Packet Tracer - Troubleshoot Static and Default Routes

Addressing Table

Device	Interface	IP Addresses
R1	G0/0	172.31.1.1/25
		2001:DB8:1::1/64
	S0/0/0	172.31.1.194/30
		2001:DB8:2::194/64
R2	G0/0	172.31.0.1/24
		2001:DB8:3::1/64
	S0/0/0	172.31.1.193/30
		2001:DB8:2::193/64
	S0/0/1	172.31.1.197/30
		2001:DB8:4::197/64
R3	G0/0	172.31.1.129/26
		2001:DB8:5::1/64
	S0/0/1	172.31.1.198/30
		2001:DB8:4::198/64
PC1	NIC	172.31.1.126/25
		2001:DB8:1::126/64
PC2	NIC	172.31.0.254/24
		2001:DB8:3::254/64
Server	NIC	172.31.1.190/26
		2001:DB8:5::190/64

Objectives

In this activity you will troubleshoot static and default routes and repair any errors that you find.

- Troubleshoot IPv4 static routes.
- Troubleshoot IPv4 default routes.
- Troubleshoot IPv6 static routes.
- Configure IPv4 static routes.
- Configure IPv4 default routes.
- Configure IPv6 static routes.

Background / Scenario

A newly hired network technician is attempting to preconfigure a simple topology that will be delivered to a customer. The technician has not been able to establish connectivity between the three LANs. You have been asked to troubleshoot the topology and verify connectivity between the hosts on the three LANs over IPv4 and IPv6.

Instructions

Part 1: Locate and document the problems.

Record your findings in a table like the one below.

Location	Problem	Solution

Part 2: Repair the problems.

Configure the devices so that full connectivity exists between the hosts on the LANs over IPv4 and IPv6.

Note: Your task is to establish connectivity using the existing static route design. Changing the types of static routes used will result in a loss of points.