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Time on Task:

3 hours, 0 minutes

Progress:

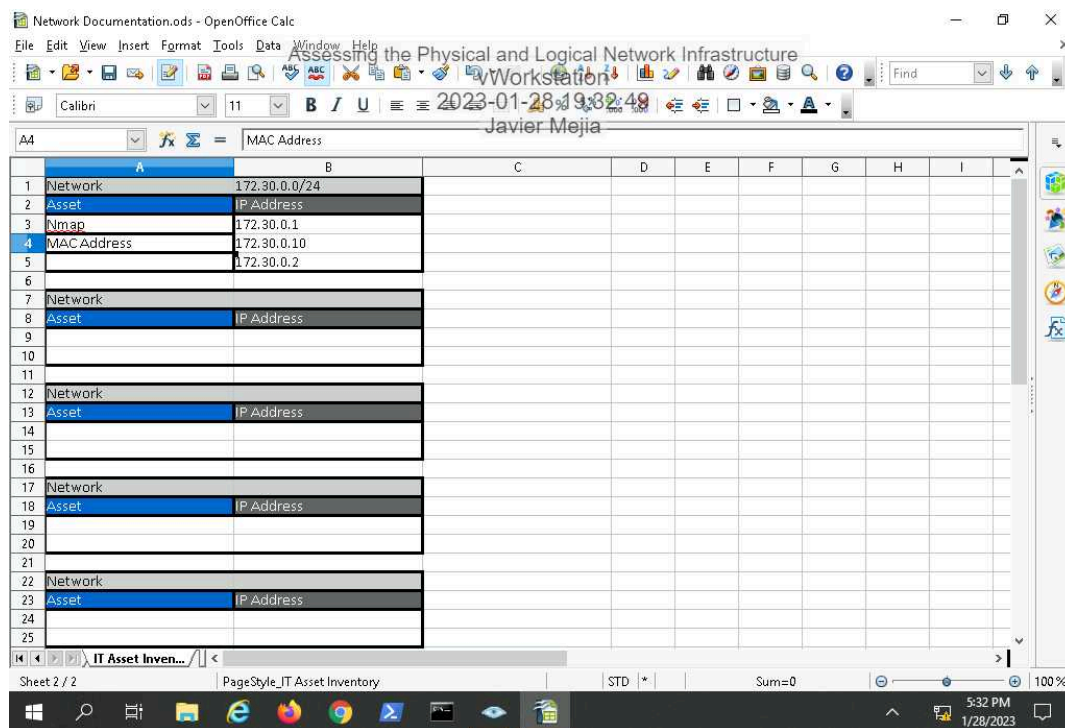
77%

Report Generated: Saturday, January 28, 2023 at 9:56 PM

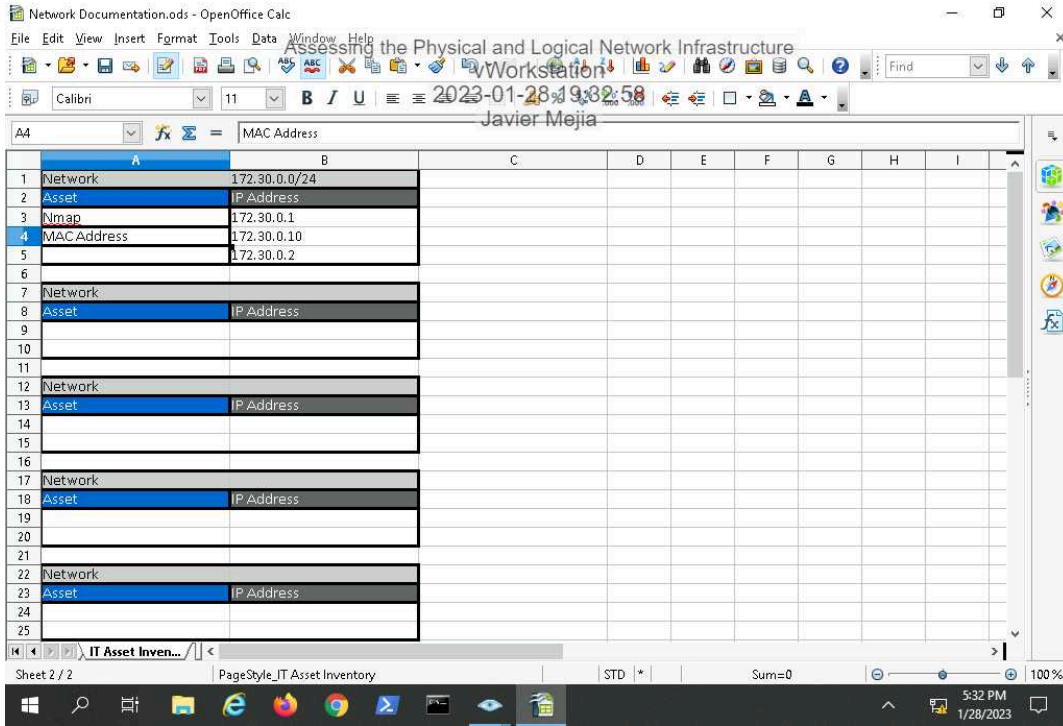
