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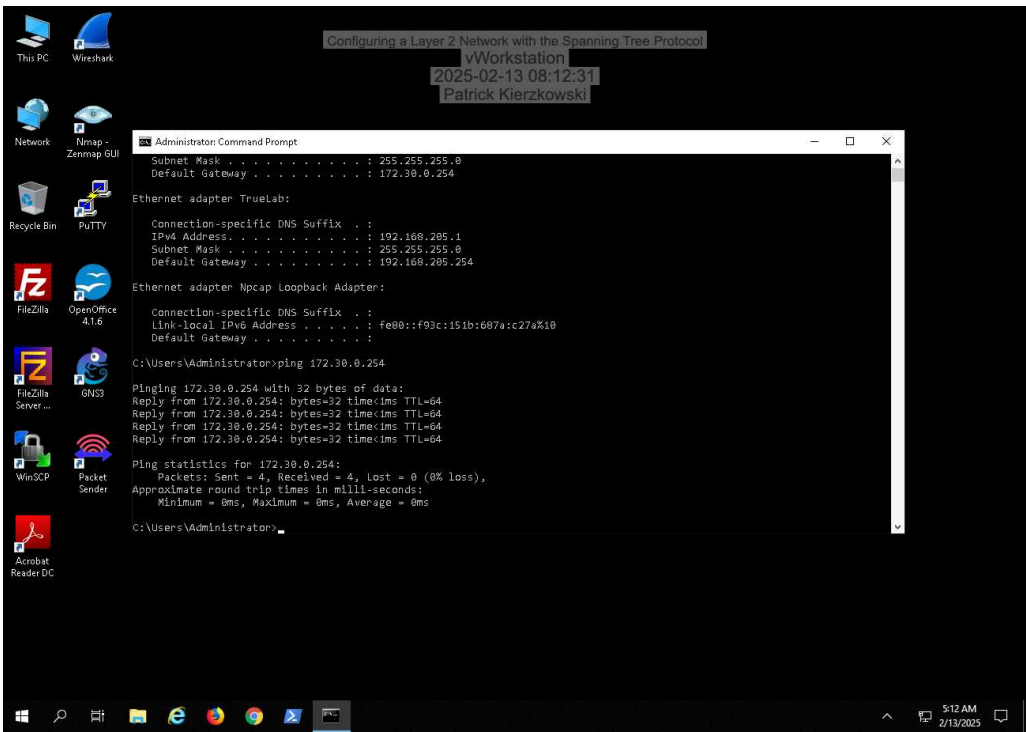
Time on Task:	Progress:
4 hours, 51 minutes	100%

