

Download and installation of VMware workstation pro:

<https://www.vmware.com/mena/products/workstation-pro/workstation-pro-evaluation.html>

Download and Install VMware Workstation:

VMware is a product that allows users to install and run virtual machines on their host computers. To install VMWare, download the installation packages from their download page

<https://www.vmware.com/mena/products/workstation-pro/workstation-pro-evaluation.html>

VMware Workstation Pro gives a user more functionality and control but requires license purchase.



- 1- Download it.
- 2- Then install It simple as like other software.
- 3- Confirm that virtualization is enable in bios if not then do it.
- 4- Go to settings -> network adapter -> vmware 1 and vmware , set it to DHCP instead of static.

Download and installation window 11 in vmware:

<https://www.microsoft.com/en-gb/software-download/windows11>



Windows 11 Installation:

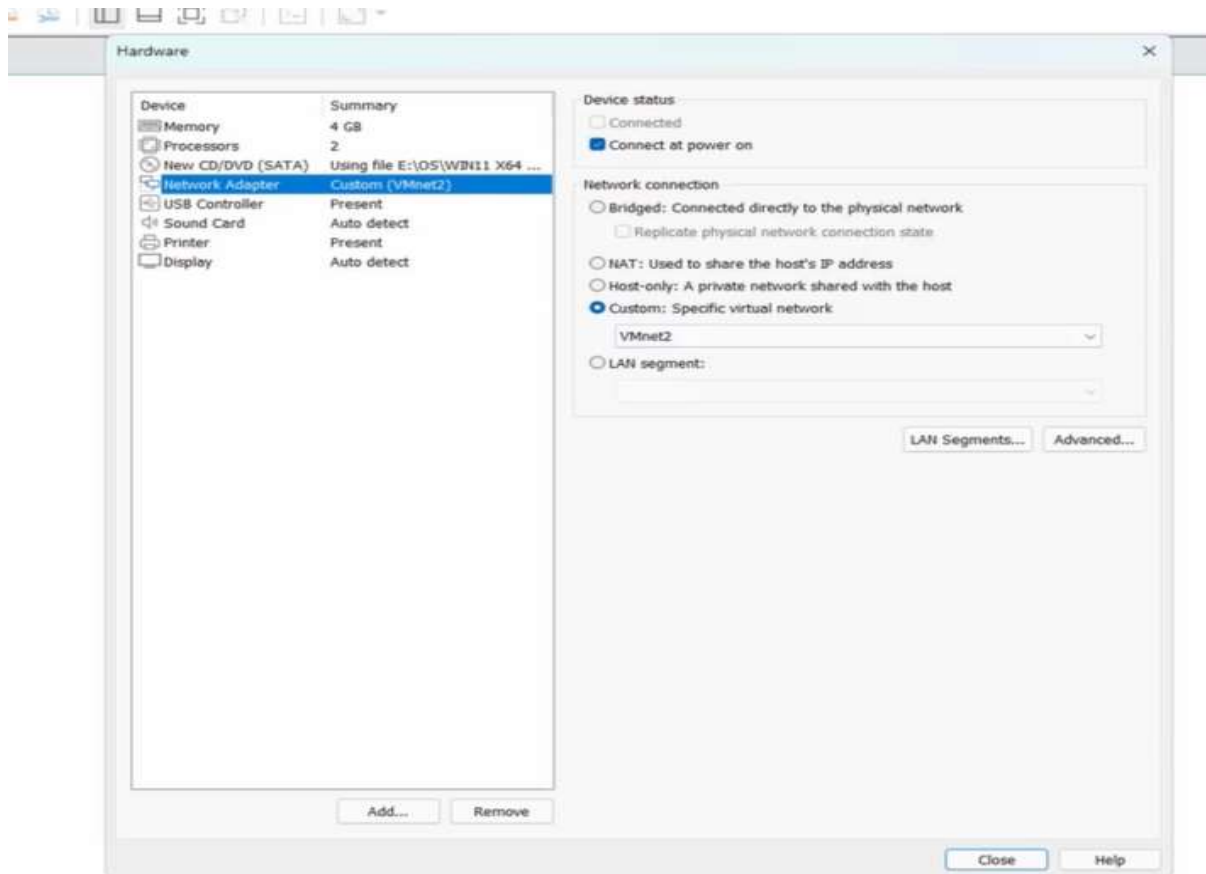
Download Windows 11 .ISO file from below Internet link.