## Section 1: Hands-On Demonstration

### Part 1: Access the Default Gateway Router

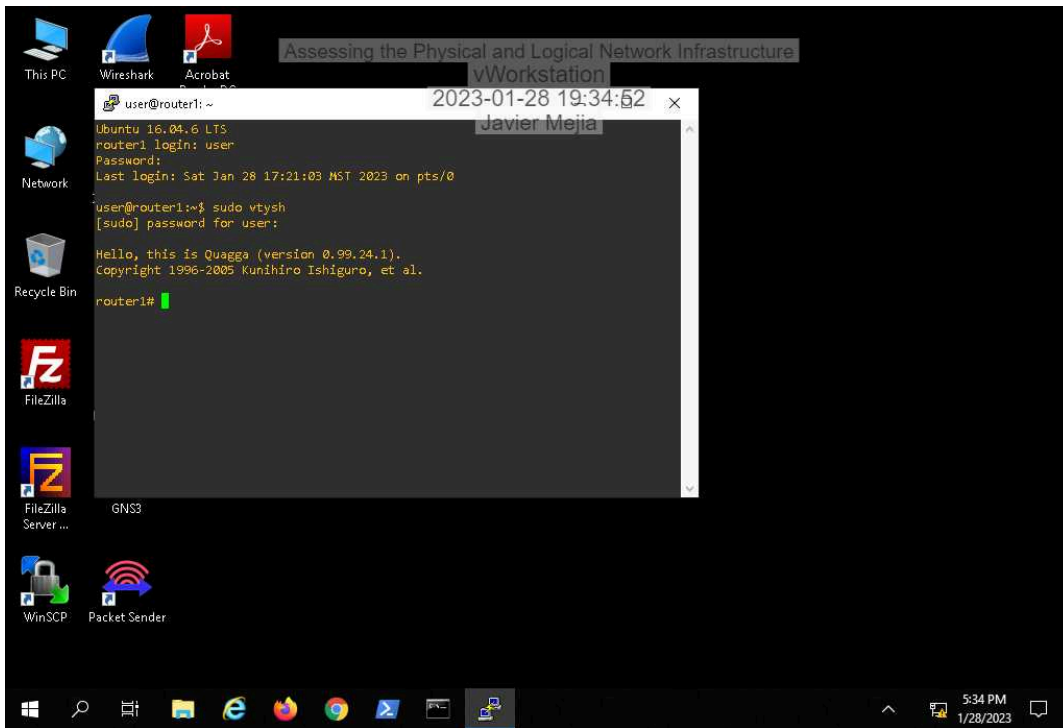
5. Make a screen capture showing the IP configuration for the vWorkstation.



