

## NSSA221 Systems Administration I

### Lab 01 Report

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Grade \_\_\_\_/100

#### Requirements:

Please insert the required screenshots for the lab in the spaces provided below. Ensure that your screenshots clearly display all necessary information and are easily readable. Blurry, illegible, or incomplete screenshots will not be accepted, and you may not receive credit. Altering the content of the screenshots is considered academic dishonesty and will result in a grade of zero for the report.

This is the first lab, and it is graded on a pass/fail basis, meaning all required screenshots must be included. Additionally, make sure to submit this document along with the signed topology diagram.

All screenshots must be labeled using the following titles, place the image **BELOW** the title.

**Figure 1 – PfSense Dashboard**

```
Reloading filter...
Reloading routing configuration...
DHCPD...

The IPv4 WAN address has been set to 192.168.117.128/24

Press <ENTER> to continue.
VMware Virtual Machine - Netgate Device ID: f0bf23624ecc0e1e15ab6

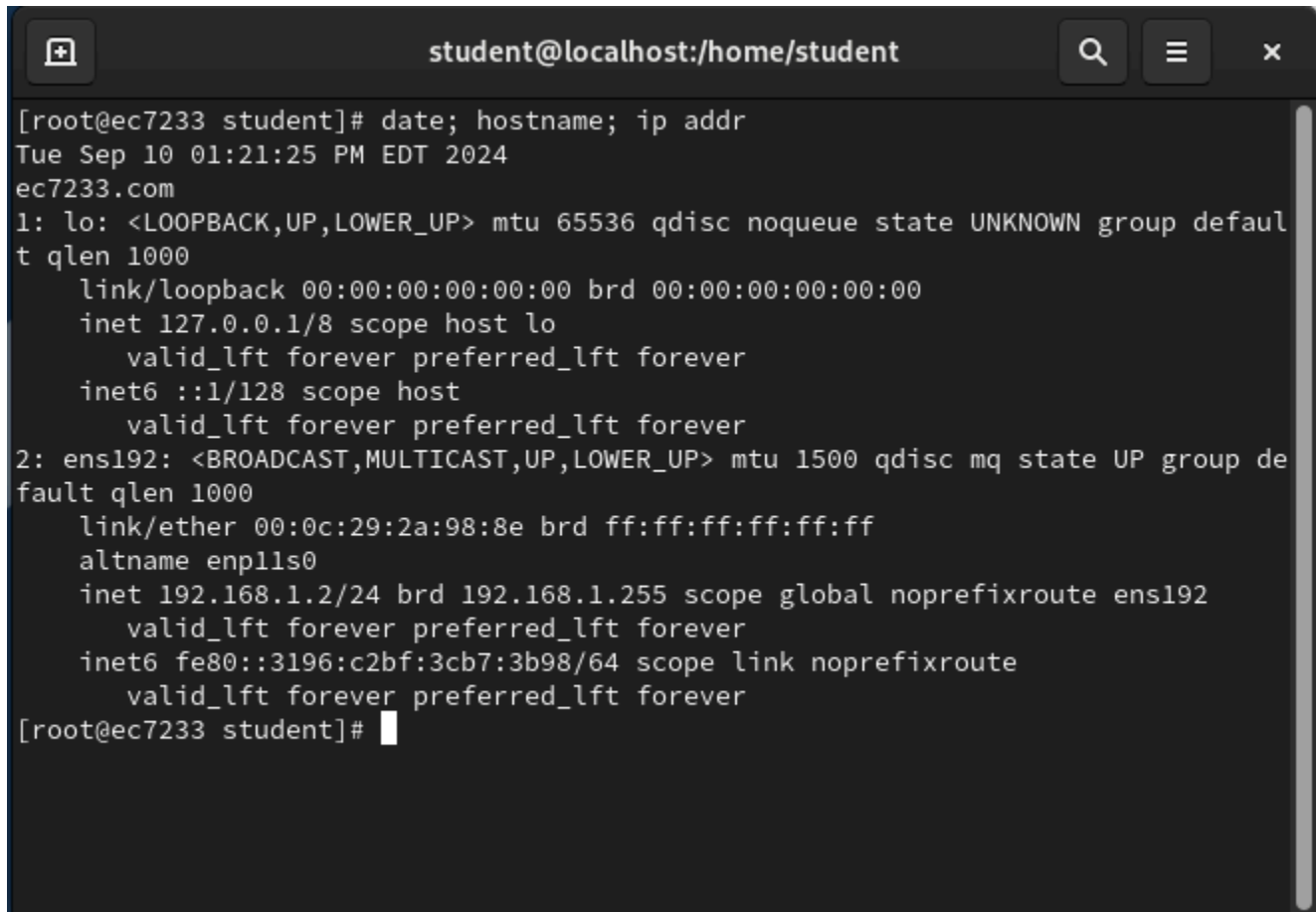
*** Welcome to pfSense 2.5.1-RELEASE (amd64) on pfSense ***

WAN (wan)      -> em0      -> v4: 192.168.117.128/24
LAN (lan)      -> em1      -> v4: 192.168.1.254/24

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: █
```

