pf

As a change of pace from vyos, we will configure pfSense 2.5.8 for routing.

New pf VM

```
* ESXi6.5 Compatability (You can export it later as an OVA if you want)

* Other FreeBSD (64-bit)

* put this on datastore2

* 2GiB RAM

* THIN provision the disk
```

- 2 Network Cards
- 1 on VM Network
- 2 on 350-Internal (you will need to add this one)
- CD Points to pfSense ISO file
- Install pfSense
 - o Before reboot
 - poweroff
 - disconnect cd by changing to "Host Device"
 - o snapshot called Base

Configure the Firewall

em0 should pick up a foster dhcp address

```
pfSense 2.5.2-RELEASE amd64 Fri Jul 02 15:33:00 EDT 2021
Bootup complete
FreeBSD/amd64 (pfSense.home.arpa) (ttyv0)
UMware Virtual Machine - Netgate Device ID: d1219fc1bfe5eb1167d0
*** Welcome to pfSense 2.5.2-RELEASE (amd64) on pfSense ***
 WAN (wan)
                  -> ем0
                                -> v4/DHCP4: 192.168.3.110/24
 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
                                        12) PHP shell + pfSense tools
 3) Reset webConfigurator password
                                        13) Update from console
14) Enable Secure Shell (sshd)
 4) Reset to factory defaults
5) Reboot system
6) Halt system
7) Ping host
                                         15) Restore recent configuration
                                        16) Restart PHP-FPM
8) Shell
Enter an option: 8
```

Set Interface IP Addresses to the following

WAN/em0

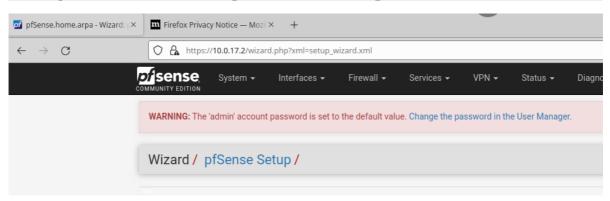
- o static ip of 192.168.3.41/24 \triangle This is Devin's Ip, pick your own.
- o gateway of 192.168.3.250
- LAN/em1
 - o static ip of 10.0.17.2/24
 - o no on dhcp just yet

configure mgmt system

This needs to get done to complete the configuration of pfSense

• mgmt1

completion of configuration via gui



Go through the wizard, changing the following values

- Hostname: pfX, where X is your super number
- Domain: yourname.local
- Primary DNS Server: 1.1.1.1
- Uncheck Unblock RFC1918 Private Networks
- Secure your admin password

PF Sense Proof

```
mgmt1
       Terminal - hermione@mgmt..
                                               ione@mgmt1: ~ (on mgmt1)
         Terminal - hermione@mgmt1: ~
 File
                                                 Help
                          Terminal
hermione@mgmt1:~$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNO
t qlen 1000
     link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
     inet 127.0.0.1/8 scope host lo
valid_lft forever preferred_lft forever
inet6 ::1/128 scope host
valid_lft forever preferred_lft forever
2: ens160: <BROADCAST,MULTICAST,UP,LOWER UP> mtu 1500 qdisc mq st
fault qlen 1000
     link/ether 00:0c:29:70:13:8a brd ff:ff:ff:ff:ff
     altname enp3s0
inet 10.0.17.100/24 brd 10.0.17.255 scope global noprefixrout
valid_irt forever preferred_lft forever
inet6 fe80::c6bb:bdc1:8bb1:835c/64 scope link noprefixroute
          valid_lft forever preferred_lft forever
hermione@mgmt1:~$ ping google.com
PING google.com (142.251.40.206) 56(84) bytes of data.
64 bytes_from_lga34s38-in-f14.1e100.net (142.251.40.206): icmp_se
e=9.64 ms
64 bytes from lga34s38-in-f14.1e100.net (142.251.40.206): icmp se
e=9.81 ms
```

Remote Access

• Optional, but CRD is a good idea