Student:	Email:
Shoumya Rayamajhi	sxr230169@utdallas.edu

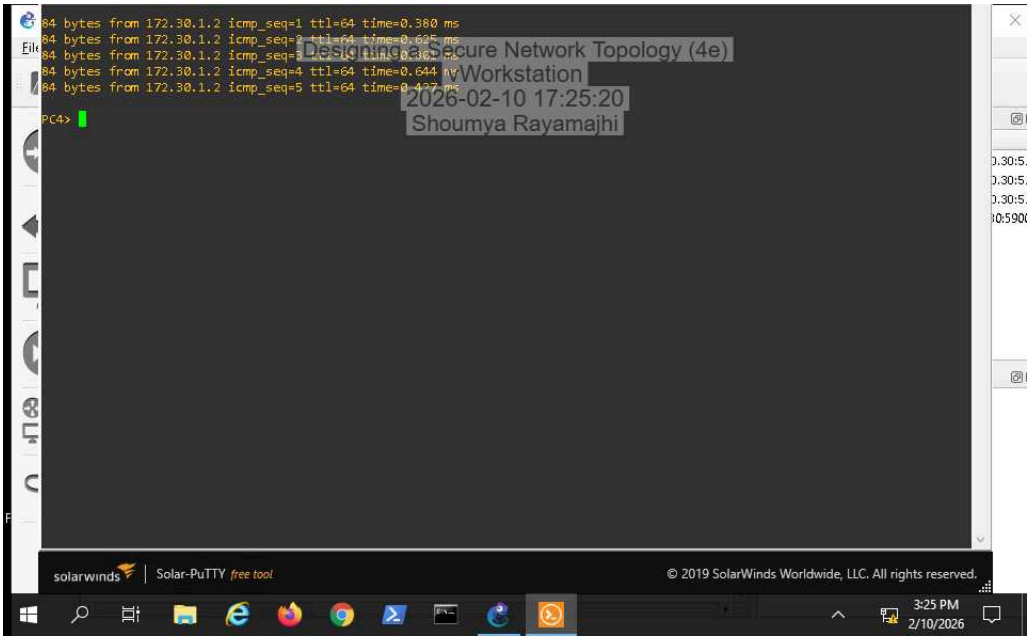
Time on Task:	Progress:
3 hours, 4 minutes	100%

