Installing Hortonworks Sandbox – VirtualBox on Windows

Getting Ready to install on Windows using Oracle VirtualBox

Use this section to prepare for your installation.

Prerequisites

To use the Hortonworks Sandbox on Windows you must have the following resources available to you:

- Hosts:
 - A 64-bit machine with a chip that supports virtualization. Not all 64bit chips have this capability. Check your system documentation or your IT department. For more information, see this Microsoft article: <u>http://windows.microsoft.com/en-us/windows7/32-bit-and-64-bit-windows-frequently-asked-questions</u>
 - A BIOS that has been set to enable virtualization support. This is usually already set, but in some cases must be set manually. Check your system documentation or your IT department. For more information, see this Microsoft article: <u>http://www.microsoft.com/windows/virtual-pc/support/configurebios.aspx</u>
- Host Operating Systems:
 - Windows 7
- At least 4 GB of RAM
- Virtual Machine Environments:
 - Oracle <u>VirtualBox, version 4.2</u> or later
- The correct virtual appliance file for your environment. Download them from http://hortonworks.com/products/sandbox-instructions/. You will need to login to your free Hortonworks account to download the file.

Virtual Machine Overview

The Hortonworks Sandbox is delivered as a virtual appliance that is a bundled set of operating system, configuration settings, and applications that work together as a unit. The virtual appliance (indicated by an .ovf or .ova extension in the filename) runs in the context of a virtual machine (VM), a piece of software that appears to be an application to the underlying (host) operating system, but that looks like a bare machine, including CPU, storage, network adapters, and so forth, to the operating system and applications that run on it.

To run the Sandbox you must install one of the supported virtual machine environments on your host machine, either Oracle VirtualBox or VMware Fusion (Mac) or Player (Windows/Linux).

In general, the default settings for the environments are fine. The one item that you may need to set up is the Network Adapter. To use the Sandbox, you should have a Host-only network adapter with DHCP enabled. This ensures that the host machine and the virtual machine can talk to each other, which is necessary for the Sandbox to work. Setting up this adapter is covered in the detailed installation instructions.

Installing on Windows using Oracle VirtualBox

1. Open the Oracle VM VirtualBox Manager Double click:



2. The Oracle VM Virtualization Manager window opens.



3. Change the Auto-Capture preference. **File->Preferences** and select **Input** in the left navigation bar. Uncheck **Auto-Capture Keyboard**.

General	Input	
Input Update Language Display Network Extensions Proxy	Host Key: Ctrl] 🗶
	Select a settings category from the list on the left-hand side an move the mouse over a settings item to get more information.	d

4. Import the Sandbox appliance file: File->Import Appliance



6. The Import Virtual Appliance screen opens



7. Click the **Open appliance** button; the file browser opens. Make sure you select the correct appliance. In this case, the top file is the VirtualBox formatted file. Click the **Open** button..

Select an appliance to import			-	×
		• 47	Search Download	ls J
Organize 👻 New folder			833	• 🔟 🔞
	Name			Date modified
	Hortonworks+Sandbox+1.2+1-21-2012-3	L+VirtualBox	3	2/7/2013 9:21 AM
	🤹 Hortonworks+Sandbox+1.2+1-21-2012-1	+vmware		2/7/2013 9:16 AM
E				
- 4	m			
File nam		*	Open Virtualizatio	n Format (*.o 🔻
			Open	Cancel

8. You return to the Import Virtual Appliance screen. Click Next



9. The **Appliance settings** screen appears. You can check here to see if a **HostOnly Network Adapter** already exists. Hover your mouse over the entry to check its value. If Host-only does not exist, you can add it later. Click **Import**.

Appliance settings		
These are the virtual machines contair imported VirtualBox machines. You car clicking on the items and disable other	ned in the appliance and the sug n change many of the properties s using the check boxes below.	ggested settings of t s shown by double-
Description	Configuration	
CPU	2	
RAM	2048 MB	
Sound Card	ICH AC97	
P Network Adapter	Intel PRO/1000 MT De	esktop (82540EM)
P Network Adapter	Intel PRO/1000 MT De	Original Value:
Hard Disk Controller (IDE)	PIIX4	HostOnly

10. The appliance is imported.



11. If you need to add a Host-only adapter, click Settings in the main Manager window. The appliance Settings window opens. Select Network in the left navigation bar. Check Enable Network Adapter and use the Attached to: dropdown to select Host-only Adapter. Click OK.

