Student:	Email:
Patrick Kierzkowski	pxk405@francis.edu

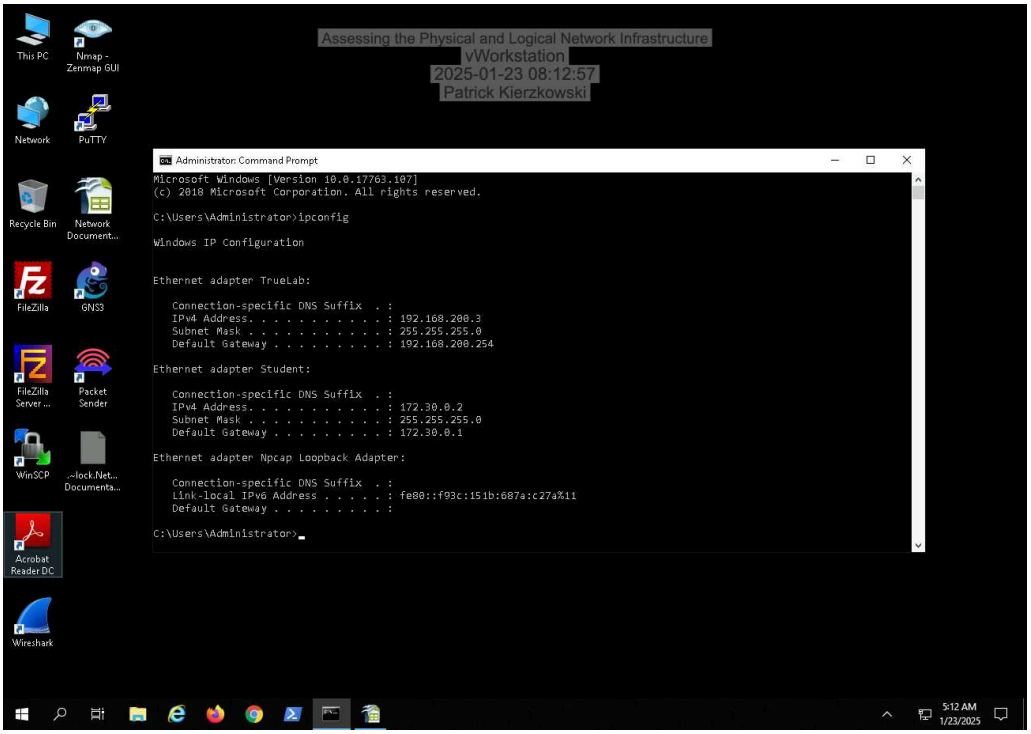
Time on Task:	Progress:
14 hours, 45 minutes	100%

