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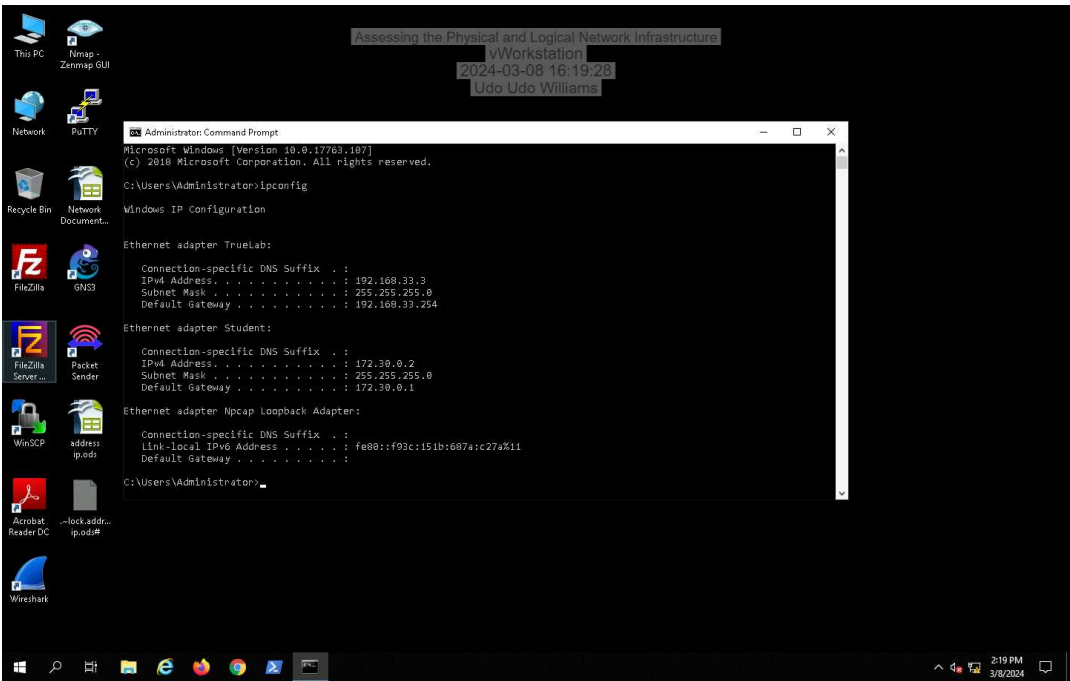
Time on Task:	Progress:
18 hours, 0 minutes	100%