😚 Oracle VM VirtualBox Manager	
File Machine Help New Settings Start Dis Hortonworks Sance Powered Off Horton Vorks Sance Powered Off Network Serial Ports USB Shared Fold	andbox 1.2_1 - Settings Network Adapter 1 Adapter 2 Adapter 3 Adapter 4 Image:
	None

12. Turn on the Sandbox. Select the appliance and click the green **Start** arrow. A console window opens and displays an information screen. Click OK to clear the info screen.



Because what is being displayed is a conceptually separate machine, control of the mouse and the keyboard must be passed back and forth between the host and the VM. This is particularly useful when the VM has a GUI. In the case of the Sandbox appliance, however, you never need to use your keyboard or your mouse inside the Sandbox console window. If you accidently let the console "capture" your mouse or keyboard, you can release them back to the host machine by pressing the **Ctrl** key. Click **OK**.

13. Wait while the VM boots up. When the process is complete, the console displays the login instructions for the Sandbox.

Bortonworks Sandbox 1.2 [Running] - Oracle VM VirtualBox		×
Machine View Devices Help		
Hortonworks Sandbox 1.2		
http://hortonworks.com		
To initiate your Hertonyonka Sandbay appaien		
please open a browser and enter this address		
in the browser's address field: http://192.168.56.101/		
Log in to this virtual machine: Linux/Windows <alt+f5>, Mac OS X <c< td=""><td>md+Alt+F</td><td>5></td></c<></alt+f5>	md+Alt+F	5>
9070		Ctrl

14. Use a browser on your host machine to open the URL displayed on the console.



The Sandbox GUI is displayed. Enjoy.

Troubleshooting

Use the following to help you troubleshoot problems with your installation.

Problem: DHCP not or incorrectly set on Host-Only interface

Unpredictably the DHCP settings of the Host-Only interface may not be set correctly. When you attempt to boot up your Sandbox, you get a message like this:

000	Hortonworks Sandbox 1.2 [Running]
Hortonworks Sandbox 1.2 http://hortonworks.com	
Connectivity issues dete Connectivity issues dete Check connection of Host and check DHCP is enable For details, see VM setu	========== cted! ========= -only interface d for it p instructions
L Log in to this virtual ma	chine: Linux/Windows <alt+f5>, Mac OS X <cmd+alt+f5></cmd+alt+f5></alt+f5>
	😂 🖉 🗗 🛄 💟 🖉 Left ೫

Solution: Set up DHCP manually.

To solve this issue, you must set up the DHCP server manually.

- 1. Open the global Preferences for VirtualBox: **File->Preferences**. **Do not** use the Settings gear icon.
- 2. Select **Network** from the side navigation bar. See if **DHCP Server** is shown as **Enabled**. Click the Settings screwdriver, shown boxed in red.

S Oracle VM Virtua File Machine H	iBox Manager elp		×
New Settings S Hortonwc Powerc	VirtualBox - Sett General Juput Update Language Display Network Extensions Proxy	ings Network Host-only Networks: VirtualBox Host-Only Ethernet Adapter Adapter: Adapter: Manually configured DHCP Server: Enabled Select a settings category from the list on the left-hand side and move the mouse over a settings liem to get more information.	2
		OK Cancel Help	

3. Select **DHCP Server**. Make sure **Enable Server** is checked and make sure the IP address values are as shown in the screenshot. Make whatever changes you need to make and OK out.

General	Network			
Input	Host	only Networks:		
Host-only	Network Deta	ils		8 2
Adapter	DHCP Server	12		
🔽 Enable	Server			
Server Address:		192.168.56.100		
	Server Mask:	255.255.255.0		
Lower	Address Bound:	192.168.56.101		
Upper /	Address Bound:	192.168.56.254		1
			ОК	Cancel
	move the m	ouse over a settings iten	n to get more	information.