### **Analyzing Data Link and Network Layer Traffic with Wireshark**

Fundamentals of Communications and Networking, Third Edition - Lab 02

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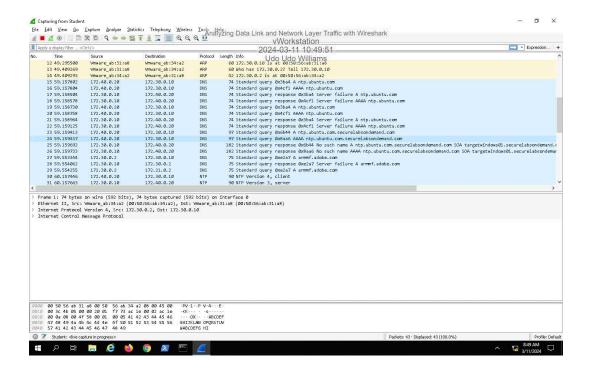
Time on Task: Progress:
13 hours, 28 minutes 100%

Report Generated: Monday, March 11, 2024 at 6:25 PM

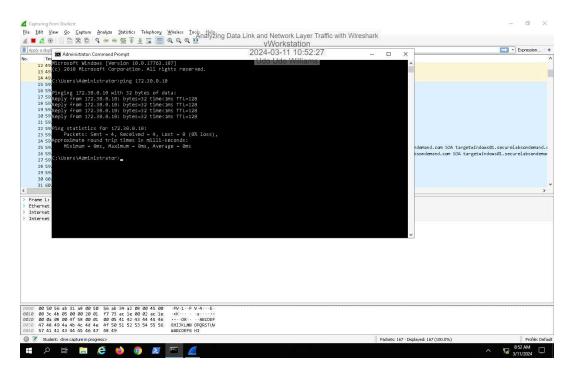
### **Section 1: Hands-On Demonstration**

### Part 1: Explore the Wireshark Application and Capture Network Traffic

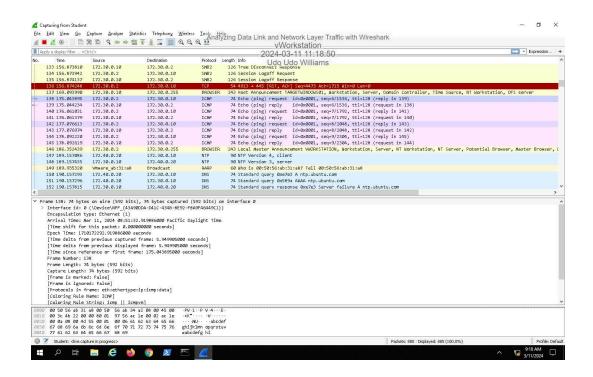
6. Make a screen capture showing the captured packets in Wireshark.



9. Make a screen capture showing the Ping results for 170.30.0.10.

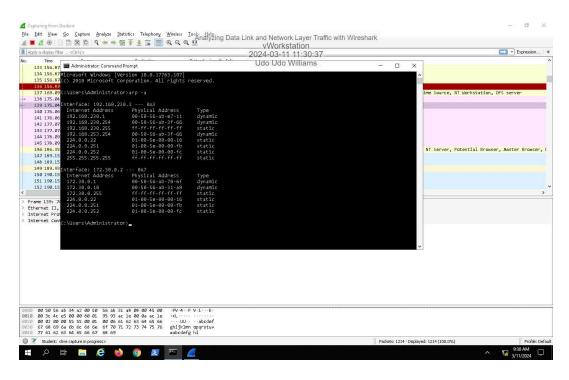


14. Make a screen capture showing the Packet details related to time.

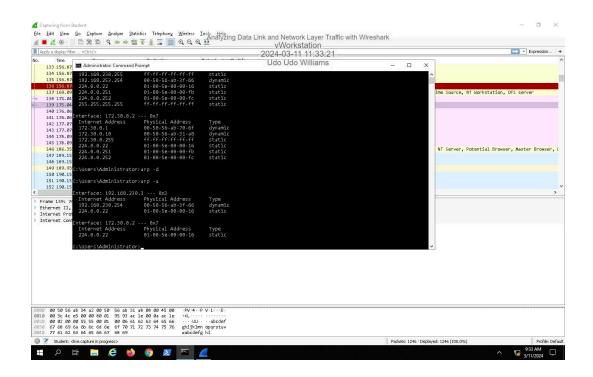


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17. Make a screen capture showing the ARP table for the vWorkstation.

