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Ch2 - Packet Tracer Skills Integration Challenge

Introduction:

This activity focuses on basic device configurations and static routing. The addressing scheme has already been determined. Once you have configured all devices, you will test for end-to-end connectivity and examine your configuration.

Learning Objectives

- Cable the devices.
- Apply a basic configuration to the devices.
- Configure static and default routing.
- Test connectivity and examine the configuration.

Addressing Table:

Device	Interface	IP Address	Subnet Mask	Default Gateway
HQ	S0/0/0	10.0.0.1/30	255.255.255.252	N/A
	S0/0/1	10.0.0.5/30	255.255.255.252	N/A
	Fa0/0	192.168.64.1/24	255.255.255.0	N/A
	Fa0/1	192.168.65.1/24	255.255.255.0	N/A
B1	S0/0/0	10.0.0.2/30	255.255.255.252	N/A
	Fa0/0	172.24.0.1/16	255.255.0.0	N/A
	Fa0/1	172.25.0.1/16	255.255.0.0	N/A
	Fa1/0	172.26.0.1/16	255.255.0.0	N/A
	Fa1/1	172.27.0.1/16	255.255.0.0	N/A
B2	S0/0/0	10.0.0.6/30	255.255.255.252	N/A
	Fa0/0	192.168.0.1/24	255.255.255.0	N/A
	Fa0/1	192.168.1.1/24	255.255.255.0	N/A
	Fa1/0	192.168.2.1/24	255.255.255.0	N/A
	Fa1/1	192.168.3.1/24	255.255.255.0	N/A
PC1	NIC	172.24.0.10/16	255.255.0.0	172.24.0.1/16
PC2	NIC	172.25.0.10/16	255.255.0.0	172.25.0.1/16
PC3	NIC	172.26.0.10/16	255.255.0.0	172.26.0.1/16
PC4	NIC	172.27.0.10/16	255.255.0.0	172.27.0.1/16
PC5	NIC	192.168.64.10/24	255.255.255.0	192.168.64.1/24
PC6	NIC	192.168.65.10/24	255.255.255.0	192.168.65.1/24

Device	Interface	IP Address	Subnet Mask	Default Gateway
PC7	NIC	192.168.0.10/24	255.255.255.0	192.168.0.1/24
PC8	NIC	192.168.1.10/24	255.255.255.0	192.168.1.1/24
PC9	NIC	192.168.2.10/24	255.255.255.0	192.168.2.1/24
PC10	NIC	192.168.3.10/24	255.255.255.0	192.168.3.1/24

Task 1: Cable the devices.

Cable the WAN. HQ s0/0/0 connects to B1 S0/0/0 and HQ s0/0/01 connects to B2 s0/0/0. HQ is the DCE side of both WAN links.

Task 2: Apply a basic configuration.

Configure the routers with basic configurations including addressing.

- For the WAN links, assign the first address to HQ and the second address to the other router.
- For the LANs, assign the first address to the router interface. Make sure to also configure hostnames.
- Assign the .10 address to the PCs. Make sure to include the default gateway.
- Use **cisco** as the line passwords and **class** as the secret password.
- Use 64000 as the clock rate.

Task 3: Configure static and default routing.

- Configure HQ with exactly two static routes using the local interface.
- Configure B1 and B2 with exactly one default route using the local interface.

Task 4: Test connectivity and examine the configuration.

Step 1: Test connectivity.

- You should now have end-to-end connectivity. Use ping to test connectivity across the network.
- Troubleshoot until pings are successful.

Step 2: Examine the configuration.

Use verification commands to make sure your configurations are complete.