Report Generated: Monday, July 7, 2025 at 9:44 PM

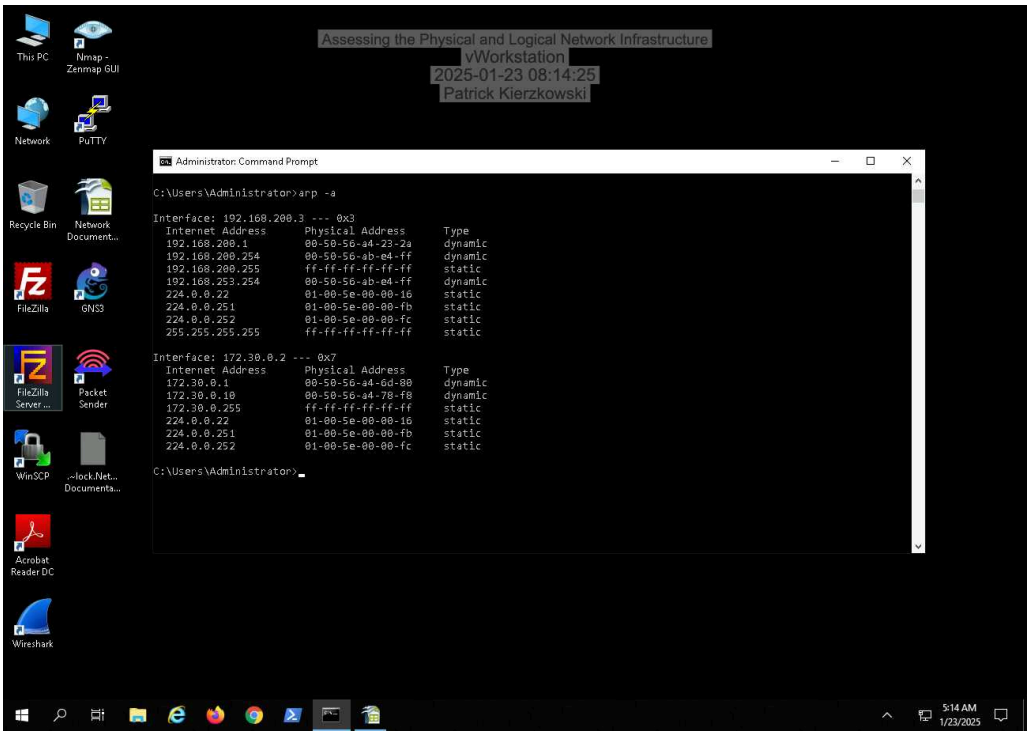
Section 1: Hands-On Demonstration

Part 1: Access the Default Gateway Router

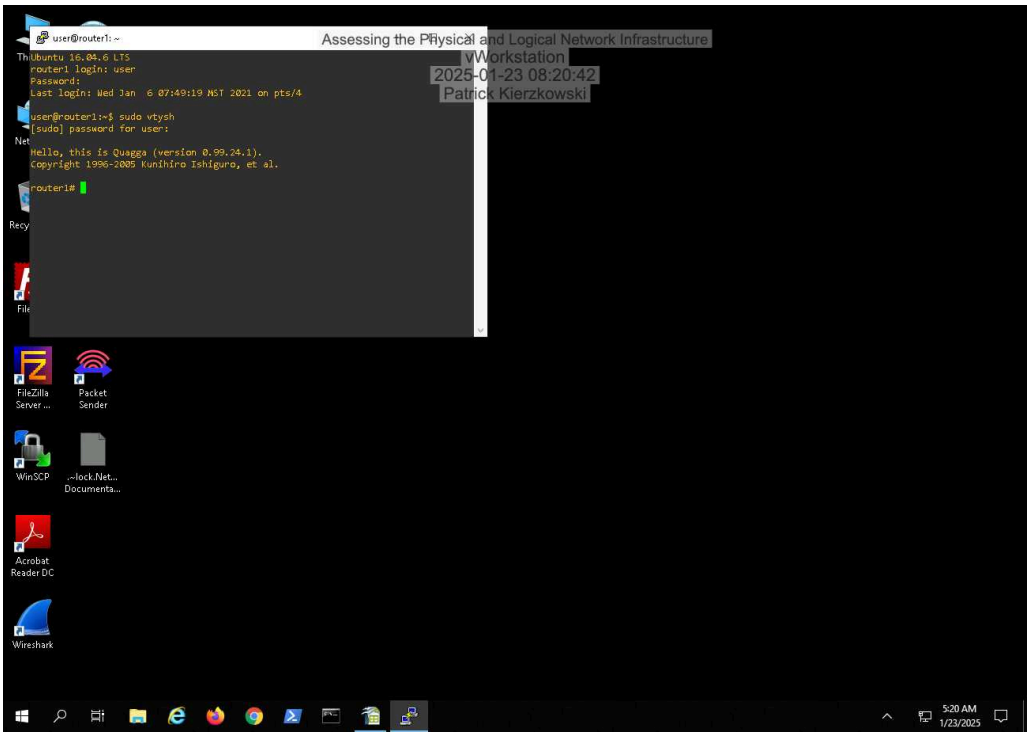
5. **Make a screen capture** showing the **IP configuration for the vWorkstation**.



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



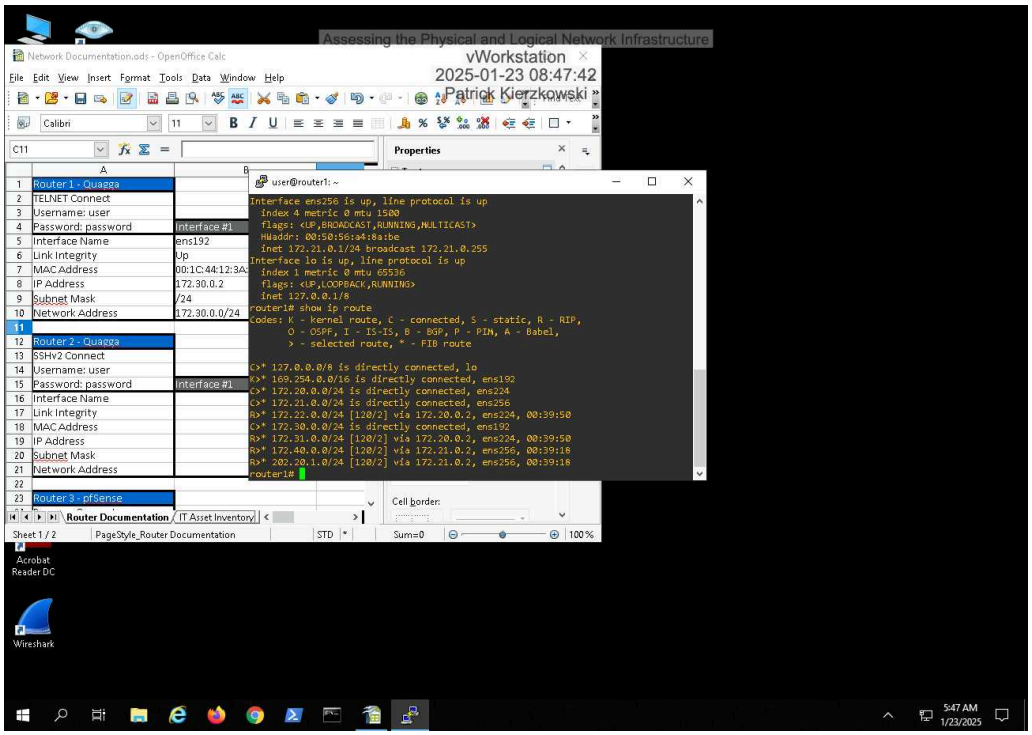
16. **Make a screen capture** showing the **router1 console shell**.