Report Generated: Monday, July 7, 2025 at 9:45 PM

Section 1: Hands-On Demonstration

Part 1: Assess the Layer 2 Network Configuration

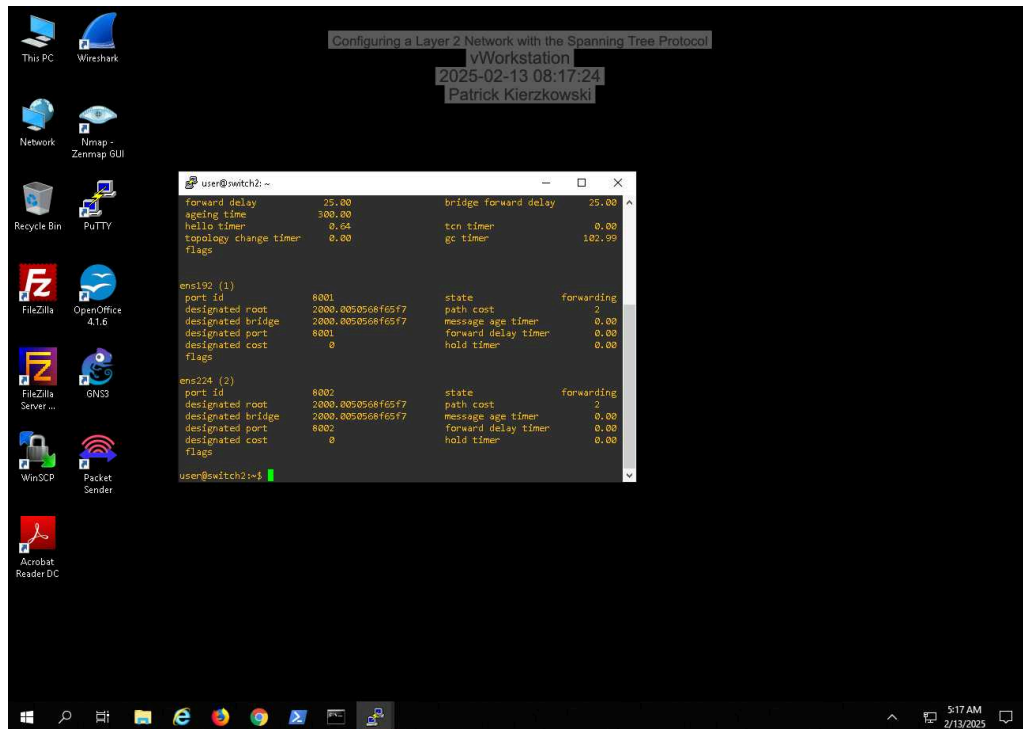
- 4. Make a screen capture showing the responses from your ICMP echo request to 172.30.0.254.



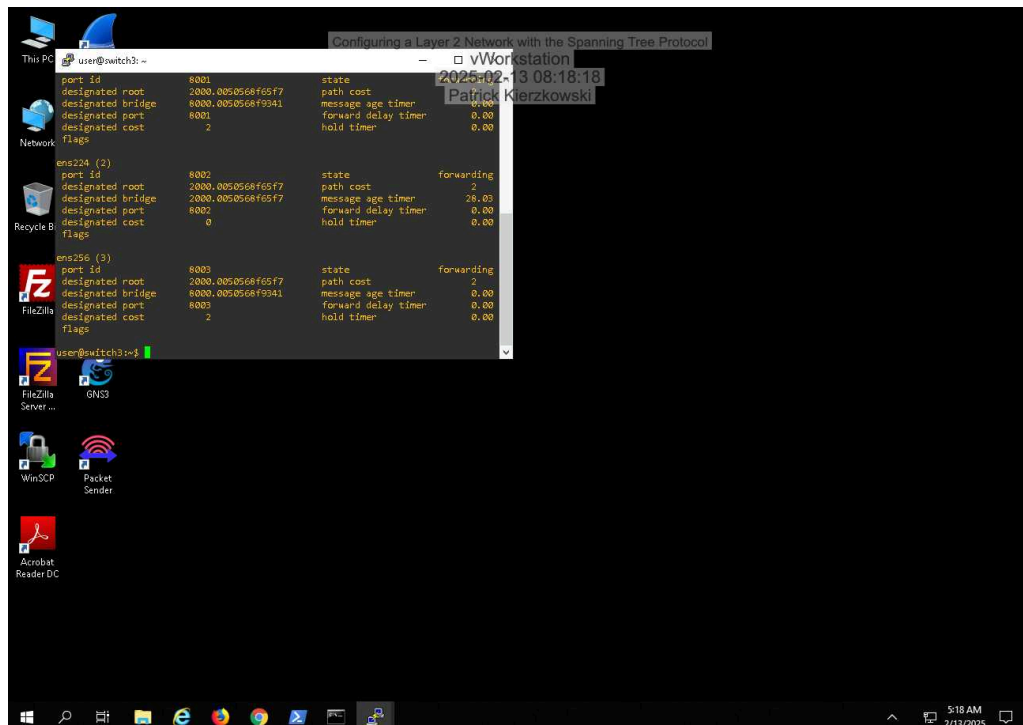
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18. Make a screen capture showing the matching bridge ID and designated root bridge values on Switch2.