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



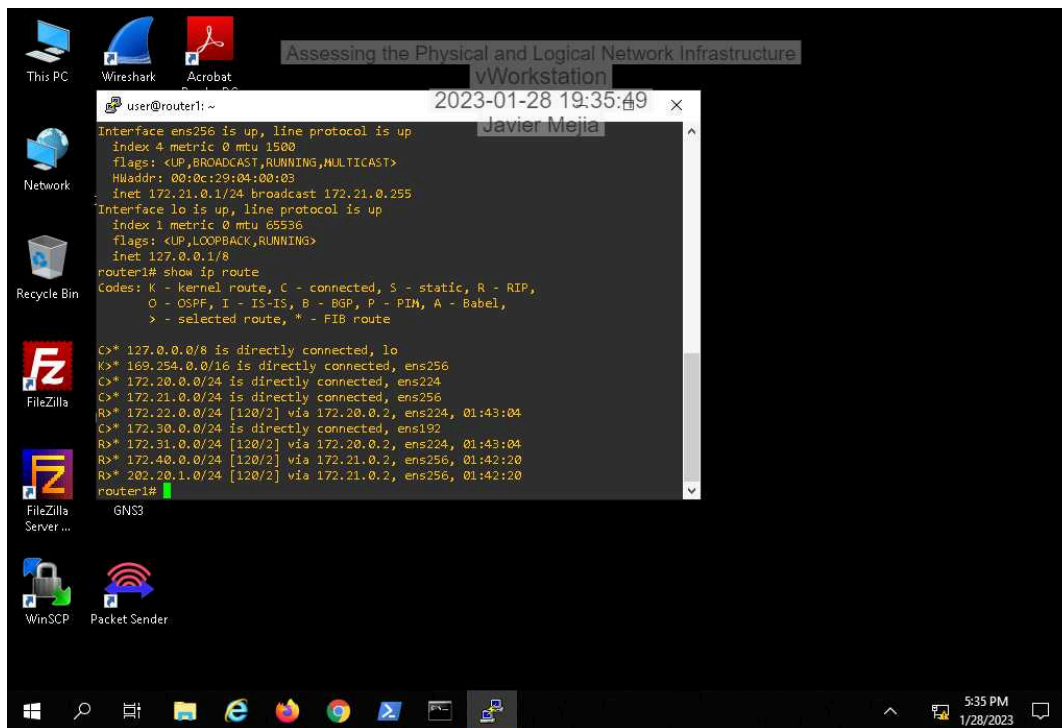
16. **Make a screen capture** showing the **router1** console shell.



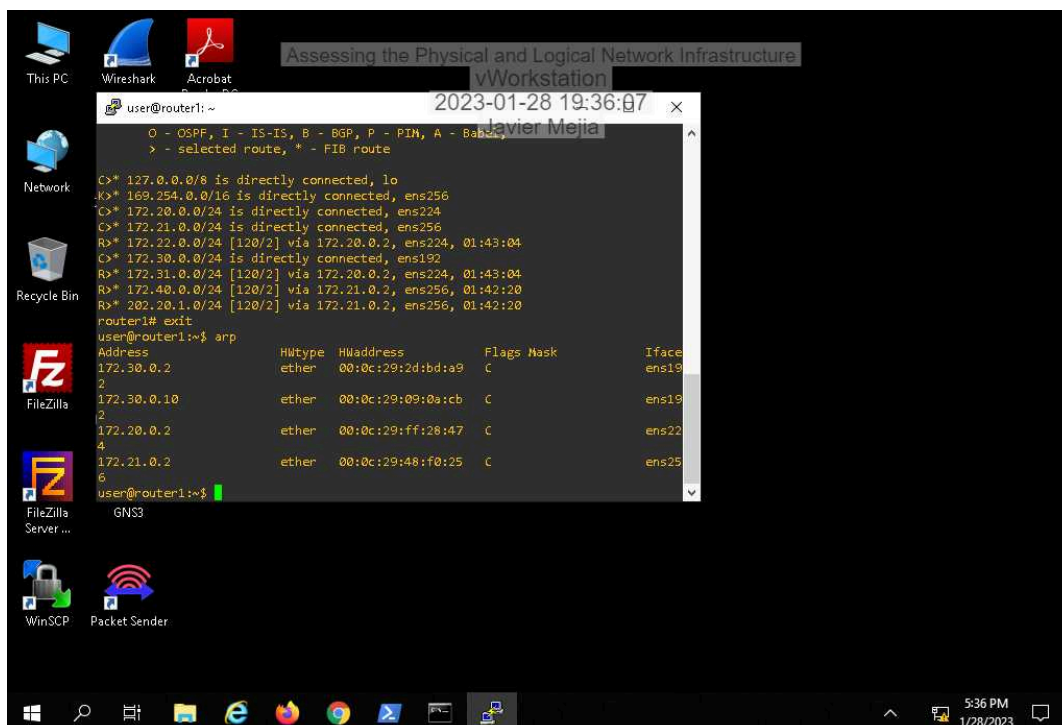
## Part 2: Collect Physical, Data Link, and Network Layer Information for a Quagga