Report Generated: Saturday, March 9, 2024 at 11:15 PM

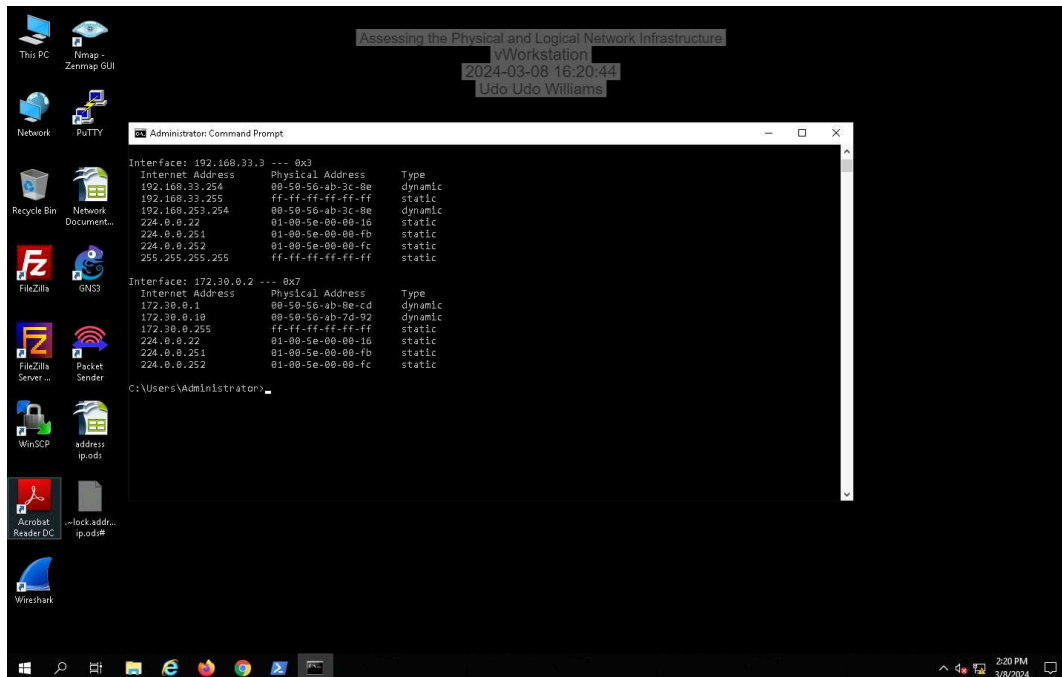
Section 1: Hands-On Demonstration

Part 1: Access the Default Gateway Router

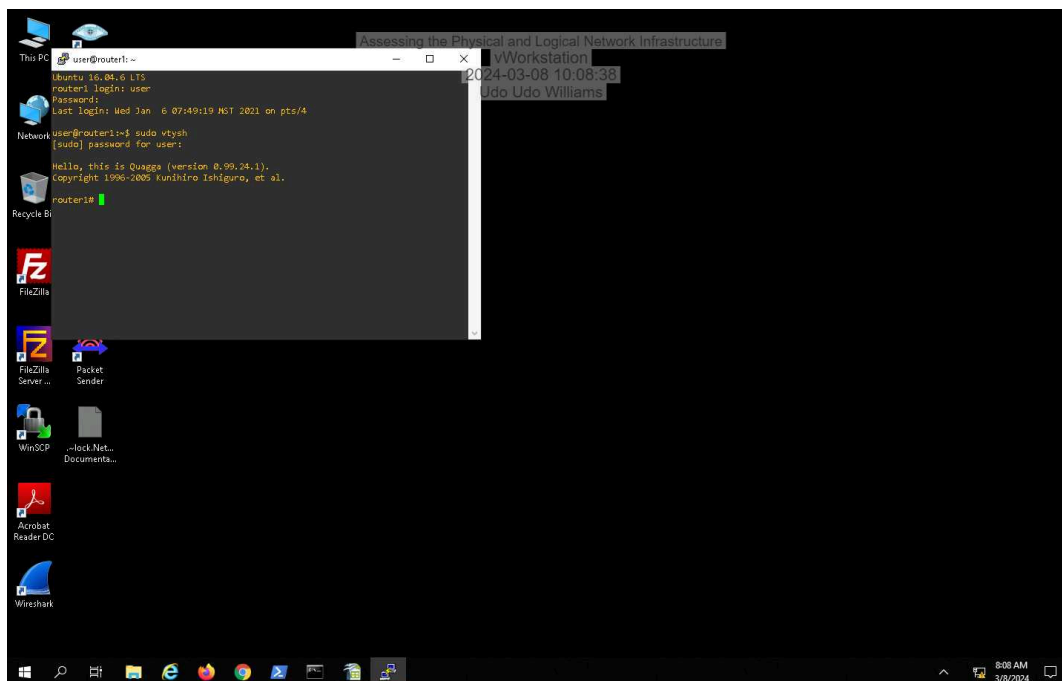
5. Make a screen capture showing the IP configuration for the vWorkstation.



