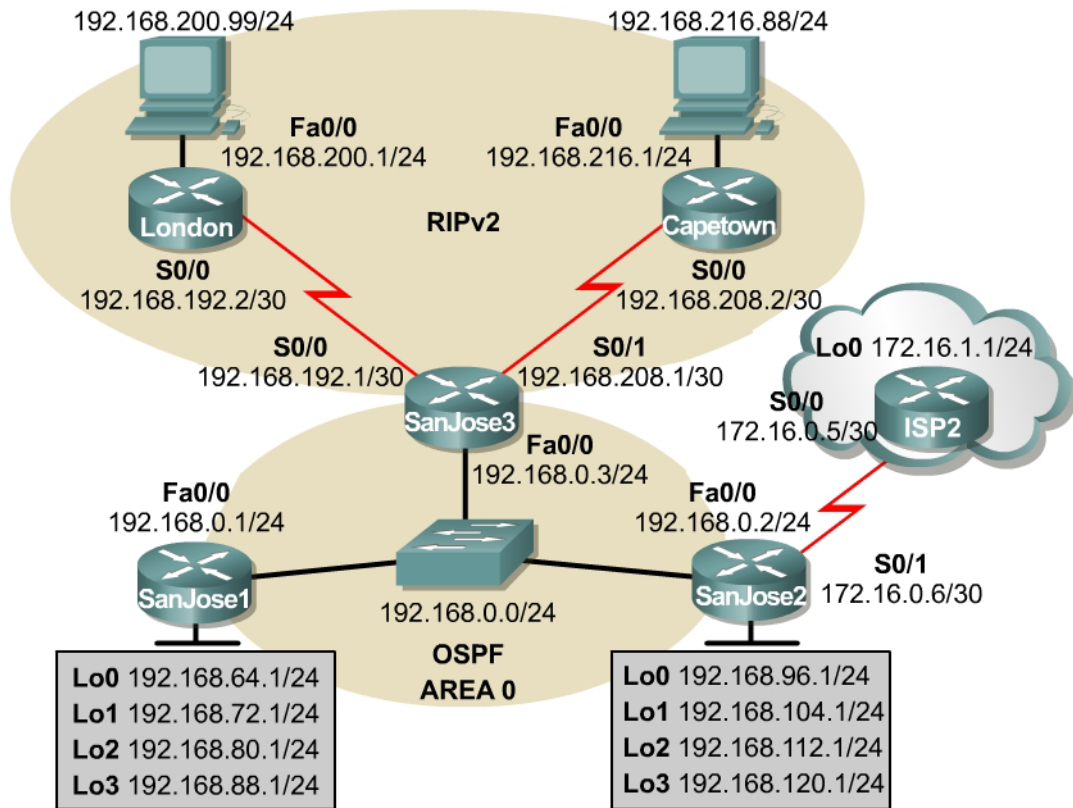


### Lab 8.6.1 Route Optimization Challenge Lab



#### Objective

Create and optimize a network utilizing RIP v2 and OSPF. The network must connect to the Internet.

#### Scenario

International Travel Agency is finally connecting its disparate networks. Working as the network engineer, all locations need to communicate by the end of the month per the agencies request. The only monies available for the project are for provisioning WAN links.

#### Design Considerations

Work with the existing routers in London and Cape Town that support only RIP v2. For simplicity, propagate a default route from SanJose2 to as many routers as possible. Redistribute the connected loopbacks on SanJose1 and SanJose2, simulating sections of the internetwork. Summarize, if appropriate.

#### Implementation Requirements

- All RIP v2 networks will be redistributed into OSPF. Summarize, if appropriate.
- Use default routes between SanJose2 and ISP2.

- SanJose3 will advertise a default route through the RIP v2 network.
- Redistribute connected loopbacks on SanJose1 and SanJose2. Filter the ISP2 WAN link from being advertised by SanJose2.
- SanJose1 will always be the DR in the core network.
- Minimize the number of routes exchanged between core routers.

### **Implementation Completion Tests**

- Successful pings from all hosts to the Internet, ISP2 Lo0.
- SanJose1 is the DR.