



Configuring the Hyper-V Host Server

This chapter includes the following sections:

- [Installing the Host Server Operating System, page 1](#)
- [Obtaining the Cisco Drivers and Utilities for VM-FEX for Hyper-V, page 2](#)
- [Installing the PF Driver and VM-FEX Switch Driver, page 2](#)
- [Installing the Port Profile Utility and Management Snap-in, page 3](#)
- [Creating the Virtual Switch in Microsoft Hyper-V Manager, page 4](#)

Installing the Host Server Operating System

Before You Begin

For detailed information about installing Windows 2012 Server with Hyper-V, see the Microsoft Windows 2012 Server documentation.

Procedure

- Step 1** Install Windows 2012 Server with Hyper-V on the host server.
 - Step 2** Open the Windows Server Manager.
 - Step 3** In the Windows Server Manager, add the Hyper-V role.
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What to Do Next

Install the Cisco drivers and utilities.

Obtaining the Cisco Drivers and Utilities for VM-FEX for Hyper-V

Procedure

- Step 1** From the Cisco support site, download the Cisco UCS B-Series Blade Server Software Bundle ISO file. The Cisco UCS B-Series Blade Server Software Bundle contains drivers and installation utilities for VM-FEX for Hyper-V.
 - Step 2** In the Cisco UCS Manager KVM settings, mount the software bundle ISO file as virtual media for access from your servers.
 - Step 3** From the host server, open the `CSCO_VIO_INSTALLER_<version>` directory in the ISO file. Insert the release version number for *version* in the directory name. For example, the directory name is `CSCO_VIO_INSTALLER_2.0.24` for release 2.0.24.
 - Step 4** Open and read the `readme.txt` file for the latest information about installing and configuring VM-FEX for Hyper-V.
 - Step 5** On the Cisco Developer Network, access the Cisco UCS VM-FEX Resources page at this URL: <http://developer.cisco.com/web/unifiedcomputing/vmfex/resources>. You will need to enter your credentials for the Cisco Developer Network.
 - Step 6** Click **VM-FEX Tools for Development** and follow the instructions to download the archive file.
 - Step 7** Unpack the downloaded archive file. The VM-FEX tools installation file `VMFEX_TOOLS_64_<version>.msi` is contained in the VM-FEX Tools for Development/`VMFEX_TOOLS-<version>` directory of the unpacked archive content.
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Installing the PF Driver and VM-FEX Switch Driver

Perform this task on the host server to install the Cisco VIO drivers and utilities.

Before You Begin

The Cisco UCS B-Series Blade Server Software Bundle ISO file must be mounted on the server.

Procedure

- Step 1** In Powershell on the host server, open the `CSCO_VIO_INSTALLER_<version>` directory in the contents of the mounted ISO file.
- Step 2** Run `CSCO_VIO_INSTALLER_64_<version>.msi` as administrator. Insert the release version number for *version* in the command name. For example, the command name is `CSCO_VIO_INSTALLER_64_2.0.24.MSI` for release 2.0.24.
- Step 3** Select **Custom** installation.
- Step 4** If necessary, expand **VIO drivers** to display the driver list.
- Step 5** Click **VIC iSCSI dump** and select **Entire feature will be unavailable**.

Caution The installation may fail if the iSCSI driver are not deselected.

- Step 6** Click **VIC Teaming** and select **Entire feature will be unavailable**.
 - Step 7** Click **VICManagement** and select **Entire feature will be unavailable**.
 - Step 8** Click **Next** and follow the instructions to install the drivers.
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Installing the Port Profile Utility and Management Snap-in

This task installs the Port Profile Utility and, optionally, the Port Profile Management Snap-in on a server. You must install the Port Profile Utility on the Hyper-V host server. For port profile management, you can use either the Port Profile Management Snap-in or Microsoft PowerShell with custom Cisco scripts.

If you choose to use the Port Profile Management Snap-in, you can install it on the host server, a VM, or a remote computer. From a remote computer, you can use the Port Profile Management Snap-in to manage multiple Hyper-V hosts.



Note If you install the Port Profile Management Snap-in on a remote computer, be sure that the computer has connectivity to both the Cisco UCS Manager and the Hyper-V host server.

Before You Begin

The Cisco UCS B-Series Blade Server Software Bundle ISO file must be mounted on the server.

Procedure

- Step 1** In Powershell on the server, open the `VMFEX_TOOLS-version` directory in the contents of the mounted ISO file.
 - Step 2** Run `VMFEX_TOOLS_64_version.msi` as administrator.
 - Step 3** If you do not intend to run the Port Profile Management Snap-in from this server, select the **Typical** installation and skip to Step 8. In this case, only the Port Profile Utility is installed. If you intend to run the Port Profile Management Snap-in from this server, proceed to the next step.
 - Step 4** Select the **Custom** installation.
 - Step 5** If necessary, expand the **Vmfex utilities** to display the feature list.
 - Step 6** Click **Vmfex Port Profile Manager** and select **Entire feature will be installed on local hard drive**. This option installs the Port Profile Management Snap-in.
 - Step 7** Click **Vmfex Port Profile Utilities** and select **Entire feature will be installed on local hard drive**.
 - Step 8** Click **Next** and follow the instructions to install the software.
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Creating the Virtual Switch in Microsoft Hyper-V Manager

Procedure

- Step 1** On the Hyper-V host server, open the Microsoft Hyper-V Manager and navigate to the Virtual Switch Manager.
 - Step 2** In the navigation frame, click **New virtual network switch**.
 - Step 3** In the **Virtual Switch Properties** pane, enter a **Name** for the virtual switch.
 - Step 4** Select **External network** and choose the Cisco VIC Ethernet interface from the drop-down list.
 - Step 5** Check the check box for **Allow management operating system to share this network adapter**.
 - Step 6** Check the check box for **Enable single-root I/O virtualization (SR-IOV)**.
 - Step 7** Click **Apply**.
If a confirmation is requested, click **OK**.
 - Step 8** Click **OK**.
 - Step 9** In the navigation frame, under the newly-created virtual switch, click **Extensions**.
The **Virtual Switch Extensions** pane appears.
 - Step 10** In the **Virtual Switch Extensions** pane, under **Switch extensions**, select **Cisco Vmflex Switch** and leave the other check boxes unselected.
 - Step 11** Click **Apply**.
If a confirmation is requested, click **OK**.
 - Step 12** Click **OK**.
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What to Do Next

Create the VMs in Microsoft Hyper-V Manager.