays the Installed Patches page. The patch installation takes some time.
11. On the Installed Patches page, perform the following:
  - a. In **Action to be performed**, click **Commit**.

The system installs the patch, service pack or feature pack that you selected.
  - b. Click **Get Info**.
  - c. Select the patch, service pack or feature pack, and click **Commit**.

**Related links**

[Update VM field descriptions](#) on page 60

## Upgrade Management field descriptions

### Upgrade Elements

Name	Description
IP/FQDN	The IP address or the FQDN of System Manager virtual machine.
SMGR Name	System Manager name.
Upgrade Status	The status of the upgrade process. The status can be <b>Upgrading</b> , <b>Completed</b> , or <b>Failed</b> . The <b>Status Details</b> link provides more information about the System Manager upgrade.
Last Action	The last upgrade action.

Button	Description
Add Elements	Displays the Add Element page where you add System Manager.
Upgrade	Displays the Upgrade Management page where you upgrade the System Manager virtual machine.
Edit	Displays the Edit Element page where you can change the details of System Manager that you added.
Delete	Deletes the System Manager virtual machine.

## Add Element field descriptions

### Required Element information

Name	Description
SMGR IP	The IP address of System Manager
SMGR NAME	The name of the System Manager virtual machine
SMGR SSH User Name	The SSH user name of System Manager
SMGR SSH Password	The SSH password of System Manager

### Required C-DOM information

Name	Description
C-DOM IP/FQDN	The C-DOM IP/FQDN
C-DOM SSH User Name	The C-DOM SSH user name
C-DOM SSH Password	The C-DOM SSH password

*Table continues...*

Name	Description
C-DOM Root User Name	The C-DOM root user name
C-DOM Root password	The C-DOM root password

Button	Description
Save	Saves the element that you added

---

## Edit Elements field descriptions

### Required Element information

Name	Description
SMGR IP	The IP address of System Manager
SMGR NAME	The name of System Manager virtual machine.
SMGR SSH User Name	The SSH user name of System Manager
SMGR SSH Password	The SSH password of System Manager

### Required C-DOM information

Name	Description
C-DOM IP/FQDN	The C-DOM IP/FQDN
C-DOM SSH User Name	The C-DOM SSH user name
C-DOM SSH Password	The C-DOM SSH password
C-DOM Root User Name	The C-DOM root user name
C-DOM Root password	The C-DOM root password

Button	Description
Update	Updates the changes to the element.

---

## Upgrade Management field descriptions

Name	Description
Install on Same ESXi	<p>The option to select the same or a different server. The options are:</p> <ul style="list-style-type: none"> <li>• Select: To upgrade on the same server.</li> <li>• Clear: To upgrade to a different server.</li> </ul>

*Table continues...*

Name	Description
	If you do not select the check box, you must add a new server or select a server from the list to which you want to update.
<b>Host FQDN</b>	The Host FQDN to which you want to update.  The system displays the CPU and memory details of the host in the Capacity Details section.
<b>VM Name</b>	The virtual machine name displayed on the Add Element page.

## Deploy OVA

Name	Description
<b>Select the OVA</b>	The option to select a <code>.ova</code> file of the virtual machine that is available on System Manager.
<b>OVA file</b>	The absolute path to the <code>.ova</code> file of the virtual machine.  The field is available only when you click <b>Select the OVA from Local SMGR</b> .
<b>Submit File</b>	Selects the <code>.ova</code> file of the virtual machine that you want to deploy.  The field is available only when you click <b>Select the OVA from Local SMGR</b> . The system displays the network configuration details in the Network Parameters section based on the System Manager virtual machine.
<b>Flexi Footprint</b>	The footprint size supported for the selected server.  The system validates for the CPU, memory, and other parameters in the Capacity Details section.  You must ensure that the status is  .
<b>SMGR Datamigration Utility file</b>	The absolute path to the System Manager data migration utility file.   <b>Note:</b> Provide the latest datamigration bin that is available for the System Manager release.
<b>Backup file</b>	The absolute path to the backup of System Manager virtual machine.
<b>Service Pack or Feature Pack</b>	The absolute path to the service pack or feature pack.  For the latest service pack or feature pack, see the latest System Manager release notes.

