

Troubleshooting Common Network Issues

Fundamentals of Communications and Networking, Third Edition - Lab 10

Student:

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Time on Task:

0 hours, 45 minutes

Progress:

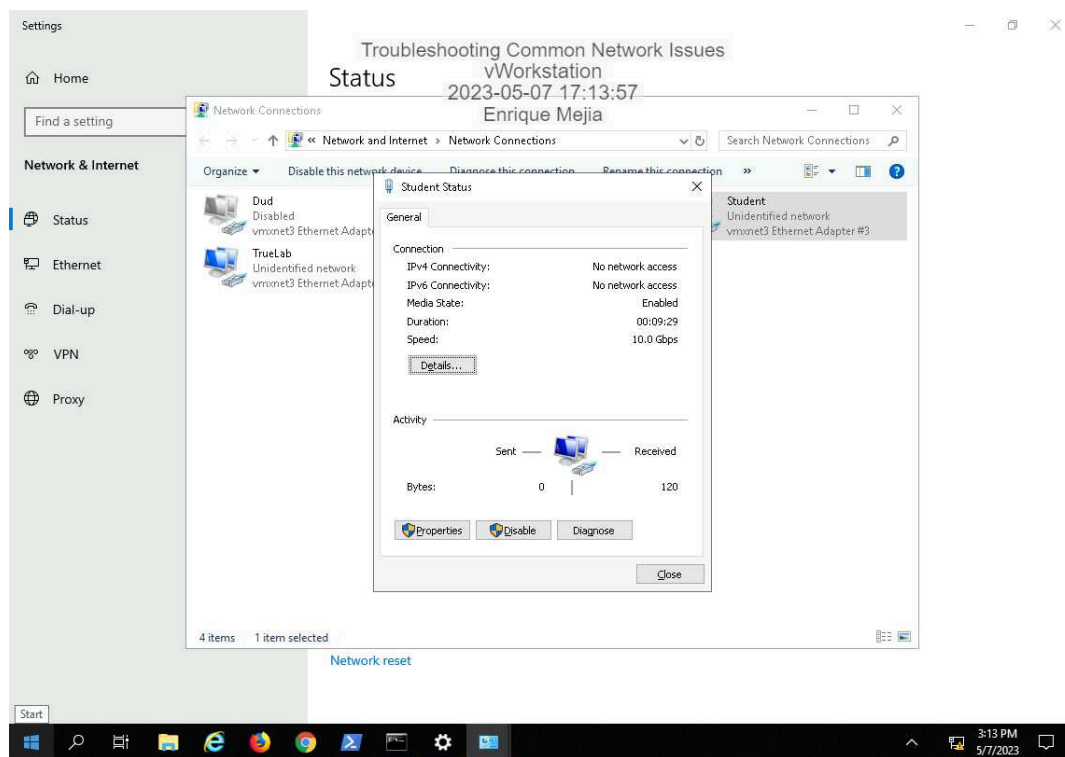
100%

Report Generated: Sunday, May 7, 2023 at 6:47 PM

