

## 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			N/A
	S0/0/1			N/A
	Fa0/0			N/A
	Fa0/1			N/A
B1	S0/0/0			N/A
	Fa0/0			N/A
	Fa0/1			N/A
	Fa1/0			N/A
	Fa1/1			N/A
B2	S0/0/0			N/A
	Fa0/0			N/A
	Fa0/1			N/A
	Fa1/0			N/A
	Fa1/1			N/A
PC1	NIC			
PC2	NIC			
PC3	NIC			
PC4	NIC			
PC5	NIC			
PC6	NIC			

Device	Interface	IP Address	Subnet Mask	Default Gateway
PC7	NIC			
PC8	NIC			
PC9	NIC			
PC10	NIC			

### 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.