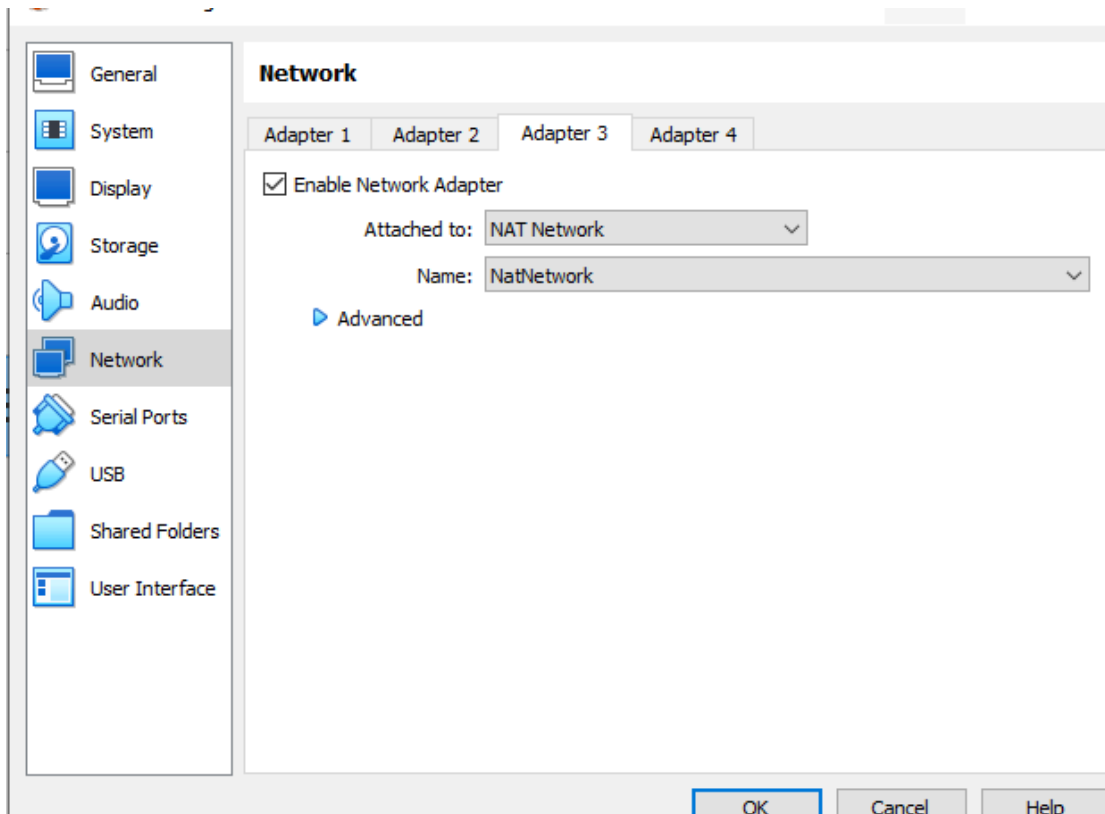


Solution Tp 3 model SSR

Team : G 4

- mensour FEKHAR
- nabil BASAID
- oussama KHOBZI

- 1) Download the ISO
- 2) Create a VM with three network interfaces



- install the vm

```
pfSense [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help

*** Welcome to pfSense 2.7.2-RELEASE (amd64) on pfSense ***

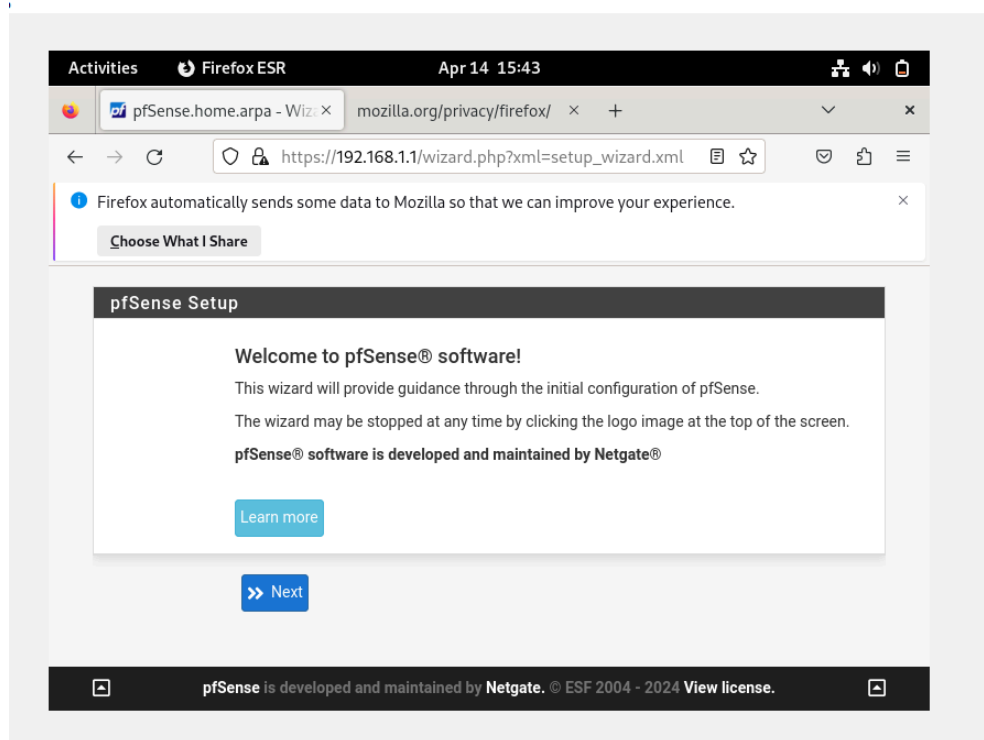
WAN (wan)      -> em0      -> v4/DHCP4: 10.0.2.15/24
LAN (lan)      -> em1      -> v4: 192.168.1.1/24

0) Logout (SSH only)          9) pfTop
1) Assign Interfaces          10) Filter Logs
2) Set interface(s) IP address 11) Restart webConfigurator
3) Reset webConfigurator password 12) PHP shell + pfSense tools
4) Reset to factory defaults    13) Update from console
5) Reboot system              14) Enable Secure Shell (sshd)
6) Halt system                15) Restore recent configuration
7) Ping host                  16) Restart PHP-FPM
8) Shell

Enter an option:
Message from syslogd@pfSense at Apr 14 14:41:21 ...
php-fpm[499881]: /index.php: webConfigurator authentication error for user 'admin' from: 192.168.1.100

Message from syslogd@pfSense at Apr 14 14:42:25 ...
php-fpm[499881]: /index.php: Successful login for user 'admin' from: 192.168.1.100
0 (Local Database)
```

3) Discover Web Configuration Interface and pfSense Features



4) Plan d'adressage IP proposé :

- pfSense Firewall:

WAN Interface (connectée à Internet):

DHCP (adresse IP attribuée automatiquement) 192.168.8.1/24

LAN Interface (connectée à Metasploitable2 et PC nmap):

192.168.1.1/24

```
pfsense [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Reloading filter...
Reloading routing configuration...
DHCPD...

The IPv4 WAN address has been set to 192.168.8.15/24

Press <ENTER> to continue.
VirtualBox Virtual Machine - Netgate Device ID: 0f7f1c6591e2d2864ede

*** Welcome to pfSense 2.7.2-RELEASE (amd64) on pfSense ***

WAN (wan)      -> em0      -> v4: 192.168.8.15/24