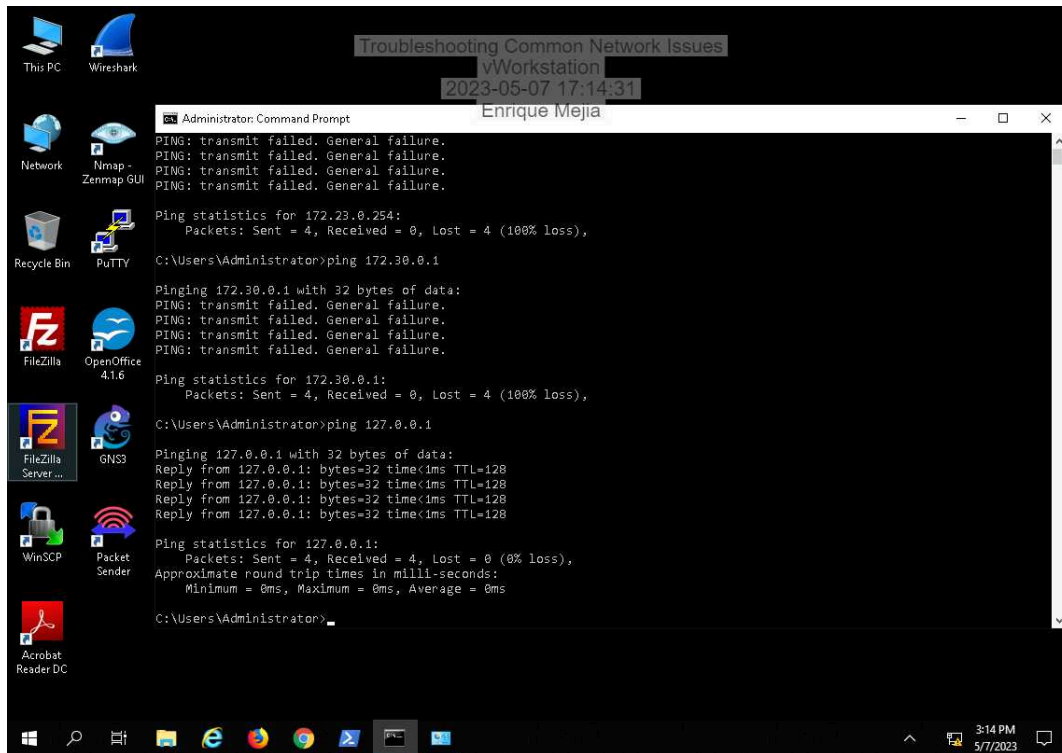
Section 1: Hands-On Demonstration

Part 1: Troubleshoot Connectivity Issues on the LAN

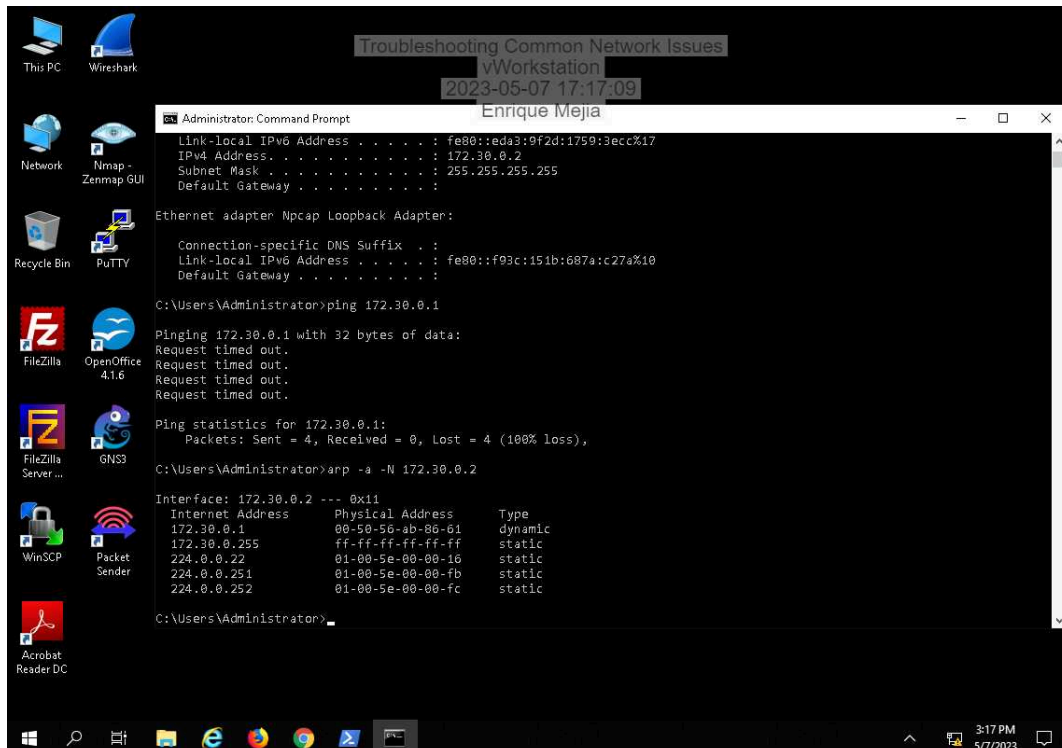
8. **Make a screen capture** showing the **Student connection details** in the **Student Status** window.



