



# Connecting Cisco UCS Manager to VMware vCenter

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## Connecting Using the Extension Key

### (Optional) Modifying the vCenter Extension Key

You can modify the vCenter extension key to be more meaningful than the default ID string. This provides better system identification.

## Procedure

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- Step 1** In the **Navigation** pane, click the **VM** tab.
- Step 2** On the **VM** tab, expand the **All** node.
- Step 3** On the **VM** tab, click **VMWare**.
- Step 4** In the **Work** pane, click the **General** tab.
- Step 5** In the **Actions** area, click **Modify Extension Key**.
- Step 6** In the **Modify Extension Key** dialog box, do the following:
- In the **Key** field, modify the key as needed.  
A vCenter extension key can have a maximum length of 33 characters. These characters can be letters, numbers, or hyphens. No other characters or spaces are permitted in the extension key.
  - Click **OK**.
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## What to Do Next

Export the vCenter extension file or files from Cisco UCS Manager.

# Exporting a vCenter Extension File from Cisco UCS Manager

Depending on the version of VMware vCenter you are using, you can either generate one extension file or a set of nine extension files.

## Procedure

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- Step 1** In the **Navigation** pane, click the **VM** tab.
- Step 2** On the **VM** tab, expand the **All** node.
- Step 3** On the **VM** tab, click **VMWare**.
- Step 4** In the **Work** pane, click the **General** tab.
- Step 5** In the **Actions** area, click one of the following links:

Option	Description
<b>Export vCenter Extension</b>	For vCenter version 4.0 update 1 and later versions.
<b>Export Multiple vCenter Extensions</b>	For vCenter version 4.0.

- Step 6** In the **Export vCenter Extension** dialog box, do the following:
- 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.
  - Click **OK**.

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

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### What to Do Next

Register the vCenter extension file or files in VMware vCenter.

## Registering a vCenter Extension File in VMware vCenter

In VMware vCenter, the vCenter extension files are called plug-ins.

### Before You Begin

Export the vCenter extension file(s) from Cisco UCS Manager. Ensure that the exported vCenter extension files are saved to a location that can be reached by VMware vCenter.

### Procedure

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- Step 1** In VMware vCenter, choose **Plug-ins > Manage Plug-ins**.
  - Step 2** Right-click any empty space below the Available Plug-ins section of the **Plug-in Manager** dialog box and click **New Plug-in**.
  - Step 3** Click **Browse** and navigate to the location where the vCenter extension file(s) are saved.
  - Step 4** Choose a vCenter extension file and click **Open**.
  - Step 5** Click **Register Plug-in**.
  - Step 6** If the **Security Warning** dialog box appears, click **Ignore**.
  - Step 7** Click **OK**.  
The vCenter extension file registers as an available VMware vCenter plug-in. You do not need to install the plug-in; instead, leave it in the available state. If you are registering multiple vCenter extension files, repeat this procedure until all files are registered.
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## Configuring a Certificate for VM-FEX

## Creating a Certificate for VM-FEX for VMware

### Before You Begin

Copy a certificate to the fabric interconnect.

**Procedure**

	Command or Action	Purpose
<b>Step 1</b>	UCS-A# <b>scope system</b>	Enters system mode.
<b>Step 2</b>	UCS-A /system # <b>scope vm-mgmt</b>	Enters system VM management mode.
<b>Step 3</b>	UCS-A /system/vm-mgmt # <b>scope vmware</b>	Enters system VM management VMware mode.
<b>Step 4</b>	UCS-A /system/vm-mgmt /vmware # <b>scope cert-store</b>	Enters system VM management VMware certificate store mode.
<b>Step 5</b>	UCS-A /system/vm-mgmt /vmware/cert-store # <b>create certificate</b> <i>certificate-name</i>	Creates the specified certificate for VM-FEX for VMware and enters system VM management VMware certificate store certificate mode.
<b>Step 6</b>	UCS-A /system/vm-mgmt /vmware/cert-store/certificate # <b>set location</b> {volatile   workspace} <b>path</b> <i>path</i> <b>certfile</b> <i>file-name</i>	Specifies the location and filename of an existing certificate to use as the certificate for VM-FEX for VMware.
<b>Step 7</b>	UCS-A /system/vm-mgmt /vmware/cert-store/certificate # <b>commit-buffer</b>	Commits the transaction to the system configuration.

