# preparations:

# Two openSUSE 16 machines

# The first one (VM1) is with 2 network adapters -> NAT and internal network

# The second one (VM2) is with 1 network adapter -> internal network

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# VM1:

# enable firewalld:

sudo systemctl enable --now firewalld

# check

firewall-cmd --state # returns "running"

# or for more information

sudo systemctl status firewalld

# after that install dhcp-server

sudo zypper install dhcp-server

# add the second adapter enp0s8 as DHCPD\_INTERFACE

sudo vi /etc/sysconfig/dhcpd

# add the following lines:

DHCPD\_INTERFACE="enp0s8"

# Add ip address to the second adapter:

nmcli connection Wired\ connection\ 2 ipv4.method manual ipv4.addresses 192.168.99.1/24 ipv4.gateway 192.168.99.254 ipv4.dns "8.8.8.8 8.8.4.4"

# restart the adapter

nmcli connection down Wired\ connection\ 2

nmcli connection up Wired\ connection\ 2

# Configure the DHCP server

sudo vi /etc/dhcpd.conf

# uncomment default-lease-time, max-lease-time, autoritative, subnet

# change the network to 192.168.99.0/24, range 99.100 - 99.110, router 192.168.99.1 and google dns servers

# apply the new settings

sudo systemctl enable --now dhcpd

# firewall rules

# I have firewalld up and running so first enable ip forwarding:

sudo vi /etc/sysctl.conf

net.ipv4.ip\_forward = 1

sudo sysctl -p

# checking if internal is in the list of zones:

sudo firewall-cmd --get-zones

# add enp0s8 to the internal zone:

sudo firewall-cmd --permanent --zone=internal --add-interface=enp0s8

# allow internet access to the internal zone:

sudo firewall-cmd --permanent --zone=internal --add-masquerade

# add forwarding from enp0s3 to enp0s8:

sudo firewall-cmd --permanent --zone=internal --add-forward

# allo public zone to allow internet traffic for the main interface:

sudo firewall-cmd --permanent --zone=public --add-interface=enp0s3

sudo firewall-cmd –permanent –zone=public –add-service=dhcp

sudo firewall-cmd –permanent –zone=internal –add-service=dhcp

# apply the changes:

sudo firewall-cmd --reload

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# VM2:

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