14. Make a screen capture showing the successful localhost ping.

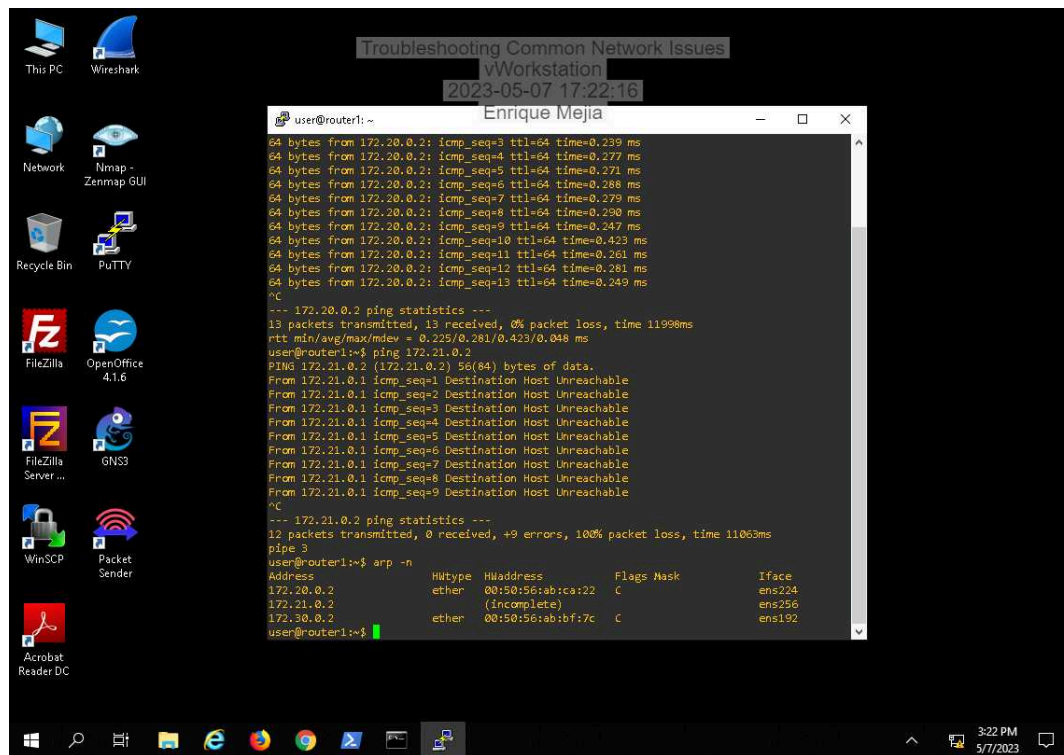


28. Make a screen capture showing the current ARP cache for the vWorkstation machine.

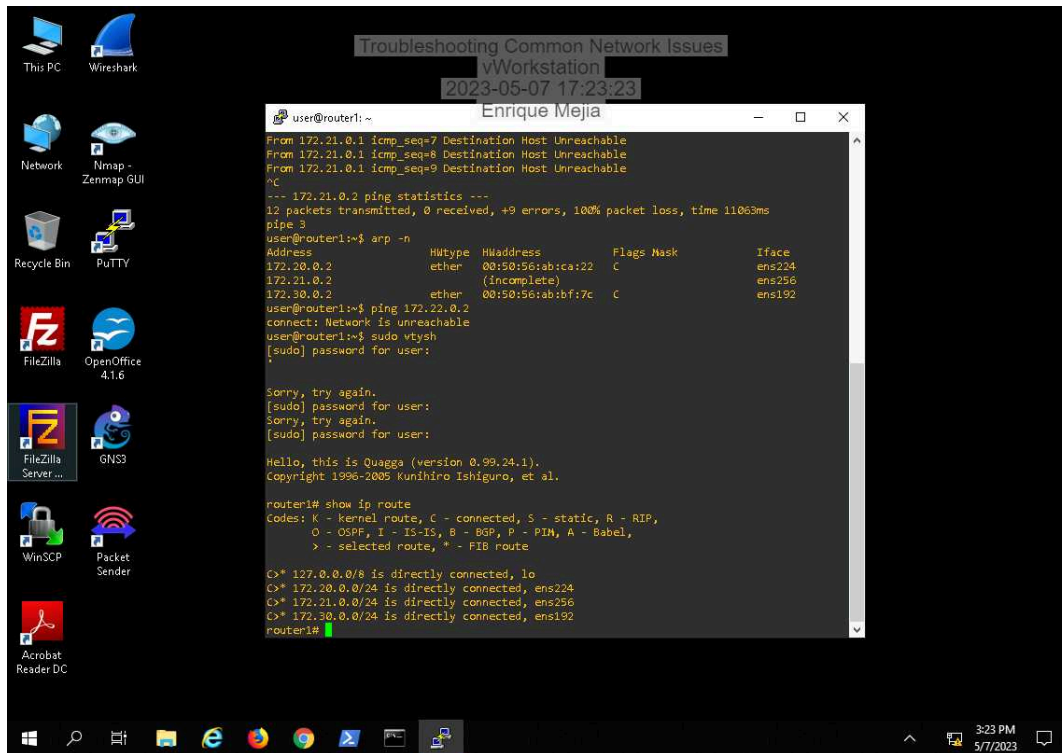


Part 2: Troubleshoot Connectivity Issues on the WAN

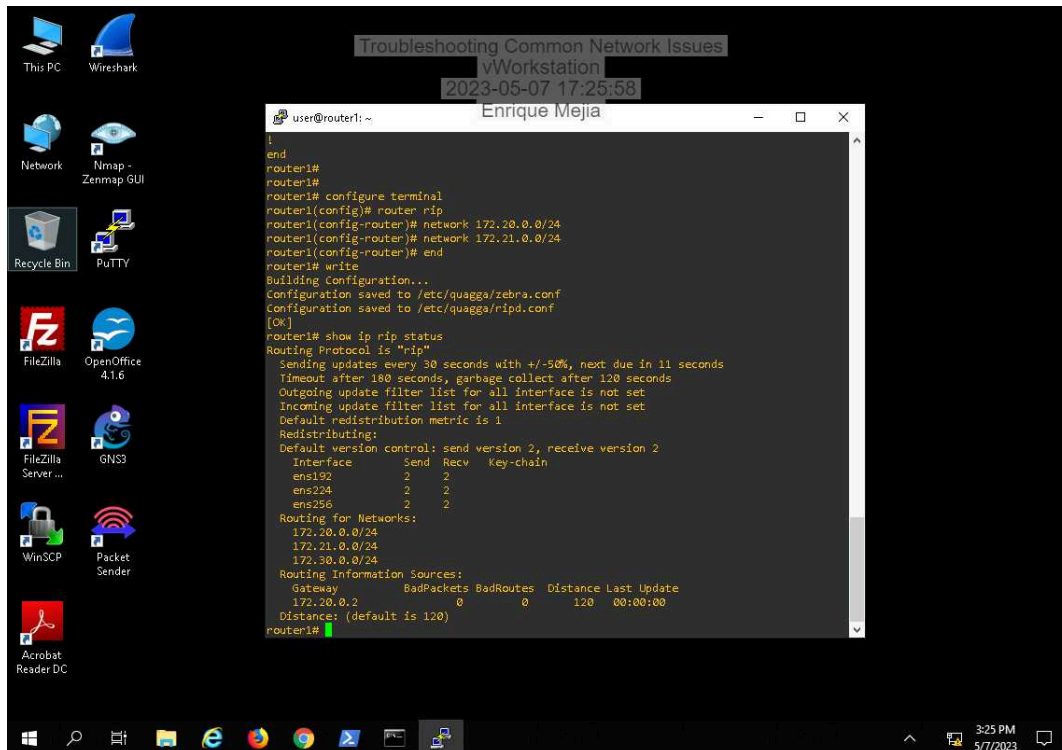
7. Make a screen capture showing the router1 ARP cache.