Report Generated: Sunday, February 22, 2026 at 12:35 AM

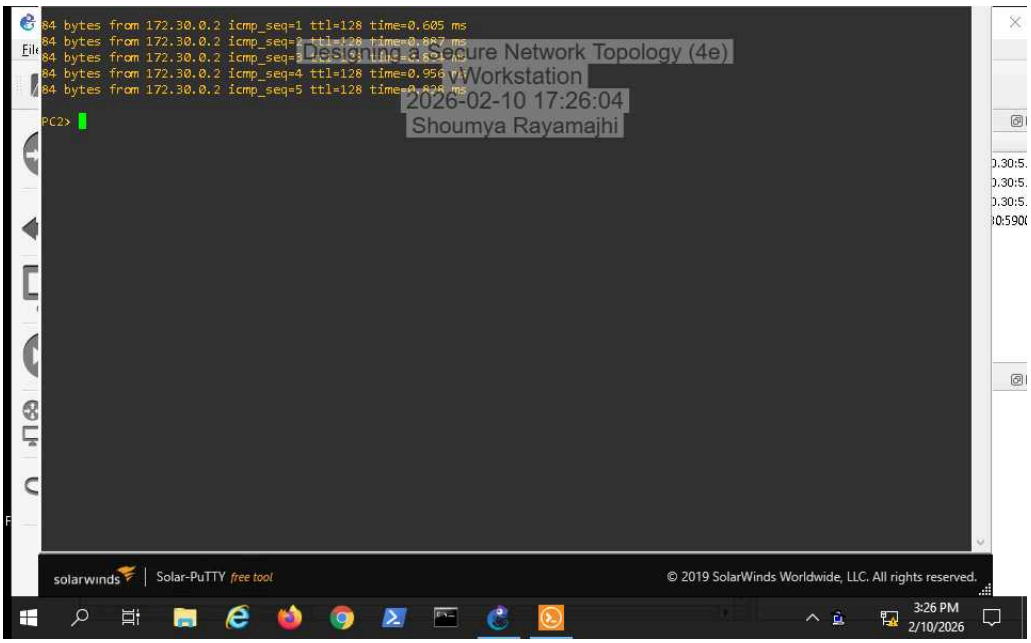
Hands-On Demonstration

Part 1: Design a Simple Network Topology

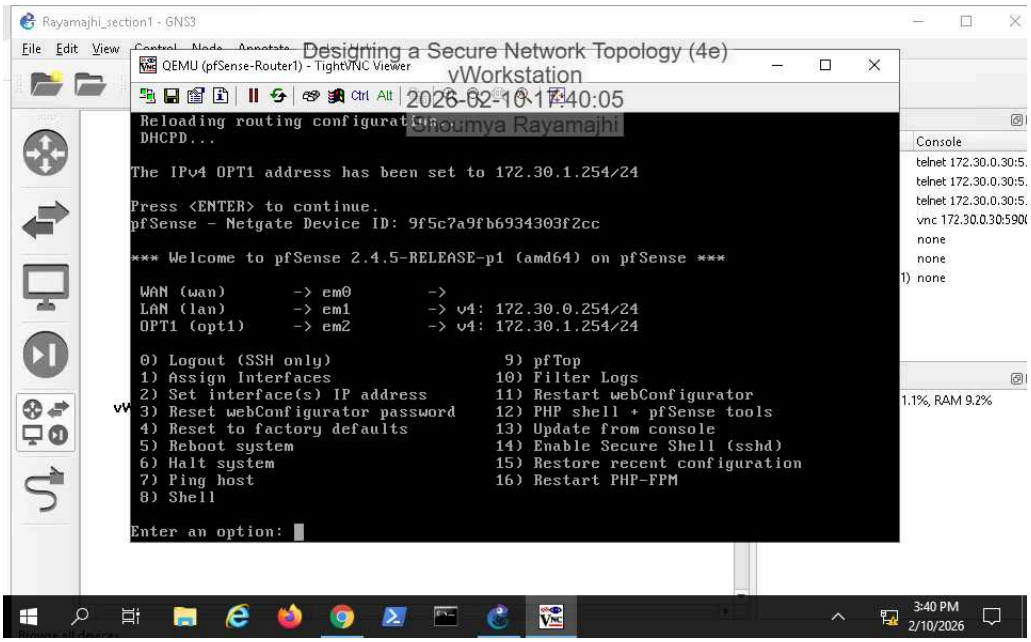
34. **Make a screen capture** showing the **results of the ping attempt from PC4 to PC3**.



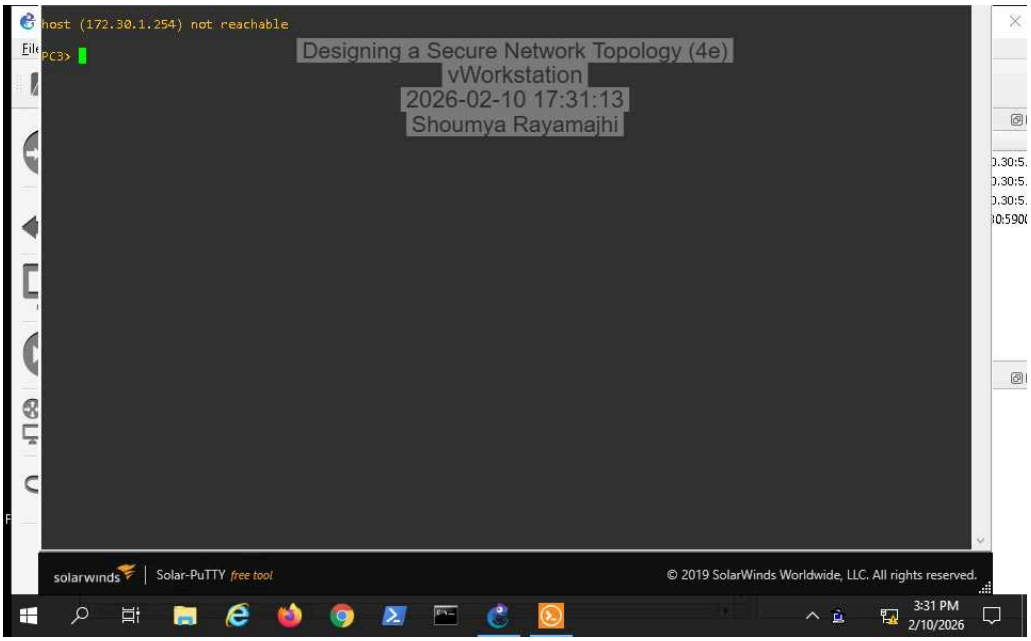
37. **Make a screen capture** showing the **results of the ping attempt from PC2 to vWorkstation (172.30.0.2)**.



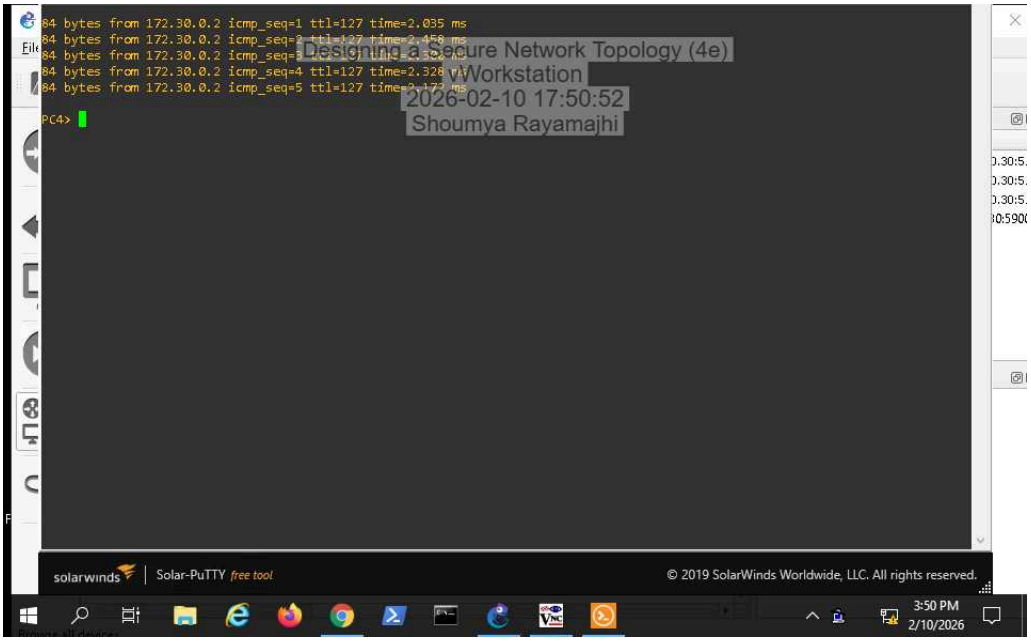
49. **Make a screen capture** showing the **IP address assignments in the pfSense console**.