**\* Note:**

- For upgrades from System Manager Release 6.3.15 or later, the bin file is mandatory.
- For upgrades from System Manager 6.3.14 or earlier, the bin patch file is optional.

If you provide the service pack or feature pack, the datamigration utility automatically deploys the service pack or feature pack on System Manager Release 7.0.0.0 after data migration.

## Configuration Parameters

The system populates most of the fields depending on the OVA file. You must provide information, such as password, FQDN, and timezone.

Name	Description
<b>Management IP Address (Out of Band Management IP Address)</b>	The IP address of the System Manager virtual machine for Out of Band Management.  The field is optional network interface to isolate management traffic on a separate interface from the inbound signaling network.
<b>Management Netmask</b>	The Out of Band Management subnetwork mask to assign to the System Manager virtual machine.
<b>Management Gateway</b>	The gateway IP address to assign to the System Manager virtual machine. For example, 172.16.1.1.
<b>IP Address of DNS Server</b>	The DNS IP addresses to assign to the primary, secondary, and other System Manager virtual machines. Separate the IP addresses with commas (.). For example, 172.16.1.2, 172.16.1.4.
<b>Management Hostname</b>	The hostname to assign to the System Manager virtual machine. For example, bouldervm2.
<b>Default Search List</b>	The search list of domain names. The field is optional.
<b>NTP Server IP or FQDN</b>	The IP address or FQDN of the NTP server. The field is optional. Separate the IP addresses with commas (.).
<b>Time Zone</b>	The timezone where the System Manager virtual machine is located. A list is available where you can select the continent and the country.

## Public Network Settings

Name	Description
<b>Public IP Address</b>	The IP address to enable public access to different interfaces.
<b>Public Netmask</b>	The subnetwork mask to assign to System Manager virtual machine.

*Table continues...*

Name	Description
Public Gateway	The gateway IP address to assign to the System Manager virtual machine. For example, 172.16.1.1.
Public Hostname	The hostname to assign to the System Manager virtual machine. For example, bouldervm2.

### Virtual FQDN

Name	Description
Virtual Hostname	The virtual hostname of the System Manager virtual machine. For example, grsmgr.
Virtual Domain	The virtual domain name of the System Manager virtual machine. For example, dev.com.

### SNMPv3 Parameters

Name	Description
SNMPv3 User Name Prefix	The prefix for SNMPv3 user.
SNMPv3 User Authentication Protocol Password	The password for SNMPv3 user authentication.
Confirm Password	The password that you retype to confirm the SNMPv3 user authentication protocol.
SNMPv3 User Privacy Protocol Password	The password for SNMPv3 user privacy.
Confirm Password	The password that you must provide to confirm the SNMPv3 user privacy protocol.

### Backup Definition

Name	Description
Schedule Backup?	<ul style="list-style-type: none"> <li>• <b>Yes:</b> To schedule the backup jobs during the System Manager installation.</li> <li>• <b>No:</b> To schedule the backup jobs later.</li> </ul> <p> <b>Note:</b> If you select No, the system does not display the remaining fields.</p>
Backup Server IP	<p>The IP address of the remote backup server.</p> <p> <b>Note:</b> The IP address of the backup server must be different from the System Manager IP address.</p>
Backup Server Login Id	The login ID of the backup server to log in through the command line interface.

*Table continues...*

Name	Description
<b>Backup Server Login Password</b>	The SSH login password to log in to the backup server from System Manager through the command line interface.
<b>Confirm Password</b>	The password that you reenter to log in to the backup server through the command line interface.
<b>Backup Directory Location</b>	The location on the remote backup server.
<b>File Transfer Protocol</b>	The protocol that you can use to create the backup. The values are SCP and SFTP.
<b>Repeat Type</b>	<p>The type of the backup. The possible values are:</p> <ul style="list-style-type: none"> <li>• Hourly</li> <li>• Daily</li> <li>• Weekly</li> <li>• Monthly</li> </ul>
<b>Backup Frequency</b>	<p>The frequency of the backup taken for the selected backup type.</p> <p>The system generates an alarm if you do not schedule a System Manager backup every 7 days.</p>
<b>Backup Start Year</b>	The year in which the backup must start. The value must be greater than or equal to the current year.
<b>Backup Start Month</b>	The month in which the backup must start. The value must be greater than or equal to the current month.
<b>Backup Start Day</b>	The day on which the backup must start. The value must be greater than or equal to the current day.
<b>Backup Start Hour</b>	<p>The hour in which the backup must start.</p> <p>The value must be 6 hours later than the current hour.</p>
<b>Backup Start Minutes</b>	The minute when the backup must start. The value must be a valid minute.
<b>Backup Start Seconds</b>	The second when the backup must start. The value must be a valid second.