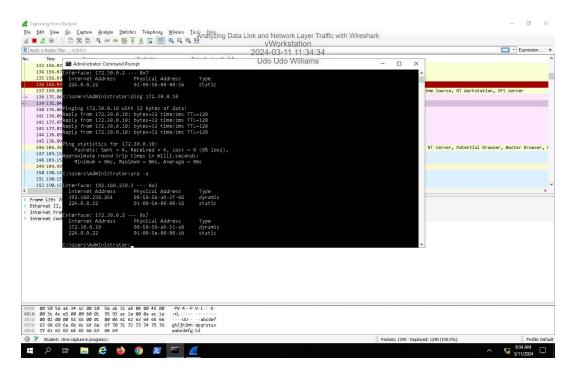


20. Make a screen capture showing the cleared ARP table on the vWorkstation.

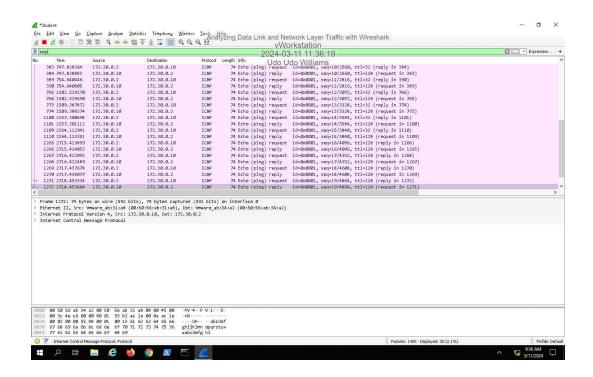


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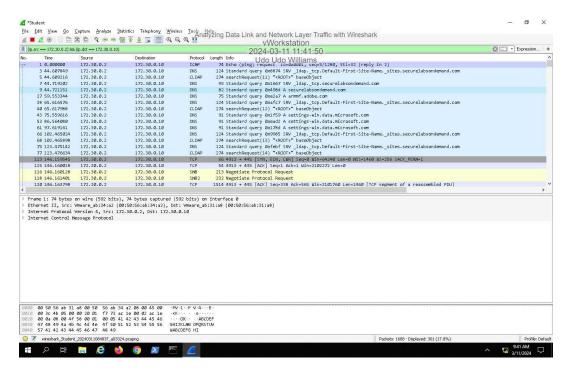
21. Make a screen capture showing the updated ARP table with the new 172.30.0.10 entry.



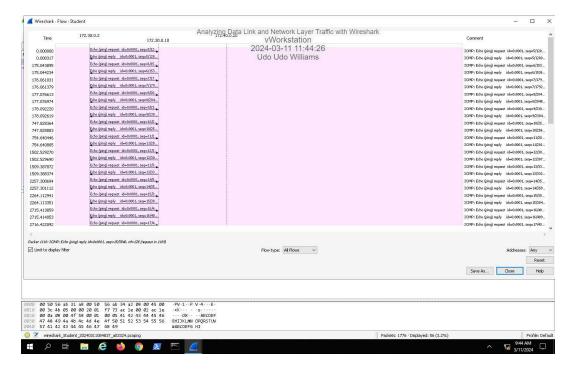
26. Make a screen capture showing the filtered list of ICMP packets.



