1-Install network manager

- Install

$ sudo apt install network-manager

- Configure grub

$ sudo nano /etc/default/grub

- Edit line GRUB_CMDLINE_LINUX="", and inside "" add net.ifnames=0 biosdevname=0
- Compile GRUB

$ sudo grub-mkconfig -o /boot/grub/grub.cfg

- Create managed devices file

$ sudo touch /etc/NetworkManager/conf.d/10-globally-managed-devices.conf

- Reboot the machine

$ sudo reboot

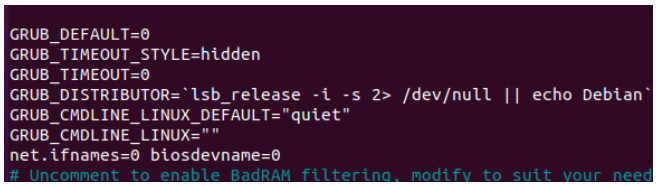
2-Configure the scenario

3-In vm2, install apache2

4-In vm2 enable access to apache2 from vm1

curl http://192.168.10.2

In vm1



Install network manager:

$ sudo apt install network-manager

$ sudo nano /etc/default/grub

GRUB_CMDLINE_LINUX="", and inside "net.ifnames=0 biosdevname=0"

$ sudo grub-mkconfig -o /boot/grub/grub.cfg

$ touch /etc/NetworkManager/conf.d/10-globally-managed-d.conf

$ sudo reboot

Firewall:

$ sudo apt install firewalld

$ sudo systemctl enable --now firewalld

$ sudo firewall-cmd --add-service=http

$ sudo firewall-cmd --permanent --add-service=http

$ sudo firewall-cmd --reload

$ sudo nmcli con add con-name ExternalIF type ethernet ifname eth0 ip4 192.168.1.200/24 gw4 192.168.1.1

$ sudo nmcli con mod ExternalIF ipv4.dns 192.168.1.1

$ sudo nmcli con mod ExternalIF connection.zone external

$ sudo nmcli con up ExternalIF

$ sudo nmcli con add con-name InternalIF type ethernet ifname eth1 ip4 192.168.10.1/24 gw4 192.168.10.1

$ sudo nmcli con up InternalIF

In vm2

Install network manager:

$ sudo apt install network-manager
$ sudo nano /etc/default/grub
GRUB_CMDLINE_LINUX="", and inside "net.ifnames=0 biosdevname=0"
$ sudo grub-mkconfig -o /boot/grub/grub.cfg
$ touch /etc/NetworkManager/conf.d/10-globally-managed-d.conf
$ sudo reboot

Firewall:

$ sudo apt install firewalld
$ sudo systemctl enable --now firewalld
$ sudo firewall-cmd --add-service=http
$ sudo firewall-cmd --permanent --add-service=http
$ sudo firewall-cmd --reload
$ sudo nmcli con add con-name mylan type ethernet ifname eth0 ip4 192.168.10.2/24 gw4 192.168.10.1
$ sudo nmcli con mod mylan ipv4.dns 192.168.1.1
$ sudo nmcli con mod mylan connection.zone external
$ sudo nmcli con up mylan

Apache2:

$ sudo apt update
$ sudo apt install apache2
$ sudo apt start apache2

$ curl http://192.168.10.1