53. **Make a screen capture** showing the **ICMP timeout message.**

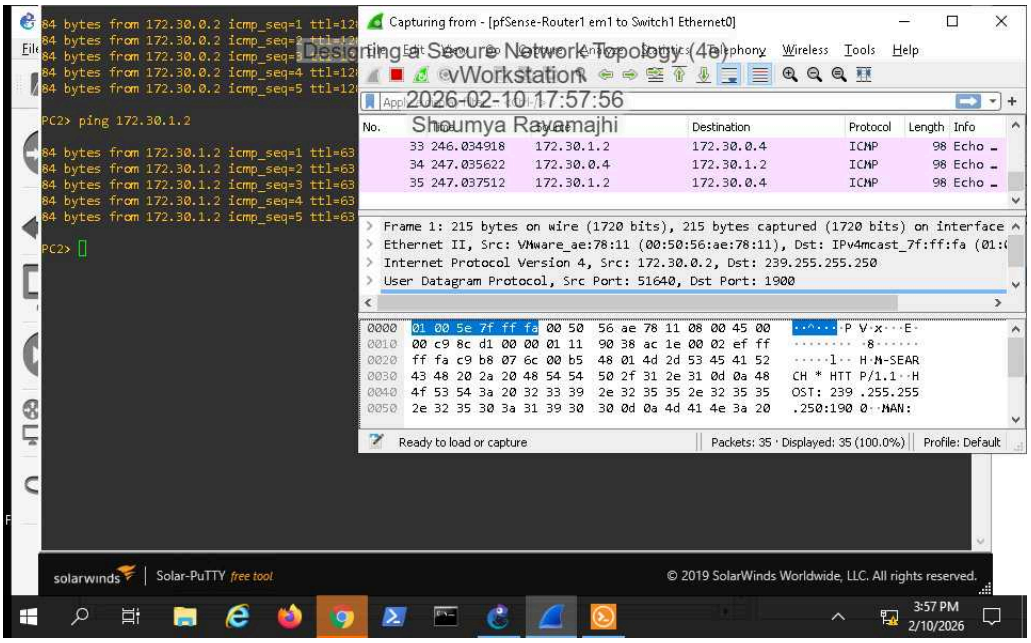


76. **Make a screen capture** showing the **successful ping from PC4 to vWorkstation**.