LAN (lan)      -> em1      -> v4: 192.168.1.1/24

0) Logout (SSH only)          9) pfTop
1) Assign Interfaces          10) Filter Logs
2) Set interface(s) IP address 11) Restart webConfigurator
3) Reset webConfigurator password 12) PHP shell + pfSense tools
4) Reset to factory defaults  13) Update from console
5) Reboot system              14) Enable Secure Shell (sshd)
6) Halt system                 15) Restore recent configuration
7) Ping host                   16) Restart PHP-FPM
8) Shell

Enter an option: 
```

- Test the access of your PC to the Internet. **Doesn't Access**

```

Activities  Terminal  Apr 14 17:18
mensour@mensour: ~

mensour@mensour:~$ ping 8.8.8.8
PING 8.8.8.8 (8.8.8.8) 56(84) bytes of data.
From 192.168.1.1 icmp_seq=1 Destination Host Unreachable
From 192.168.1.1 icmp_seq=2 Destination Host Unreachable
From 192.168.1.1 icmp_seq=3 Destination Host Unreachable
From 192.168.1.1 icmp_seq=4 Destination Host Unreachable
From 192.168.1.1 icmp_seq=5 Destination Host Unreachable
From 192.168.1.1 icmp_seq=6 Destination Host Unreachable
^C
--- 8.8.8.8 ping statistics ---
6 packets transmitted, 0 received, +6 errors, 100% packet loss, time 5085ms

mensour@mensour:~$

```

- Write the rules that allow you to open the flows for ping and for web browsing from the PC to the Internet

Allow Ping (ICMP) Traffic.:

To configure the firewall rules in pfSense, start by accessing the pfSense WebGUI. Open a web browser and navigate to the IP address of your pfSense firewall. Log in using your administrative credentials. Once logged in, navigate to the firewall rules section by going to Firewall > Rules > LAN in the pfSense dashboard. To create a new rule allowing ICMP traffic, click on the Add button to initiate a new rule configuration. Set the action to Pass, select the interface as LAN, choose the protocol as ICMP, set the source to LAN subnet, and the destination to Any and click button save

