Install VM on Windows – VirtualBox

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. Download and install Oracle VM VirtualBox from https://www.virtualbox.org/wiki/Downloads
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 VirtualBox option.
2. In the VirtualBox, choose File -> Import Appliance, and select the ova file to import the image.
    a. In the settings pages, increase CPU and RAM as appropriate.
    b. If you have a split drive setup, change the Machine Base Folder as you like.
    c. For the MAC Address Policy, choose Generate New.
3. At this point, create a snapshot for easy fallback.
4. The Windows VM needs to be activated through Internet at the first use. Make sure NAT is selected for the network interface, and start it.
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. 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 VirtualBox.
2. In the VirtualBox, choose Machine -> Add, then navigate to the vbox file you just extracted.
3. Go to the Settings page of the VM and increase the resource cap as appropriate.
4. Create a snapshot, then start it.
5. Login with kali:kali
6. You are all set!

Set up network:

1. For both VM, go to Settings -> Network
    a. For Adapter 1, set the *Attached to* option to *Internal Network*. Set the name to something in common, such as *cse434s*
    b. For Adapter 2, tick the Enable Network Adapter, but leave the *Attached to* option to *Not attached*.
        i. For situations where the VM needs Internet access, simply change the *Not attached* to *NAT*.
        ii. Beware not to expose the VM to the Internet when there's malware on it!
2. 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.