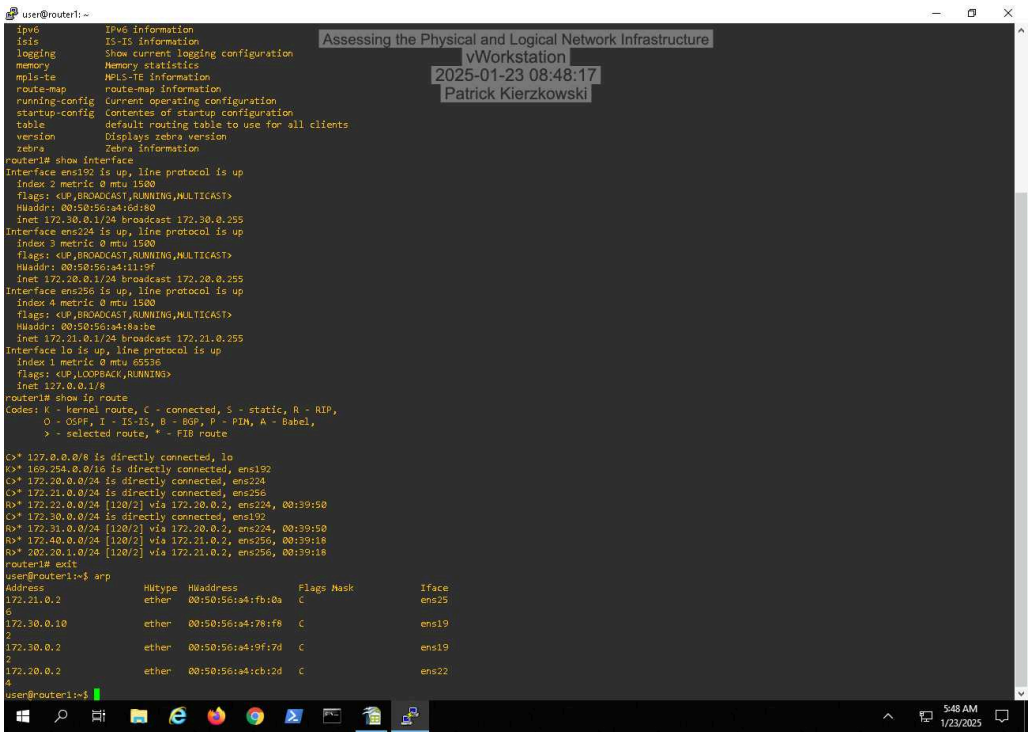
Part 2: Collect Physical, Data Link, and Network Layer Information for a Quagga

