Lab - Create a Virtual Install of Metasploitable3 Using VirtualBox

# Overview

Metasploitable3 is a VM of Windows Server 2008 made intentionally vulnerable. Metasploitable3 is intended to be used as a target for testing exploits. Metasploitable3 is a free virtual machine that allows you to simulate attacks essentially using Kali Linux and Metasploit.

Creating a VM of Metasploitable3 is as simple as having VirtualBox installed, downloading the OVA for Metasploitable3, and then x2 clicking the image to begin the importation process into VirtualBox.

## Lab Requirements

- One installation of VirtualBox with Extension Pack.
- One download of the OVA file for Metasploitable3.

The OVA image for Metaspoitable3 can be downloaded from Dropbox using the following link:

## Metasploitable3 w2k8

Once the download is complete, find the downloaded OVA file, and x2 click it.



This begins the importation of the appliance into VirtualBox. In this example, you can rename and change the locations of where to save the virtual disk. When you are ready to complete the importation, click on the Import button.

 $\times$ 

?

#### Import Virtual Appliance

#### Appliance settings

These are the virtual machines contained in the appliance and the suggested settings of the imported VirtualBox machines. You can change many of the properties shown by double-clicking on the items and disable others using the check boxes below.

Virtual System 1		^
😸 Name	Metasploitable3-win2k8	
🚼 Guest OS Type	👹 Windows 2008 (64-bit)	
CPU	1	
RAM	1244 MB	
🕩 Sound Card	CH AC97	
Network Adapter	Intel PRO/1000 MT Desktop (82540EM)	
🔷 Storage Controller (IDE)	PIIX4	~
Machine Base Folder: 📻 E:		~
MAC Address Policy: Include only N	IAT network adapter MAC addresses	•
Additional Options: 🗹 Import har	d drives as VDI	
Appliance is not signed		
	Restore Defaults Import Cance	2

The importation process begins.

🗿 Import	ng Appliance: Importing appliance 'C:/Users/Clifton Krahenbill/Do	×	
	Importing virtual disk image 'Metasploitable3-win2k8-disk001.vmdk 29 3 minutes remaining	c' (2/2) % 🗙	

Once the importation process has been completed, from the left windowpane of your VirtualBox manager, find the virtual disk you just created and x2 click to launch.

When you first launch Metasploitable3 for the first time, you will see the following error.



This is a result of the guest editions needing to be installed. Click on the button to close the VM.

From the left windowpane, find your Metasploitable3 virtual disk, right-click, and from the context menu, select, Settings.

Change Host-only Adapter to NAT network adapter. Click OK.

😳 м	letasploitable3-v	vin2k8 -1	- Settings					?	×
	General	Netv	work						
	System	Adap	oter 1 A	pter 2	Adapter 3	Adapter 4			
	Display	E	nable Netwo	Adapter					
$\mathbf{S}$	Storage		Attached t	NAT Ne	twork		•		
	Audio		Nam	NatNet	work				•
-	Network		Advance						

The launch continues.

On the log-on screen, from the VirtualBox taskbar. Click on Input, and from the content men, click on Keyboard, and from the next context button, select:

```
Insert Ctrl-Alt-Del.
```

🕌 Metasploitable3-win2k8 -1 [Running] - Oracle VM VirtualBox							
File Machine View Input Devices Help							
The Virtual Machine report	🖉 Ke	eyboard		≁	$\diamond$	Keyboard Settings	
Mouse Integration				Soft Keyboard			
						Insert Ctrl-Alt-Del	Host+Del
						Insert Ctrl-Break	3

On the next screen, log on as the administrator.



On the next screen, type in the administrator's password, which **vagrant** all lower case.

Once you log in for the first time, Windows needs to create your profile. Note the trial period has ended, and the machine license is not genuine. We need to rearm SRV8 for another 90 days.

Click on the start button, and from the menu, select Command Prompt.



At the command prompt, type

slmgr /rearm

Hit enter. After a short pause, you receive a message that the command has been completed successfully. Press OK. Close the command prompt.



Click on Start, log off and then Shut down.