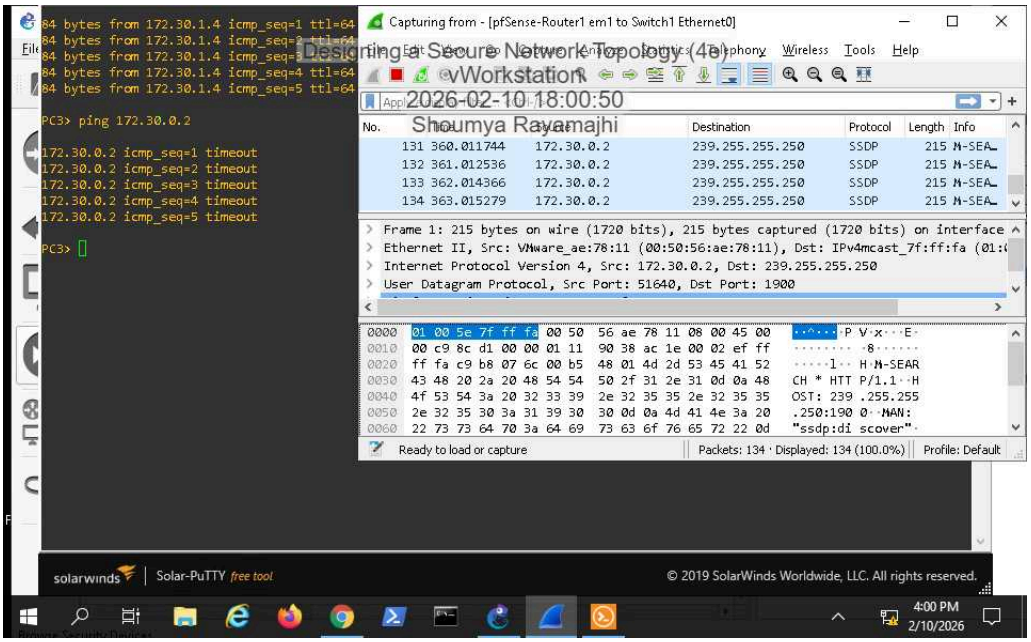


Part 2: Capture the Network Traffic to Validate Connectivity

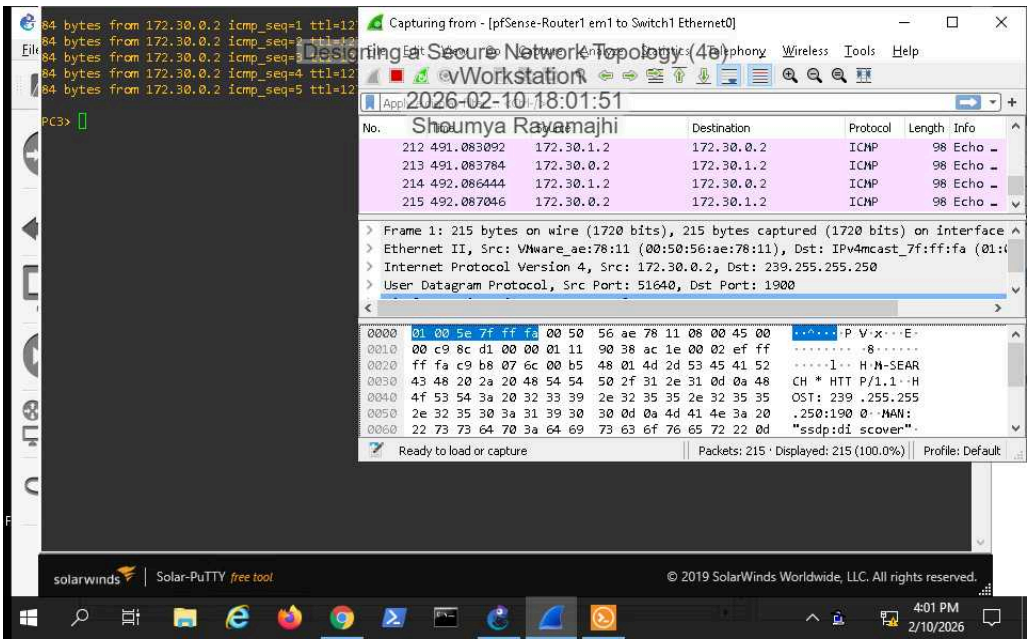
7. **Make a screen capture** showing the **Wireshark capture for the PC2 to PC3 ping request**.



17. **Make a screen capture** showing the **timed out ping request**.



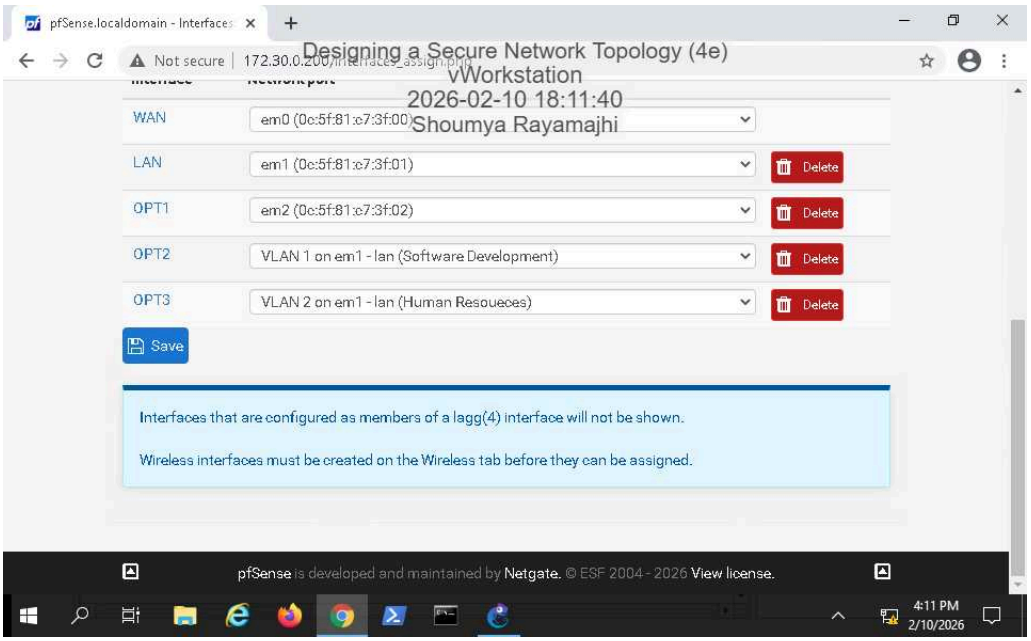
20. **Make a screen capture** showing the **Wireshark capture for the PC3 to vWorkstation ping request**.