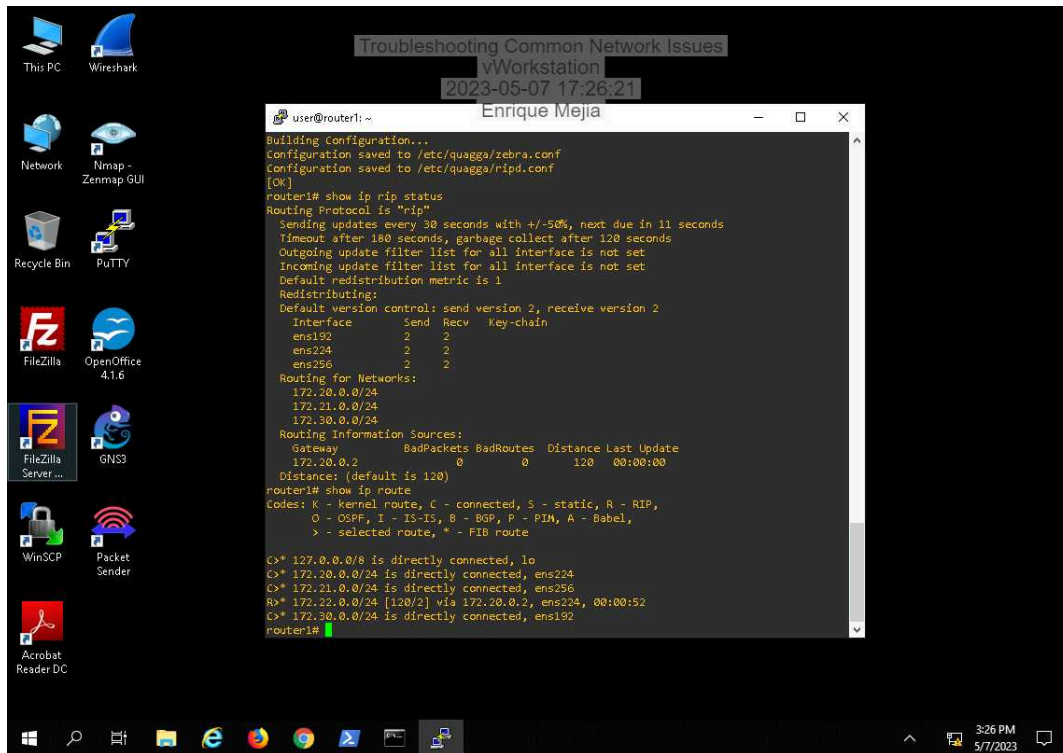
11. Make a screen capture showing the current routing table on router1.



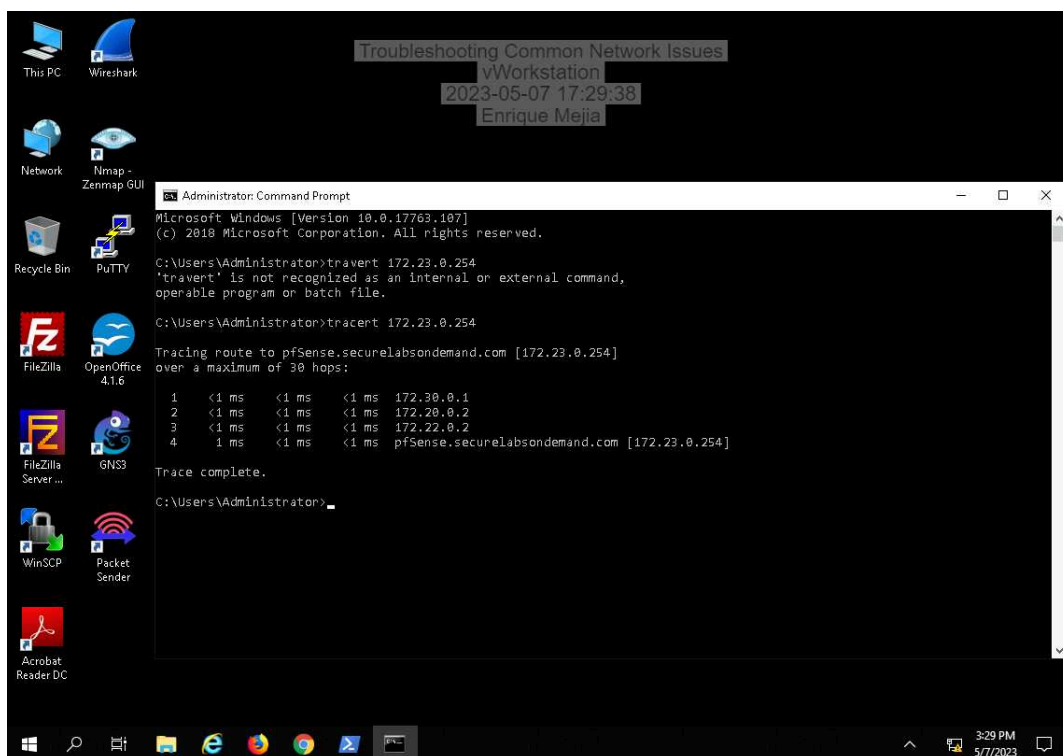
21. Make a screen capture showing the output of your RIP status command.