Figure 2 – Rocky Linux Information



A terminal window titled "student@localhost:/home/student" with search, menu, and close buttons. The terminal shows the output of the command "date; hostname; ip addr". The output displays the date and time as "Tue Sep 10 01:21:25 PM EDT 2024" and the hostname as "ec7233.com". It then lists network interfaces: "lo" (loopback) and "ens192" (Ethernet). For "lo", it shows "mtu 65536", "qdisc noqueue", "state UNKNOWN", "group default", "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". For "ens192", it shows "mtu 1500", "qdisc mq", "state UP", "group default", "qlen 1000", "link/ether 00:0c:29:2a:98:8e", "brd ff:ff:ff:ff:ff:ff", "altname enp11s0", "inet 192.168.1.2/24", "brd 192.168.1.255", "scope global", "noprefixroute", "ens192", "valid\_lft forever", "preferred\_lft forever", "inet6 fe80::3196:c2bf:3cb7:3b98/64", "scope link", "noprefixroute", "valid\_lft forever", "preferred\_lft forever". The prompt "[root@ec7233 student]#" is shown at the bottom.

```
[root@ec7233 student]# date; hostname; ip addr
Tue Sep 10 01:21:25 PM EDT 2024
ec7233.com
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default 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: ens192: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc mq state UP group default qlen 1000
    link/ether 00:0c:29:2a:98:8e brd ff:ff:ff:ff:ff:ff
    altname enp11s0
    inet 192.168.1.2/24 brd 192.168.1.255 scope global noprefixroute ens192
        valid_lft forever preferred_lft forever
    inet6 fe80::3196:c2bf:3cb7:3b98/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
[root@ec7233 student]#
```

**Figure 3** – Windows 10 Information

```
Administrator: Windows PowerShell
PS C:\Windows\system32> Get-Date; ipconfig /all

Tuesday, September 10, 2024 1:27:11 PM

Windows IP Configuration

Host Name . . . . . : DESKTOP-5Q38FHF
Primary Dns Suffix . . . . . :
Node Type . . . . . : Hybrid
IP Routing Enabled. . . . . : No
WINS Proxy Enabled. . . . . : No

Ethernet adapter Ethernet0:

Connection-specific DNS Suffix . :
Description . . . . . : Intel(R) 82574L Gigabit Network Connection
Physical Address. . . . . : 00-0C-29-70-0F-75
DHCP Enabled. . . . . : No
Autoconfiguration Enabled . . . . : Yes
Link-local IPv6 Address . . . . . : fe80::8039:be6c:5b47:e50a%14(Preferred)
IPv4 Address. . . . . : 192.168.1.1(Preferred)
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.1.254
DHCPv6 IAID . . . . . : 100666409
DHCPv6 Client DUID. . . . . : 00-01-00-01-2E-72-2A-CB-00-0C-29-70-0F-75
DNS Servers . . . . . : 8.8.8.8
                        8.8.4.4
NetBIOS over Tcpip. . . . . : Enabled

PS C:\Windows\system32>
```

Figure 4 – Windows Server 2022 Information

The screenshot displays the pfSense Community Edition web interface in a browser window. The address bar shows the URL `192.168.1.254`. The interface includes a top navigation bar with tabs for System, Interfaces, Firewall, Services, VPN, Status, Diagnostics, and Help. A warning message at the top states: "WARNING: The 'admin' account password is set to the default value. Change the password in the User Manager." The main content area is titled "Status / Dashboard" and features two primary panels. The "System Information" panel on the left provides details about the system, including the name (pfSense.home.arpa), user (admin@192.168.1.3), system (VMware Virtual Machine), BIOS (Phoenix Technologies LTD), version (2.5.1-RELEASE), CPU type (Intel(R) Core(TM) i9-10900K CPU @ 3.70GHz), kernel PTI (Disabled), MDS Mitigation (Inactive), uptime (00 Hour 40 Minutes 06 Seconds), current date/time (Tue Sep 10 13:29:04 UTC 2024), and DNS server(s) (127.0.0.1). The "Netgate Services And Support" panel on the right shows a "Retrieving support information" status. Below this, the "Interfaces" panel lists the WAN and LAN interfaces, both configured as 1000baseT <full-duplex> with IP addresses 192.168.1.128 and 192.168.1.254, respectively. The Windows taskbar at the bottom shows the search bar and several application icons, with the system clock indicating 1:29 PM on 9/10/2024.

I was getting an “Unable to check for updates” error everytime I tried to update or check for updates.