Router

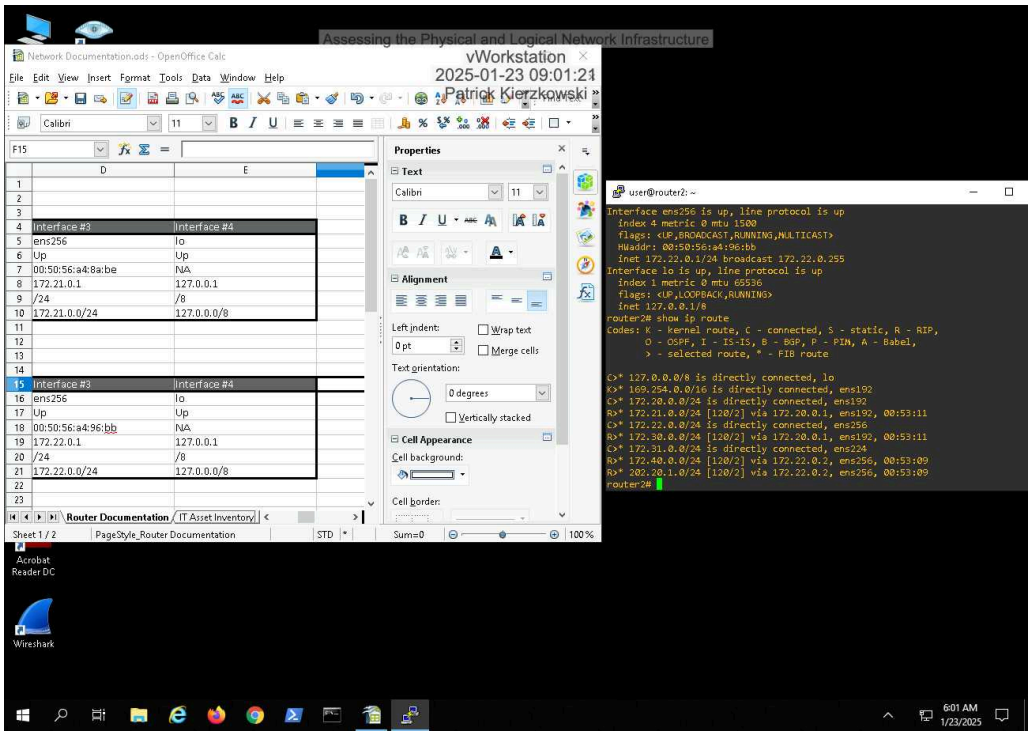
6. **Make a screen capture** showing the **IP routes for router1**.



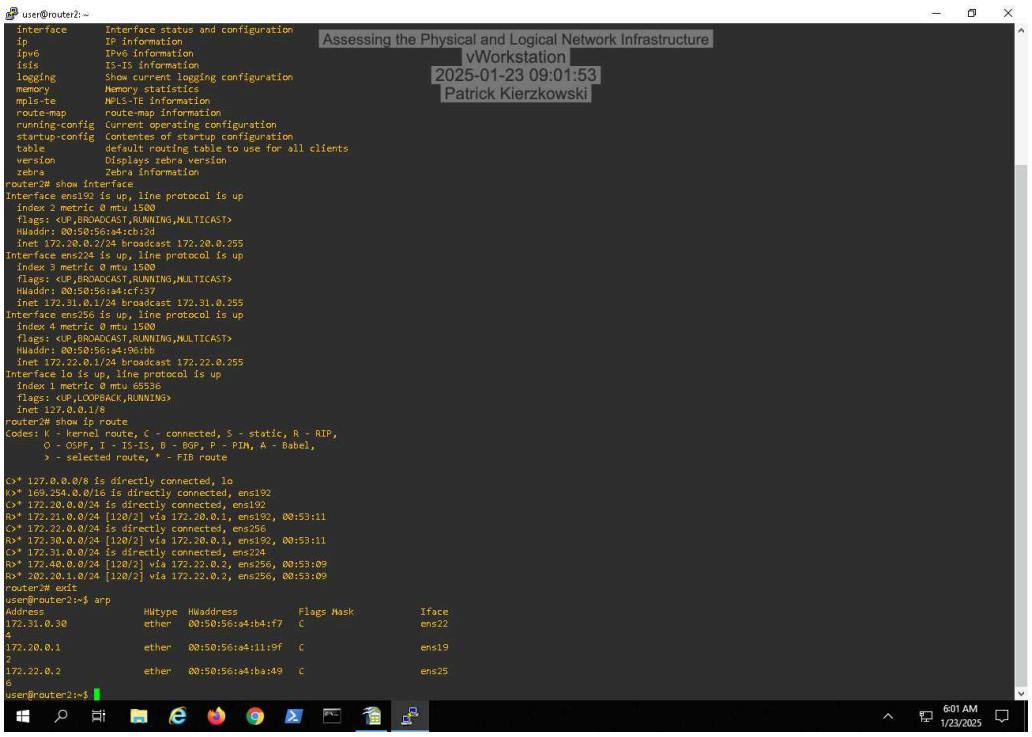
9. **Make a screen capture** showing the **ARP cache for router1**.