23. Make a screen capture showing the new RIP-provided route.



39. Make a screen capture showing the successful traceroute to pfSense from the vWorkstation.



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Section 2: Applied Learning

Part 1: Troubleshoot VPN Issues

8. Make a screen capture showing the **blocked connections** from 202.20.1.2 in the firewall logs.

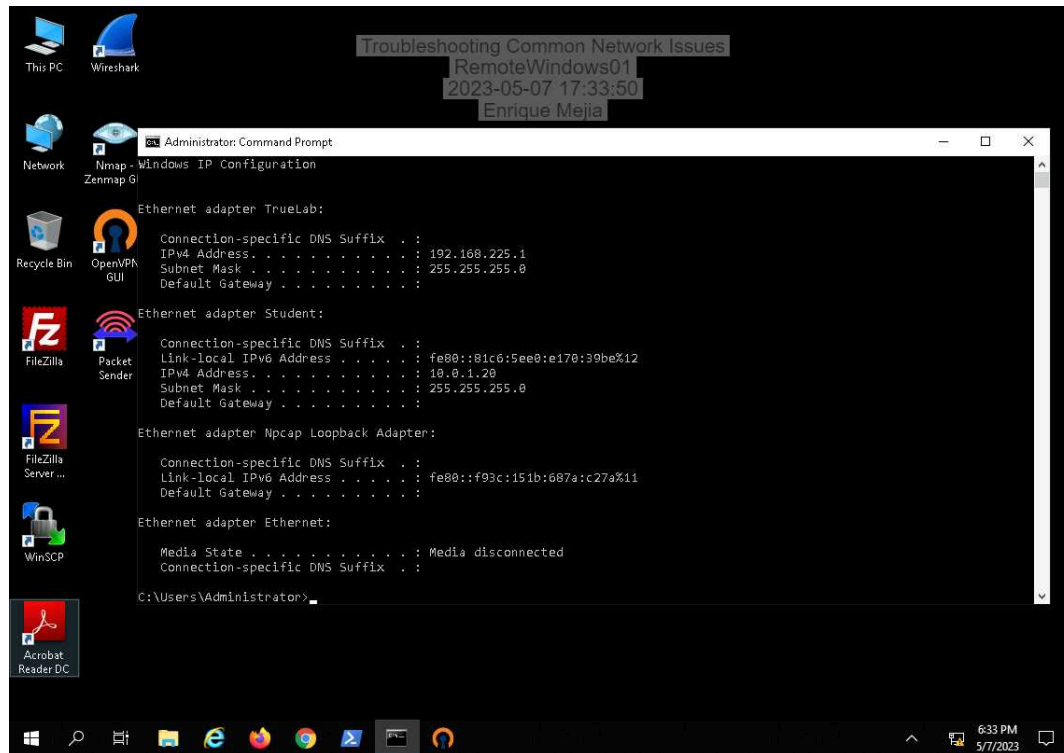
The screenshot shows the pfSense web interface. The breadcrumb trail is Status / System Logs / Firewall / Normal View. The 'Firewall' tab is selected in the top navigation bar. Below the navigation bar, there are tabs for 'Normal View', 'Dynamic View', and 'Summary View', with 'Normal View' being the active tab. The main content area displays 'Last 5 Firewall Log Entries. (Maximum 250)'. The log entries are as follows:

Action	Time	Interface	Source	Destination	Protocol
✗	Mar 28 08:02:24	WAN	202.20.1.1:520	224.0.0.9:520	UDP
✗	Mar 28 08:02:18	WAN	0.0.0.0	224.0.0.1	IGMP
✗	Mar 27 08:37:38	WAN	202.20.1.2:14423	202.20.1.1:443	TCP:8
✗	Mar 27 08:37:32	WAN	202.20.1.2:14423	202.20.1.1:443	TCP:SEC
✗	Mar 27 08:37:29	WAN	202.20.1.2:14423	202.20.1.1:443	TCP:SEC

