



Using the Configure VMware Integration Wizard

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Overview of the Configure VMware Integration Wizard

The **Configure VMware Integration** wizard provides a single access to perform the basic configuration steps that are specific to Cisco UCS Manager. The wizard does not address every vCenter configuration. For example, it does not create a DVS structure that includes a vCenter server folder that contains the datacenter. If you want a folder between the vCenter server and the datacenter, do not use this wizard.

You cannot use this wizard to complete the configuration steps that must be performed in VMware vCenter to complete the integration.

Through the **Configure VMware Integration** wizard, you can perform the following configuration steps:

- 1 Export the vCenter extension files to establish a connection to VMware vCenter.
You must register the vCenter extension key as a plug-in in VMware vCenter. You cannot perform that step in the **Configure VMware Integration** wizard.
- 2 Define the structure for one VMware vCenter Distributed Virtual Switch (DVS), including the vCenter server, datacenter, DVS folder, and DVS.
- 3 Define the port profile and profile client.
- 4 Apply the configuration to VMware vCenter.

When you have completed the integration steps through the wizard, you must log in to VMware vCenter and associate the VMs and port profiles with the DVS. The port profiles are shown as port groups in VMware vCenter.

Configuring the VMware Integration with the Wizard

If you prefer not to use this wizard, you can perform each of these steps individually.

Before You Begin

Before you use the **Configure VMware Integration** wizard, complete the following:

- Configure the VMware ESX host for VM-FEX.
- Configure a VMware vCenter instance for VM-FEX.
- Configure a certificate for VM-FEX.

Procedure

- Step 1** In the **Navigation** pane, click the **VM** tab.
- Step 2** On the **VM** tab, expand the **All** node.
- Step 3** Click **VMware**.
- Step 4** In the **Work** pane, click the **General** tab.
- Step 5** In the **Actions** area, click **Configure VMware Integration**.
- Step 6** In the **Configure VMware Integration** wizard, complete the following:
- [Page 1: Establishing the Connection to vCenter Server](#), on page 2
 - [Page 2: Defining a VMware vCenter Distributed Virtual Switch](#), on page 3
 - [Page 3: Defining a Port Profile](#), on page 5
 - [Page 4: Applying Port Profiles and Configuration to vCenter Server](#), on page 7
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Page 1: Establishing the Connection to vCenter Server

This procedure directly follows the steps in [Configuring the VMware Integration with the Wizard](#), on page 1. It describes how to establish a connection to VMware vCenter through the **Configure VMware Integration** wizard.

You can skip this page and move onto the next page if you have already exported and registered the vCenter extension key files.

Before You Begin

- If you want to use a custom extension key, you must modify the extension key before performing this step as described in [\(Optional\) Modifying the vCenter Extension Key](#).
- The vCenter server must have network connectivity to the Cisco UCS management port and to the uplink Ethernet port(s) being used by the ESX host. Specifically, the HTTP and HTTPS ports (normally TCP 80 and 443) must not be blocked by any device or policy in the network path.

Procedure

- Step 1** To export the vCenter extension files, click one of the following:

| Option | Description |
|------------------------|--|
| Export | For VMware vCenter version 4.0 update 1 and later. Exports a single vCenter Extension Key file. |
| Export Multiple | For VMware vCenter version 4.0. Exports nine vCenter Extension Key files. |

Step 2 In the **Export vCenter Extension** dialog box, do the following:

- a) In the **Save Location** field, enter the path to the directory where you want to save the extension file or files.

If you do not know the path, click the ... button and browse to the location.

- b) Click **OK**.

Cisco UCS Manager generates the extension file(s) and saves them to the specified location.

Step 3 Copy the downloaded file to a location on the VMware vCenter.

Step 4 Register the vCenter extension file(s) in VMware vCenter.

For more information, see [Registering a vCenter Extension File in VMware vCenter](#), and the instructions on this page in the **Configure VMware Integration** wizard.

Step 5 Click **Next**.