## Network Parameters

Name	Description
Out of Band Management IP Address	The port number that you must assign to the Out of Band Management port group. The field is mandatory.
Public	The port number that you must assign to public port group. The field is optional.

Button	Description
Upgrade	Displays the EULA acceptance screen where you must click <b>Accept</b> to start the upgrade.

---

## Install on Same ESXi field descriptions

Name	Description
Install on Same ESXi	The option to select the same or a different server during the upgrade. The options are: <ul style="list-style-type: none"> <li>• Select: To upgrade on same server.</li> <li>• Clear: To upgrade on a different server.</li> </ul>
HOST FQDN	The fully qualified domain name. For example, platform.mydomain.com.

# Chapter 9: Additional Solution Deployment Manager client functionality

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## Certificate validation

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### Certification validation

With System Manager Solution Deployment Manager and Solution Deployment Manager client, you can enable a certificate-based TLS connection between the Solution Deployment Manager service and a host that is running Avaya Aura® 7.x applications. This enables to establish secure communications between System Manager Solution Deployment Manager or the Solution Deployment Manager client and Appliance Virtualization Platform or ESXi hosts.

The certificate-based sessions apply to the Avaya Aura® Virtualized Appliance offer using host self-signed certificates and the customer-provided Virtualization Environment using host self-signed or third party certificates.

You can check the following with certificate based TLS sessions:

- Certificate valid dates
- Origin of Certificate Authority
- Chain of Trust
- CRL or OCSP state
- Log Certificate Validation Events

Solution Deployment Manager checks the certificate status of hosts. If the certificate is incorrect, Solution Deployment Manager does not connect to the host.

For the correct certificate:

- The fully qualified domain or IP address of the host to which you are connecting must match the value in the certificate and the certificate must be in date.
- Appliance Virtualization Platform and VMware ESXi hosts do not automatically regenerate their certificates when host details such as IP address or hostname and domain changes. The certificate might become incorrect for the host.

If the certificate is incorrect:

- For the Appliance Virtualization Platform host, Solution Deployment Manager regenerates the certificate on the host and then uses the corrected certificate for the connection.

- For the VMware ESXi host or vCenter, the system denies connection. The customer must update or correct the certificate on the host or vCenter.

For more information about updating the certificate, see “Updating the certificate on the ESXi host from VMware”.

**\* Note:**

Solution Deployment Manager:

- Validates certificate of vCenter
- Does not validate certificates for hosts that vCenter manages

With Solution Deployment Manager, you can only accept certificate while adding vCenter. If a certificate changes, the system gives a warning that the certificate does not match the certificate in the trust store on Solution Deployment Manager. You must get a new certificate, accept the certificate as valid, and save the certificate on the system.

To validate certificates, you can directly log on to the host and confirm that the details in the `/etc/vmware/ssl/rui.crt` file match the details displayed on the screen.

---

## Generating and accepting certificates

### About this task

With Solution Deployment Manager, you can generate certificates only for Appliance Virtualization Platform hosts.

For the VMware ESXi hosts, if the certificate is invalid:

- Get a correct certificate for the host and add the certificate.
- Regenerate a self-signed certificate on the host.

For more information, see “Generating new self-signed certificates for the ESXi host”.

### Before you begin

Require permissions to add a host to generate certificates.

### Procedure

1. On the desktop, click the SDM icon () and then click **VM Management**.
2. In VM Management Tree, select a location.
3. On the Host tab, in the Host for Selected Location <location name>, select an Appliance Virtualization Platform host.
4. Click **More Actions > AVP Cert. Management > Generate/Accept Certificate**.
5. On the Certificate window, do the following:
  - a. Click **Generate Certificate**.

**\* Note:**

You can generate certificate only for the Appliance Virtualization Platform host.

- b. Click **Accept Certificate**.

In the Hosts for Selected Location <location name> section, the **Host Certificate** column must display .