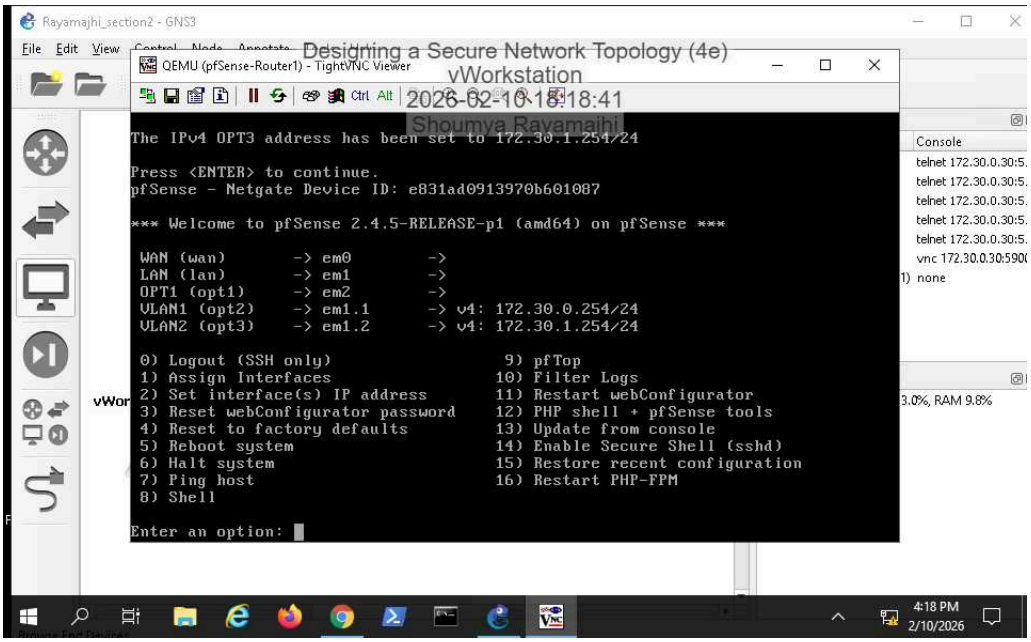
Applied Learning

Part 1: Design a More Complex Network Topology

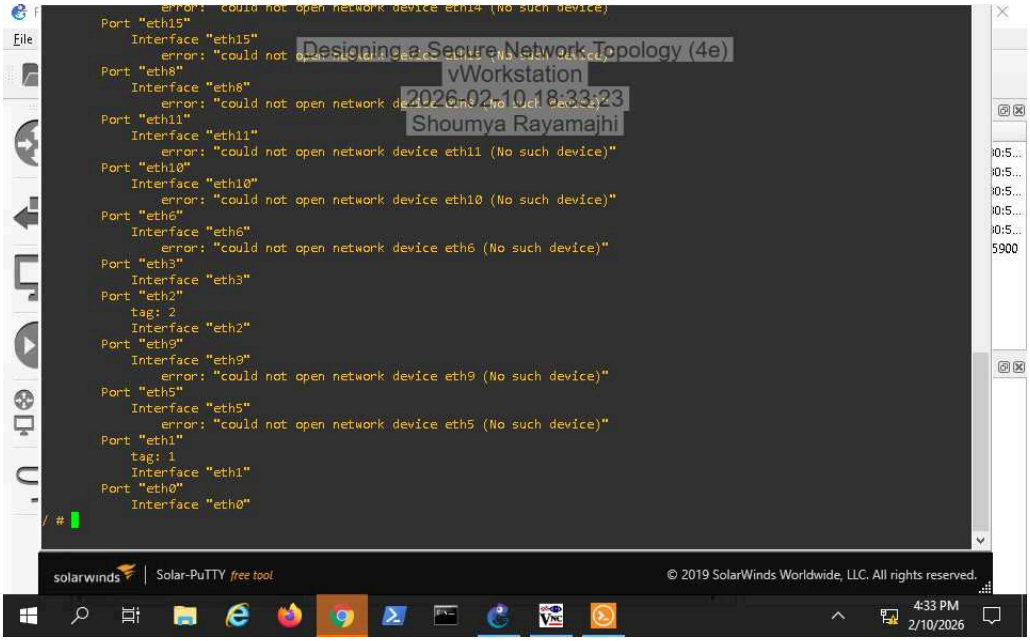
14. **Make a screen capture** showing the **Interface Assignments page**.



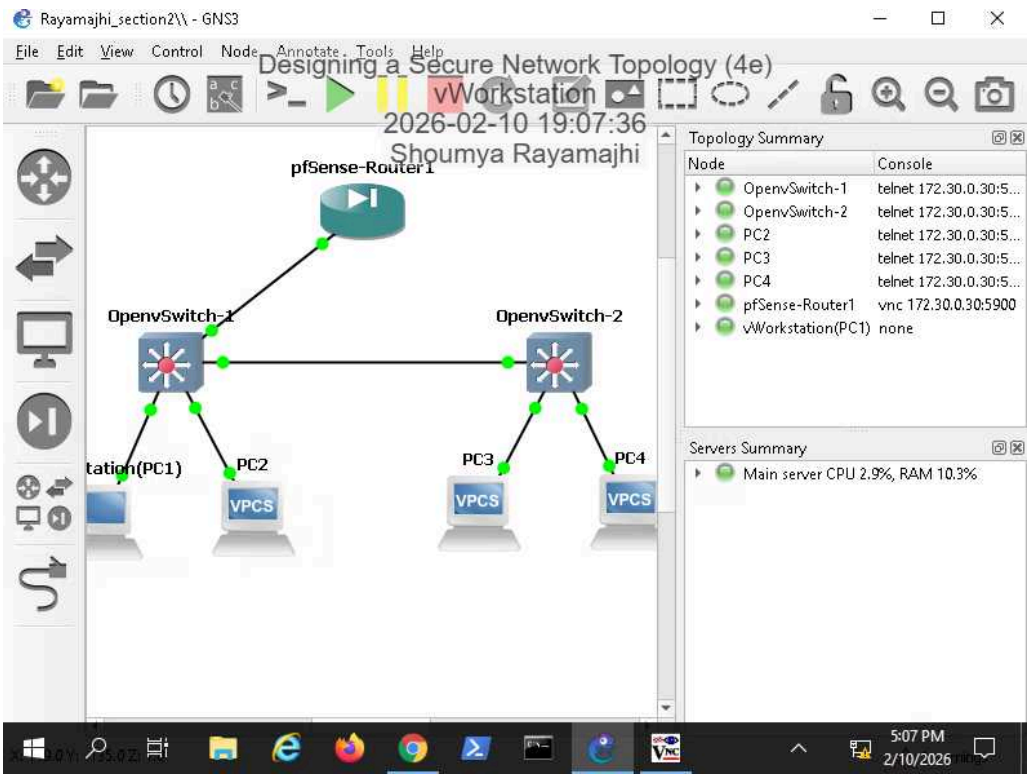
28. **Make a screen capture** showing the **updated pfSense router settings with the VLAN IP address assignments**.



36. **Make a screen capture** showing the **eth1 and eth2 interfaces with their assigned VLAN tags on Switch2**.