## Router

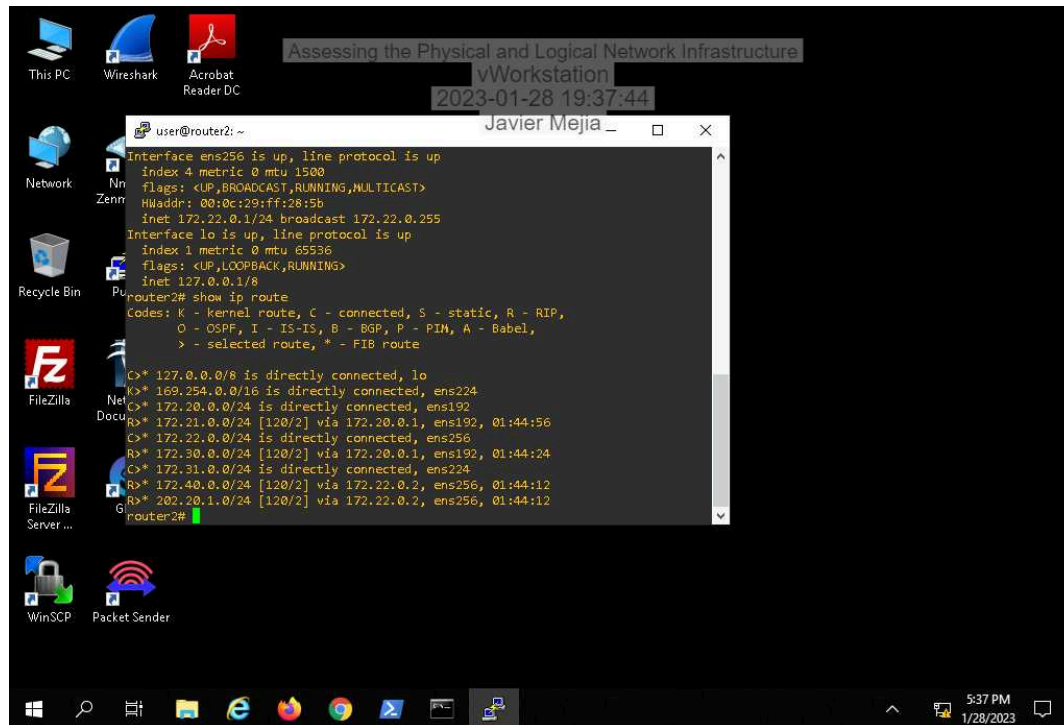
6. Make a screen capture showing the IP routes for router1.



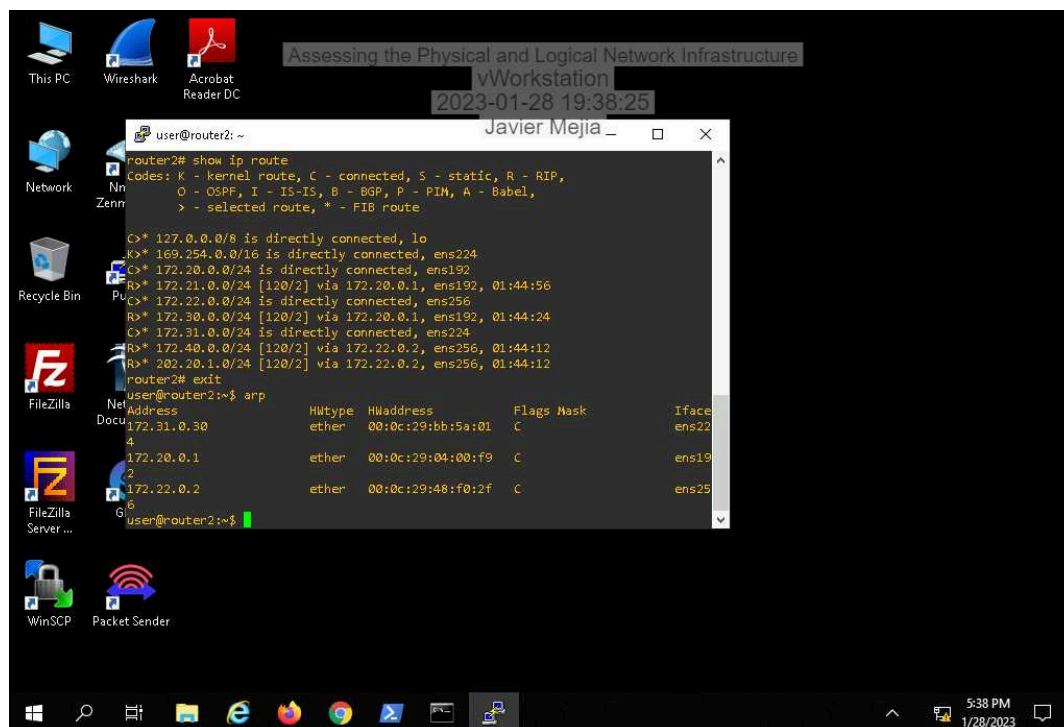
9. Make a screen capture showing the ARP cache for router1.