What to Do Next

Complete the steps in [Page 2: Defining a VMware vCenter Distributed Virtual Switch](#), on page 3.

Page 2: Defining a VMware vCenter Distributed Virtual Switch

This procedure directly follows the steps in [Page 1: Establishing the Connection to vCenter Server](#), on page 2. It describes how to define the components of a distributed virtual switch in VMware vCenter through the **Configure VMware Integration** wizard.

Procedure

Step 1 In the **vCenter Server** area, complete the following fields to define the connection to VMware vCenter:

| Name | Description |
|----------------------------------|--|
| vCenter Server Name field | The user-defined name for the vCenter server. This name can be between 1 and 16 alphanumeric characters. You cannot use spaces or any special characters other than - (hyphen), _ (underscore), : (colon), and . (period), and you cannot change this name after the object is saved. |

| Name | Description |
|--|--|
| Description field | The description of the vCenter server. Enter up to 256 characters. You can use any characters or spaces except ` (accent mark), \ (backslash), ^ (carat), " (double quote), = (equal sign), > (greater than), < (less than), or ' (single quote). |
| vCenter Server Hostname or IP Address field | The hostname or IP address of the vCenter server. Note If you use a hostname rather than an IPv4 or IPv6 address, you must configure a DNS server. If the Cisco UCS domain is not registered with Cisco UCS Central or DNS management is set to local , configure a DNS server in Cisco UCS Manager. If the Cisco UCS domain is registered with Cisco UCS Central and DNS management is set to global , configure a DNS server in Cisco UCS Central. |
| vCenter Server Port field | Specifies the HTTP port number of vCenter. The default port number is 80 and is displayed in this field as default. Although the communication is HTTPS, vCenter receives the packets on its HTTP port. The valid range is 1-65355. |

Step 2 In the **Datacenter** area, complete the following fields to create the datacenter in VMware vCenter:

| Name | Description |
|--------------------------------------|---|
| vCenter Datacenter Name field | The name of the vCenter Datacenter. This name can be between 1 and 16 characters. You can use spaces and any other ASCII characters except for ` (accent), \ (back slash), ^ (carat), " (double quote), / (forward slash), > (greater than), < (less than), or ' (single quote). |
| Description field | The user-defined description of the Datacenter. Enter up to 256 characters. You can use any characters or spaces except ` (accent mark), \ (backslash), ^ (carat), " (double quote), = (equal sign), > (greater than), < (less than), or ' (single quote). |

Step 3 In the **DVS Folder** area, complete the following fields to create a folder to contain the distributed virtual switch in VMware vCenter:

| Name | Description |
|--------------------------|--|
| Folder Name field | The name of the folder that contains the distributed virtual switch (DVS). This name can be between 1 and 16 characters. You can use spaces and any other ASCII characters except for ` (accent), \ (back slash), ^ (carat), " (double quote), / (forward slash), > (greater than), < (less than), or ' (single quote). |

| Name | Description |
|--------------------------|---|
| Description field | The user-defined description of the folder. Enter up to 256 characters. You can use any characters or spaces except ` (accent mark), \ (backslash), ^ (carat), " (double quote), = (equal sign), > (greater than), < (less than), or ' (single quote). |

Step 4 In the **DVS** area, complete the following fields to create the distributed virtual switch in VMware vCenter:

| Name | Description |
|--------------------------|--|
| DVS Name field | The name of the DVS. This name can be between 1 and 16 characters. You can use spaces and any other ASCII characters except for ` (accent), \ (back slash), ^ (carat), " (double quote), / (forward slash), > (greater than), < (less than), or ' (single quote). |
| Description field | The user-defined description of the DVS. Enter up to 256 characters. You can use any characters or spaces except ` (accent mark), \ (backslash), ^ (carat), " (double quote), = (equal sign), > (greater than), < (less than), or ' (single quote). |
| DVS field | This can be one of the following: <ul style="list-style-type: none"> • disable • enable <p>If you disable the DVS, Cisco UCS Manager does not push any configuration changes related to the DVS to VMware vCenter.</p> |

Step 5 Click **Next**.