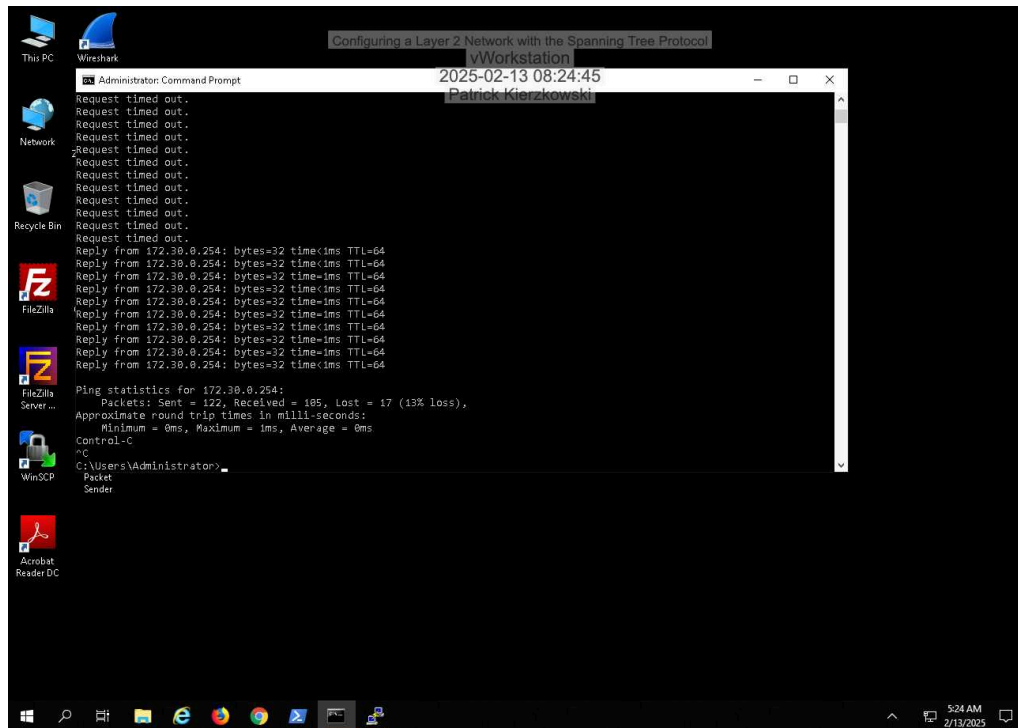


21. Make a screen capture showing all three ports in forwarding mode on Switch3.

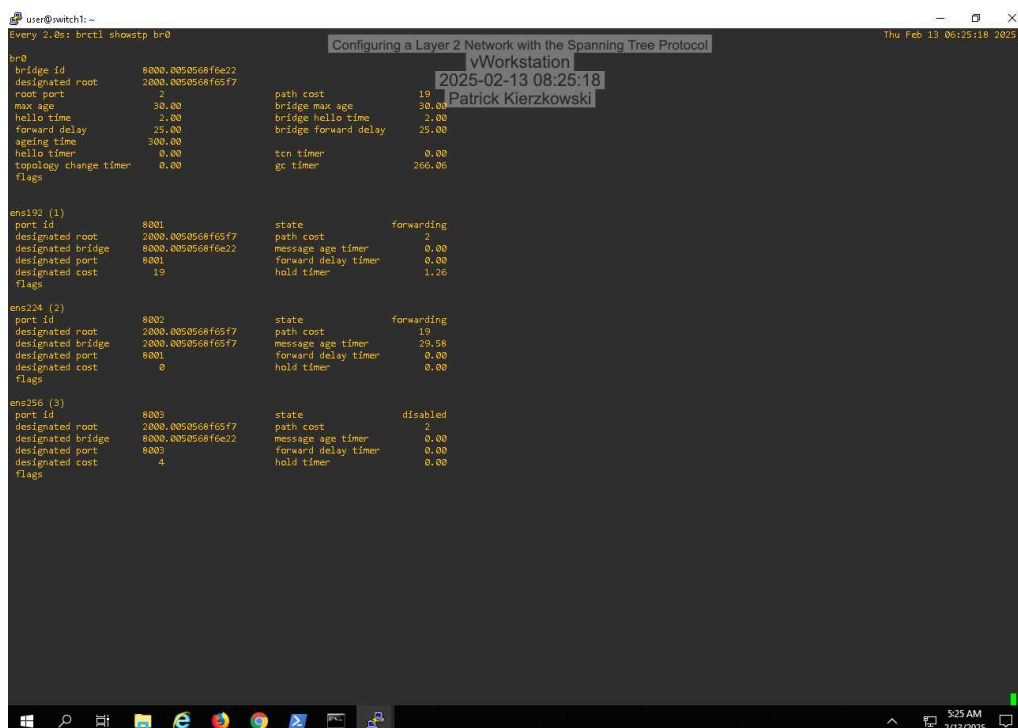


Part 2: Redirect Network Traffic using STP

14. Make a screen capture showing the number of Lost packets under Ping statistics.



17. Make a screen capture showing port ens256 in a disabled state.



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22. Make a screen capture showing port ens256 back in a forwarding state.



The screenshot shows a terminal window titled "user@switch1: ~" with the command "brctl showstp br0" executed. The output displays the Spanning Tree Protocol configuration and status for bridge br0. The bridge ID is 8000.0050568f6e22, and the root port is 3. The bridge is in a forwarding state. The ports are listed as follows:

Port	Port ID	Designated Root	Designated Bridge	Designated Port	Designated Cost	Flags	State	Path Cost	Message Age Timer	Forward Delay Timer	Hold Timer
ens192 (1)	8001	2000.0050568f65f7	8000.0050568f6e22	8001	4		forwarding	2	0.00	0.00	0.14