30. Make a screen capture showing the ICMP Packets with the src of 172.30.0.2 and dst of 172.30.0.10.

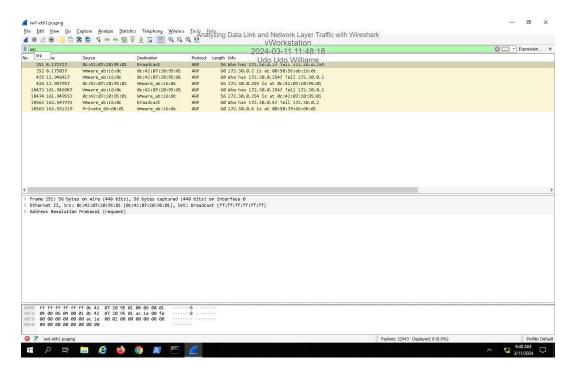


35. Make a screen capture showing the Flow Graph limited to display filter (ICMP packets).

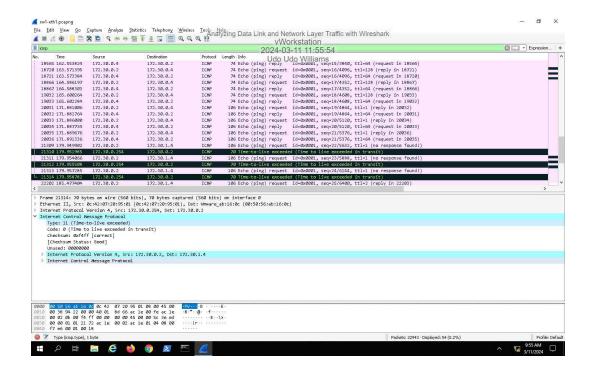


Part 2: Explore a Wireshark Capture File

4. Make a screen capture showing the ARP Packet List from your pcap file.

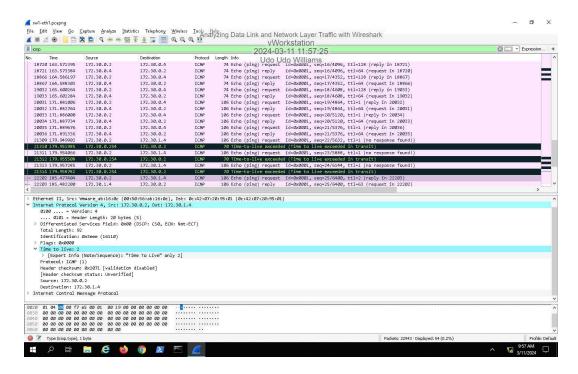


12. Make a screen capture showing the Time to live field value for packet 21314.



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15. Make a screen capture showing the Time to live field for packet 22202.



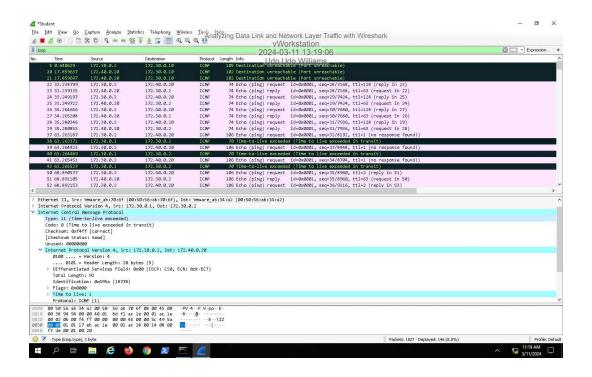
24. Record the VLAN ID of the 172.30.0.0/24 network.

VLANID = 2

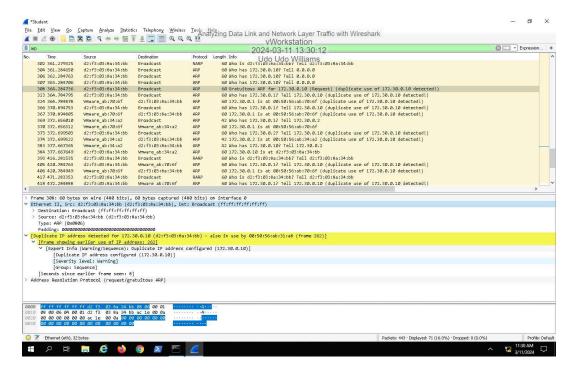
# **Section 2: Applied Learning**

### Part 1: Explore the Wireshark Application and Capture Network Traffic

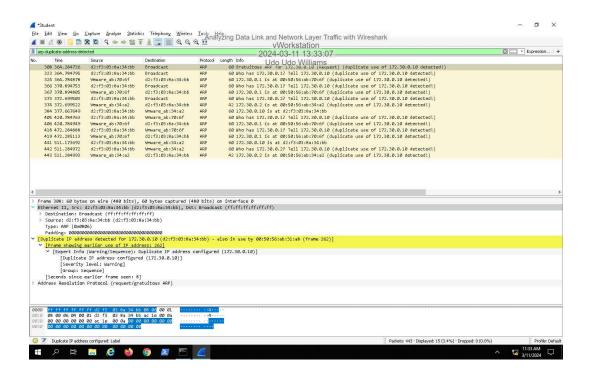
9. Make a screen capture showing the Echo request Type in the Packet Details view.



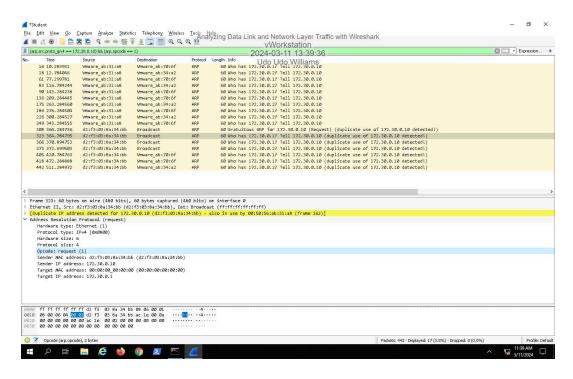
26. Make a screen capture showing the "Duplicate IP address detected" details and the Frame the original MAC address was identified in.



