

# **Packet Tracer - Basic Device Configuration**

# **Topology**

You will receive one of three possible topologies.

## **Addressing Table**

| Device    | Interface | IP Address       | Default Gateway |
|-----------|-----------|------------------|-----------------|
|           | G0/0      | 128.107.20.1/24  | N/A             |
| College   |           | 2001:db8:a::1/64 |                 |
|           |           | FE80::1          |                 |
|           | G0/1      | 128.107.30.1/24  | N/A             |
|           |           | 2001:db8:b::1/64 |                 |
|           |           | FE80::1          |                 |
| Class-A   | VLAN 1    | 128.107.20.2/24  | 128.107.20.1    |
| Class-B   | VLAN 1    | 128.107.30.15/24 | 128.107.30.1    |
|           | NIC       | 128.107.20.25/24 | 128.107.20.1    |
| Student-1 |           | 2001:db8:a::2/64 | FE80::1         |
|           | NIC       | 128.107.20.30/24 | 128.107.20.1    |
| Student-2 |           | 2001:db8:a::3/64 | FE80::1         |
|           | NIC       | 128.107.30.25/24 | 128.107.30.1    |
| Student-3 |           | 2001:db8:b::2/64 | FE80::1         |
| Student-4 | NIC       | 128.107.30.30/24 | 128.107.30.1    |
|           |           | 2001:db8:b::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.

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**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 devices 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.