Routing Course

Assignment 2: RIP

In the second assignment you shall

- 1. Design and configure a network suitable for testing and comparing RIP and OSPF, e. g. a network with multiple paths. This might be the network you designed in Assignment 1.
- 2. Remove all dynamic and static routing and setup RIP on all routers.
- 3. Control the routing tables. Do ping and traceroute tests from at least one endpoint in the network to a "diagonal" endpoint.
- 4. Introduce an error in the network by shutting down a significant interface. Study the recover process (use debug) until an alternative path is working, and describe your findings. Note that you will use the same network and repeat this exercise with OSPF, and make comparisons.
- 5. RIP v1 can only handle classful routing while the routers can perform classless forwarding. Design an experiment that shows how the routers manages this situation. Perform the experiment, and report your findings.

Your task is to present your preparations, planning and the carrying out of practical lab, and your findings in a written report.

Before doing the practical lab you shall present a preliminary report covering your preparations and planning. Discuss your network design in the report. The preliminary report must be approved before you may perform the actual lab.

Add significant part of significant configuration files to your report. An approved full report concludes this assignment.

Good luck!