ens224 (2)	8002	2000.0050568f65f7	8000.0050568f65f7	8001	0		blocking	19	28.50	0.00	0.00
ens256 (3)	8003	2000.0050568f65f7	8000.0050568f9541	8001	2		forwarding	2	28.50	0.00	0.00

The terminal window also shows the configuration for the bridge, including the root port, max age, hello time, forward delay, aging time, hello timer, topology change timer, and flags. The flags are TOPOLOGY_CHANGE.

Section 2: Applied Learning

Part 1: Review STP Parameters and MAC Address Tables

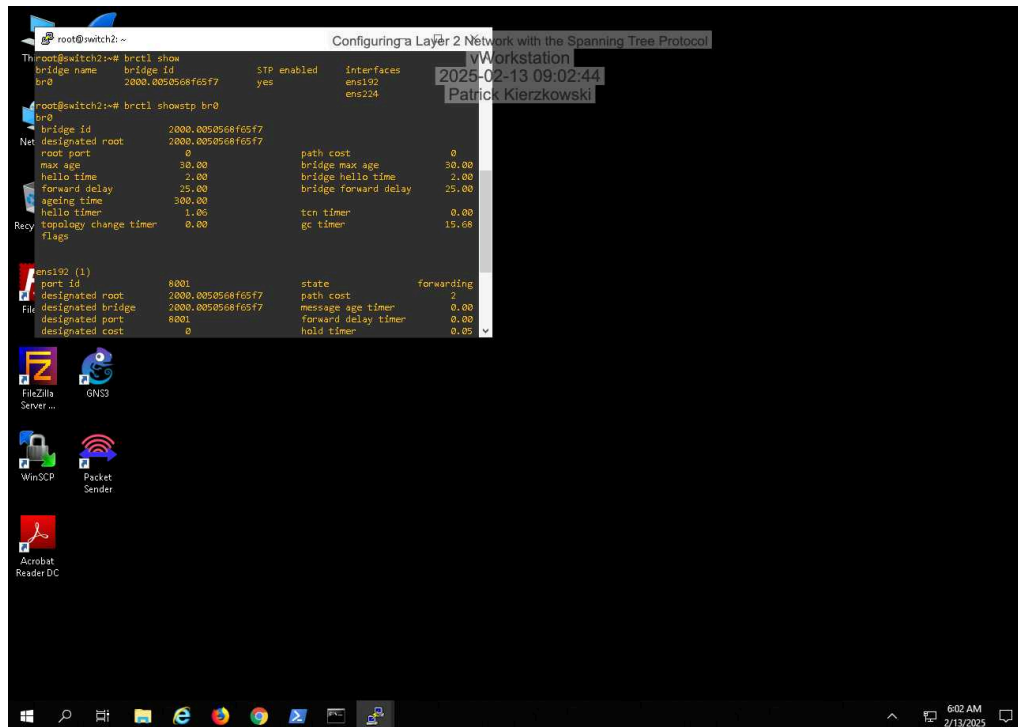
7. Make a screen capture showing the list of MAC addresses known by Switch1.

```
user@switch1: ~
Every 2.0s: brctl showmacs br0

port no mac addr      is local?  ageing timer
1  00:50:56:8f:29:a4    no         0.86
1  00:50:56:8f:6e:22    yes        0.00
1  00:50:56:8f:6e:22    yes        0.00
3  00:50:56:8f:8c:b6    no         5.75
3  00:50:56:8f:93:41    no         1.99
3  00:50:56:8f:a6:29    yes        0.00
3  00:50:56:8f:a6:29    yes        0.00
2  00:50:56:8f:ed:15    yes        0.00
2  00:50:56:8f:ed:15    yes        0.00
```

