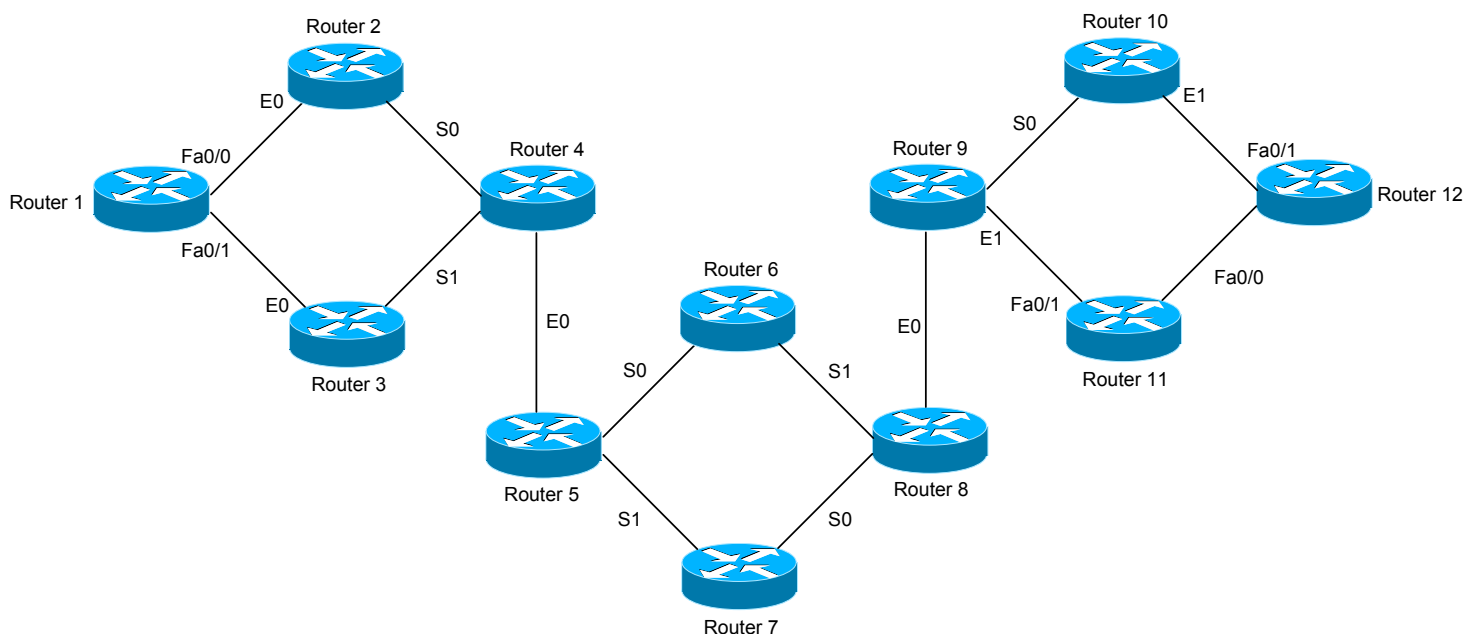# - Advanced Static Routing Lab -

Advanced Static Routing – Lab

Basic Objectives:

1. Configure and cable the Serial/Ethernet interfaces as indicated in the above diagram.

2. Configure the IP addresses on the routers using the following 192.168.YY.x/24 scheme:

   Router 1 – 2 = 192.168.12.x   Router 6 – 8 = 192.168.68.x
   Router 1 – 3 = 192.168.13.x   Router 7 – 8 = 192.168.78.x
   Router 2 – 4 = 192.168.24.x   Router 8 – 9 = 192.168.89.x
   Router 3 – 4 = 192.168.34.x   Router 9 – 10 = 192.168.109.x
   Router 4 – 5 = 192.168.45.x   Router 9 – 11 = 192.168.119.x
   Router 5 – 6 = 192.168.56.x   Router 10 – 12 = 192.168.120.x
   Router 5 – 7 = 192.168.57.x   Router 11 – 12 = 192.168.121.x

3. Configure a loopback interface on each router. The interface should have an address using the following scheme: Y.Y.Y.Y/24. For example, Router 4's loopback should be 4.4.4.4/24.

Advanced Static Routing – Lab

Static Routing Objectives:

4. Configure static routes to all networks. Each route should use the *least* amount of hops to get to its destination. You must be able to ping every loopback interface from every router once this lab is complete.

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Advanced Static Routing – Lab

Static Routing Objectives:

5. Configure a *backup* static route to each destination. Configure this route in such a way that it will *only* become active if the primary route is removed from the routing table. Important: ensure that a routing loop *will not* occur if a primary route fails.

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