

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	255.255.255.0	N/A
	Fa0/1	192.168.65.1	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	255.255.0.0	N/A
	Fa0/1	172.25.0.1	255.255.0.0	N/A
	Fa1/0	172.26.0.1	255.255.0.0	N/A
	Fa1/1	172.27.0.1	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	255.255.255.0	N/A
	Fa0/1	192.168.1.1	255.255.255.0	N/A
	Fa1/0	192.168.2.1	255.255.255.0	N/A
	Fa1/1	192.168.3.1	255.255.255.0	N/A
PC1	NIC	172.24.0.10	255.255.0.0	172.24.0.1
PC2	NIC	172.25.0.10	255.255.0.0	172.25.0.1
PC3	NIC	172.26.0.10	255.255.0.0	172.26.0.1
PC4	NIC	172.27.0.10	255.255.0.0	172.27.0.1
PC5	NIC	192.168.64.10	255.255.255.0	192.168.64.1
PC6	NIC	192.168.65.10	255.255.255.0	192.168.65.1

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

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.