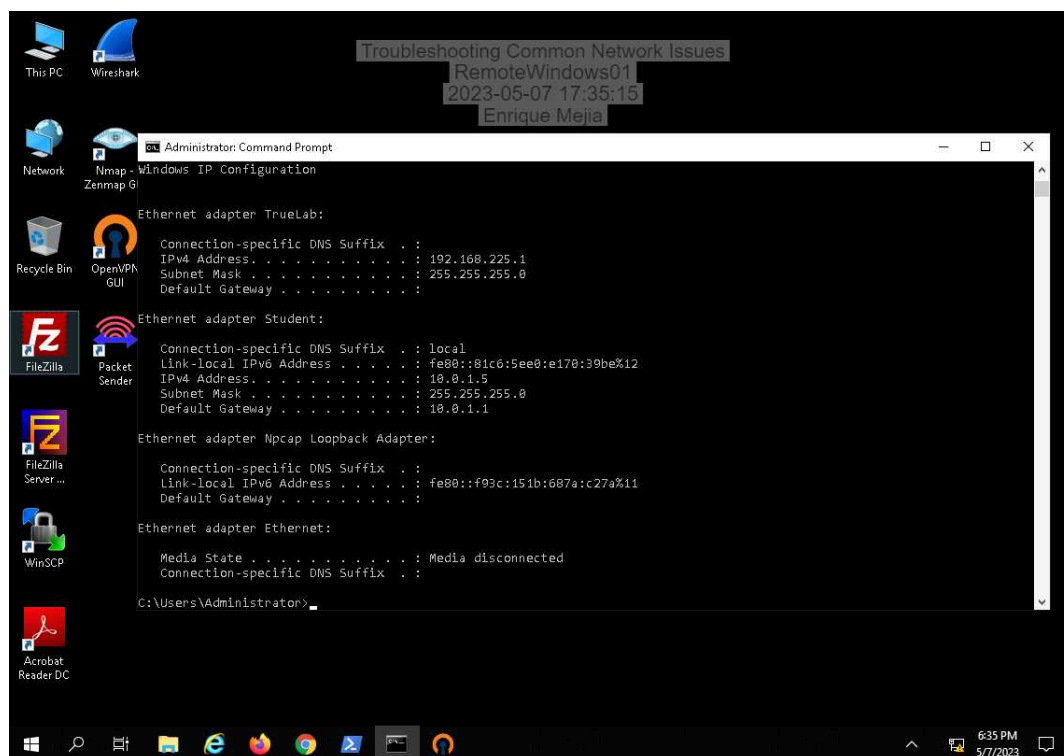
The bottom of the screen shows the Windows taskbar with the time 3:31 PM and date 5/7/2023.

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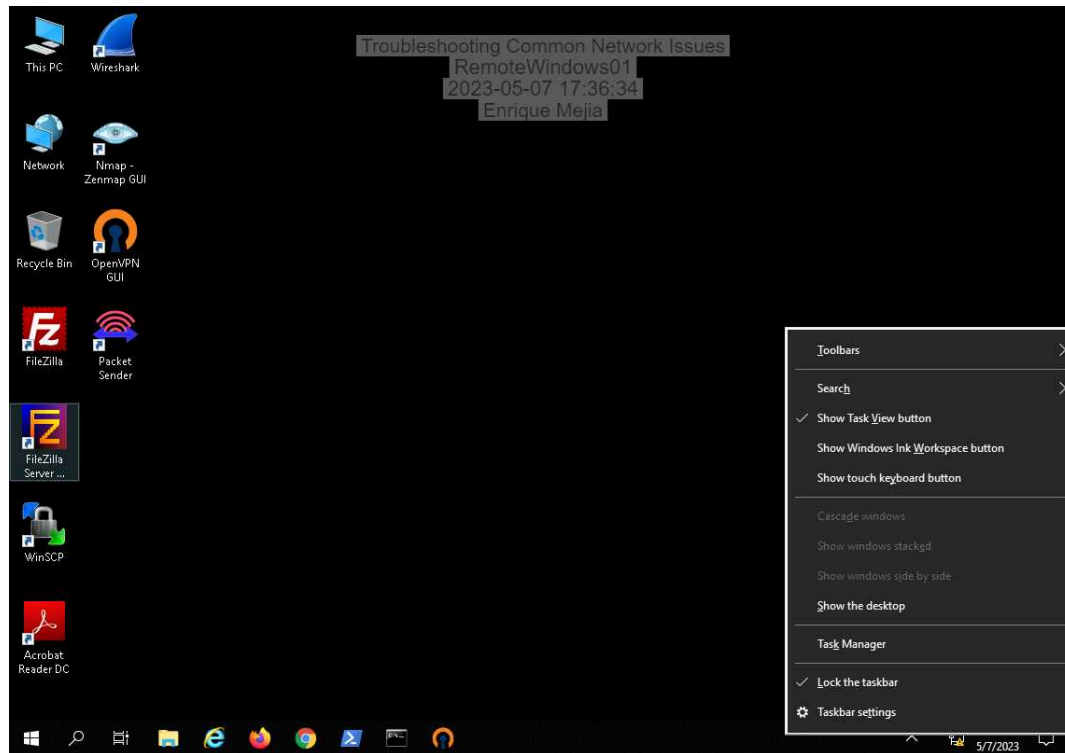
18. **Make a screen capture** showing the **current IP configuration** on RemoteWindows01.