### Next steps

If the system displays an SSL verification error when you gain access to the Appliance Virtualization Platform host from the vSphere client, restart the Appliance Virtualization Platform host.

### Related links

[Adding an ESXi host](#) on page 26

[Generating new self-signed certificates for the ESXi host](#) on page 80

---

## Updating the certificate on the ESXi host from VMware

### About this task

Use the procedure to update the ESXi host certificate.

For information about updating vCenter certificates, see the VMware documentation.

### Before you begin

Start an SSH session on the ESXi host.

### Procedure

1. Start vSphere client, and log in to the ESXi host as admin or root user.
2. Ensure that the domain name and the hostname of the ESXi host is set correctly and matches the FQDN that is present on the DNS servers, correct the entries to match if required.

For security reason, the common name in the certificate must match the hostname to which you connect.

3. To generate new certificates, type `/sbin/generate-certificates`.

The system generates and installs the certificate.

4. Restart the ESXi host.
5. **(Optional)** Do the following:
  - a. Move the ESXi host to the maintenance mode.
  - b. Install the new certificate.
  - c. From the Direct Console User Interface (DCUI), restart management agents.

**\* Note:**

The host certificate must now match the fully qualified domain name of the host.

VMware places only FQDN in certificates that are generated on the host. Therefore, use a fully qualified domain name to connect to ESXi hosts and vCenter from Solution Deployment Manager.

Appliance Virtualization Platform places an IP address and FQDN in generated certificates. Therefore, from Solution Deployment Manager, you can connect to Appliance Virtualization Platform hosts through IP address or FQDN.

The connection from Solution Deployment Manager 7.0.1 to a vCenter or ESXi host by using an IP address fails because the IP address is absent in the certificate and the connection is not sufficiently secure.

### Related links

[Generating new self-signed certificates for the ESXi host](#) on page 80

---

## Managing certificates for existing hosts

### About this task

By default, the certificate status of the host or vCenter that is migrated from earlier release is invalid. To perform any operation on the host from Solution Deployment Manager, you require a valid certificate. Therefore, you must get the valid certificate and accept the certificate.

Depending on the host type and the validity of the certificate, use appropriate steps to generate the certificate, and then accept the certificate.

### Before you begin

Require permissions to add a host to generate certificates.

### Procedure

1. On the desktop, click the SDM icon () and then click **VM Management**.
2. In VM Management Tree, select a location.
3. On the Host tab, in the Host for Selected Location <location name>, select a host.
4. **(Optional)** On an Appliance Virtualization Platform host, click **More Actions > Generate/ Accept Certificate**, and on the Certificate dialog box, do one of the following:
  - If the certificate is valid, click **Accept Certificate**.
  - If the certificate is invalid, click **Generate Certificate**, and then click **Accept Certificate**.
5. For the ESXi host, do one of the following:
  - If the certificate is valid, on the Certificate dialog box, click **More Actions > Generate/ Accept Certificate**, and click **Accept Certificate**.

- If the certificate is invalid, log in to the ESXi host, validate the certificate, and then from Solution Deployment Manager, accept the certificate.

For more information, see “Generating new self-signed certificates for the ESXi host”.

6. For vCenter, do the following:
  - a. Click **Map vCenter**, select the vCenter server, and click **Edit**.
  - b. In the Certificate dialog box, accept certificate, and click **Save**.

### Related links

[Generating new self-signed certificates for the ESXi host](#) on page 80

[Generating and accepting certificates](#) on page 77

---

## Generating new self-signed certificates for the ESXi host

### About this task

Generate new certificates only if you change the host name or accidentally delete the certificate. Under certain circumstances, you must force the host to generate new certificates.

To receive the full benefit of certificate checking, particularly if you want to use encrypted remote connections externally, do not use a self-signed certificate. Instead, install new certificates that are signed by a valid internal certificate authority or purchase a certificate from a trusted security authority.

### Before you begin

Start an SSH session on the ESXi host.

### Procedure

1. Log in to the ESXi host as an admin user.
2. To create a backup of any existing certificates, in the `/etc/vmware/ssl` directory, rename the certificates by using the following commands:

```
mv rui.crt orig.rui.crt
mv rui.key orig.rui.key
```

#### **Note:**

Do not perform the step if you are regenerating certificates because you deleted the certificates.