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



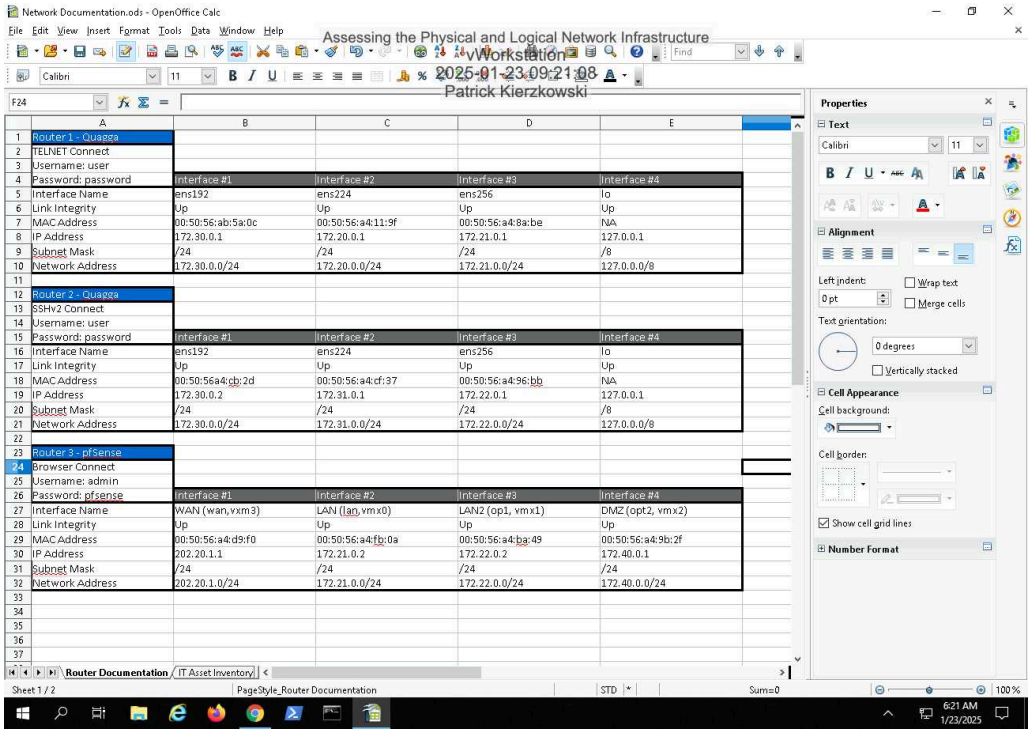
20. **Make a screen capture** showing the **ARP cache for router2**.



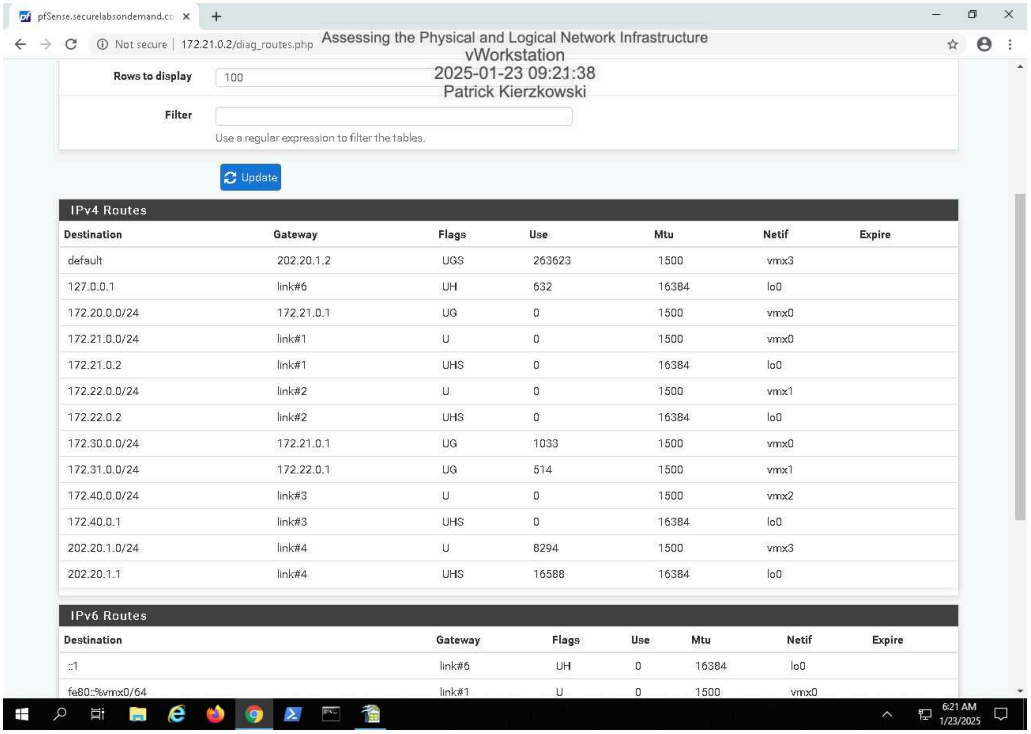
Part 3: Collect Physical, Data Link, and Network Layer Information for a pfSense