8. Make a screen capture showing the ARP cache for the vWorkstation.

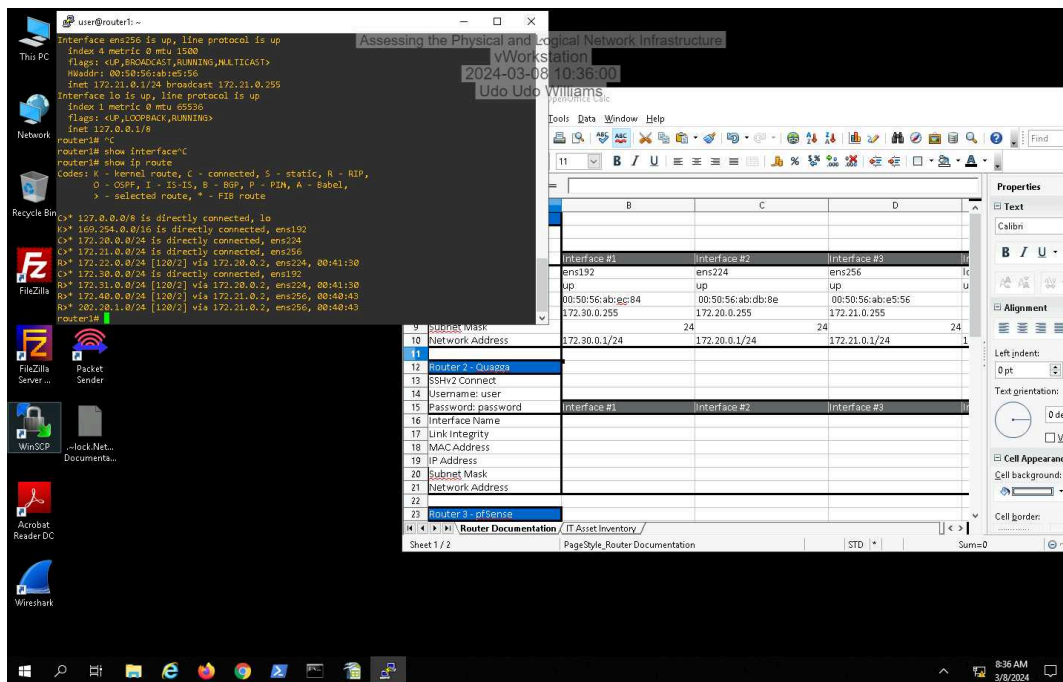


16. Make a screen capture showing the router1 console shell.

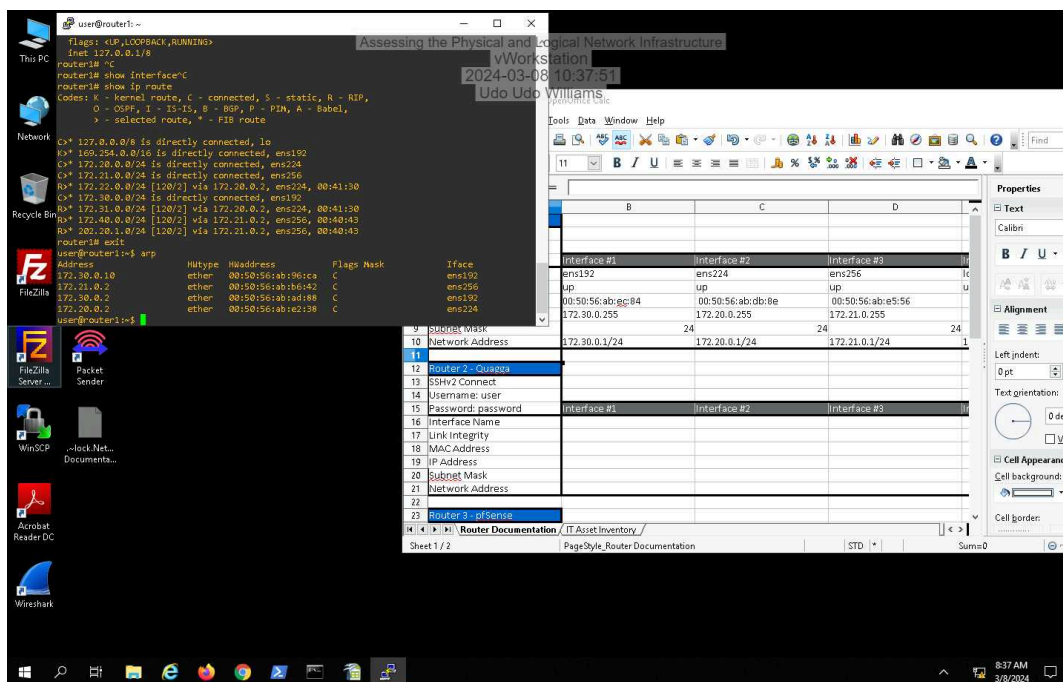


Part 2: Collect Physical, Data Link, and Network Layer Information for a Quagga Router