<https://www.microsoft.com/en-gb/software-download/windows11>

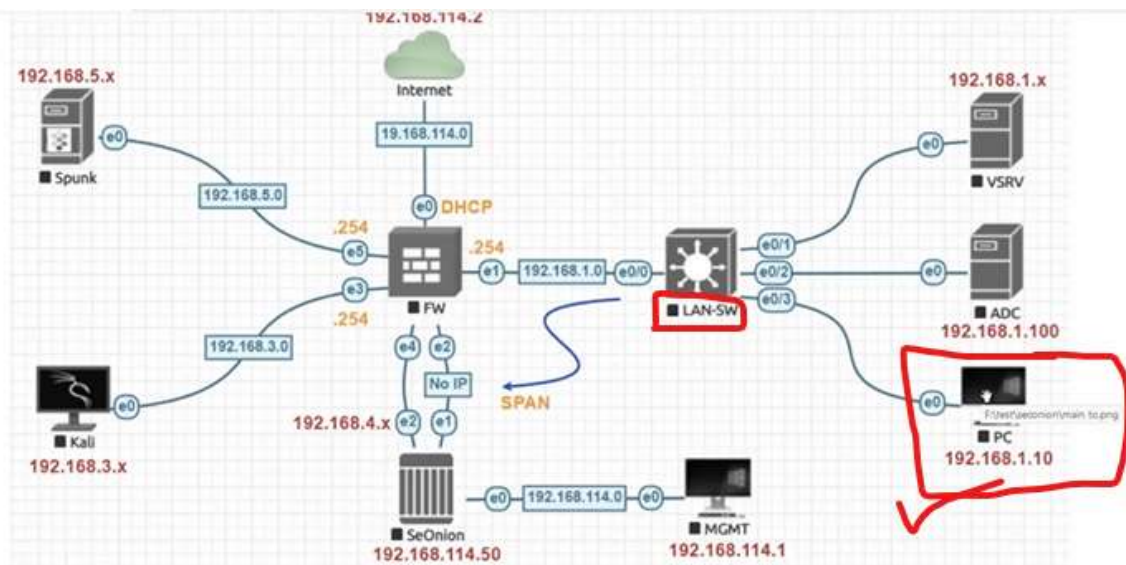
Download Windows 11 Disk image (ISO)

This option is for users who want to create a bootable installation media (USB flash drive, DVD, etc.) or create a virtual machine (ISO file) to install Windows 11. This download is a multi-edition ISO that uses your product key to unlock the correct edition.

- 1- Download the window 11 in English language.
- 2- Open vmware and select the create new virtual machine.
- 3- Select typical and then select the download iso file and then give name to virtual machine.
- 4- Accept privacy policy and select hard memory that allocate to it.
- 5- Set the virtual machine to vmware 2 at custom as recommended for lab. Show in pic below.



- 6- Then follow instruction as like next and machine open .
- 7- Press any key to start installation.
- 8- Select language , username and password and login account and then machine is ready.



The installation of marked pc is complete of my lab setup.

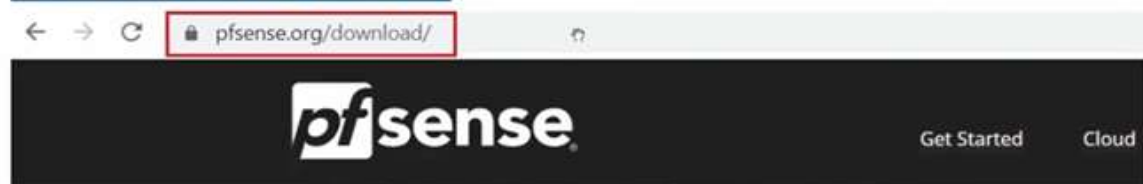
Download and installation of Pfsense firewall:

<https://www.pfsense.org/download/>

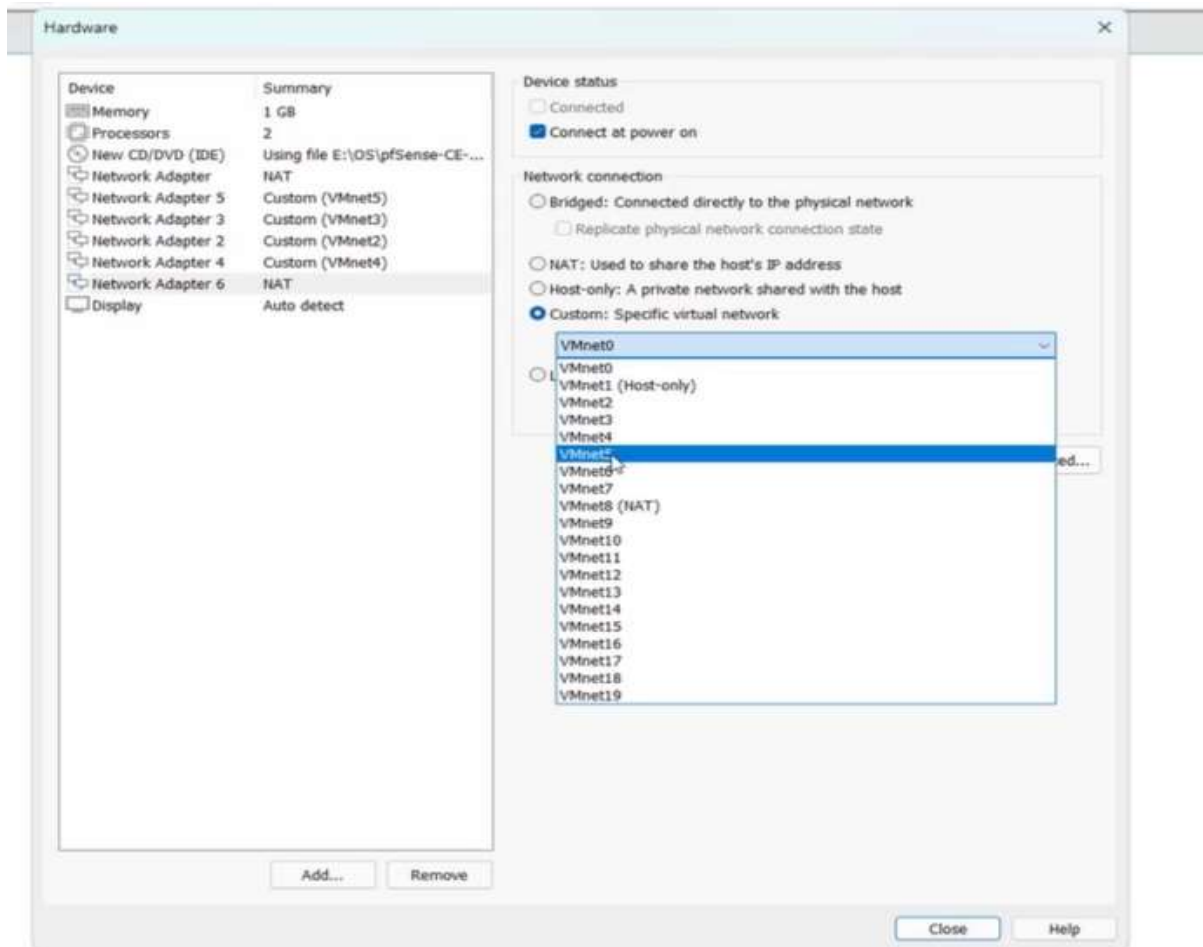
PfSense Firewall Installation:

