Installing Hortonworks Sandbox 1.3 – VirtualBox on Hyper-V

Getting Ready to install on Windows using Hyper-V

Use this section to prepare for your installation.

Pre-Requisites

- Ensure that you have installed and enabled Microsoft Hyper-V on your Windows 8 or Windows Server 2012 system. See <u>http://windows.microsoft.com/en-us/windows-8/hyper-v-run-virtual-machines</u> for details on enabling this feature.
- Ensure your hardware is 64bit (x64 processor)
- Enable BIOS Hardware Virtualization Assists
 - For Intel processors: Intel VT-x and Execute Disable (XD)
 - For AMD processors: AMD-V and No Execute (NX)
- The correct virtual appliance file for your environment. Download them from http://hortonworks.com/sandbox.
- Extract Hortonworks Hyper-V Virtual machine archive to the local file system.

Introduction

The following contains a list of steps required for starting the Hortonworks Sandbox on Hyper-V. Although the instructions outline exact steps and illustrations for Windows 8, instructions are similar for Windows Server 2012.

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- 1. Create a new Virtual Switch.
 - a. Start Hyper-V and create a private network for the Sandbox to connect to and allow access to the Internet. Select "Virtual Switch Manager..." from the Action menu in Hyper-V (see Figure 1).

Hyper-V Manager	- • ×
File Action View Help	
Hyper-V Manager	Actions
	HOMER
Name State CPU Usage Assigned Memory U	New 🕨
Sandbox HUP Caterpillar Off	🕞 Import Virtual Machine
	Hyper-V Settings
	🗱 Virtual Switch Manager
	🔬 Virtual SAN Manager
	💋 Edit Disk
<	🖳 Inspect Disk
Snapshots	Stop Service
The selected with a provision has no approximate	X Remove Server
The selected virtual machine has no shapshots.	Refresh
	View
	7 Help
	Constituent LIDD Cotons illes
	Sandbox HDP Caterpillar
	Connect
Sandbox HDP Caterpillar	Settings
· · · · · · · · · · · · · · · · · · ·	🔮 Start
Adapter: Network Adapter (Dynamic MAC: 00:15:5D:02:72:03)	snapshot
Connection: Not connected	P Move
IP Addresses:	Export
Status:	🗐 Rename
Summany Memory Networking	Delete
warman internet interworking	📝 Help
	1
Summary Memory Networking	Delete

Figure 1: Virtual Switch Manager

b. Select Internal from the selection box (see Figure 2).

#1 V	/irtual Switch Manager for HOMER – 🗆 🗙
★ Virtual Switches § [±] • New virtual network switch € Global Retwork Switch ¶ • MACAdress Range ₩ Global Retwork Switch ₩ ↓	Create virtual switch What type of virtual switch do you want to create? External Private
	Create virtual switch that can be used only by the virtual machines that run on the physical computer, and between the virtual machines and the physical computer. An internal virtual switch does not provide connectivity to a physical network connection.
,	OK Cancel Apply

Figure 2: Create Virtual Switch

c. Provide a name for the virtual switch being created, i.e. "Sandbox Network" and an optional description in the notes section (see Figure 3).

★ Virtual Switches	Virtual Switch Properties
👯 New virtual network switch	
Sandbox Network	Name:
Global Network Settings	Sandbox Network
MAC Address Range	Notes:
00-15-5D-01-04-00 to 00-15-5D-0	Microsoft Virtual Switch
	Connection type
	External network:
	Intel(R) 82579LM Gigabit Network Connection
	Allow management operating system to share this network adapter
	 Internal network
	O Private network
	VLAN ID
	 Enable virtual LAN identification for management operating system
	The VLAN identifier specifies the virbual LAN that the management operating system will use for all network communications through this network adapter. This setting does not affect virbual machine networking.
	Remove

Figure 3: Name the Virtual Switch

- 2. Turn on Internet Connection Sharing.
 - a. Open Network and Sharing Center (see Figure 4).

E	Network and Sharing	Center – 🗆 💌	
🔄 🏵 👻 🕇 ີ 😨 « Network	and Internet > Network and Sharing Center	v 🖒 Search Control Panel 🔎	
Control Panel Home	View your basic network information and set up connections		
Change adapter settings	View your active networks		
Change advanced sharing settings	bagpipe Private network	Access type: Internet HomeGroup: Joined Connections: att Wi-Fi (bagpipe)	
	Unidentified network Public network	Access type: No network access Connections:	
	Change your networking settings		
Set up a new connection or network Set up a broadband, dial-up, or VPN connection; or set up a router or access Troubleshoot problems Diagnose and repair network problems, or get troubleshooting information.		k l connection; or set up a router or access point. ims, or get troubleshooting information.	
See also HomeGroup Internet Options Windows Firewall			

Figure 4: Network Sharing Center

b. Click on the Connection link for your existing network to bring up the General properties tab, select the Properties tab to bring up the Network properties dialog and select the sharing tab. In this tab you should select the first option to enable other network users to connect through this active connection (see Figure 5).

ļ	Wi-Fi Properties
Networki	ng Sharing
Intern	et Connection Sharing low other network users to connect through this omputer's Internet connection
H	ome networking connection:
✓ Al sh	low other network users to control or disable the ared Internet connection Settings
	01/ 0 1

Figure 5: Sharing Tab of Network properties

- 3. Import Sandbox Hyper-V Virtual Machine
 - a. Select "Import Virtual Machine" from the Actions section (see Figure 6). Note, this can also be accomplished by right-clicking on the host name and selecting "Import Virtual Machine".