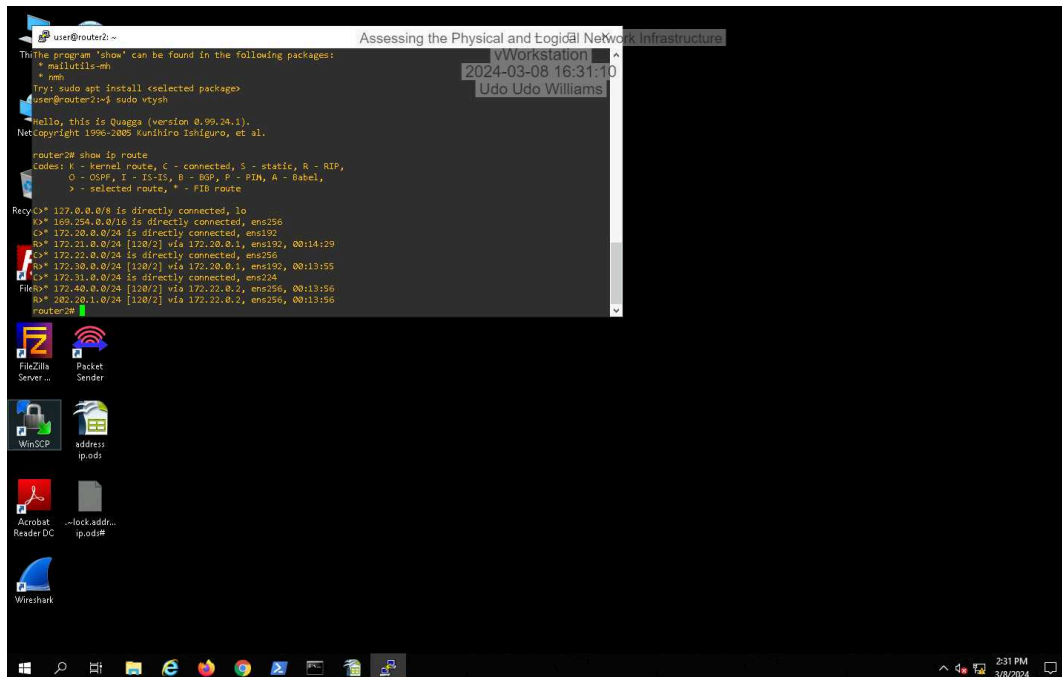
6. Make a screen capture showing the IP routes for router1.



