Setting up a Hyper-V Virtual Sensor

https://campus.barracuda.com/doc/19610/

Setting up a Hyper-V virtual sensor requires several steps. Follow the procedures below:

- To download the Hyper-V ZIP
- To create a new Hyper-V virtual switch for mirroring

After you have followed these procedures, contact your Barracuda XDR representative to complete the setup.

The virtual sensor files are large and can take over 100GB of memory when unzipped.

To work properly, the host must have 2 Network Interface Cards.

To download the Hyper-V ZIP

1. In **Barracuda XDR Dashboard**, click **Downloads** > **Virtual Sensors**.
2. In the **Step 2** box, select **Hyper-V**.
3. Click one of the following buttons:
   - **Hyper-V ZIP**
   - **Hyper-V ZIP (Large)**

   The ZIP file downloads.
4. Unzip the file.

To create a new Hyper-V virtual switch for mirroring

Before you begin, identify an open physical NIC on the Hyper-V host and make a physical connection to a mirrored pot on the core switch or firewall.

1. In Hyper-V manager, in the right navigation panel, click **Virtual Switch Manager**.
2. Click External, then click **Create New Virtual Switch**.
3. Type an appropriate name for the switch. For example, `Virtual_Switch_Name`.
4. Select the physical NIC you identified and designate it as the external NIC to connect.
5. Click **OK**.
6. On the Hyper-V host, as an **Administrator**, open a **PowerShell** session.
7. Execute the following commands, which enable the virtual switch to receive packets from the physical mirror port:

```
$a = Get-VMSystemSwitchExtensionPortFeature -FeatureId
776e0ba7-94a1-41c8-8f28- 951f524251b5
$a.SettingData.MonitorMode = 2
add-VMSwitchExtensionPortFeature -ExternalPort -SwitchName
```

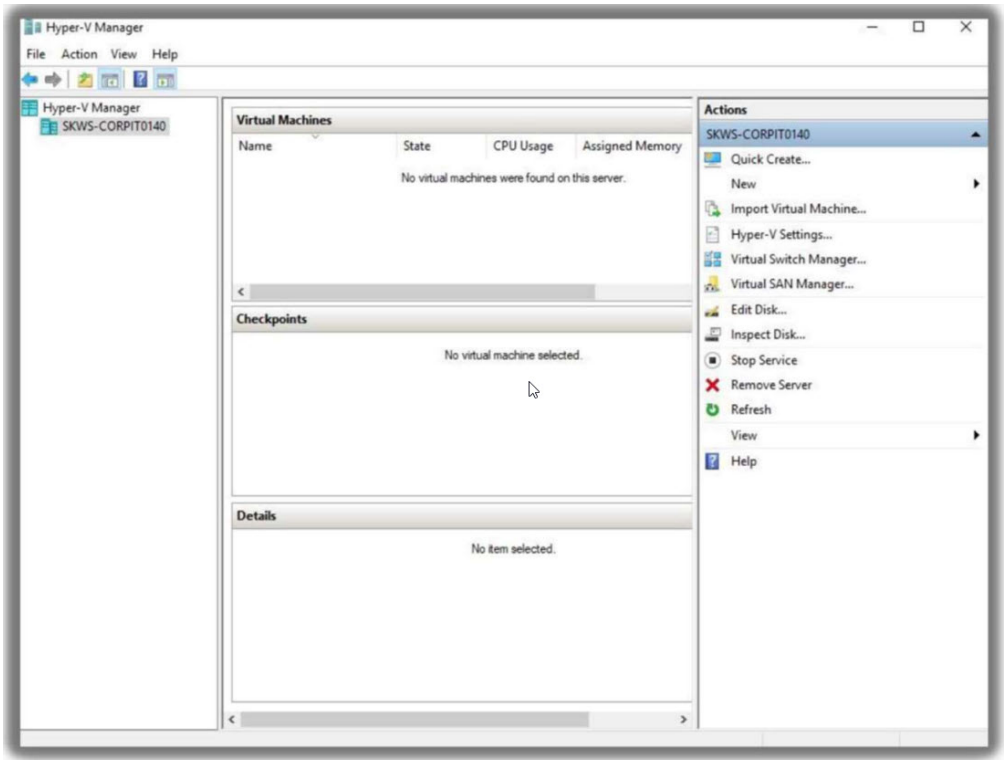
`<virtual_switch_name>` - `VMSwitchExtensionFeature $a`, where `<virtual_switch_name>` is the name of the virtual switch you identified in Step 4.