22. **Make a screen capture** showing the **successful ping to the RemoteWindows01 machine's default gateway.**

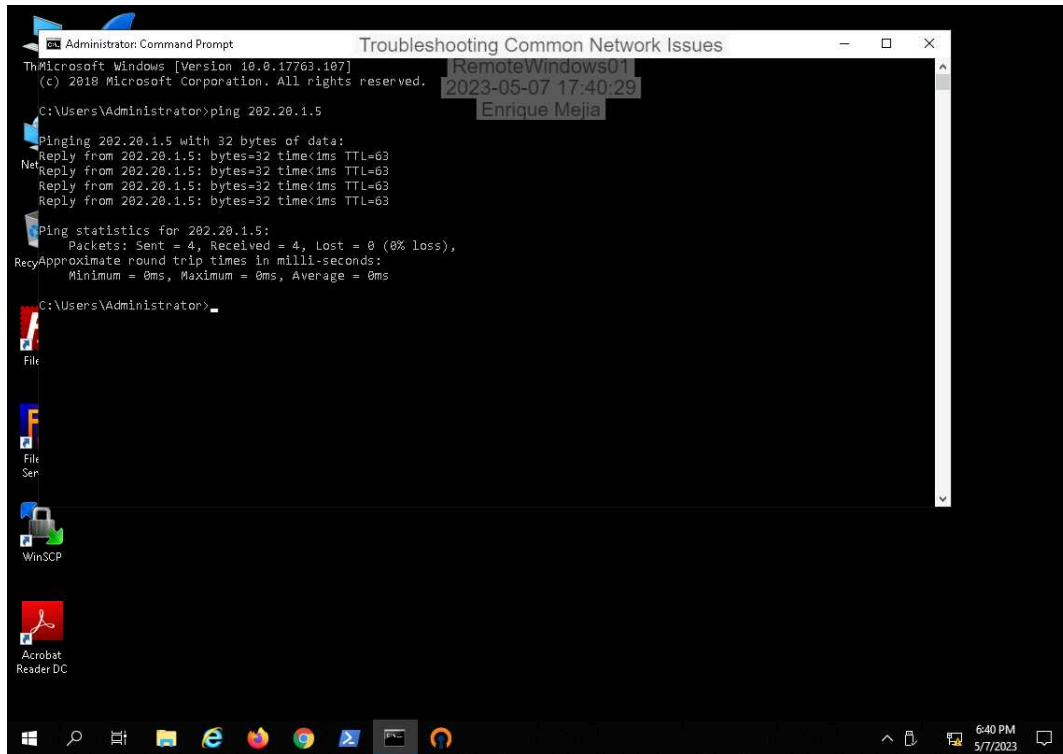


31. Make a screen capture showing the **OpenVPN Connection window**.



Part 2: Troubleshoot DNS Issues

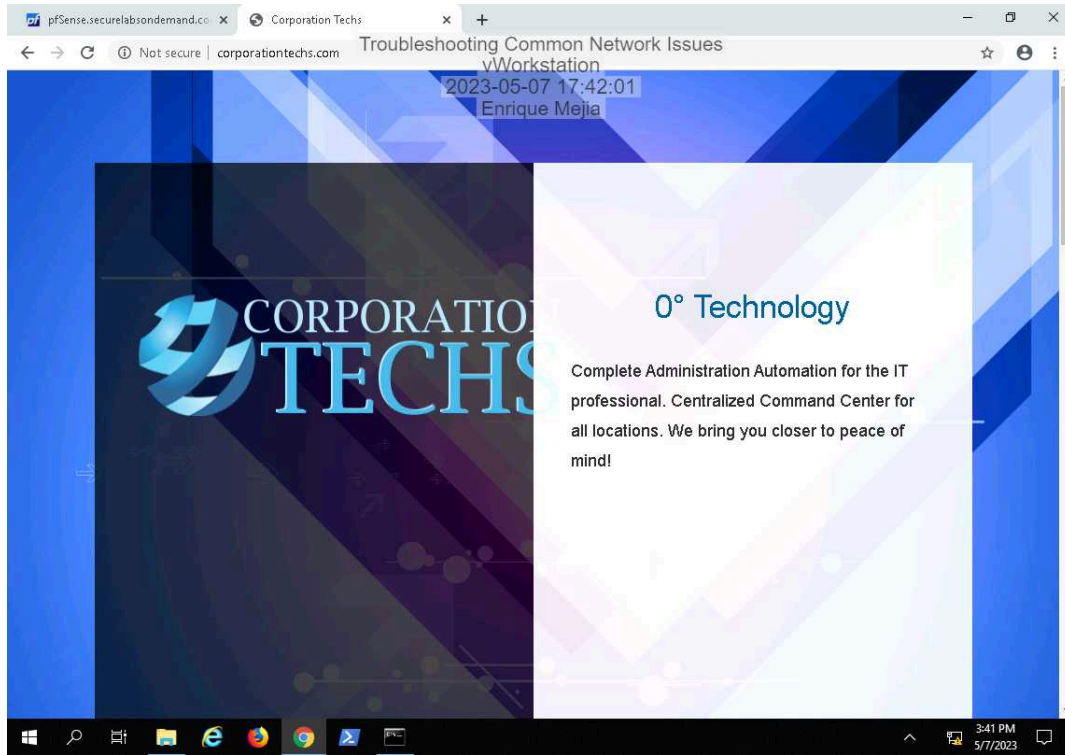
15. Make a screen capture showing the output of your ping and nslookup executions.



