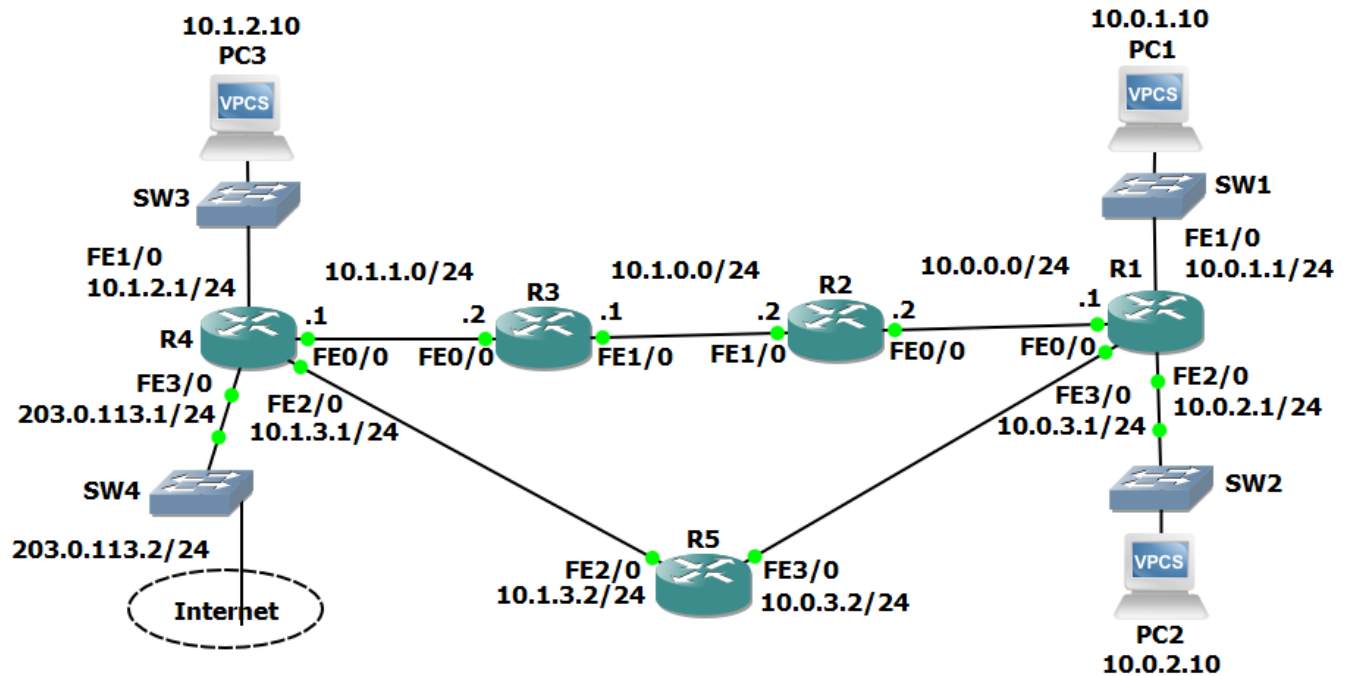


19-1 RIP Configuration – Lab Exercise

In this lab you will configure the RIPv2 routing protocol.

Lab Topology



Load the Startup Configurations

Open the '19-1 RIP Configuration.gns3project' file in GNS3 to load the lab.

RIP Configuration

- 1) Enable RIPv2 on every router. Ensure all networks except 203.0.113.0/24 are advertised. Do not perform any summarisation.
- 2) Verify all networks are in the router's routing tables.
- 3) Enable summarisation using a /16 mask on the routers which are at the boundary of the 10.0.0.0/16 and 10.1.0.0/16 networks.
- 4) What change do you expect to see on R1's routing table? Verify this (give the routing table a couple of minutes to converge).
- 5) Will R4's routes to the 10.0.x.x networks mirror R1's routes to the 10.1.x.x networks? Verify this.
- 6) Verify that routing is working by checking that PC1 has connectivity to PC3.
- 7) Ensure that all routers have a route to the 203.0.113.0/24 network. Internal routes must not be advertised to the Service Provider at 203.0.113.2.
- 8) Verify that all routers have a path to the 203.0.113.0/24 network.
- 9) Configure a default static route on R4 to the Internet via the service provider at 203.0.113.2
- 10) Ensure that all other routers learn via RIP how to reach the Internet.
- 11) Verify all routers have a route to the Internet.
- 12) Set the RIP timers to half their current settings on all routers.