Device

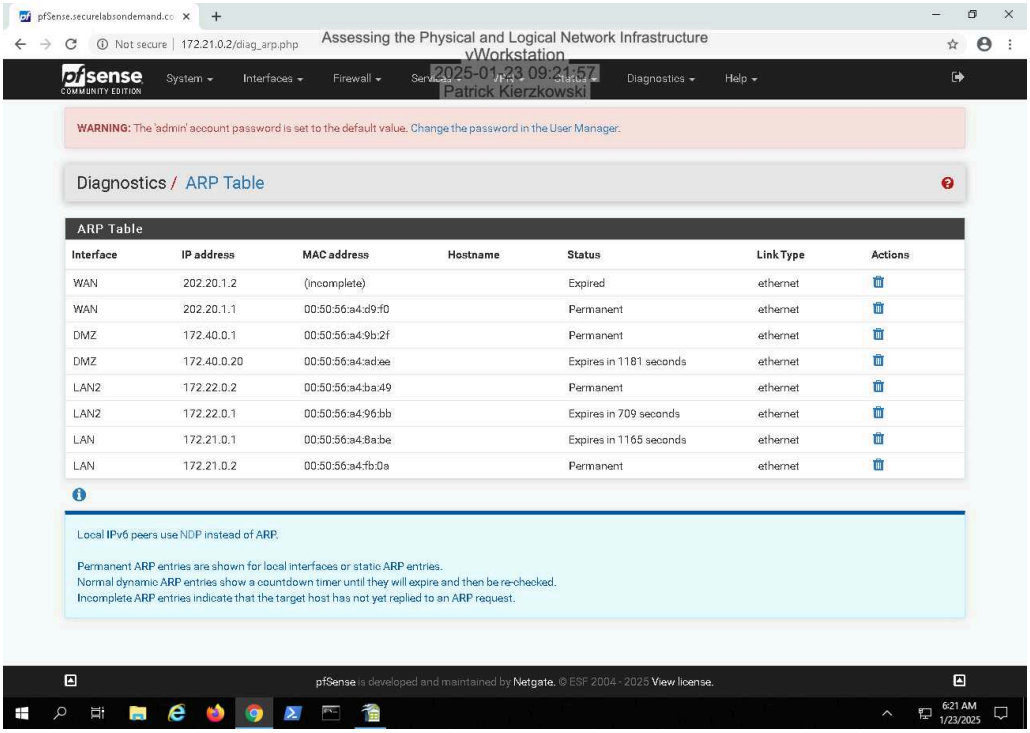
6. **Make a screen capture** showing the **completed Network Documentation spreadsheet**.



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



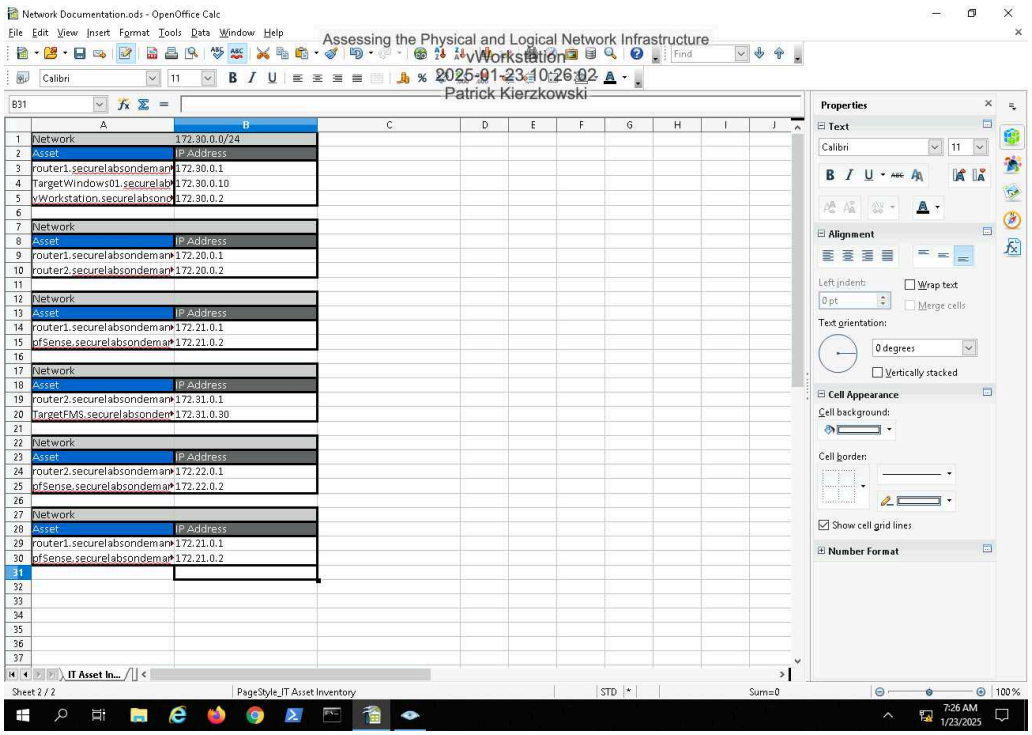
10. **Make a screen capture** showing the **ARP table for pfSense**.