3. To generate new certificates, type `/sbin/generate-certificates`.
4. Restart the ESXi host.

The generation process places the certificates places in the correct location.

5. **(Optional)** Do the following:
  - a. Move the ESXi host to the maintenance mode.
  - b. Install the new certificate.

- c. Restart management agents from Direct Console User Interface (DCUI).
6. Do the following to confirm that the host successfully generated new certificates:
  - a. Type `ls -la`.
  - b. Compare the time stamps of the new certificate files with `orig.rui.crt` and `orig.rui.key`.

### Next steps

Replace the self-signed certificate and the key with a trusted certificate and key.

---

## Monitoring a host and virtual machine

---

### Monitoring a host

#### Procedure

1. On the desktop, click the SDM icon () and then click **VM Management**.
2. Click the Monitor Hosts tab.
3. In the Monitor Hosts page, do the following:
  - a. In **Hosts**, click a host.
  - b. Click **Generate Graph**.

The system displays the graph regarding the CPU/memory usage of the host that you selected.

---

### Monitoring a virtual machine

#### Procedure

1. On the desktop, click the SDM icon () and then click **VM Management**.
2. Click the Monitor VMs tab.
3. In the Monitor VMs page, do the following:
  - a. In **Hosts**, click a host.
  - b. In **Virtual machines**, click a virtual machine on the host that you selected.
4. Click **Generate Graph**.

The system displays the graph regarding the CPU/memory usage of the virtual machine that you selected.

---

# Managing vCenter

---

## Adding a vCenter to Solution Deployment Manager

### About this task

System Manager Solution Deployment Manager supports virtual machine management in vCenter 5.0, 5.1, 5.5, and 6.0. When you add vCenter, System Manager discovers the ESXi hosts that this vCenter manages, adds to the repository, and displays in the Managed Hosts section. Also, System Manager discovers virtual machines running on the ESXi host and adds to the repository.

System Manager displays vCenter, ESXi host, and virtual machines on the Manage Elements page.

### Before you begin

Ensure that you have the required permissions.

### Procedure

1. On the desktop, click the SDM icon () and then click **VM Management**.
2. In the lower pane, click **Map vCenter**.
3. On the Map vCenter page, click **Add**.
4. In the New vCenter section, provide the following vCenter information:

- **vCenter FQDN**

For increased security when using a vCenter with Solution Deployment Manager, use an FQDN for the vCenter. vCenter does not put IP addresses in its certificates. Therefore, you need FQDN to confirm the server identity through the certificate in Solution Deployment Manager.

- **User Name**

- **Password**

- **Authentication Type**

5. Click **Save**.
6. On the certificate dialog box, click **Accept Certificate**.

The system generates the certificate and adds vCenter.

In the Managed Hosts section, the system displays the ESXi hosts that this vCenter manages.

### Related links

[Editing vCenter](#) on page 83

[Map vCenter field descriptions](#) on page 84

[New vCentre and Edit vCentre field descriptions](#) on page 85

---

## Editing vCenter

### Before you begin

Ensure that you have the required permissions.

### Procedure

1. On the desktop, click the SDM icon () and then click **VM Management**.
2. In the lower pane, click **Map vCenter**.
3. On the Map vCenter page, select a vCenter server and click **Edit**.
4. In the Edit vCenter section, change the vCenter information as appropriate.
5. If vCenter is migrated from earlier release, on the Certificate page, click **Accept Certificate**, and click **Save**.
6. To edit the location of ESXi hosts, in the Managed Hosts section, do one of the following:
  - Select an ESXi host and click the edit icon (.
  - Select one or more ESXi hosts, select the location, and click **Bulk Update** and click **Update**.

If you do not click **Commit** after you move the host from Managed Hosts to Unmanaged Hosts or vice versa, and you refresh the table, the page displays the same host in both the tables. Click **Commit** to get an updated list of managed and unmanaged hosts.

---

## Deleting vCenter from Solution Deployment Manager

### Before you begin

Ensure that you have the required permissions.

### Procedure

1. On the desktop, click the SDM icon () and then click **VM Management**.
2. In the lower pane, click **Map vCenter**.
3. On the Map vCenter page, select one or more vCenter servers and click **Delete**.
4. Click **Yes** to confirm the deletion of servers.