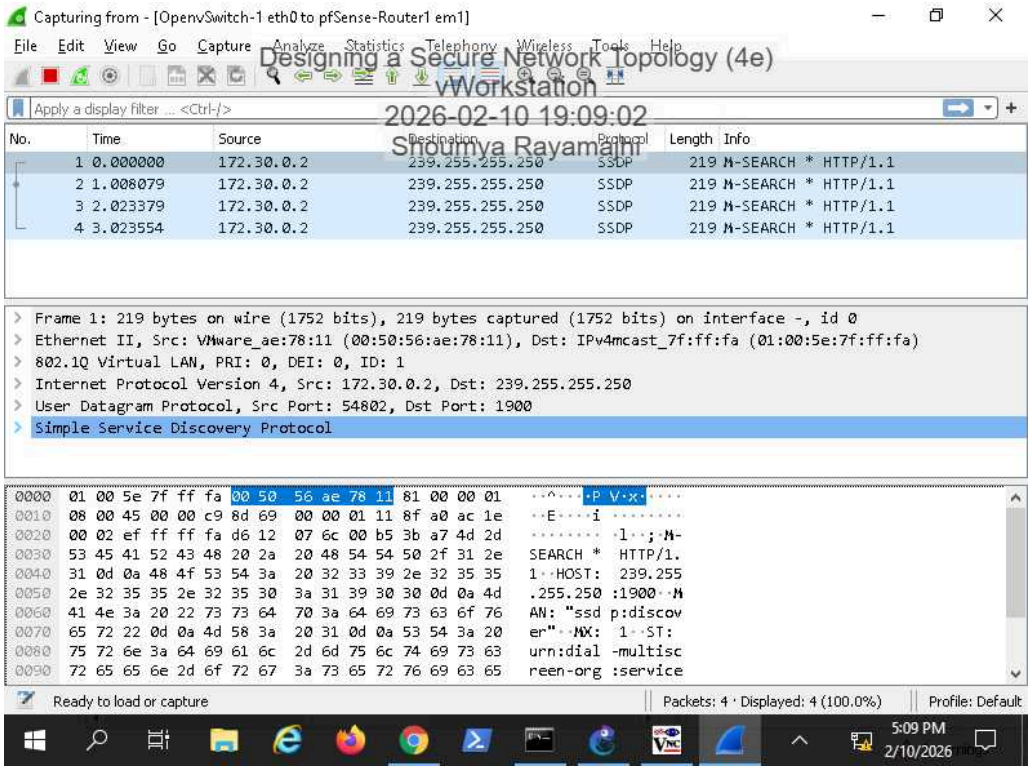


39. **Make a screen capture** showing the **completed topology**.