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.

ens192 172.30.0.1/24 172.30.0.255 ens224 172.20.0.1/24. 172.20.0/255 ens256 172.21.0.1/24. 172.21.0.255lo 127.0.0.1/8 NA

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

ens192 172.30.0.1/24 172.30.0.255ens224 172.20.0.1/24 172.20.0.255ens256 172.21.0.1/24 172.21.0.255lo 127.0.0.1/8 NA

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.

LAN 172.21.0.0/24 172.21.0.2 LAN 2 172.22.0.0/24 172.22.0.2 DMZ 172.40.0.0/24 172.40.0.1
WAN 202.20.1.0/24 202.20.1.1
All match

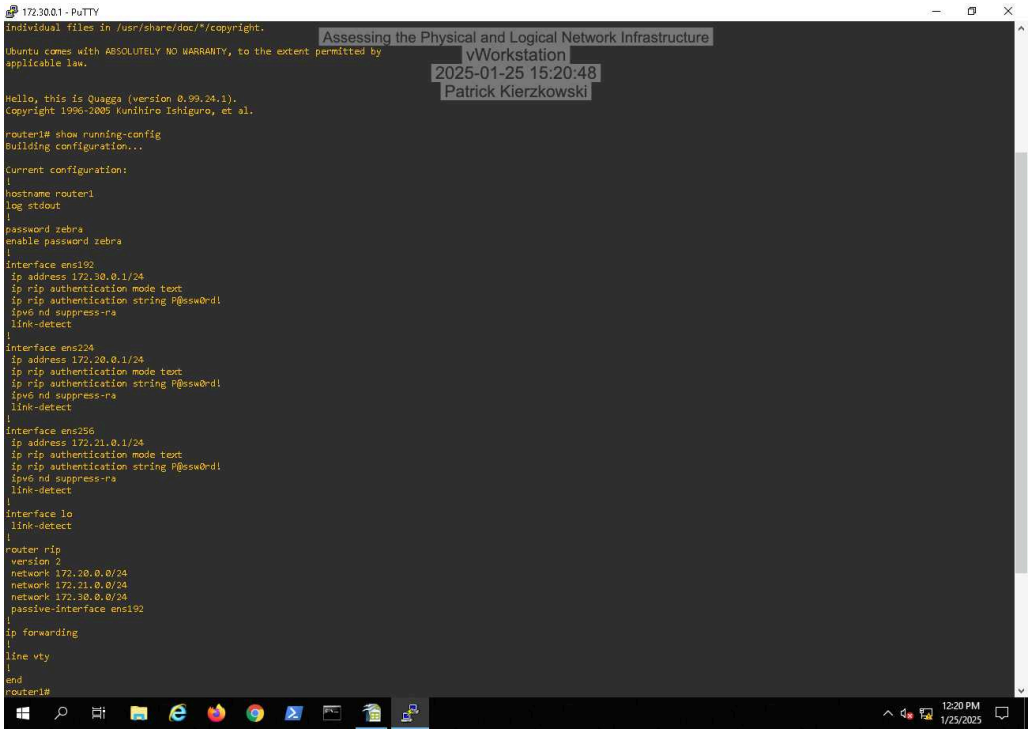
13. **Compare** your findings with the IT Asset Inventory and Router Documenation in the Network Documentation spreadsheet.

    Do your findings match your documentation?

