



# Managing VMware Clouds

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## About Managing VMware Clouds

Cisco UCS Director supports VMware through vCenter (ESX 3.5, ESX/ESXi 4.x, 5.x, 6.0 and 6.5). Cisco UCS Director automatically discovers all existing virtual machines (VMs) and images in the newly added cloud account. Typically, the discovery process takes about 5 minutes. You can also add VMware clouds



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**Note** The term “cloud” refers to one vCenter installation.

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Cisco UCS Director supports inventory collection and VM provisioning using multiple datacenters and clusters. When creating a VMware cloud, you can choose the option to discover and select multiple datacenters and clusters. Once you add a discovered datacenter and cluster to a cloud, you cannot de-select them from the cloud by editing it. However, you can edit the cloud to add extra datacenters and clusters.



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**Note** Cisco UCS Director does not support the creation of clouds that use the same vCenter account. If there are duplicate accounts, you cannot create a VMware Cloud. In addition, if there are duplicate accounts, VM provisioning fails and an error appears in the status for the virtual account. The **Test Connectivity** function also fails with the error message. This error also occurs if the same server with the same combination of clusters is used in different clouds.

To disable this functionality, you can manually modify the `vmware.properties` file in the `cd /opt/infra/inframgr` directory to allow duplicate account IDs by setting the `allowDuplicateClouds` field to true. By default the field is set to false.

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When upgrading from a previous release, all duplicate accounts display a failed connection status. Though an error message displays, all the actions can still be executed on the VMs.

# Creating a VMware Cloud

When creating a VMware cloud, you can specify a datacenter and clusters in one of the following ways:

- Within the credential policy
- In the **VMware Datacenter** and **VMware Cluster** fields
- From the **Discover Datacenters / Clusters** check box



**Note** Either a datacenter within the credential policy or the VMware datacenter and VMware cluster can be selected. Specifying the datacenter in the **Add Cloud** screen and in the credential policy form results in an error.

- Step 1** Choose **Administration > Virtual Accounts**.
- Step 2** On the **Virtual Accounts** page, click **Virtual Accounts**.
- Step 3** Click **Add**.
- Step 4** On the **Add Cloud** screen, complete the required fields, including the following:

Name	Description
<b>Cloud Type</b> drop-down list	Displays the available cloud types. Choose VMware. <b>Note</b> The following fields are displayed when VMware is chosen. Other cloud types display fields that are specific to that cloud type.
<b>Cloud Name</b> field	The cloud name. The name cannot include single quotes. <b>Note</b> Each cloud requires a unique name in Cisco UCS Director. Once a cloud has been added, all reports refer to the cloud using the Cloud Name.
<b>Server Address</b> field	The vCenter server address
<b>Use Credential Policy</b> check box	Check this check box if you want to use a credential policy for this account rather than enter the information manually.
<b>Use Credential Policy</b> drop-down list	If you checked <b>Use Credential Policy</b> , choose the credential policy that you want to use from this drop-down list.  This field is only displayed if you choose to use a credential policy.
<b>Server User ID</b> field	The vCenter server username.
<b>Server Password</b> field	The vCenter server password.
<b>Server Access Port</b> field	The server port number.

Name	Description
Server Access URL field	The server access URL.
VMware Datacenter field	The data center name on the vCenter account.
Discover Datacenters / Clusters check box	Check this check box to discover and use any VMware datacenters and associated VMware clusters.
VMware Cluster field	The name of the VMware cluster in the vCenter account. This name allows you to discover, monitor, and manage the specified pod's resources. Leave the field blank if the entire vCenter account is managed by Cisco UCS Director.
Select Datacenters / Clusters field	Check the associated datacenters and clusters you want to use. <b>Note</b> This field is visible only when you check the <b>Discover Datacenters / Clusters</b> check box.
Enable SRM check box	Check this check box to enable Site Recovery Manager (SRM) for the account.
Primary SRM Server Address field	The IP address of the primary SRM server. <b>Note</b> This field is visible only when you check the <b>Enable SRM</b> check box.
Primary SRM Server User ID field	The user ID for the primary SRM server. <b>Note</b> This field is visible only when you check the <b>Enable SRM</b> check box.
Primary SRM Server Password field	The password of the user for the primary SRM server. <b>Note</b> This field is visible only when you check the <b>Enable SRM</b> check box.
Primary SRM Server Access Port field	The port number for the primary SRM server. For SRM version 6.0, enter 9086 as the port number. <b>Note</b> This field is visible only when you check the <b>Enable SRM</b> check box.
Remote SRM Server User ID field	The user ID for the remote SRM server. <b>Note</b> This field is visible only when you check the <b>Enable SRM</b> check box.
Remote SRM Server Password field	The password of the user ID for the remote SRM server. <b>Note</b> This field is visible only when you check the <b>Enable SRM</b> check box.

Name	Description
Use SSO check box	<p>Check this check box to use Single Sign-On (SSO) for authentication.</p> <p>The SSO option is only available for Virtual SAN (VSAN). SSO credentials are required for VM provisioning using storage profiles on the Virtual SAN cluster.</p>
SSO Server Address field	<p>The IP address of the Single-Sign On server.</p> <p><b>Note</b> This field is visible only when you check the <b>Use SSO</b> check box.</p>
SSO Server User ID field	<p>The user ID for the SSO server.</p> <p><b>Note</b> This field is visible only when you check the <b>Use SSO</b> check box.</p>
SSO Server Password field	<p>The password of the user ID for the SSO server.</p> <p><b>Note</b> This field is visible only when you check the <b>Use SSO</b> check box.</p>
SSO Server Access URL field	<p>The URL for SSO server access.</p> <p><b>Note</b> This field is visible only when you check the <b>Use SSO</b> check box.</p>
SSO Server Access Port field	<p>The port number. For vCenter version 5.x, enter 7444 as the port number.</p> <p><b>Note</b> This field is visible only when you check the <b>Use SSO</b> check box.</p>
Server Access URL field	<p>The URL for server access.</p>
Description field	<p>The description of the cloud.</p>
Contact Email field	<p>The contact email address for the cloud.</p>
Location field	<p>The location.</p>
Pod drop-down list	<p>Choose the converged infrastructure pod.</p> <p>When you choose a pod name, the VMware cloud account is made available in the converged infrastructure stack.</p> <p><b>Note</b> You cannot add more than one virtual account to a virtual SAN pod.</p>
Service Provider field	<p>The service provider's name.</p>

**Step 5** Click **Add**.

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## Testing the Connection

### SUMMARY STEPS

1. Choose **Administration > Virtual Accounts**.
2. On the **Virtual Accounts** page, click **Virtual Accounts**.
3. Choose the VMware account that you want to test.
4. Click **Test Connectivity**.
5. Choose **Virtual > Compute**.
6. Click **Summary**.
7. Choose the cloud name to view its status details.

### DETAILED STEPS

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**Step 1** Choose **Administration > Virtual Accounts**.

**Step 2** On the **Virtual Accounts** page, click **Virtual Accounts**.

**Step 3** Choose the VMware account that you want to test.

**Step 4** Click **Test Connectivity**.

There is no progress bar that displays the results of the connectivity test. Use the **Summary** tab to verify that the cloud account is added and its data is collected.

**Step 5** Choose **Virtual > Compute**.

**Step 6** Click **Summary**.

It can take a few minutes to complete autodiscovery and populate the data.

**Step 7** Choose the cloud name to view its status details.

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## Viewing vCenter Plug-ins

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**Step 1** Choose **Administration > Virtual Accounts**.

**Step 2** On the **Virtual Accounts** page, click **Plugins**.

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