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**.

	A	B	C	D	E
10	Network Address	172.30.0.1/24			
11					
12	Router 2 - Quagga				
13	SSHv2 Connect				
14	Username: user				
15	Password: password	Interface #1	Interface #2	Interface #3	Interface #4
16	Interface Name	ens192			
17	Link Integrity	Up			
18	MAC Address	00:0c:29:ff:28:47			
19	IP Address	172.20.0.2			
20	Subnet Mask	/24			
21	Network Address	172.20.0.2/24			
22					
23	Router 3 - pfSense				
24	Browser Connect				
25	Username: admin				
26	Password: pfSense	Interface #1	Interface #2	Interface #3	Interface #4
27	Interface Name	wan	lan	opt1	opt2
28	Link Integrity	Up	Up	up	up
29	MAC Address	00:0c:29:48:f0:43	00:0c:29:48:f0:25	00:0c:29:48:f0:2f	00:0c:29:48:f0:39
30	IP Address	202.20.1.1	172.21.0.2	172.22.0.2	172.40.0.1
31	Subnet Mask	255.255.255.0	255.255.255.0	255.255.255.0	255.255.255.0
32	Network Address	202.20.1.1	172.21.0.2	0172.22.0.2	172.40.0.1
33					
34					

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

WARNING: The 'admin' account password is set to the default value. Change the password in the User Manager.

Diagnostics / Routes

Routing Table Display Options

Resolve names ☐ Enable  
Enabling name resolution may cause the query to take longer. It can be stopped at any time by clicking the Stop button in the browser.

Rows to display: 100

Filter:

Update

Destination	Gateway	Flags	Use	Mtu	Netif	Expire
default	202.20.1.2	UGS	292879	1500	vmx3	



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

The screenshot shows the pfSense web interface in a browser window. The address bar displays '172.21.0.2/diag\_ar.php'. The page title is 'Assessing the Physical and Logical Network Infrastructure'. The pfSense logo and 'COMMUNITY EDITION' are visible. A warning message states: 'WARNING: The 'admin' account password is set to the default value. Change the password in the User Manager.' The breadcrumb trail is 'Diagnostics / ARP Table'. The main content area is titled 'ARP Table' and contains a table with the following data:

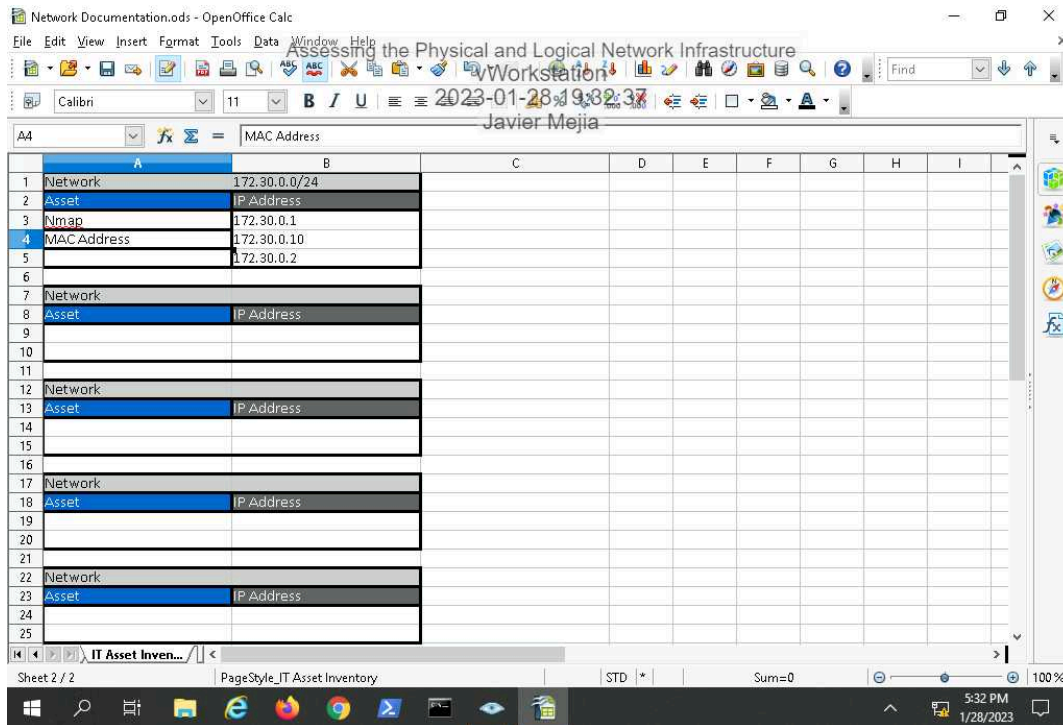
Interface	IP address	MAC address	Hostname	Status	Link Type	Actions
WAN	202.20.1.2	(incomplete)		Expired	ethernet	
WAN	202.20.1.1	00:0c:29:48:f0:43		Permanent	ethernet	
DMZ	172.40.0.1	00:0c:29:48:f0:39		Permanent	ethernet	
DMZ	172.40.0.20	00:0c:29:85:8c:83		Expires in 1189 seconds	ethernet	
LAN2	172.22.0.2	00:0c:29:48:f0:2f		Permanent	ethernet	
LAN2	172.22.0.1	00:0c:29:ff:28:5b		Expires in 599 seconds	ethernet	
LAN	172.21.0.1	00:0c:29:04:00:03		Expires in 1178 seconds	ethernet	
LAN	172.21.0.2	00:0c:29:48:f0:25		Permanent	ethernet	

The Windows taskbar at the bottom shows the time as 5:41 PM on 1/28/2023.

## 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.

k > 169.254.0.0\*16

c > 172.20.0.0/24

r > 172.31.0.0/24

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

c > 127.0.0/8

k > 169.254.0.0/16

r > 172.22.0.0/24

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.