What to Do Next

Complete the steps in [Page 3: Defining a Port Profile](#), on page 5.

Page 3: Defining a Port Profile

This procedure directly follows the steps in [Page 2: Defining a VMware vCenter Distributed Virtual Switch](#), on page 3. It describes how to define the components of a distributed virtual switch in VMware vCenter through the **Configure VMware Integration** wizard.

Procedure

Step 1 In the **Port Profile** area, complete the following fields to define the port profile:

| Name | Description |
|--|---|
| Name field | The user-defined name for the port profile. This name can be between 1 and 31 ASCII alphanumeric characters. You cannot use spaces or any special characters other than - (hyphen), _ (underscore), and : (colon), and you cannot change this name after the object has been saved. |
| Description field | The user-defined description for the port profile. Enter up to 256 characters. You can use any characters or spaces except ` (accent mark), \ (backslash), ^ (carat), " (double quote), = (equal sign), > (greater than), < (less than), or ' (single quote). |
| QoS Policy drop-down list | The quality of service policy associated with this port profile. |
| Network Control Policy drop-down list | The network control policy associated with this port profile. |
| Max Ports field | The maximum number of ports that can be associated to a port profile is 4096. The default is 64 ports. If the DVS has more than one associated port profile, each port profile client can be set to use a maximum of 4096 ports. |
| Host Network IO Performance field | This can be one of the following: <ul style="list-style-type: none"> • None—Traffic to and from a virtual machine passes through the DVS. • High Performance— Traffic to and from a virtual machine bypasses the DVS and hypervisor and travels directly between the virtual machines and a virtual interface card (VIC) adapter. |
| Pin Group drop-down list | The pin group associated with this port profile. |
| Type field | The type of port profile. This can be one of the following: <ul style="list-style-type: none"> • Regular—Used for all port profiles except for SCVMM. Select regular port profile for KVM and VMware hypervisors. • SLA Only—Used for SCVMM only. <p>Note This field is not displayed for port profile clients used by logical switches.</p> |

Step 2 In the **VLANs** area, do the following to assign one or more VLANs to the port profile:

- a) In the **Select** column, check the check box in the appropriate row for each VLAN that you want to use in the port profile.
- b) In the **Native VLAN** column, click the radio button in the appropriate row for the VLAN that you want to designate as the native VLAN.

Step 3 In the **Client Profile** area, do the following to create a profile client for the port profile:

| Name | Description |
|--|--|
| Name field | The user-defined name for the profile client. This name can be between 1 and 16 ASCII alphanumeric characters. You cannot use spaces or any special characters other than - (hyphen), _ (underscore), and : (colon), and you cannot change this name after the object has been saved. |
| Description field | The user-defined description of the client. Enter up to 256 characters. You can use any characters or spaces except ` (accent mark), \ (backslash), ^ (carat), " (double quote), = (equal sign), > (greater than), < (less than), or ' (single quote). |
| Datacenter drop-down list | Choose a datacenter from the drop-down list or choose All if this profile client applies to all datacenters. |
| Folder drop-down list | Choose a folder from the drop-down list or choose All if this profile client applies to all folders. |
| Distributed Virtual Switch drop-down list | Choose a virtual switch from the drop-down list or choose All if this profile client applies to all virtual switches. |

Step 4 Click **Next**.

What to Do Next

Complete the configuration of the virtual machines in VMware vCenter.

Page 4: Applying Port Profiles and Configuration to vCenter Server

This procedure directly follows the steps in [Page 3: Defining a Port Profile](#), on page 5. It describes how to apply the port profiles to vCenter Server through the **Configure VMware Integration** wizard.

Procedure

Step 1 Review the text on the page in the **Configure VMware Integration** wizard.

Step 2 Click **Finish**.

Cisco UCS Manager connects to the vCenter Server, creates the specified DVS, and applies the port profiles.

What to Do Next

In VMware vCenter, associate the VMs and port profiles with the DVS. The port profiles are shown as port groups in VMware vCenter.