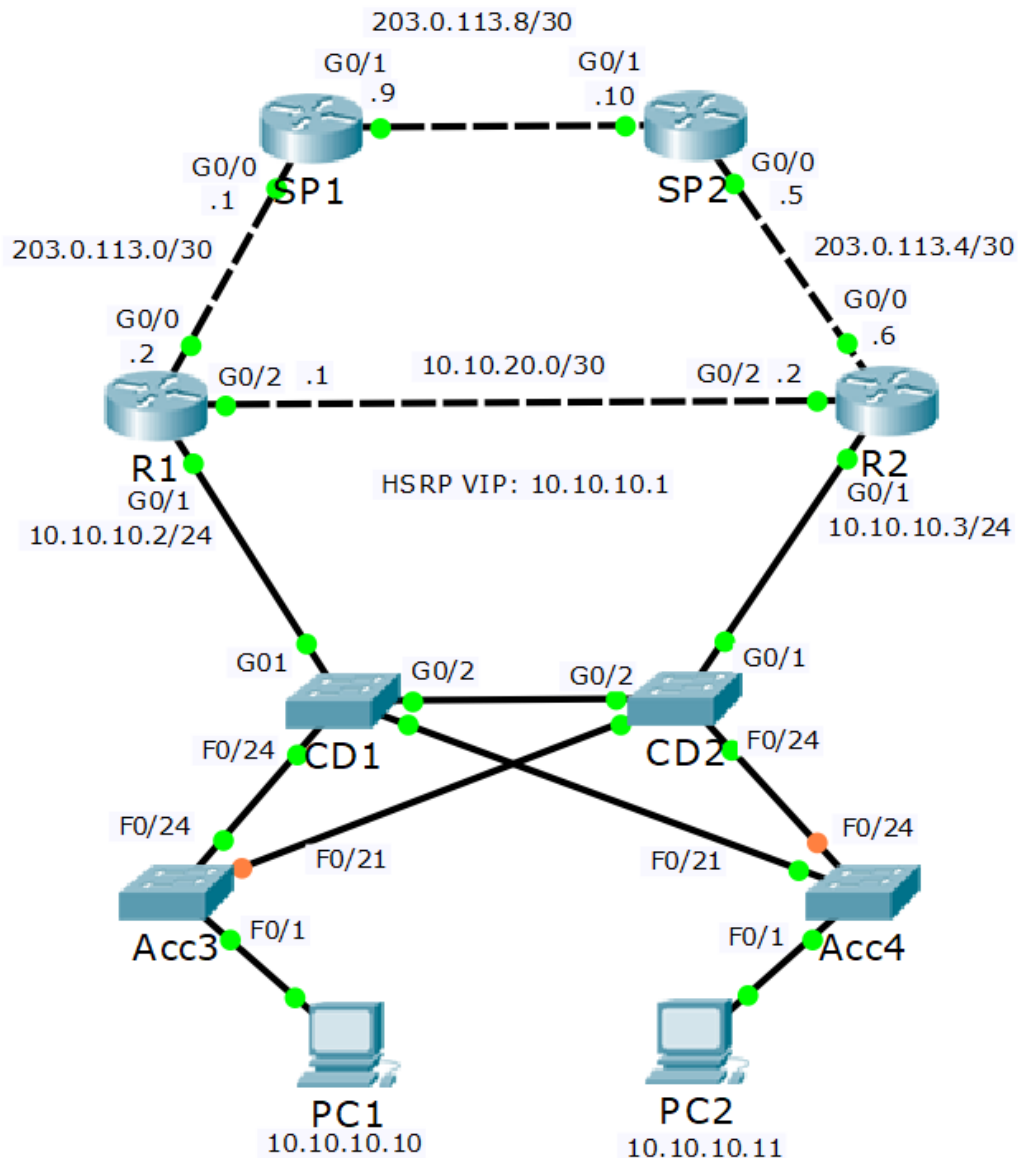# 24-1 HSRP Configuration – Lab Exercise

In this lab you will configure and test HSRP for a small campus network.

Lab Topology

Load the Startup Configurations

Open the '24-1 HSRP Configuration.pkt' file in Packet Tracer to load the lab.

Basic HSRP

1) Configure basic HSRP for the 10.10.10.0/24 network using the IP addresses shown in the topology diagram.

2) Wait for HSRP to come up on both routers and then check which is the active router.

3) Verify that the PCs can ping their default gateway using the HSRP address 10.10.10.1.

4) Verify that the PCs have upstream connectivity via their HSRP default gateway. Ping SP1 at 203.0.113.1

5) What is the MAC address on the physical interface of the active router?

6) What is the MAC address of the HSRP virtual interface?

7) Verify the PCs are using the virtual MAC address for their default gateway.

Priority and Pre-emption

8) Configure HSRP so that R1 will be the preferred router. Use a single command.

9) Which router do you expect will be active now? Verify this.

10) Ensure that R1 is the active router. Do not reboot.

Test HSRP

11) Run a continuous ping to the HSRP IP address from PC1 with the 'ping 10.10.10.1 –n 1000' command.

12) Save the configuration on R1 then reboot.

13) View the ping output on PC1. You should see a few dropped pings as R2 transitions to active following the outage of R1.

14) Verify R2 has transitioned to HSRP active.

15) Wait for R1 to complete booting and HSRP to come up. Verify R1 transitions to HSRP active because pre-emption is enabled.

16) Hit 'Ctrl-C' to cancel the ping on PC1. If you scroll back you should see a dropped ping or two as R1 transitioned back to HSRP active.