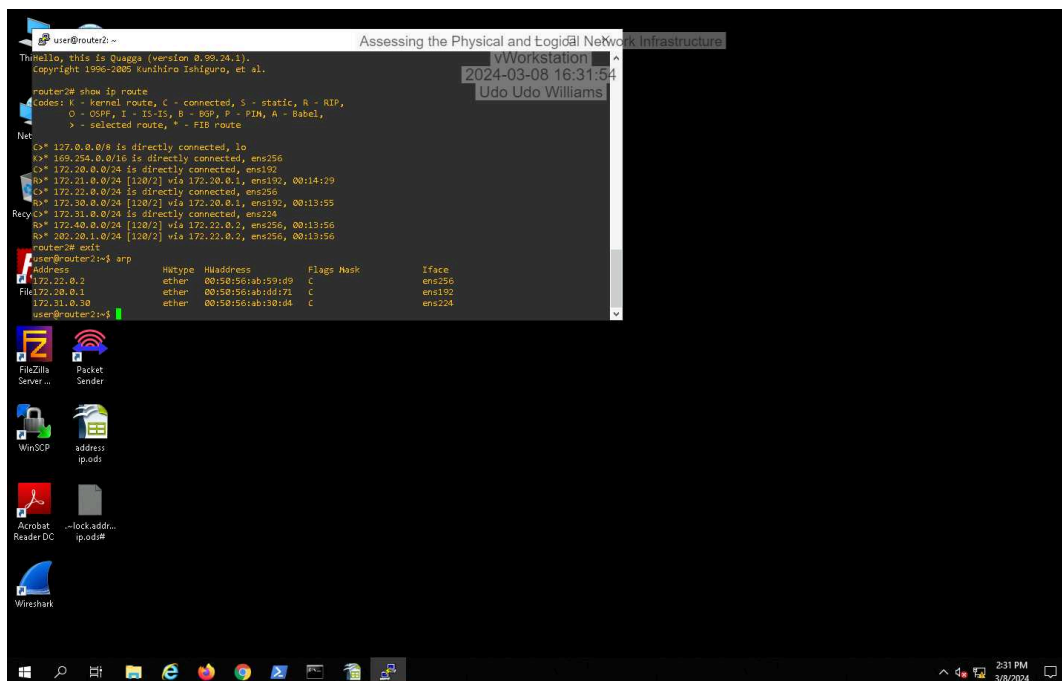
9. Make a screen capture showing the ARP cache for router1.



18. Make a screen capture showing the IP routes for router2.



20. Make a screen capture showing the ARP cache for router2.



Part 3: Collect Physical, Data Link, and Network Layer Information for a pfSense Device

6. Make a screen capture showing the completed Network Documentation spreadsheet.

The screenshot shows an OpenOffice Calc spreadsheet titled 'Router Documentation' with the following data:

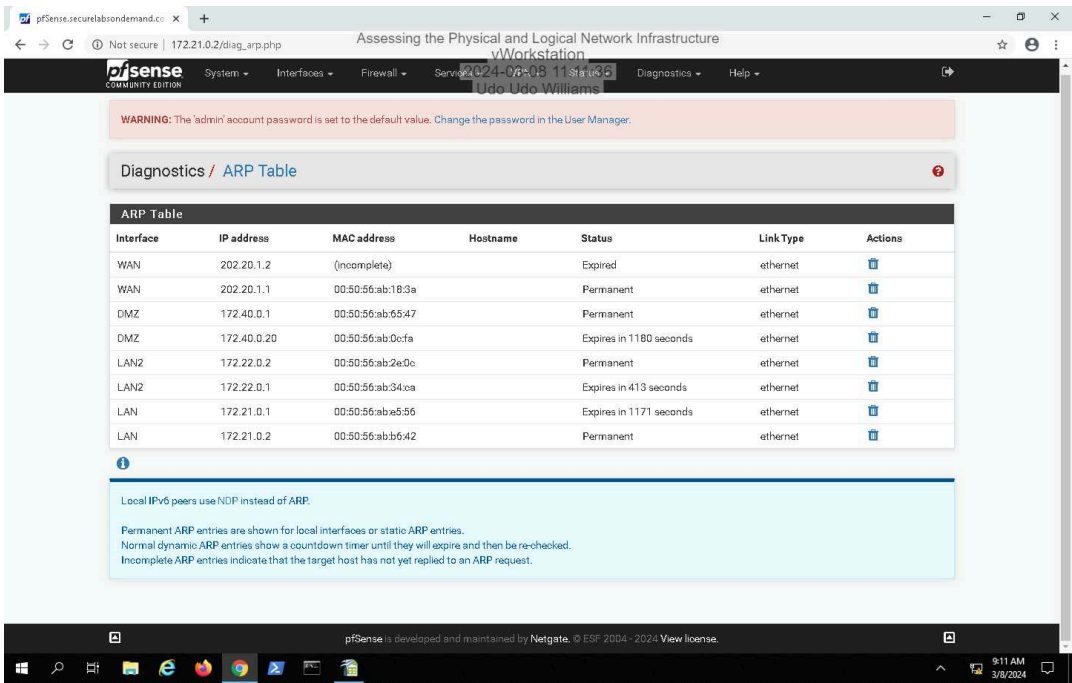
Router	Interface	Interface Name	Link Integrity	MAC Address	IP Address	Subnet Mask	Network Address
Router 1 - Quasa	Interface #1	ens192	up	00:50:56:ab:c6:84	172.30.0.255	24	172.30.0.1/24
	Interface #2	ens224	up	00:50:56:ab:db:8e	172.20.0.255	24	172.20.0.1/24
	Interface #3	ens256	up	00:50:56:ab:e5:56	172.21.0.255	24	172.21.0.1/24
	Interface #4	lo	up			24	127.0.0.1/8
Router 2 - Quasa	Interface #1	ens192	up	00:50:56:ab:e2:38	172.20.0.255	24	172.20.0.2/24
	Interface #2	ens224	up	00:50:56:ab:b1:a6	172.31.0.255	24	172.31.0.1/24
	Interface #3	ens256	up	00:50:56:ab:34:ca	172.22.0.255	24	172.22.0.1/24
	Interface #4	lo	up			24	127.0.0.1/8
Router 3 - pfSense	Interface #1	vmx3	up	00:50:56:ab:18:3a	202.20.1.1	255.255.255.0	202.20.1.0
	Interface #2	vmx0	up	00:50:56:ab:b6:42	172.21.0.2	255.255.255.0	172.21.0.0
	Interface #3	vmx1	up	00:50:56:ab:2e:0c	172.22.0.2	255.255.255.0	172.22.0.0
	Interface #4	vmx2	up	00:50:56:ab:65:47	172.40.0.1	255.255.255.0	172.40.0.0