		Нур	er-V Manager			- 🗆 🗙
File Action View Help						
Hyper-V Manager	Virtual Machi	nes	-	Assistent Manager		Actions HOMER
	< Snapshots	No vitual ma	chines were found o	ed.		New New Import Vitual Machine Hyper-V Settings Vitual Skitch Manager Vitual Skitch Manager Vitual Skitch Manager Vitual Skitch Manager Inspect Disk Inspect Disk Stop Service Remove Server Refresh View Help
	Details		No item selected.			
	<			_	>	

Figure 6: Import Virtual Machine

b. Navigate through the first set of screens in the import wizard until you see the screen in Figure 7.

	Import Virtual Machine	×
Locate Folde	r	
Before You Begin	Specify the folder containing the virtual machine to import.	
Locate Folder	Folder:	Browse
Select Virtual Machine		
Choose Import Type		
Summary		
	< Previous Next > Fin	ish Cancel

Figure 7: Import Virtual Machine

c. Find the location where the Sandbox archive was extracted on the local file system and select the top-level folder of the archive (see Figure 8).

<u>~</u>	Import Virtual Mach	ine	×		
	2	Select Folder			F
A Locate Folder	🛞 ∋ → ↑ 🔳 Desktop →		♥ C Search Desktop		Q
	Organize 🔻 New folder				0
Before You Begin S	Desktop	System rolder			
Select Virtual Machine	Recent places	Computer System Folder			
Choose Import Type Summary	Cibraries	Network System Folder			
	Pictures Videos	Control Panel System Folder			
	🔞 Homegroup	Recycle Bin System Folder			
	r Computer	Sandbox File folder			
	Folder: Sand	xox			
			Select Folder	Cancel	

Figure 8: Select Virtual Machine Folder

d. Hyper-V will analyze the folder select and display the following dialog (see Figure 9).

	Import Virtual Machine	×
Select Virtua	Machine	
Before You Begin	Select the virtual machine to import:	
Locate Folder	Name Date Created	
Choose Import Type	Sandbox HDP Caterpilar 4/24/2013 10:34:39 AM	
Summary		
	< Previous Next > Finish Can	el

Figure 9: Select Virtual Machine

e. Choose Import Type as follows (see Figure 10)



Figure 10: Choose Import Type

f. At this point, the Virtual Machine just imported should be displayed in Hyper-V (See Figure 11)

11	Hyper-V Manager	_ 🗆 🗙
File Action View Help		
Hyper-V Manager	Virtual Machines	Actions HOMER
	Name State CPU Usage Assigned Memory U Sandbox HDP Catepalle Of <	HUMER • New • import Virtual Machine • Virtual Switch Manager • Virtual Skitch Manager • Virtual Skitch Manager • Edit Disk • Impect Disk • Remove Sever • Referes • View • Sandbox HDP Caterpillar • © Connect •
Display: the Virtual Switch Manager	Sandbox HDP Caterpillar Adapter: Network Adapter (Dynamic MAC: 00.15.5D.02.72.03) Connection: Not connected IP Addresses: Status: Summay Memory Networking c c c c c c c c c c c c c c c c c c c	Settings Start Image: Settings Image: Seting Image: Se

Figure 11: Newly Imported Virtual Machine

- 4. Configure Sandbox Network
 - a. Select "Setting..." and Network Adapter for the Sandbox. For the Virtual Switch, select the "Sandbox Network" you created in step 1 above. If there are multiple virtual switches to choose from, make sure that you select the correct one; refer to step 1.

Settin	gs for Sandbox HDP Caterp	illar on HOMER	
Sandbox HDP Caterpillar 🗸 🗸	● ▶ Q		
* Hardware ^	Network Adapter		
1 Add Hardware	The control of Adapter		
EIOS	Specify the configuration of the	network adapter or remove the network	adapter.
Boot from CD	Virtual switch:		
Memory	Not connected	~	
1950 MB	Not connected		
Processor	Sandbox Network	ication	
IDE Controller 0			
line line Controller U	The VLAN identifier specifies	the virtual LAN that this virtual machine w	ill use for all
sandbox.vhd	network communications thro	ugn uns network adapter.	
IDE Controller 1	2		
DVD Drive			
None	Bandwidth Management		
SCSI Controller	Enable bandwidth manag	ement	
Network Adapter	Enactify how this potwork ada	unter utilizer network bandwidth. Reth Mir	
Not connected	Bandwidth and Maximum Ban	dwidth are measured in Megabits per sec	ond.
COM 1	Misimum baodwidthu	0 Minos	
None	Minimum Danowidur.	o Pibps	
None	Maximum bandwidth:	0 Mbps	
Diskette Drive	To leave the minimum or	an an improvement in the second	unh un
None	To leave the minimum of	maximum unresoluted, specify 0 as the	raiue.
* Management	To remove the petwork adapter	from this virtual machine, click Demove	
I Name	To remove the network ddupter		
Sandbox HDP Caterpillar			Remove
Integration Services	Use a legacy network adapt	oter instead of this network adapter to pe	r form a
All services offered	network-based installation	of the guest operating system or when in	itegration
Snapshot File Location	services are not installed in	the guest operating system.	
Smart Paging File Location			
C: Users \erik \Desktop \Sandbox			
Automatic Start Action			
Restart if previously running 🗸			
-	,		
		OK Cancel	Apply

Figure 12: Select Virtual Switch for Sandbox

- 5. Start the Sandbox
 - a. Select "Start" by right clicking on the Sandbox Virtual Machine or click start from the Actions section.
 - b. Connect the to the Sandbox to expose the console. This is accomplished by select "Connect..." from the Sandbox Actions section or by right-clicking on the Sandbox Virtual Machine.
 - c. Make note of the IP address that is displayed in the Sandbox console. You will this IP address in order to connect to the Sandbox Web Interface