127.0.0.1

172.20.0.0/24

172.21.0.0/24

172.21.0.2

172.22.0.0/24

172.22.0.2

172.30.0.0/24

172.31.0.0/24

172.40.0.0/24

172.40.0.1

202.20.1.0/24

202.20.1.1

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

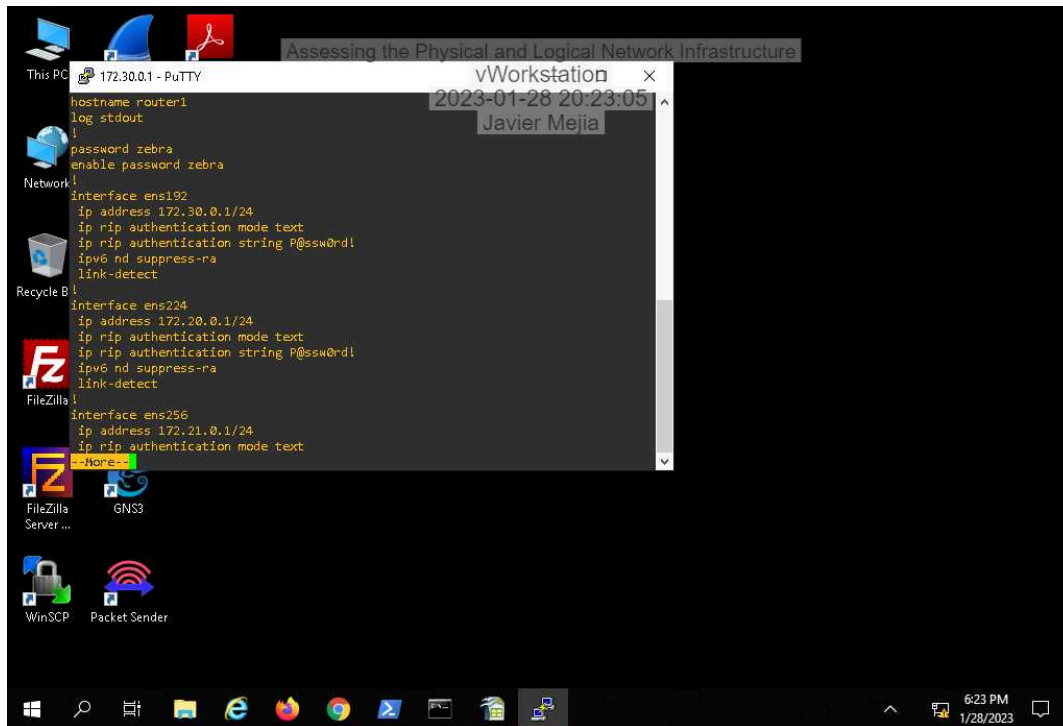
Do your findings match your documentation?

Yes I found similar IP address.

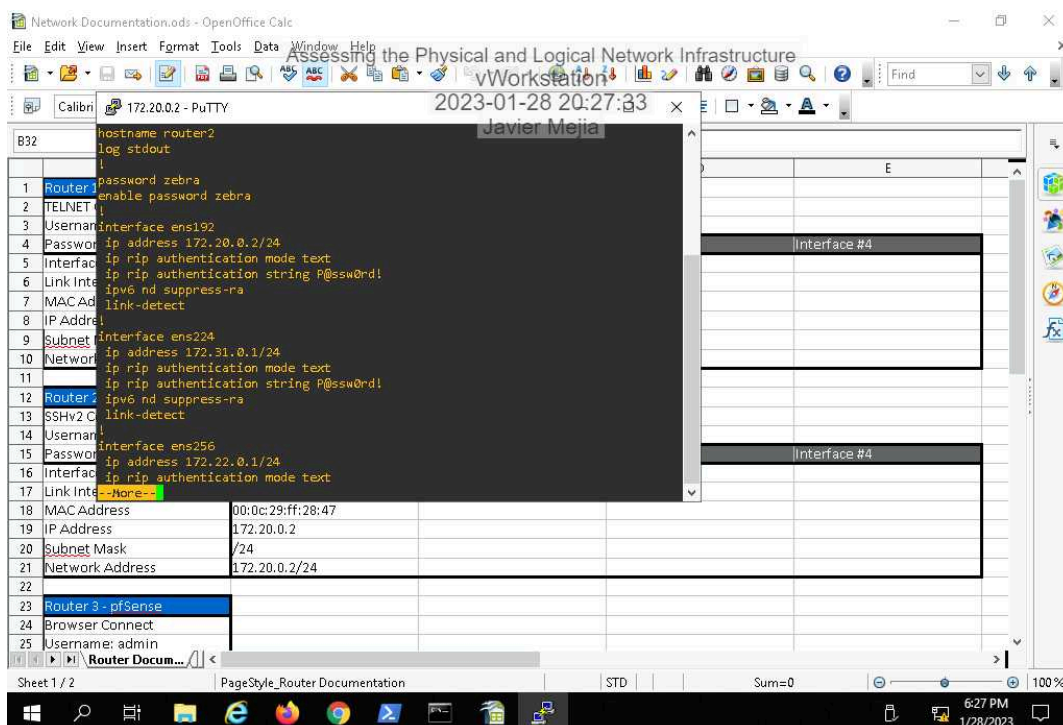


## Part 3: Use the Router Configuration File to Verify Interface Documentation

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

Incomplete

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

Do your findings match your documentation?

Incomplete

### 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**.

Incomplete

#### Part 2: Convert Nmap Output into an HTML Report

**Document** the command used to generate the XML output file.

Incomplete

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

Incomplete