8. In the right navigation panel, click **Virtual Switch Manager**.
9. Click the **+** button next to the virtual switch you identified in Step 4.
10. Click **Extensions**.
11. Ensure **Microsoft NDIS Capture** is selected.
12. Click **OK**.

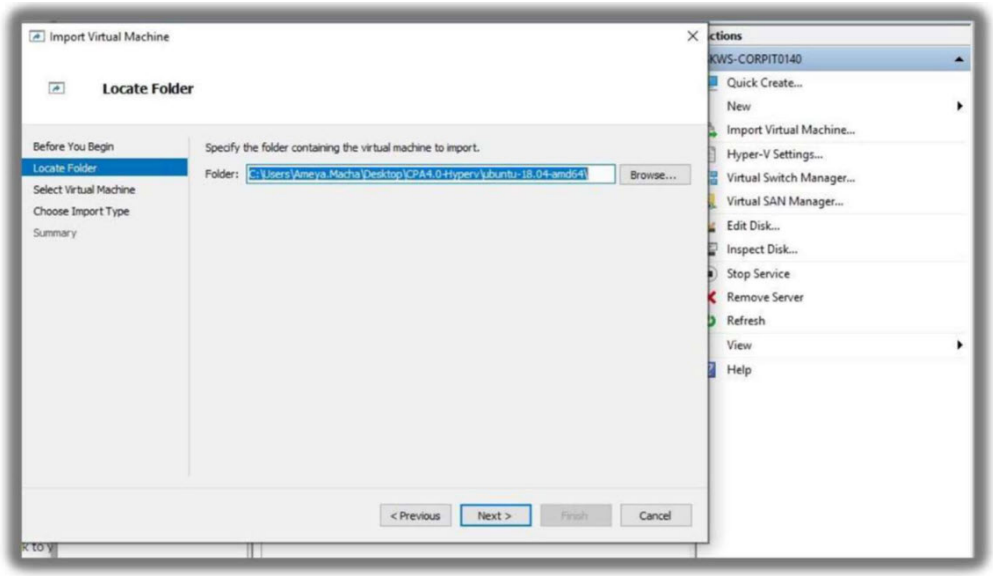
To import the Hyper-V virtual machine

Complete the To download the Hyper-V Zip procedure above before continuing with this procedure.

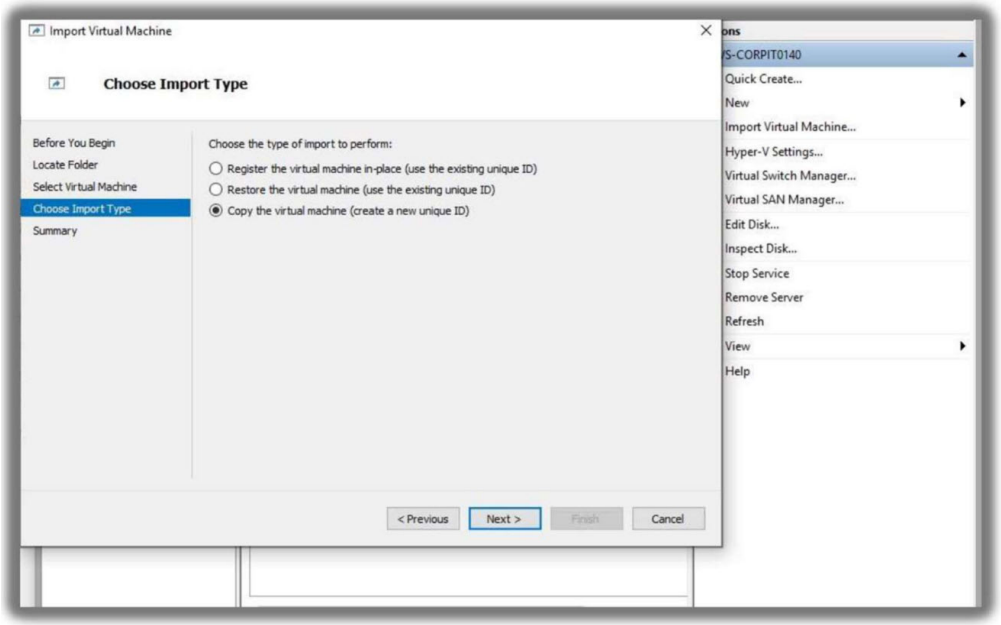
1. In Hyper-V manager, in the right navigation panel, click **Import Virtual Machine**.



