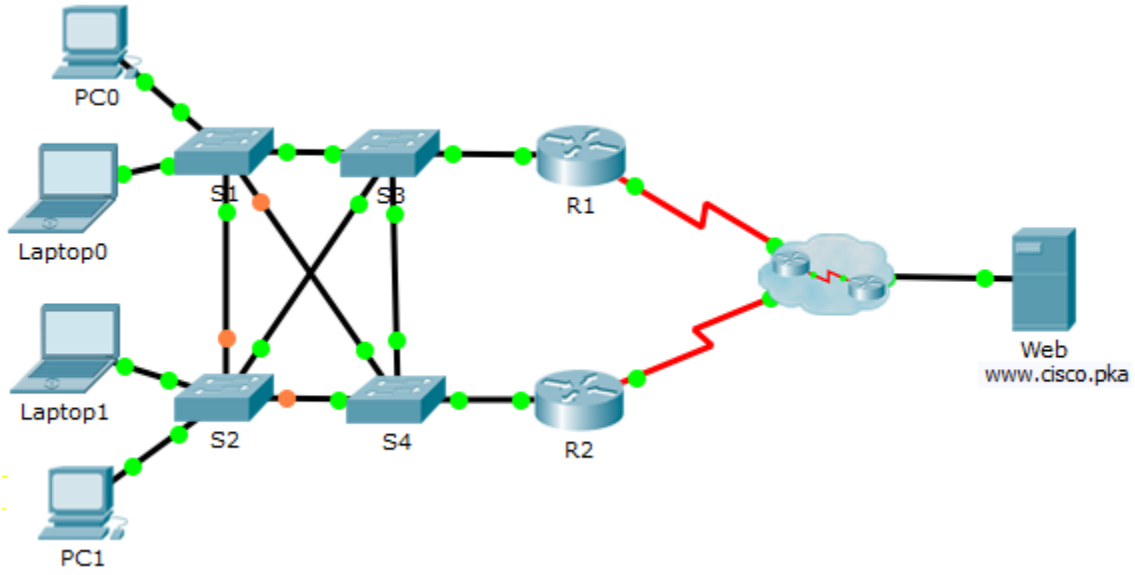
Packet Tracer - Troubleshoot HSRP

Topology



Addressing Table

Device	Interface	IP Address	Subnet Mask	Default Gateway
R1	G0/1	192.168.1.1	255.255.255.0	N/A
	S0/0/0	209.165.200.226	255.255.255.252	N/A
R2	G0/1	192.168.1.2	255.255.255.0	N/A
	S0/0/1	209.165.200.230	255.255.255.252	N/A
PC0	NIC	192.168.1.10	255.255.255.0	192.168.1.254
Laptop0	NIC	192.168.1.11	255.255.255.0	192.168.1.254
Laptop1	NIC	192.168.1.12	255.255.255.0	192.168.1.254
PC1	NIC	192.168.1.13	255.255.255.0	192.168.1.254
Web	NIC	209.165.202.156	255.255.255.224	209.165.202.158

Objective

In this activity, you will troubleshoot and resolve the HSRP issues in the network. You will also verify that all the HSRP configurations meet the network requirement.

Background / Scenario

Currently the users can access www.cisco.pka. The network has been updated to use HSRP to ensure the network availability to the users. You must verify that the users can still access the website if one of the routers is down. R1 should always be the active router if it is functioning.

Network Requirement:

- HSRP virtual router is 192.168.1.254.
- HSRP standby group is 1.
- DNS server is 209.165.202.157.
- R1 should always be the active router when it is functioning properly.
- R2 uses the default HSRP priority.
- All users should be able to access www.cisco.pka as long as one of the routers is functioning.

Troubleshooting Process

Step 1: PCs and Laptops

a. Verify the PCs and laptops are configured correctly using the provided network requirement.

b. Based on the Network Requirement shown above, verify that the PCs and laptops can navigate to www.cisco.pka successfully.

Step 2: Troubleshoot R1.

a. Disable the interface G0/1 on R2.

b. Use **show** commands to determine issues. Record and correct any issues found on R1.

R1 is in incorrect standby group and not configured to preempt. Also its prio need to be more than 100. If PC0 and Laptop1 will be using R2 as default gateway, they will be lose connection to Web, when int on R2 will disable.

c. Re-enable the interface G0/1 on R2.

Step 3: Troubleshoot R2.

a. Disable the interface G0/1 on R1.

b. Use **show** commands to determine any issues. Record and correct any issues found on R2.

PCs and laptop use 192.168.1.254 as default gateway. But R1 has been disabled and R2 not a member of standby group 1, so PCs will lose connectivity to the server.

c. After verifying that the PCs and laptops can navigate to www.cisco.pka successfully, re-enable the interface G0/1 on R1.

Step 4: Verify connectivity.

a. Verify all PCs and laptops can navigate to www.cisco.pka.

b. Verify all the HSRP requirements have been met.