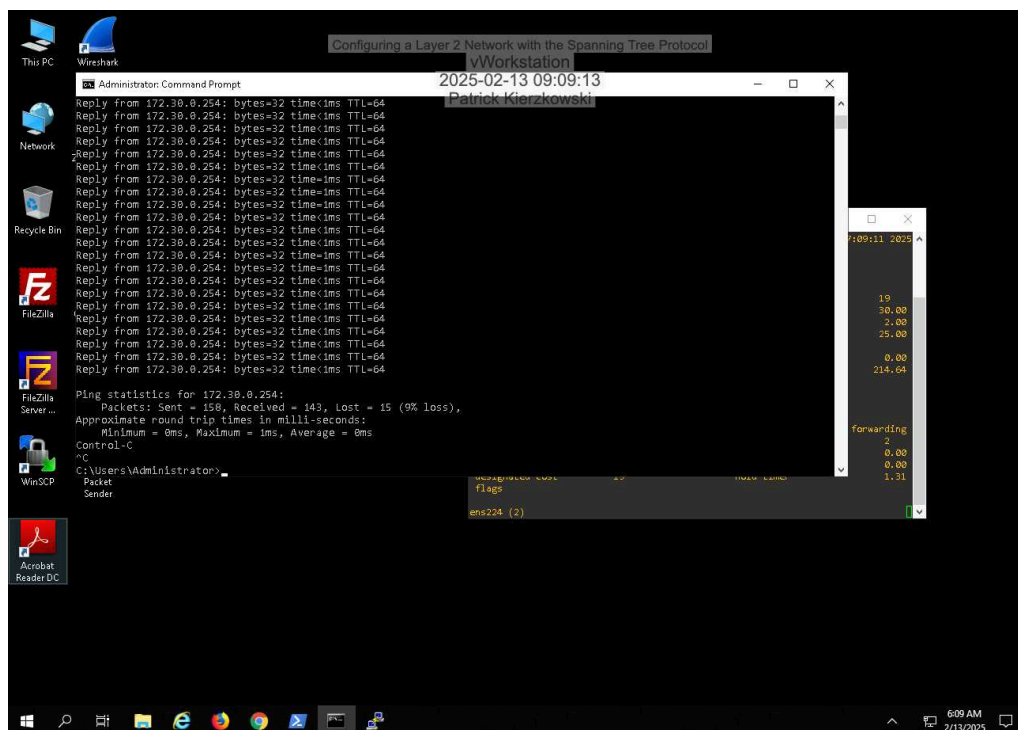
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14. **Make a screen capture** showing the **current Forward Delay** value for br0 on Switch2.