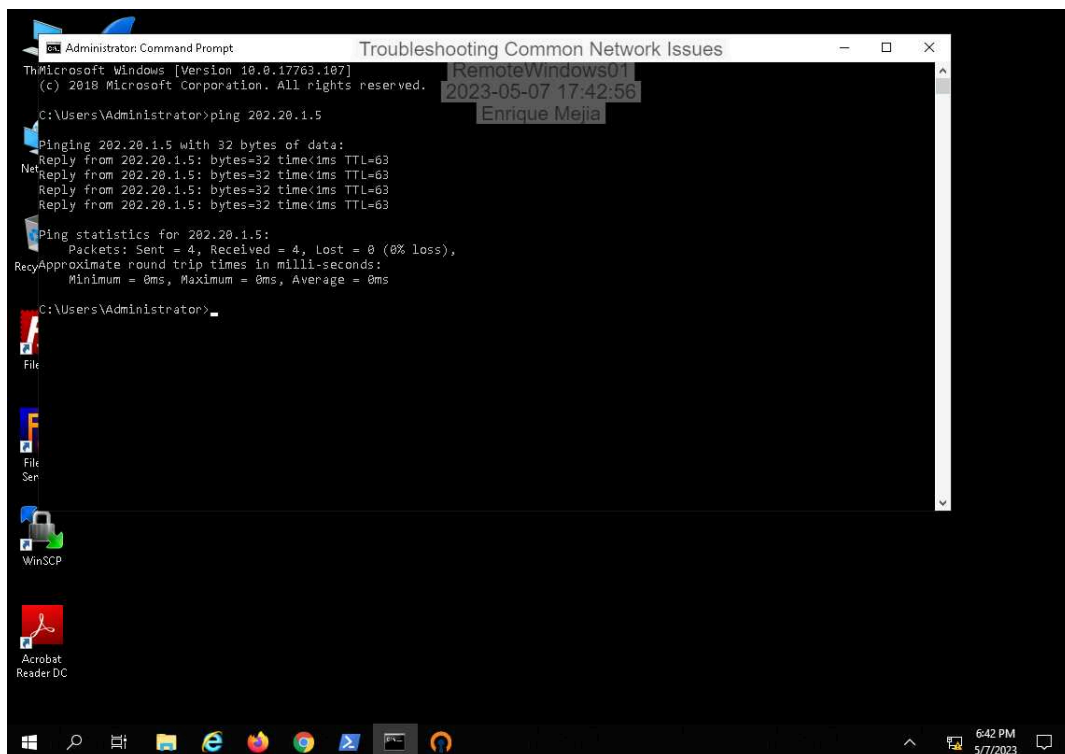
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22. Make a screen capture showing the **successful connection to the corporationtechs.com website.**



25. Make a screen capture showing the **successful record lookup of corporationtechs.com.**



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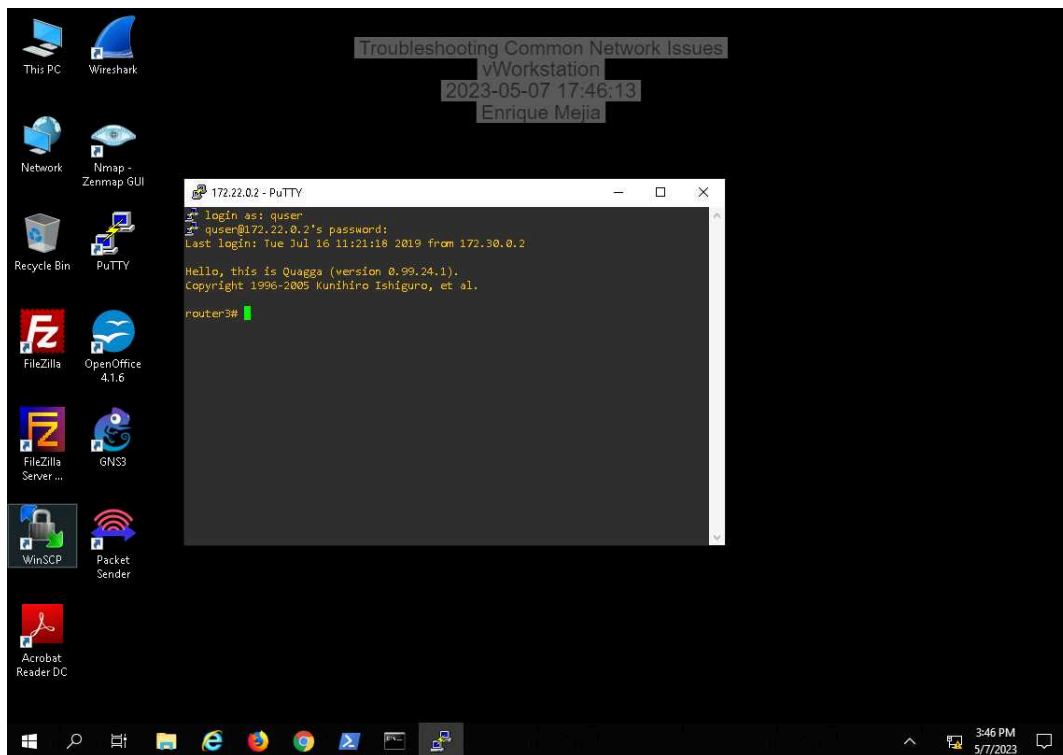
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Section 3: Challenge and Analysis

Part 1: Continue Troubleshooting Connectivity Issues

Describe the networking problem you have identified.

Make a screen capture showing the **command output** that corroborates your problem description.



Part 2: Resolve the Connectivity Issues

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Make a screen capture showing the output of your status command.

