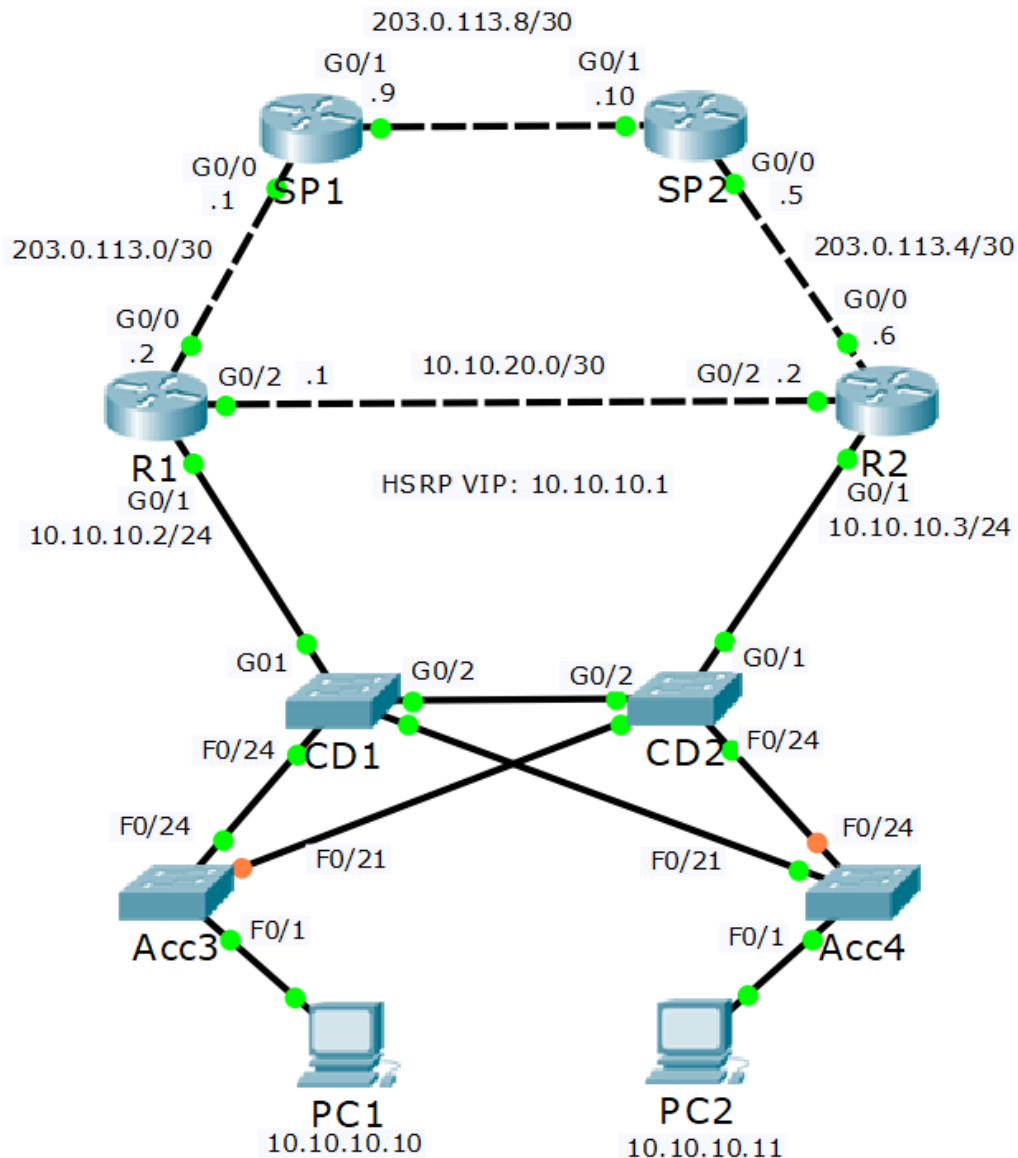


25-1 HSRP Configuration – Lab Exercise

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

Lab Topology



Load the Startup Configurations

Open the '25-1 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.