8. Make a screen capture showing the IP Routes for the pfSense device.

The screenshot shows the pfSense web interface with the 'Diagnostics / Routes' page. The 'Routing Table Display Options' section is visible, and the 'IPv4 Routes' table is displayed below.

Destination	Gateway	Flags	Use	Mtu	Netif	Expire
default	202.20.1.2	UGS	244006	1500	vmx3	
127.0.0.1	link#6	UH	664	16384	lo0	
172.20.0.0/24	172.22.0.1	UG	0	1500	vmx1	
172.21.0.0/24	link#1	U	0	1500	vmx0	
172.21.0.2	link#1	UHS	0	16384	lo0	
172.22.0.0/24	link#2	U	0	1500	vmx1	
172.22.0.2	link#2	UHS	0	16384	lo0	
172.30.0.0/24	172.21.0.1	UG	1013	1500	vmx0	
172.31.0.0/24	172.22.0.1	UG	495	1500	vmx1	
172.40.0.0/24	link#3	U	0	1500	vmx2	
172.40.0.1	link#3	UHS	0	16384	lo0	

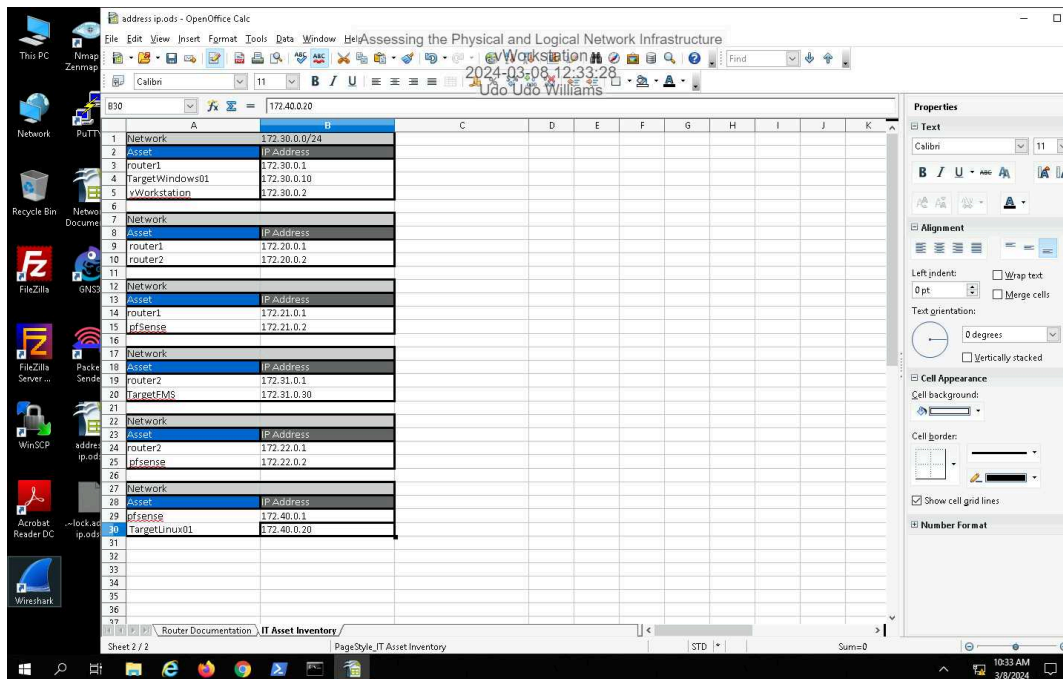
10. Make a screen capture showing the ARP table for pfSense.