The following example shows how to create a certificate for VM-FEX for VMware and commit the transaction:

```
UCS-A# scope system
UCS-A /system # scope vm-mgmt
UCS-A /system/vm-mgmt # scope vmware
UCS-A /system/vm-mgmt/vmware # scope cert-store
UCS-A /system/vm-mgmt/vmware/cert-store # create certificate VnLinkCertificate
UCS-A /system/vm-mgmt/vmware/cert-store/certificate* # set location workspace path /temp
certfile certificate.txt
UCS-A /system/vm-mgmt/vmware/cert-store/certificate* # commit-buffer
UCS-A /system/vm-mgmt/vmware/cert-store/certificate #
```

## Copying a Certificate to the Fabric Interconnect

**Before You Begin**

Obtain a certificate.

**Procedure**

	Command or Action	Purpose
<b>Step 1</b>	UCS-A# <b>connect local-mgmt</b>	Enters local management mode.

	Command or Action	Purpose
<b>Step 2</b>	UCS-A(local-mgmt)# <b>copy</b> <i>from-filesystem:</i> [ <i>from-path</i> ] <i>filename to-filesystem:</i> [ <i>to-path</i> ] <i>filename</i>	<p>Copies the certificate from its source location to its destination location. For the <i>from-filesystem:</i> argument, use one of the following syntax:</p> <ul style="list-style-type: none"> <li>• <b>ftp:// username@server-ip-addr</b></li> <li>• <b>scp:// username@server-ip-addr</b></li> <li>• <b>sftp:// username@server-ip-addr</b></li> <li>• <b>tftp:// server-ip-addr : port-num</b></li> </ul> <p>For the <i>to-filesystem:</i> argument, use one of the following syntax:</p> <ul style="list-style-type: none"> <li>• <b>Volatile:</b></li> <li>• <b>Workspace:</b></li> </ul>

The following shows how to use FTP to copy a certificate (certificate.txt) to the temp folder in the workspace:

```
UCS-A # connect local-mgmt
Cisco UCS 6100 Series Fabric Interconnect
```

```
TAC support: http://www.cisco.com/tac
```

```
Copyright (c) 2009, Cisco Systems, Inc. All rights reserved.
```

```
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License or the GNU Lesser General Public License. A copy of
each such license is available at
http://www.gnu.org/licenses/gpl.html and
http://www.gnu.org/licenses/lgpl.html
```

```
UCS-A(local-mgmt)# copy ftp://192.168.10.10/certs/certificate.txt  
workspace:/temp/certificate.txt  
UCS-A(local-mgmt)#
```

### What to Do Next

Create a certificate for VM-FEX.

## Deleting a Certificate for VM-FEX for VMware

### Procedure

	Command or Action	Purpose
<b>Step 1</b>	UCS-A# <b>scope system</b>	Enters system mode.

	Command or Action	Purpose
<b>Step 2</b>	UCS-A /system # <b>scope vm-mgmt</b>	Enters system VM management mode.
<b>Step 3</b>	UCS-A /system/vm-mgmt # <b>scope vmware</b>	Enters system VM management VMware mode.
<b>Step 4</b>	UCS-A /system/vm-mgmt/vmware # <b>scope cert-store</b>	Enters system VM management VMware certificate store mode.
<b>Step 5</b>	UCS-A /system/vm-mgmt/vmware/cert-store # <b>delete certificate</b> <i>certificate-name</i>	Deletes the specified certificate for VM-FEX for VMware.
<b>Step 6</b>	UCS-A /system/vm-mgmt/vmware/cert-store # <b>commit-buffer</b>	Commits the transaction to the system configuration.

The following example shows how to delete a certificate for VM-FEX for VMware and commit the transaction:

```
UCS-A# scope system
UCS-A /system # scope vm-mgmt
UCS-A /system/vm-mgmt # scope vmware
UCS-A /system/vm-mgmt/vmware # scope cert-store
UCS-A /system/vm-mgmt/vmware/cert-store # delete certificate VnLinkCertificate
UCS-A /system/vm-mgmt/vmware/cert-store* # commit-buffer
UCS-A /system/vm-mgmt/vmware/cert-store #
```