Download pfSense firewall from below link version 2.6.0 with AMD64 Architecture.

<https://www.pfsense.org/download/>



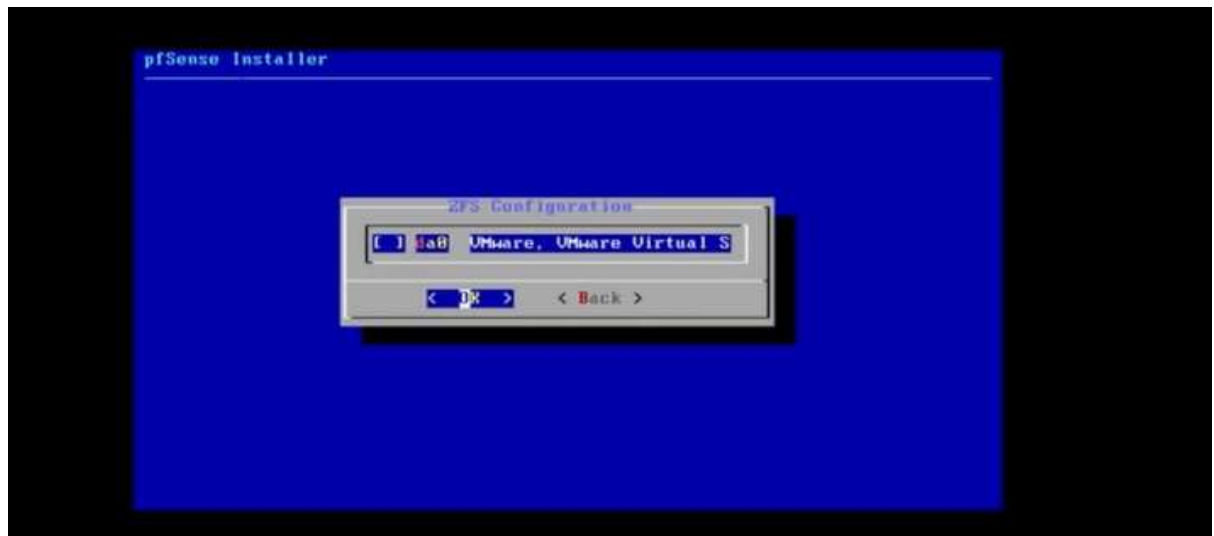
- 1- It is zip file so unzip it first .
- 2- Then open a new virtual machine in vmware and select it as like window .
- 3- In setting the hard space like do in window 11 installation , go to settings and their add new network adapter.
- 4- Add 6 adapter and then make all of them custom and select vmware adapter name as adapter number except first that has at NAT. show in image below:



The adapter technique that use is same as below:

Adopter Number	VMnet	Segment
Network Adapter	NAT	WAN
Network Adapter 2	VMnet2	LAN
Network Adapter 3	VMnet3	SPAN
Network Adapter 4	VMnet4	Kali Linux Attack
Network Adapter 5	VMnet5	Security Onion
Network Adapter 6	VMnet6	Splunk Server

- 5- Then reboot the machine.
- 6- The machine is open and then select next next and go to process but only make change in that following next step.
- 7- In that step as shown below , here press the spacebar so that star show here. Then ok.



8- In next step change the default option to yes then enter.



9- Then move on the default option and at last reboot the system.

10- Then pfsense firewall is open.



The installation is complete.