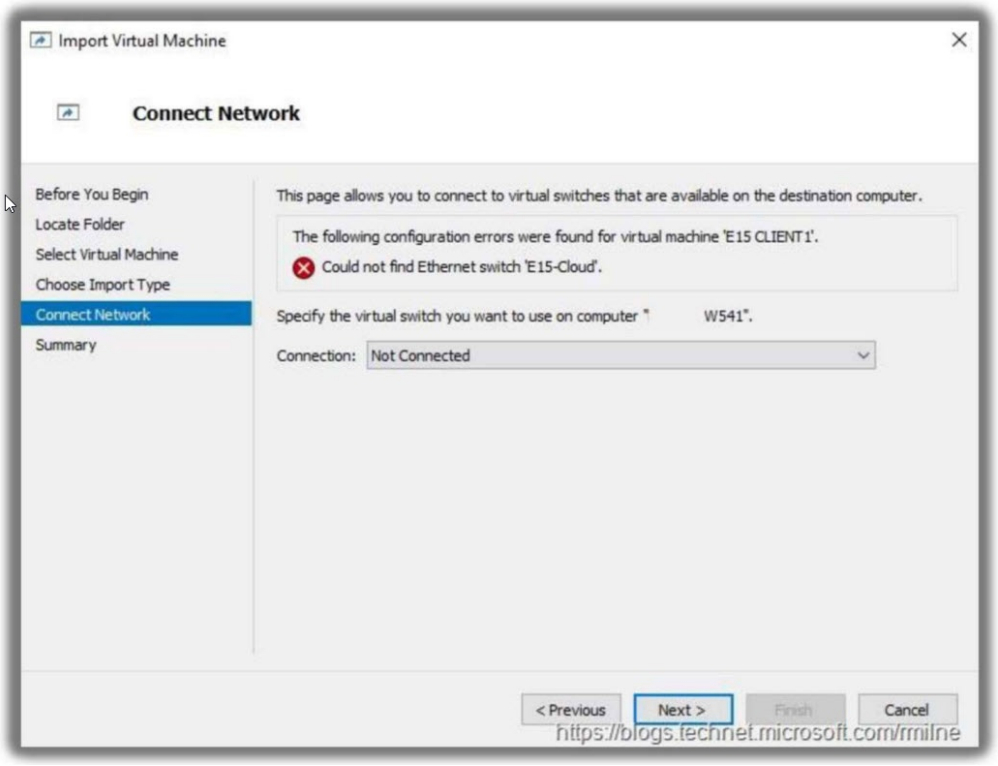
2. In the **Import Virtual Machine** dialog, click **Next**.
3. On the **Locate Folder** page, click Browse and navigate to the folder where you extracted the Hyper-V image.



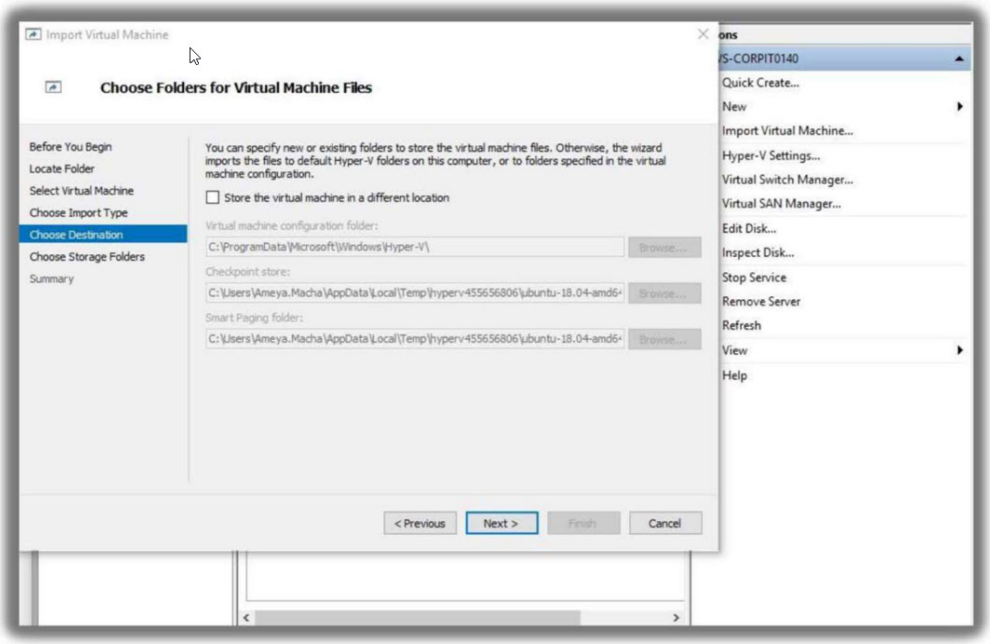
4. Click Next.
5. On the **Import Virtual Machine** page, enable **Copy the virtual machine (create a new unique ID)**.