On the shutdown screen, type in some random characters and click OK.

Shut Down Windows Windows Server <sup>®</sup> 2008 R2 Standard					
Shutdown Event Tracker Select the option that best describes why you want to shut down the computer					
Option: 🔽 Planned					
Other (Planned)					
A shutdown or restart for an unknown reason					
Comment:					
VVVV					
OK Cancel Help					

#### Install the VirtualBox Guest Editions

From the left windowpane of your VirtualBox manager, find your virtual disk for Metasploitable3. Right-click, and from the context menu, click, settings. From the left windowpane for settings, select storage. Under Storage Devices, click on the first green plus (+) sign.



We need to install an optical drive for the Guest Editions.

On the next screen, click the button that says, leave empty.

🔯 Metasploitable3-win2k8 -1 - Optical Disk Sele	ector	? ×
Medium		
Add Create Refresh		
Name	Virtual Size	^
✓ Attached		
kali-linux-2022.1-live-amd64.iso	3.46 GB	
VBoxGuestAdditions.iso	58.37 MB	~
<		>
Search By Name 🔻		<u></u>
Choose	Leave Empty	Cancel

We now have an empty CD-ROM attached to your virtual machine.

😳 Metaspioitables-wi	In2k8 - I - Settings
General	Storage
System	Storage Devices
Display	👌 Controller: IDE Controller 🛛 🧟
	Metasploitable3-win2k8-disk00
Storage	Empty

1.01.0 1

## Fix display settings

1.2.1.1.2

From settings, click on Display. Change the graphic controller to VBoxSVGA.

Click OK.

C ....



From the left windowpane of your VirtualBox manager, launch your virtual disk for Metasploitable3.

Send the Ctrl+Alt+Del. Logon on as administrator using the password vagrant.

From your VirtualBox taskbar, click on Devices and from the context menu. Select **Insert Guest Editions CD image**.



When the Autoplay window pops up, click on the highlighted first option.



If you grow tired of waiting for the window, use File Explorer to access the CD-ROM.

Step through the Guest Editions Setup Wizard, accepting the defaults. Install all adapters.



Be patient; the installation takes a while to complete. Though it may seem like the application is hanging, it is working.



Click finish to Reboot now.

😵 Oracle VM VirtualBox Gues	t Additions 6.1.32 Setup
	Completing Oracle VM VirtualBox Guest Additions 6.1.32 Setup
ORACLE VirtualBox	Your computer must be restarted in order to complete the installation of Oracle VM VirtualBox Guest Additions 6.1.32. Do you want to reboot now?
	O I want to manually reboot later
V	
	< Back Finish Cancel

When the machine comes back up, log on as an administrator.

Once you have a desktop, from the VirtualBox taskbar, click on Devices and then network setting.

🕻 🕈 Metasploitable3-win2k8 -1 [Ru	unning] - Oracle VM VirtualBox	
File Machine View Input	Devices Help	
The Virtual Machine reports that the	<ul> <li>Optical Drives</li> <li>Audio</li> </ul>	This means that you do not need to <i>captu</i>
Recycle Bin	P Network	둸 Network Settings
	Shared Folders	S Connect Network Adapter

Change your network adapter to Host-only adapter. This will help prevent W2k8 from pulling down any updates.



### **Create a Snapshot**

We next need to create a snapshot of our current configuration.



Give your snapshot a user-friendly name and click OK.

📸 Take	Snapshot of Virtual Machine	?	$\times$
2008	Snapshot Name Fresh install with Guest Editions and Rear	med	
	Snapshot Description		
	OK Cancel	He	lp

When your 90 days expire, use your snapshot to roll back to this point in time and start fresh. It beats having to reinstall!

#### Find your IP address.

Open a command prompt, and at the prompt, type **ipconfig**.



Write down or remember your IP address. You'll need it going forward.

### Summary

In this short lab, you learned how to create a virtual install of Metasploitable-w2k8. You also learned how to rearm the trial version for another 90 days. You learned how to add an optical drive to a virtual machine, and lastly, you learned how to create a snapshot of your VM.