Section 2: Applied Learning

Part 1: Build an IT Asset Inventory Using Zenmap

8. Make a screen capture showing the **completed IT Asset Inventory tab**.



Part 2: Compare IP Routing Tables

5. **Record** each directly connected IP host and subnet in the router1 IP routing table.

127.0.0.0/8 is directly connected, lo169.254.0.0/16 is directly connected to ens192172.20.0.0/24 is directly connected to ens224172.21.0.0/24 is directly connected to ens256172.30.0.0/24 is directly connected to ens192

8. **Record** each directly connected IP host and subnet in the router2 IP routing table.

127.0.0.0/8 directly connected to lo169.254.0.0/16 directly connected to ens192172.20.0.0/24 directly connected to ens192172.22.0.0/24 connected to ens256172.31.0.0/24 connected to ens224

12. **Record** each directly connected IP host and subnet in the pfSense IPv4 routing table.

In pfSense, the directly connected hosts or subnets are those that list a link# in the Gateway column, rather than IP address.

1270.0.1 link6172.21.0.0/24 link1172.21.0.2 link1172.22.0.0/24 link2172.22.0.2 link2172.40.0.0/24
link3172.40.0.1 link3202.20.0.0/24 link4202.20.101 link4

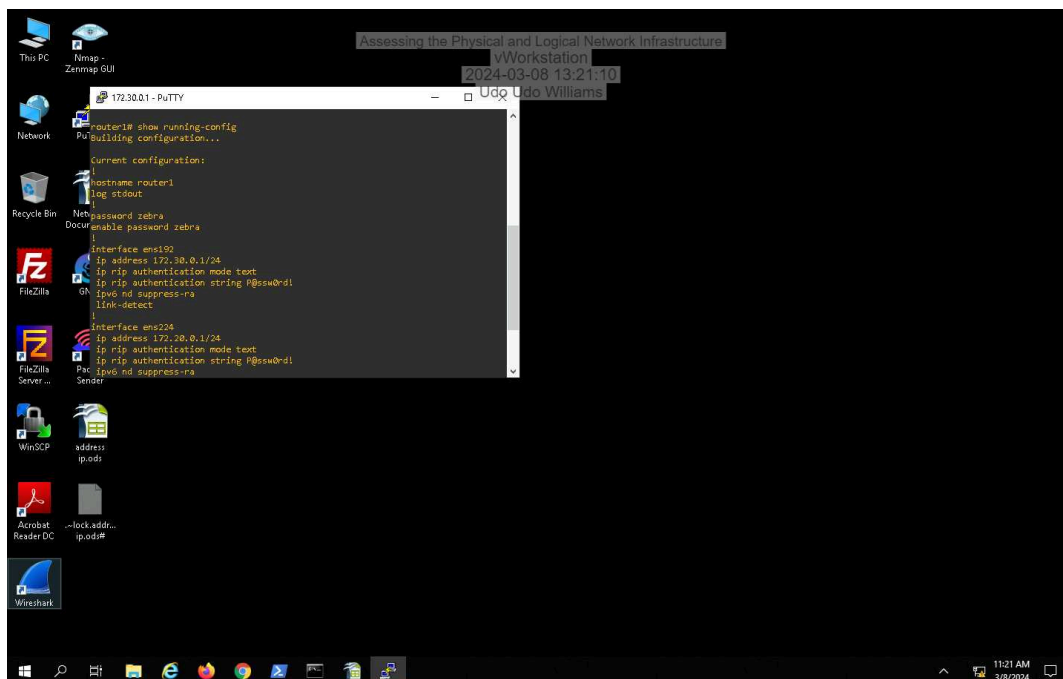
13. **Compare** your findings with the IT Asset Inventory and Router Documentation in the Network Documentation spreadsheet.