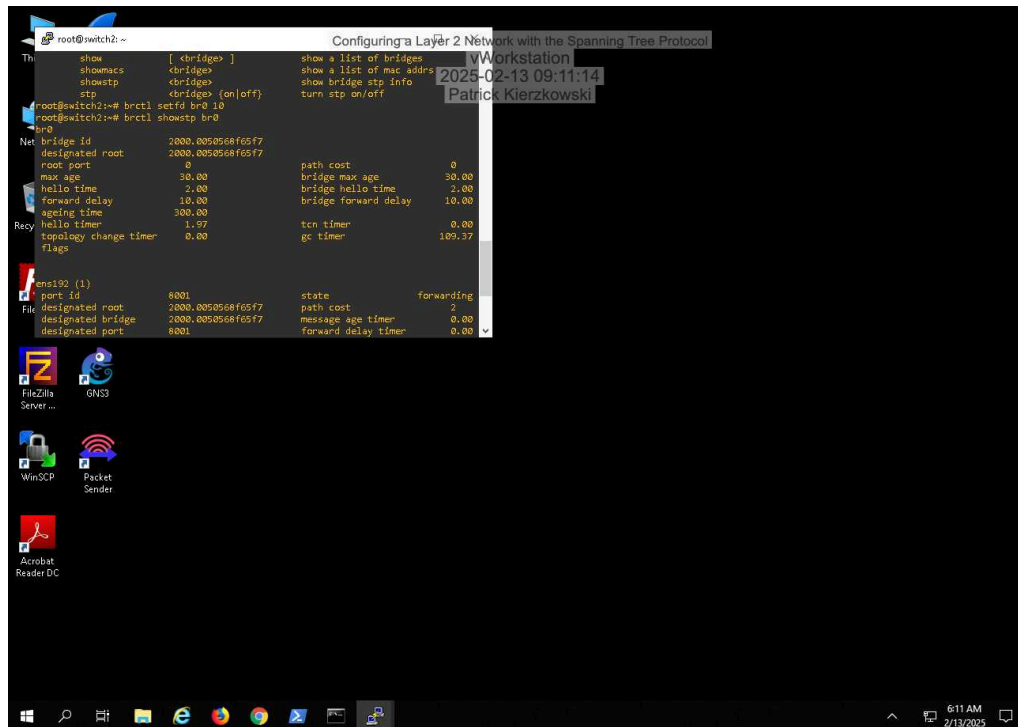
Part 2: Alter STP Timer Values

15. **Make a screen capture** showing the **number of Lost packets** from your ping test.