29. Make a screen capture showing all duplicate IP address detections in the Packet List pane.

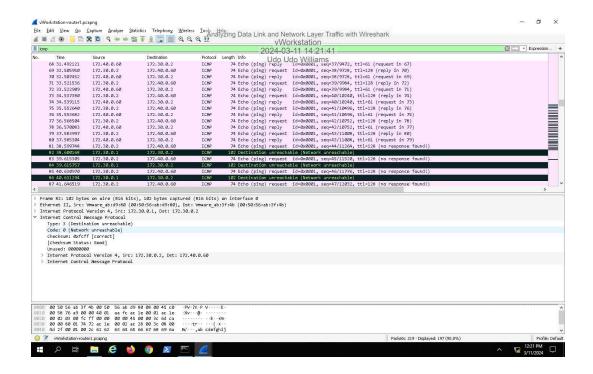


34. Make a screen capture showing the filtered ARP packets in the Packet List View.

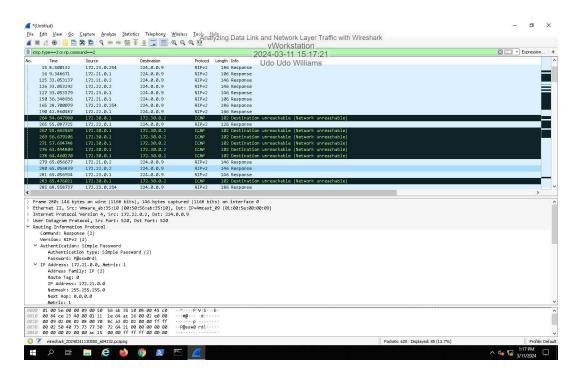


# Part 2: Explore a Wireshark Capture File

5. Make a screen capture showing the ICMP Type for this packet (Destination unreachable).



18. Make a screen capture showing the simple password for packet 280.



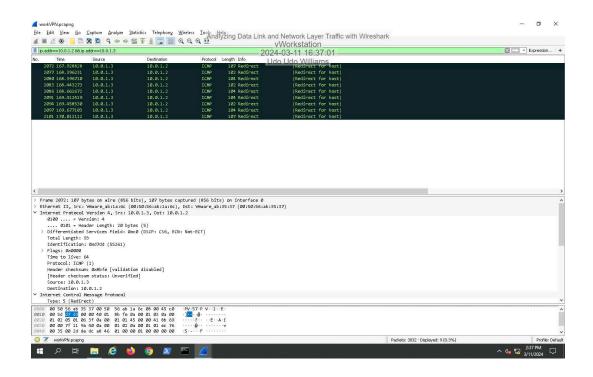
25. Record the number of the packet that contains the first corrected RIPv2 simple password.

348, 368, 369, 374, 392, 416, 532

# **Section 3: Challenge and Analysis**

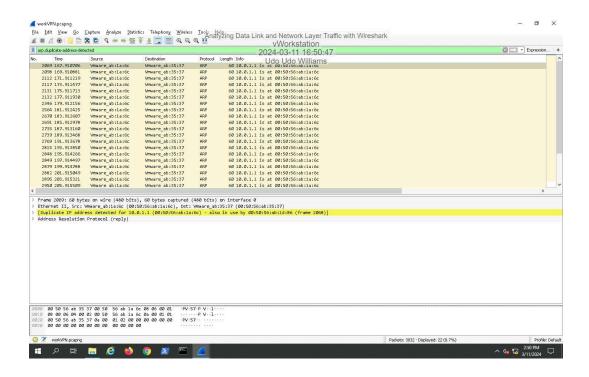
# Part 1: Identify a Rogue Host in a Packet Capture File

Make a screen capture showing the Packet List View with your applied conversation filter.



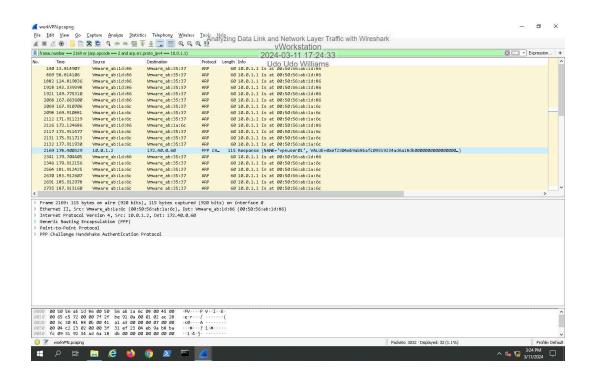
Part 2: Detect an ARP Poisoning Event in a Packet Capture File

Make a screen capture showing the "Duplicate IP address detected for..." details in the Packet Details View.



# Part 3: Determine if VPN Login Information was Compromised

Make a screen capture showing the ARP responses that came before the login packet.



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