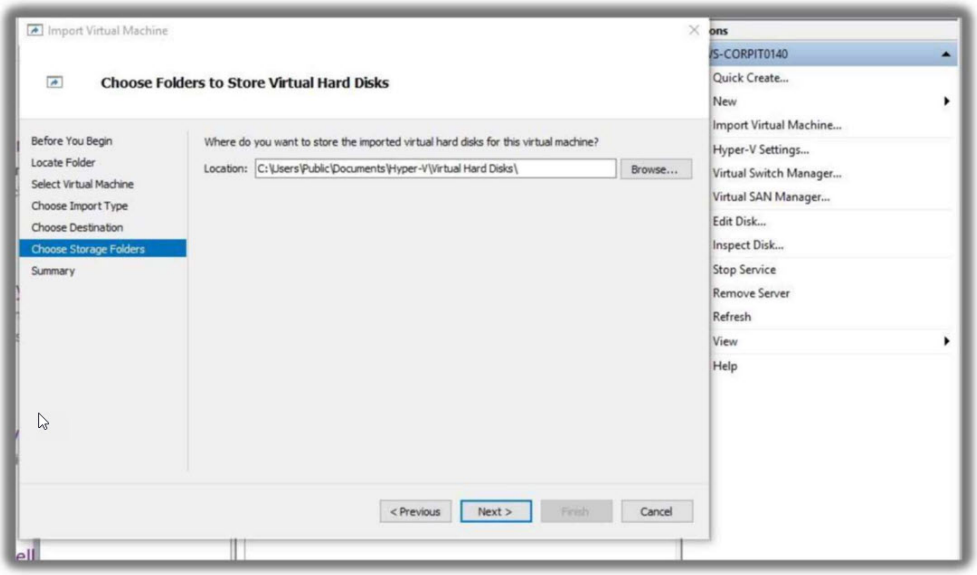
6. Click **Next**.
7. On the **Connect Network** page, select the **v.switch** you want to use.



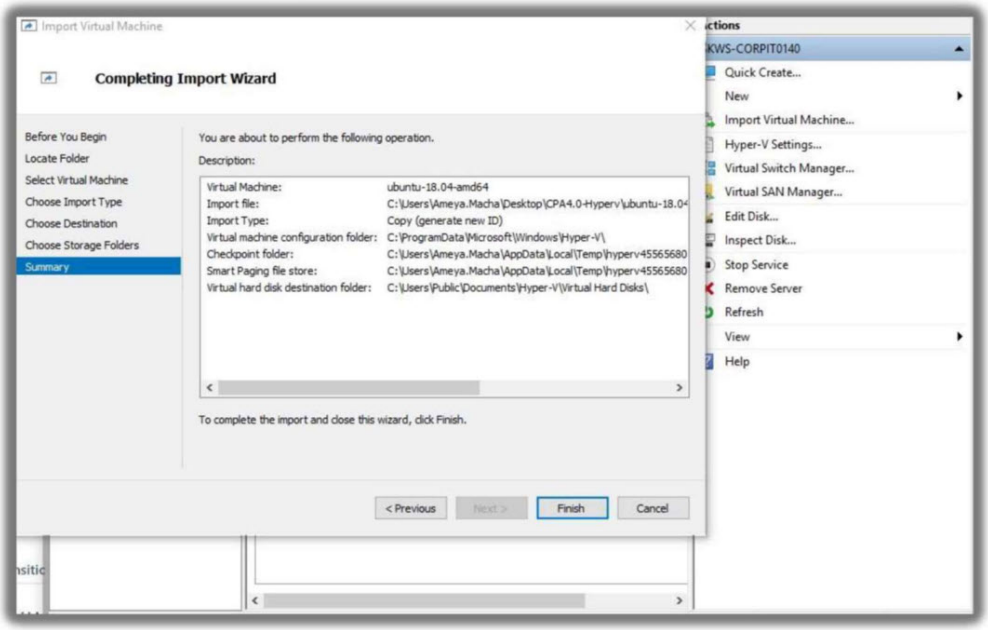
8. Click **Next**.
9. On the **Choose Folders for Virtual Machine Files** page, select the following paths:
   - **Virtual machine configuration folder**
   - **Checkpoint store**
   - **Smart Paging folder**



10. Click **Next**.
11. On the **Choose Folders to Store Virtual Hard Disks** page, click **Browse** and navigate to the folder where you want to store the hard disks for the virtual machine.