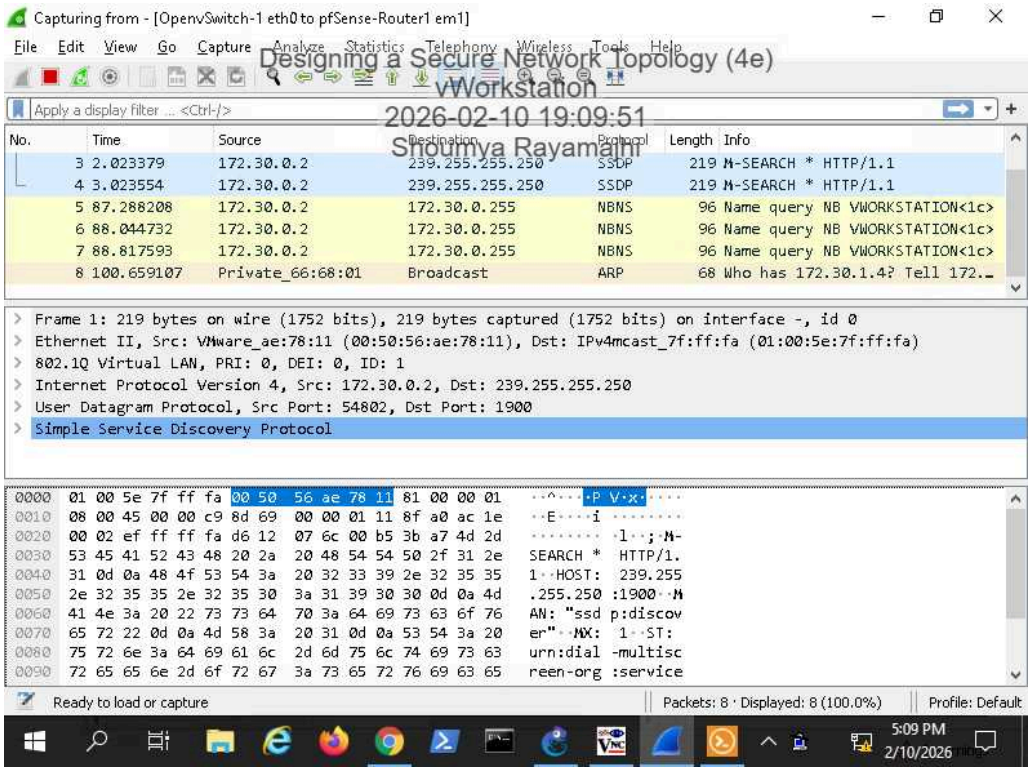


Part 2: Capture Network Traffic to Validate Connectivity

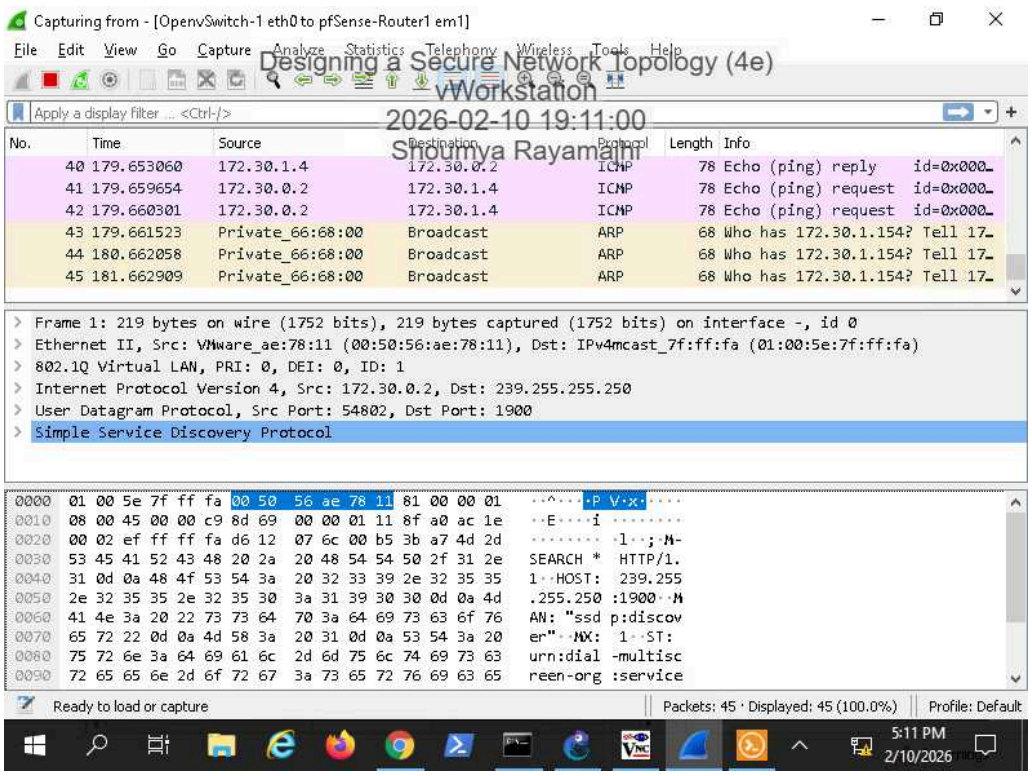
3. **Make a screen capture** showing the **Wireshark capture for the vWorkstation to PC3 ping request**.



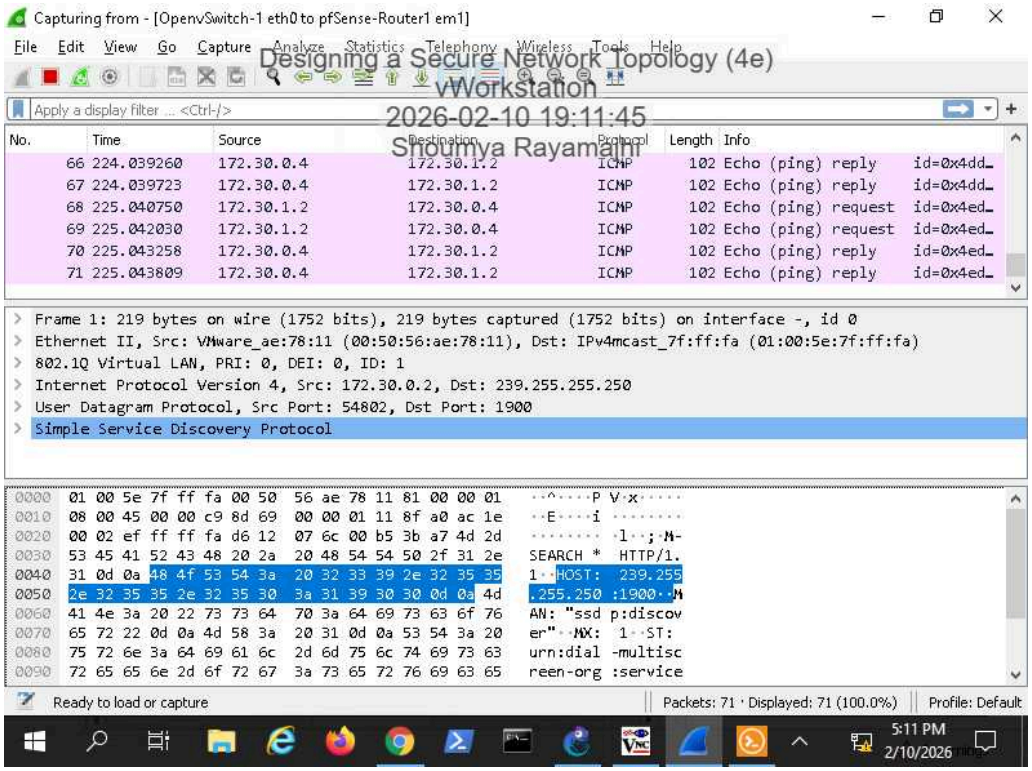
5. **Make a screen capture** showing the **Wireshark capture for the PC2 to PC4 ping request**.



7. **Make a screen capture** showing the **Wireshark capture for the vWorkstation to PC2 ping request**.