The system deletes the vCenter from the inventory.

## Map vCenter field descriptions

Name	Description
<b>Name</b>	The name of the vCenter server.
<b>IP</b>	The IP address of the vCenter server.
<b>FQDN</b>	The FQDN of the vCenter server.   <b>Note:</b> Use FQDN to successfully map and log in to vCenter from Solution Deployment Manager. With IP address, the system displays an error message about the incorrect certificate and denies connection.
<b>License</b>	The license type of the vCenter server.
<b>Status</b>	The license status of the vCenter server.
<b>Certificate Status</b>	The certificate status of the vCenter server. The values are: <ul style="list-style-type: none"> <li>• : The certificate is correct.</li> <li>• : The certificate is not accepted or invalid.</li> </ul>

Button	Description
<b>View</b>	Displays the certificate status details of the vCenter server.
<b>Generate/Accept Certificate</b>	Displays the certificate dialog box where you can generate and accept certificate for vCenter.  For vCenter, you can only accept certificate. You cannot generate certificate.

Button	Description
<b>Add</b>	Displays the New vCenter page, where you can add a new ESXi host.
<b>Edit</b>	Displays the Edit vCenter page, where you can update the details and location of ESXi hosts.
<b>Delete</b>	Deletes the ESXi host.
<b>Refresh</b>	Updates the list of ESXi hosts in the Map vCenter section.

## New vCentre and Edit vCentre field descriptions

Name	Description
vCenter FQDN	FQDN of vCenter.
User Name	The user name to log in to vCenter.
Password	The password that you use to log in to vCenter.
Authentication Type	<p>The authentication type that defines how Solution Deployment Manager performs user authentication. The options are:</p> <ul style="list-style-type: none"> <li>• <b>SSO</b>: Global username used to log in to vCenter to authenticate to an external Active Directory authentication server.</li> <li>• <b>LOCAL</b>: User created in vCenter</li> </ul>

Button	Description
Save	Saves any changes you make to FQDN, username, and authentication type of vCenter.
Refresh	Refreshes the vCenter details.

### Managed Hosts

Name	Description
Host IP/FQDN	The name of the ESXi host.
Host Name	The IP address of the ESXi host.
Location	The physical location of the ESXi host.
Edit	The option to edit the location and host.
Bulk Update	<p>Provides an option to change the location of more than one ESXi hosts.</p> <p> <b>Note:</b> You must select a location before you click <b>Bulk Update</b>.</p>
Update	Saves the changes that you make to the location or hostname of the ESXi host.
Commit	Commits the changes that you make to the ESXi host with location that is managed by vCenter.

### Unmanaged Hosts

Name	Description
Host IP/FQDN	The name of the ESXi host.

*Table continues...*

Name	Description
<b>ESXi Version</b>	The version of the ESXi host. The options are: 5.0, 5.1, 5.5, and 6.0.

Button	Description
<b>Commit</b>	Saves all changes that you made to vCenter on the Map vCenter page.

## Viewing the job history of virtual machine operations

### Procedure

1. On the desktop, click the SDM icon () , and then click **VM Management**.
2. In the lower pane, click **Job History**.
3. On the Job History page, in **Operation**, select one or more operations.
4. Click **Submit**.

The page displays the details of jobs that you selected.

## Job History field descriptions

Name/Button	Description
<b>Operation</b>	The operation that is performed on a virtual machine. You can select one or more operations that are performed on a virtual machine, such as host restart, virtual machine deployment, and patch installation.
<b>Submit</b>	Provides details of jobs that you selected.

### History

Button	Description
<b>Job ID</b>	The unique name of the virtual machine management job.
<b>IP/FQDN</b>	The IP address or host name of the virtual machine or the host where the operation is performed.
<b>Operation</b>	The operation performed on the virtual machine or host. For example, host refresh, virtual machine deployment, and patch installation.

*Table continues...*

Button	Description
Status	The status of the job.
Start Time	The start time of the job.
End Time	The end time of the job.

## Network Parameters and Configuration Parameters field descriptions

**\* Note:**

During the Utility Services deployment, if you do not know the **Communication Manager IP Address**, **System Manager IP Address**, or **Enrollment Password**, then use the dummy values. Dummy values must pass validation. Use the localhost default 127.0.0.1 for the IP address, and `Dummy` as the password.

