

Install VM on Windows – Hyper-V

Prerequisite:

1. Check if you have hardware virtualization enabled in your BIOS. Different vendors has different names for this. You may look it up on the internet or ask for assistance.
2. Enable the Hyper-V subtree through the *Turn Windows features on or off* control panel item. You might need to restart the computer.
3. A competent decompressor, such as <https://www.7-zip.org/>

Windows VM:

1. Download and extract the virtual disk image from <https://developer.microsoft.com/en-us/windows/downloads/virtual-machines/> . Choose Hyper-V (Gen2) option.
2. Open the Hyper-V Manager, and click on New -> Virtual Machine
 - a. Choose Generation 2 and assign at least 4096 MB memory.
 - b. Choose Default Switch for network connection.
 - c. Use an existing virtual hard disk, and point to the VHDX file you've extracted.
3. Create a snapshot by right-click the VM and click Checkpoint.
4. Choose the VM, click Start and then click Connect. Wait until the VM boots.
5. Check if network connection is available. Then check if there is a "Windows License is expired" wording on the bottom-right of the screen.
 - a. If it is not there, proceed to next step.
 - b. If it is there, press Win-R to open the Run window, and enter "slmgr.vbs /ato". Then wait for confirmation. Create another snapshot after it is activated.
6. The Windows Defender needs to be turned off as we will put real malware onto this VM and the Defender will annoy you by automatically quarantining these files.
 - a. Go to "Edit group policy" (gpedit.msc)
 - b. Go to *Computer Configuration > Administrative Templates > Windows Components > Microsoft Defender Antivirus*
 - c. Open the *Turn off Microsoft Antivirus* window, choose *Enabled* and then click OK.
7. Reboot the VM and install Flare-VM according to the separated doc.
8. Create another snapshot.
9. You are all set!

Kali VM:

1. Download Kali VM image from <https://www.kali.org/get-kali/#kali-virtual-machines>. Choose Hyper-V.
2. Uncompress the image to the location next to the Windows VM.
3. Execute the *install-vm.bat*, which will import the Kali Linux image to Hyper-V Manager.
4. In the Hyper-V Manager, right click on the new Kali VM and rename it to something appropriate. Then create a checkpoint.
10. Click Start and then click Connect. Login with kali:kali.
11. You are all set!

Set up network:

1. In the Virtual Switch Manager, create a Private virtual switch.
2. In both VM's Settings page, change the Network Adapter from Default Switch to the newly created switch.
 - a. For situations where the VM needs Internet access, simply change the switch back to Default Switch.
 - b. Beware not to expose the VM to the Internet when there's malware on it!
3. Set up IP address:
 - a. Go to your Kali VM, and configure it to use a static IP address: 10.0.0.1
 - i. modify `/etc/network/interfaces` to configure your network interfaces. Your configuration should include a new entry like the following:

```
auto eth0
iface eth0 inet static
    address <new IP>
    netmask 255.255.255.0
```

- b. Go your Windows VM, and configure it to use a static IP address: 10.0.0.3
 - i. Right click on the network icon on the taskbar. Select Network and Internet settings.
 - ii. In the Ethernet, change IP assignment to the new static IP address.
 - iii. Change the DNS server assignment to 10.0.0.1.