



COSMICODE

Remote Internship

Summer Internship Program 2025

Week 2: Advanced Networking Concepts

Objective: Explore more complex networking configurations and features.

Name: Waqar Ali

Intern ID: CCP\345670037

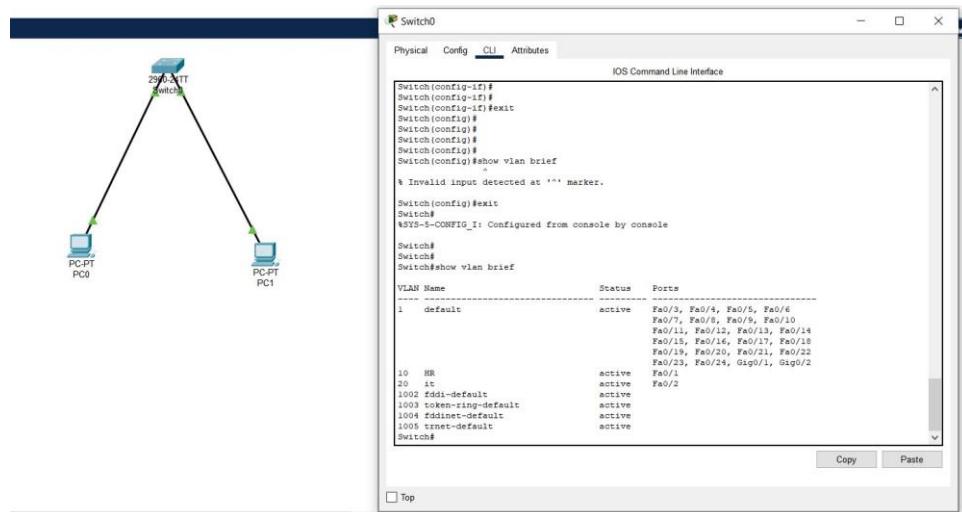
Domain: Computer Networking

Create VLANs on a Switch:

Objective: Set up VLANs to segment network traffic.

Steps:

- Access the switch's configuration interface.
- Create VLANs and assign ports to VLANs.
- Verify VLAN configuration and inter-VLAN communication.

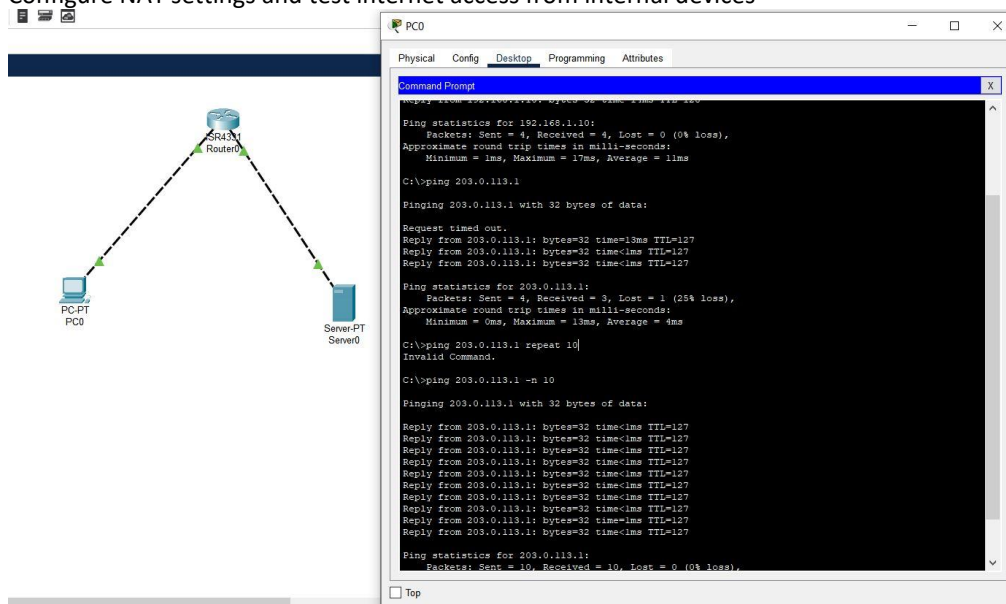


Configure NAT on a Router:

Objective: Allow internal devices to access external networks.

Steps:

- Enable NAT on the router.
- Configure NAT settings and test internet access from internal devices

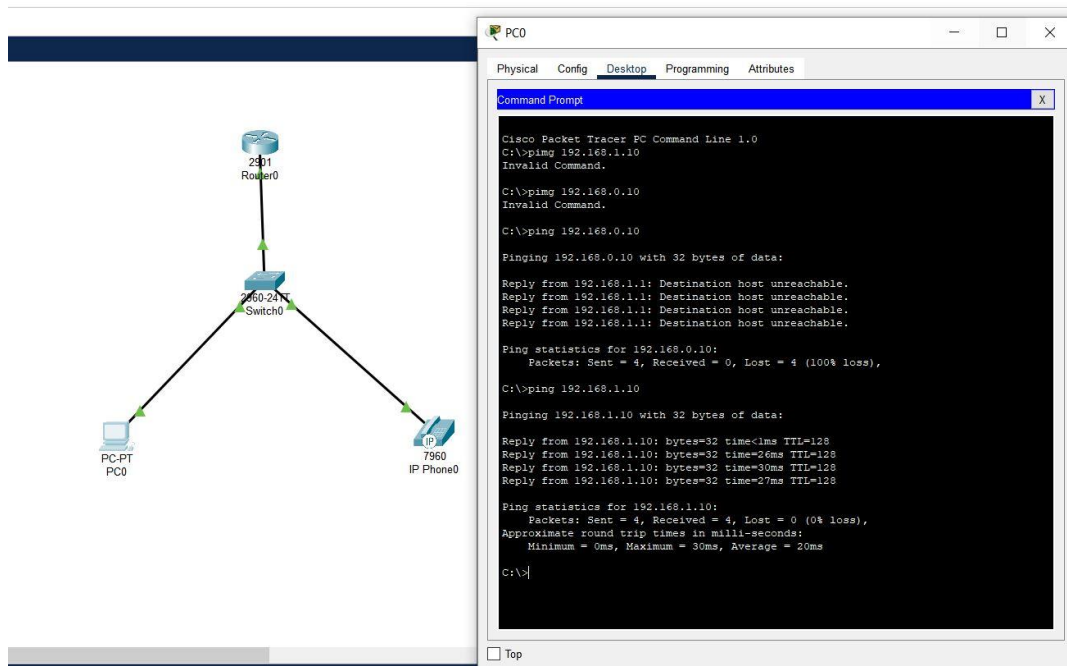


Implement QoS Settings:

Objective: Prioritize specific types of traffic.

Steps:

- Access the router's QoS settings.
- Create rules to prioritize traffic (e.g., VoIP).
- Monitor network performance and verify QoS effectiveness.



Set Up a Wireless Network:

Objective: Configure a wireless access point.

Steps:

- Connect the wireless access point to the network.
- Configure SSID and security settings (WPA2).
- Connect devices wirelessly and test connectivity.

