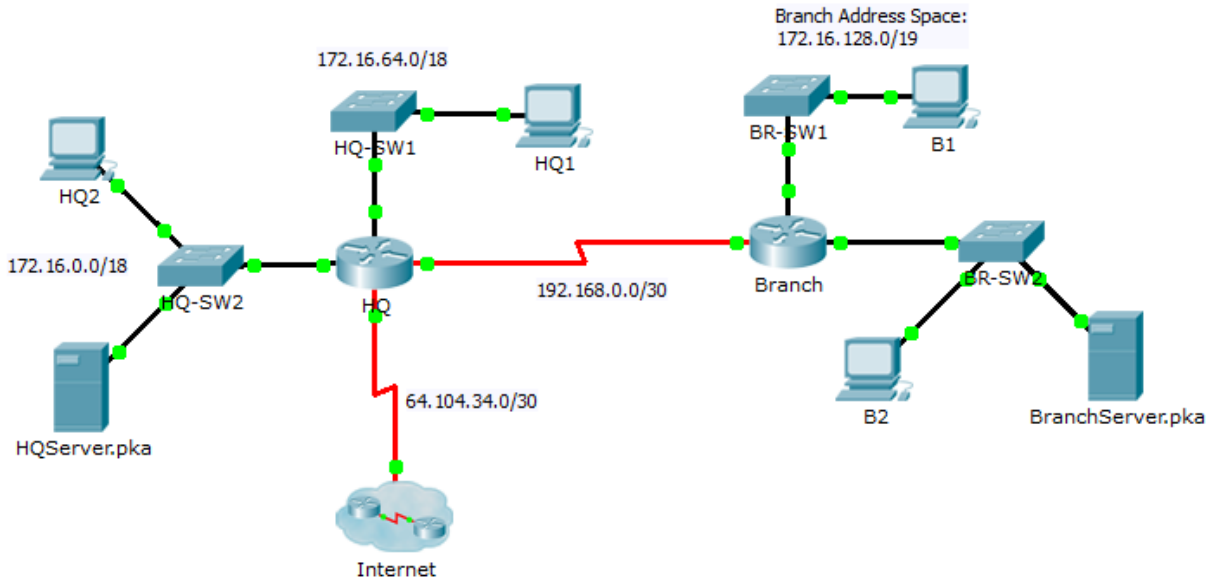


Packet Tracer - Skills Integration Challenge

Topology



Addressing Table

Device	Interface	IP Address	Subnet Mask	Default Gateway
HQ	G0/0	172.16.127.254	255.255.192.0	N/A
	G0/1	172.16.63.254	255.255.192.0	N/A
	S0/0/0	192.168.0.1	255.255.255.252	N/A
	S0/0/1	64.104.34.2	255.255.255.252	64.104.34.1
Branch	G0/0			N/A
	G0/1			N/A
	S0/0/0	192.168.0.2	255.255.255.252	N/A
HQ1	NIC	172.16.64.1	255.255.192.0	172.16.127.254
HQ2	NIC	172.16.0.2	255.255.192.0	172.16.63.254
HQServer.pka	NIC	172.16.0.1	255.255.192.0	172.16.63.254
B1	NIC			
B2	NIC	172.16.128.2	255.255.240.0	172.16.143.254
BranchServer.pka	NIC	172.16.128.1	255.255.240.0	172.16.143.254

Scenario

In this challenge activity, you will finish the addressing scheme, configure routing, and implement named access control lists.

Requirements

- a. Divide 172.16.128.0/19 into two equal subnets for use on **Branch**.
 - 1) Assign the last usable address of the second subnet to the Gigabit Ethernet 0/0 interface.
 - 2) Assign the last usable address of the first subnet to the Gigabit Ethernet 0/1 interface.
 - 3) Document the addressing in the Addressing Table.
 - 4) Configure **Branch** with appropriate addressing
- b. Configure **B1** with appropriate addressing using the first available address of the network to which it is attached. Document the addressing in the Addressing Table.
- c. Configure **Branch** with Enhanced Interior Gateway Routing Protocol (EIGRP) routing according to the following criteria:
 - Advertise all three attached networks
 - Assign AS number 1
 - Disable automatic summarization
 - Configure appropriate interfaces as passive
 - Summarize 172.16.128.0/19 on the Serial 0/0/0 interface with an administrative distance of 5.
- d. Set a default route on **HQ** which directs traffic to S0/0/1 interface. Redistribute the route to **Branch**.
- e. Summarize the **HQ** LAN subnets on the Serial 0/0/0 interface with an administrative distance of 5.
- f. Design a named access list **HQServer** to prevent any computers attached to the Gigabit Ethernet 0/0 interface of the **Branch** router from accessing **HQServer.pka**. All other traffic is permitted. Configure the access list on the appropriate router, apply it to the appropriate interface and in the appropriate direction.
- g. Design a named access list **BranchServer** to prevent any computers attached to the Gigabit Ethernet 0/0 interface of the **HQ** router from accessing the HTTP and HTTPS service of the **Branch** server. All other traffic is permitted. Configure the access list on the appropriate router, apply it to the appropriate interface and in the appropriate direction.