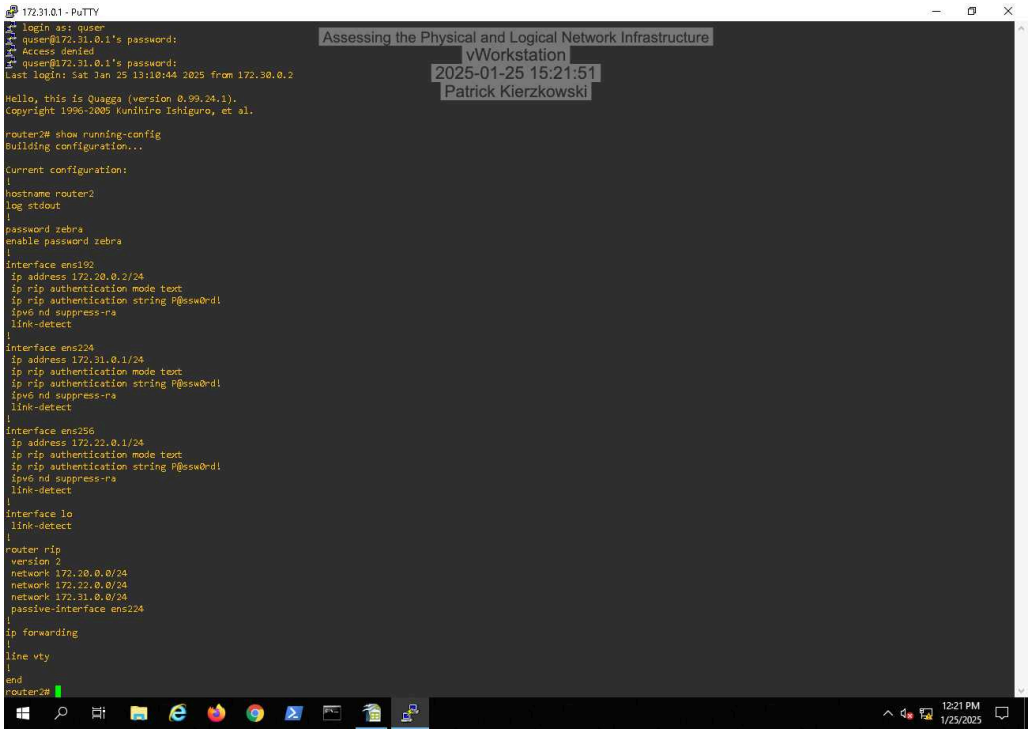
Yes they do

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

WAN 202.20.1.1 vmx3 LAN 172.21.0.2 vmx0 DMZ 172.40.0.1
vmx2 LAN2 172.22.0.2 vmx1

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

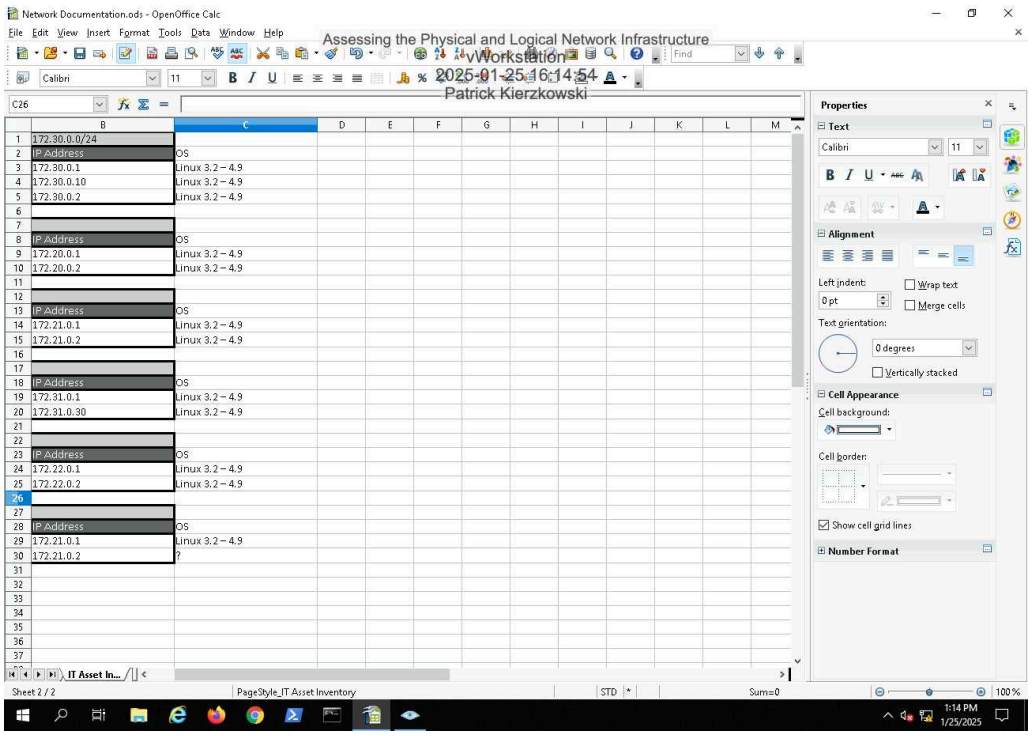
    Do your findings match your documentation?

Yes

Section 3: Challenge and Analysis

Part 1: Create a Corporate Network Documentation Package

Make a screen capture showing the **completed Asset Inventory tab with the new OS column**.



Part 2: Convert Nmap Output into an HTML Report

Document the command used to generate the XML output file.

nmap -O -oX C:\Users\Administrator\Desktop\networkReport.xml

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