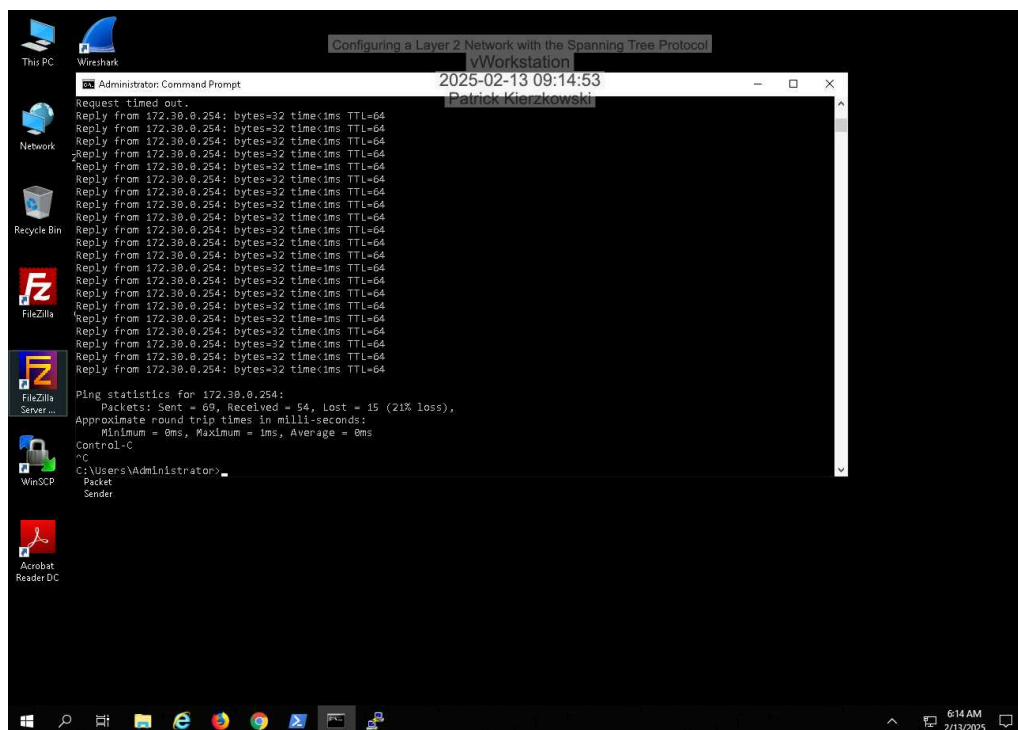


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21. **Make a screen capture** showing the new Forward Delay value on br0.



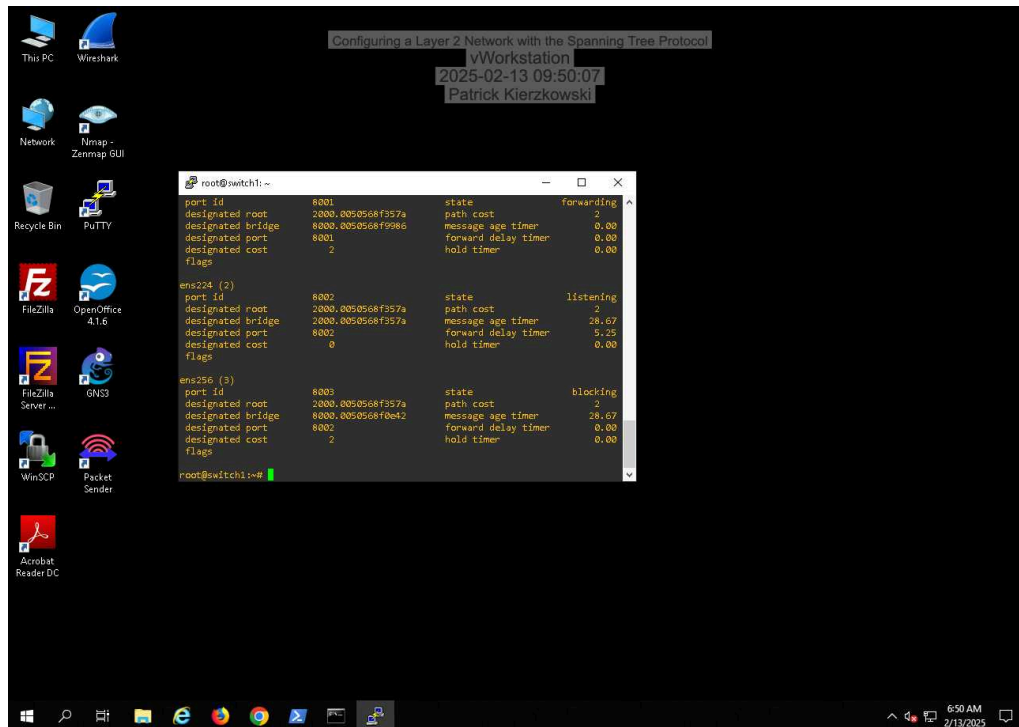
29. **Make a screen capture** showing the **number of Lost packets** from your second ping test.



Section 3: Challenge and Analysis

Part 1: Edit Path Cost Values

Make a screen capture showing the output of the `showstp` command with the new path cost on the `ens224` port.



Part 2: Assign a New Root Bridge

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Make a screen capture showing the **output of the showstp command** with the new bridge ID value.

The bridge ID and the designated root value should be identical, indicating Switch3 is now the root bridge.