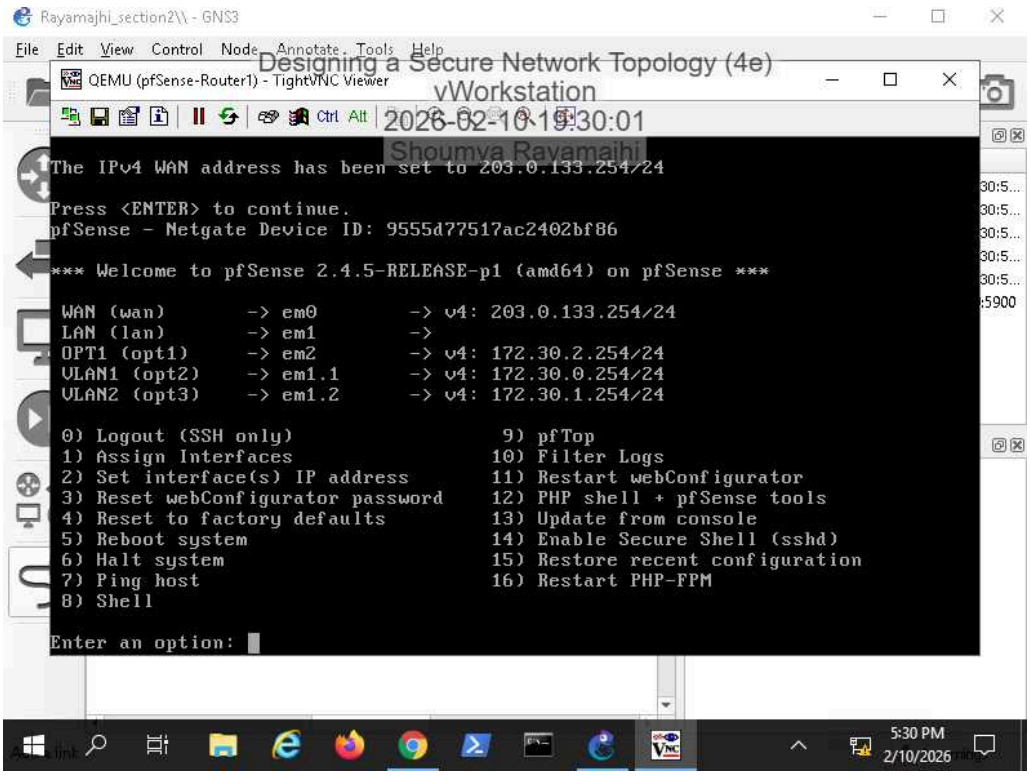
9. **Make a screen capture** showing the **Wireshark capture for the PC2 to PC3 ping request**.



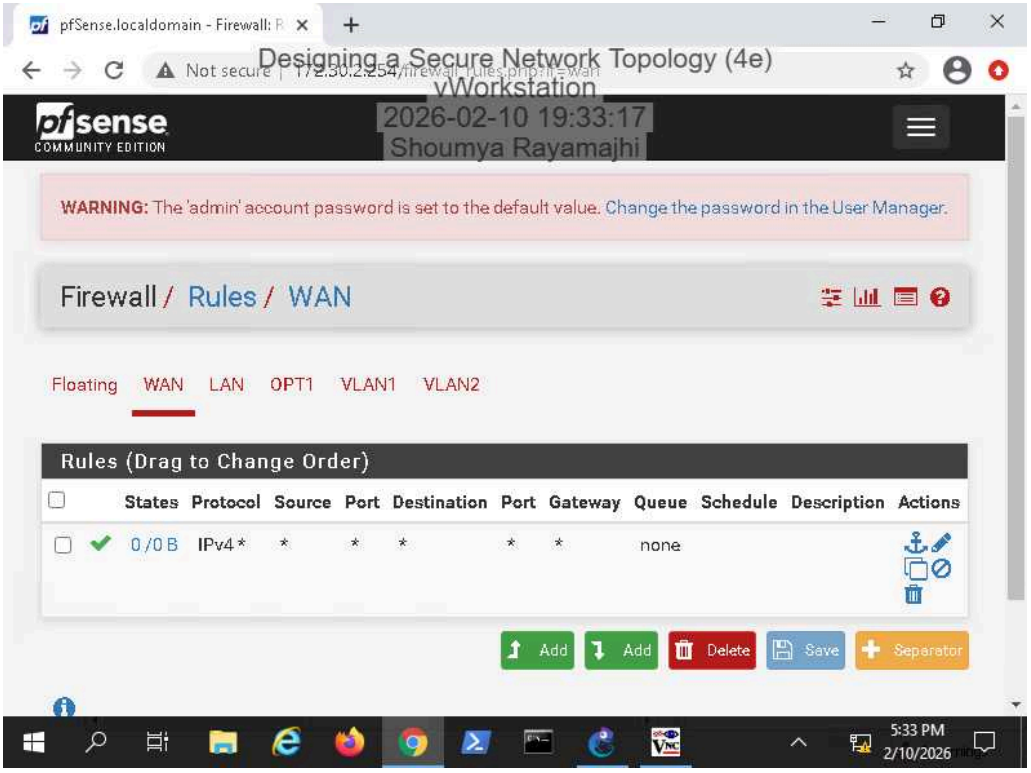
Challenge and Analysis

Part 1: Enhance the Network Topology with a DMZ

1. **Make a screen capture** showing the **interface configurations in the pfSense console**.



2. **Make a screen capture** showing the **firewall rule on the WAN interface in the pfSense webConfigurator**.



Part 2: Validate DMZ Connectivity

1. **Make a screen capture** showing the **results of both pings**.