

Rymbayeva Anelya, FIT, 2nd course, Lab5 – IT Infrastructure and Computer Networks

Packet Tracer - Basic Device Configuration

Topology

You will receive one of three possible topologies.

Addressing Table

Device	Interface	IP Address	Default Gateway
RTA	G0/0	172.14.5.1/24	N/A
		2001:DB8:CAFE:1::1/64	
		FE80::1	
	G0/1	172.14.10.1/24	N/A
		2001:DB8:CAFE:2::1/64	
		FE80::1	
Asw-1	VLAN 1		172.14.5.1
Asw-2	VLAN 1	172.14.10.254/24	172.14.10.1
User-01	NIC	172.14.5.50/24	172.14.5.1
		2001:DB8:CAFE:1::2/64	FE80::1
User-02	NIC	172.14.5.60/24	172.14.5.1
		2001:DB8:CAFE:1::3/64	FE80::1
User-03	NIC	172.14.10.50/24	172.14.10.1
		2001:DB8:CAFE:2::2/64	FE80::1
User-04	NIC	10.10.10.102/24	172.14.10.1
		2001:DB8:CAFE:2::3/64	FE80::1

Objectives

- Complete the network documentation.
- Perform basic device configurations on a router and a switch.
- Verify connectivity and troubleshoot any issues.

Scenario

Your network manager is impressed with your performance in your job as a LAN technician. She would like you to demonstrate your ability to configure a router that connects two LANs. Your tasks include configuring basic settings on a router and a switch using the Cisco IOS. You will also configure IPv6 addresses on network devices and hosts. You will then verify the configurations by testing end-to-end connectivity. You goal is to establish connectivity between all devices.

Note: The VLAN1 interface on will not be reachable over IPv6.

In this activity you will configure the router, switch, and the **PC hosts**.

Note: Packet Tracer will not score some configured values, however these values are required to accomplish full connectivity in the network.

Requirements

- Provide the missing information in the Addressing Table.
- Name the router and the second switch . You will not be able to access the switch.
- Use cisco as the user EXEC password for all lines.
- Use class as the encrypted privileged EXEC password.
- · Encrypt all plaintext passwords.
- Configure an appropriate banner.
- Configure IPv4 and IPv6 addressing for the switch according to the Addressing Table.
- Configure IPv4 and IPv6 addressing for the switch according to the Addressing Table.
- The hosts are partially configured. Complete the IPv4 addressing, and fully configure the IPv6 addresses according to the Addressing Table.
- Document interfaces with descriptions, including the VLAN 1 interface.
- Save your configurations.
- Verify connectivity between all devices. All devices should be able to ping all other device s with IPv4 and IPv6.
- Troubleshoot and document any issues.
- Implement the solutions necessary to enable and verify full end-to-end connectivity.

Note: Click **Check Results** button to see your progress. Click the **Reset Activity** button to generate a new set of requirements.