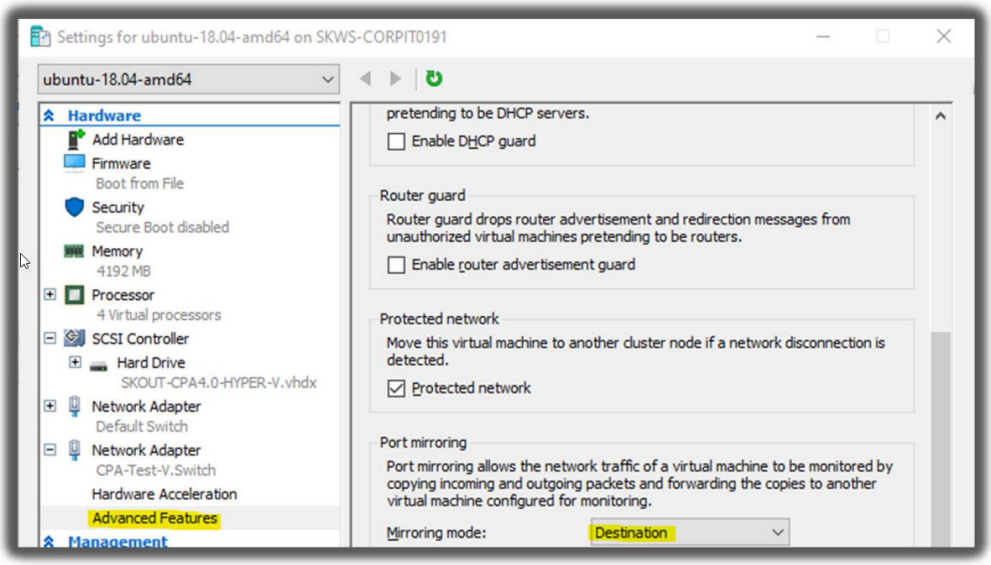
12. On the Completing Import Wizard page, click **Next**.



13. Click **Finish**.

To set up port mirroring

1. In Hyper-V manager, right-click the **Hyper-V SKOUT Sensor**.
2. Click **Settings**.
3. Click the second **Network Adapter**, and in **Virtual Switch**, select the **v.switch** created above. Click **Apply**.
4. Click **+** button next to **Advanced Features**.
5. In the **Port mirroring** section, in **Mirroring mode**, select **Destination**.



6. Click **Apply**.
7. In the same **Network Adapter** (the second), in the **Hardware Acceleration** section, clear the **Enable** check box.
8. Click **Apply**, then click **OK**.

Additional Port Mirroring Setup from VLAN Traffic Configurations

If your environment uses a VLAN to route traffic, you have to configure Microsoft Hyper-V to accept packets from the designated VLAN identifier range.

To set up VLAN port mirroring

1. In **Hyper-V Guest**, create a NIC designated as management using the following Powershell command:
   `Add-VMNetworkAdapter -VMName <VirtualMachineName> -Name "Management"`, where **<VirtualMachineName>** is the name of the virtual machine.
2. Add the port to use as a mirror, for example:
   `Add-VMNetworkAdapter -Vmname <VirtualMachineName> -name "Mirror"`, where **<VirtualMachineName>** is the name of the virtual machine.
3. Repeat Steps 1 and 2 for each NIC.
4. Add the VLAN ID ranges you want to mirror, for example:
   `Set-VMNetworkAdapterVlan -VMName <VirtualMachineName> -VMNetworkAdapterName "mirror" -trunk allowedvlanidlist <VLANIDRange> -nativevlanid <VLANIDRange>` , where **<VirtualMachineName>** is the name of the virtual machine and **<VLANIDRange>** is the range of the VLAN ID.

Figures

1. 1.jpg
2. 2.jpg
3. 4.jpg
4. 5.jpg
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6. 7.jpg
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