Do your findings match your documentation?

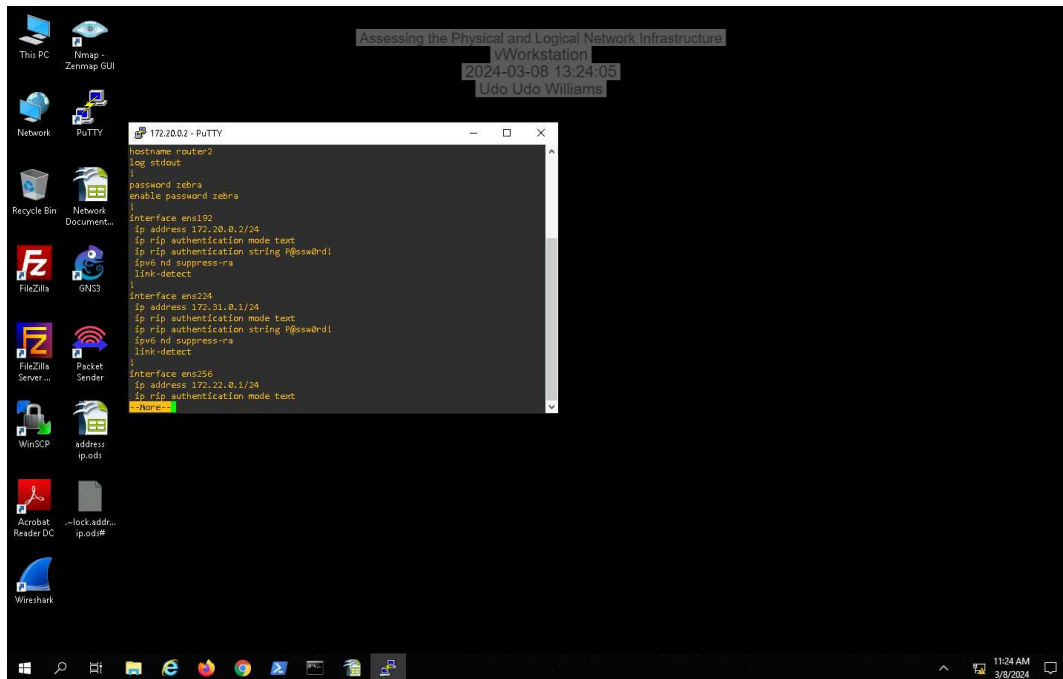
yes

Part 3: Use the Router Configuration File to Verify Interface Documentation

5. **Make a screen capture** showing the **configuration file** for router1.



8. Make a screen capture showing the **configuration file for router2**.



14. Document the following information from the **config.xml** file:

- a. Hostname
- b. Interfaces Names and IP Addresses

pfsensevmx3 202.20.1.1vmx0 172.21.0.2vmx1 172.22.0.2vmx2 172.40.0.1

15. **Compare** your findings with the IT Asset Inventory and Router Documentation in the Network Documentation spreadsheet.

Do your findings match your documentation?

yes

Make a screen capture showing the **HTML** report generated from your scan in Internet Explorer.