Name	Description
Configuration Parameters	
<b>Communication Manager IP</b>	IP address of Communication Manager.  <b>* Note:</b> A unique Communication Manager IP address is required for each Utility Services. If you are not associated with a Communication Manager server, specify a static IP that is in your network range.
<b>Hostname</b>	Linux hostname or fully qualified domain name for Utility Services virtual machine.
<b>Timezone setting</b>	The selected timezone setting for the Utility Services virtual machine.
<b>NTP Server IP</b>	IP address of a server running Network Time Protocol that Communication Manager can use for time synchronization.
<b>Out of Band Management Mode</b>	The Out of Band Management mode in which you want to deploy. The options are as follows: <ul style="list-style-type: none"> <li>• <b>OOBM_Enabled</b>: To enable Out of Band Management.</li> <li>• <b>OOBM_Disabled</b>: To disable Out of Band Management.</li> </ul> <b>* Note:</b> <b>OOBM_Disabled</b> is the default setting. If the mode is set to <b>OOBM_Disabled</b> , then you do not need to configure Out of Band Management.

*Table continues...*

Name	Description
<b>Utility Services Mode</b>	<p>The mode in which you want to deploy Utility Services. The options are:</p> <ul style="list-style-type: none"> <li>• <b>Services Port Only:</b> Deploys Services Port only. Use when the customer already has Utility Services running on another virtual machine and providing the services.  With the services port feature, through a laptop connected to the services port of Appliance Virtualization Platform, you can gain access to Avaya virtual machines and the hypervisor that are deployed.</li> <li>• <b>Utility Servers Only:</b> Use to disable routing. Set this mode only for Virtualized Environment. If you set this mode for an Avaya appliance, the services port becomes non-operational.</li> <li>• <b>Full Functionality:</b> Utility Services and services port enabled. The default mode for Appliance Virtualization Platform.</li> </ul> <p>You can set the mode only during the deployment. You cannot change the mode after the virtual machine is deployed.</p> <p> <b>Note:</b></p> <p>For the Solution Deployment Manager client to connect to the services port features of Utility Services, change the IP address to 192.11.13.5 on the computer of the technician</p> <p>Utility Services can gain access to the hypervisor and all virtual machines. Utility Services provides application routing between the physical port and virtual applications.</p>
<b>Primary System Manager IP address for application registration</b>	The IP address of System Manager that is required for application registration.
<b>Enrollment Password</b>	The enrollment password.
<b>Confirmation password</b>	The confirmation password.
Network Parameters	
<b>Default Gateway</b>	The IP address of the default gateway. Required field unless you use DHCP.
<b>DNS</b>	The IP address of domain name servers for the Utility Services virtual machine. Separate each IP address by a comma. Required field unless you use DHCP.
<b>Public IP address</b>	The IP address for this interface. Required field unless you use DHCP.
<b>Public Netmask</b>	The netmask for this interface. Required field unless you use DHCP.

*Table continues...*

Name	Description
<b>Out of Band Management IP Address</b>	The IP address for this interface.
<b>Out of Band Management Netmask</b>	The netmask for this interface.

# Chapter 10: Troubleshooting

---

## Uninstalling the Solution Deployment Manager client

### About this task

Uninstall the Solution Deployment Manager client before you install a new version of the client on your computer.

Use the procedure to uninstall the client manually if you are unable to remove the client by using Add/Remove Programs or Uninstall or change a program from Control Panel\Programs and Features.

### Procedure

1. In the Run window, type `services.msc`, and stop the Solution Deployment Manager service.

If the Solution Deployment Manager service does not stop properly, reboot the machine.

2. At the windows command prompt, log in as administrator, and type `sc delete sdm` to delete the Solution Deployment Manager service.

3. Delete following the registry entry:

```
HKEY_LOCAL_MACHINE\SOFTWARE\Avaya\SDMClient
```

4. Delete the Solution Deployment Manager client installation directory and the content in the directory.

If the client is installed at the default location, then delete `C:\Program Files\Avaya\AvayaSDMClient`.

5. Delete the Solution Deployment Manager client shortcut from the `C:\ProgramData\Microsoft\Windows\Start Menu\Programs\Avaya\AvayaSDMClient` location and the desktop.

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