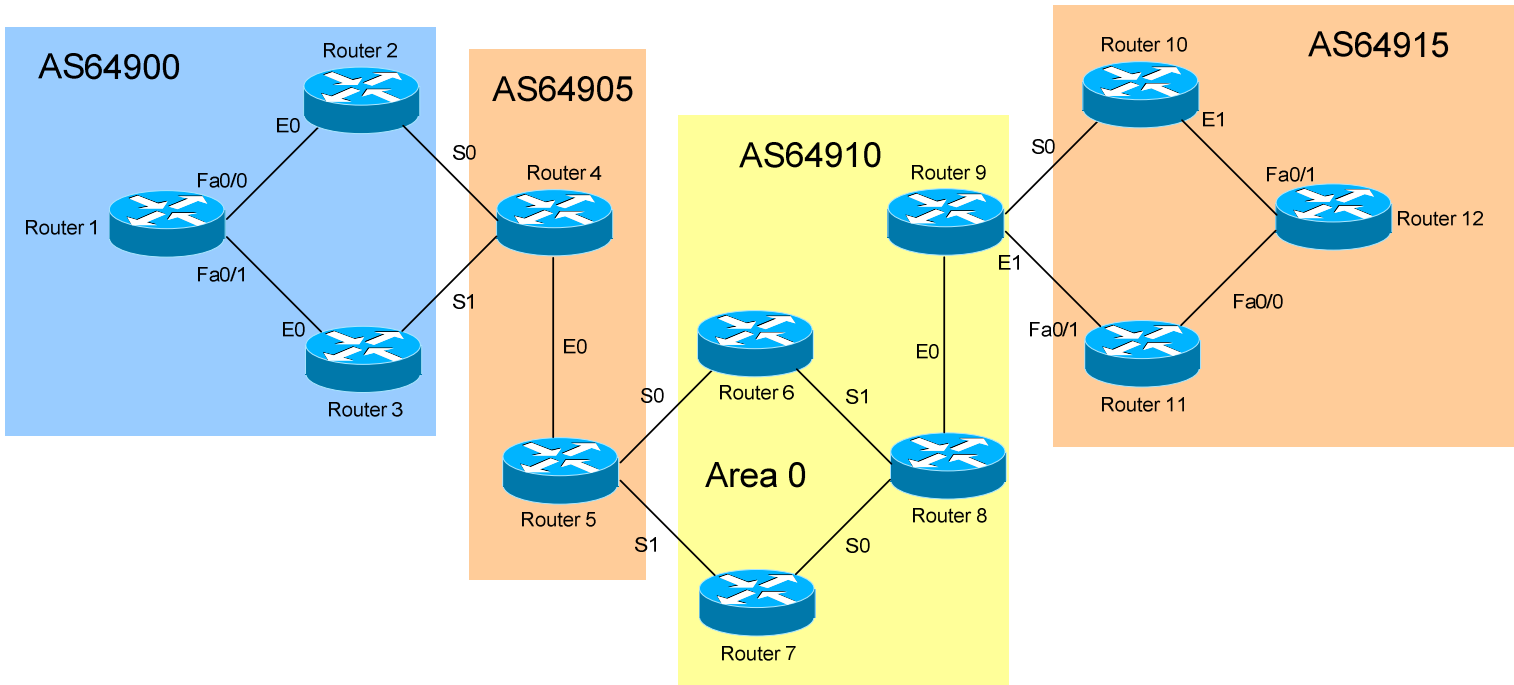


- Basic BGP Lab -

Configuring Basic BGP - 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:

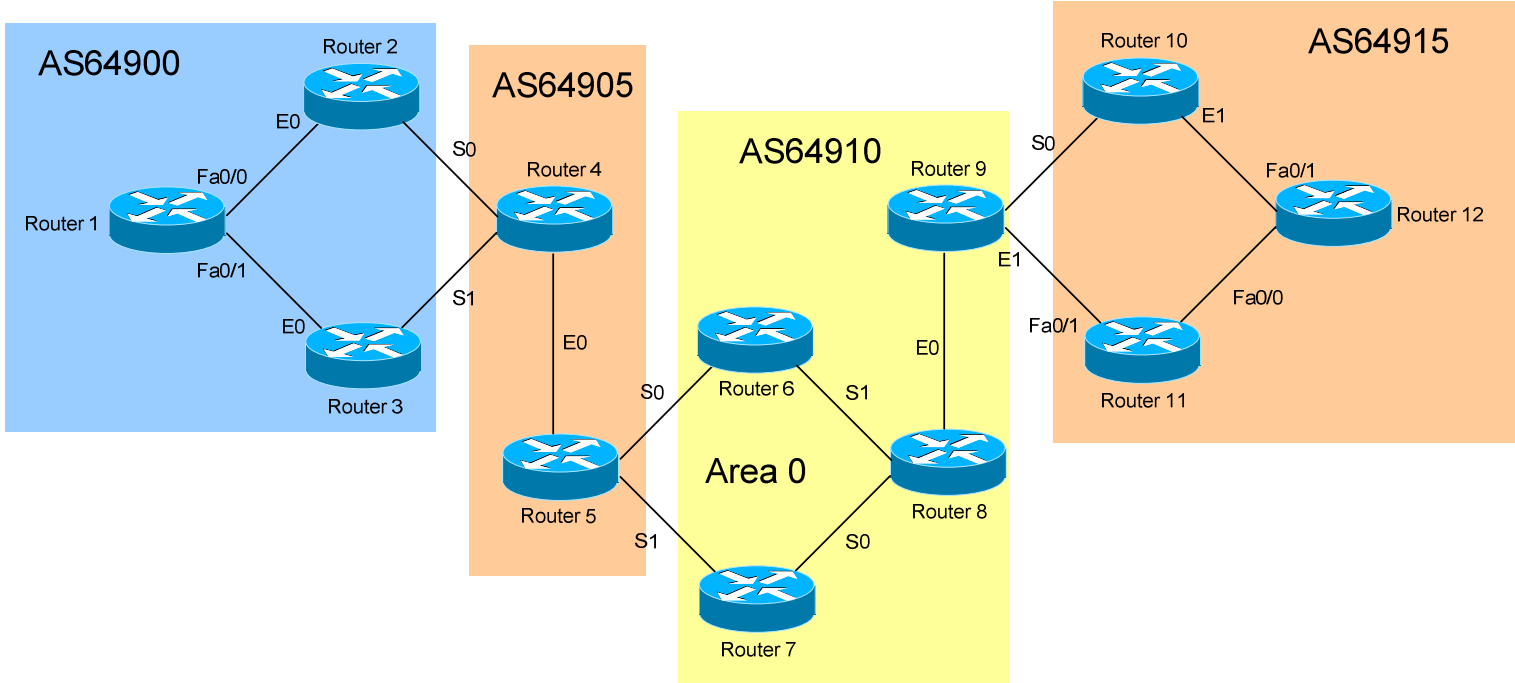
Router 1 – 2 = 192.168.12.x	Router 6 – 8 = 192.168.68.x
Router 1 – 3 = 192.168.13.x	Router 7 – 8 = 192.168.78.x
Router 2 – 4 = 192.168.24.x	Router 8 – 9 = 192.168.89.x
Router 3 – 4 = 192.168.34.x	Router 9 – 10 = 192.168.109.x
Router 4 – 5 = 192.168.45.x	Router 9 – 11 = 192.168.119.x
Router 5 – 6 = 192.168.56.x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

* * *

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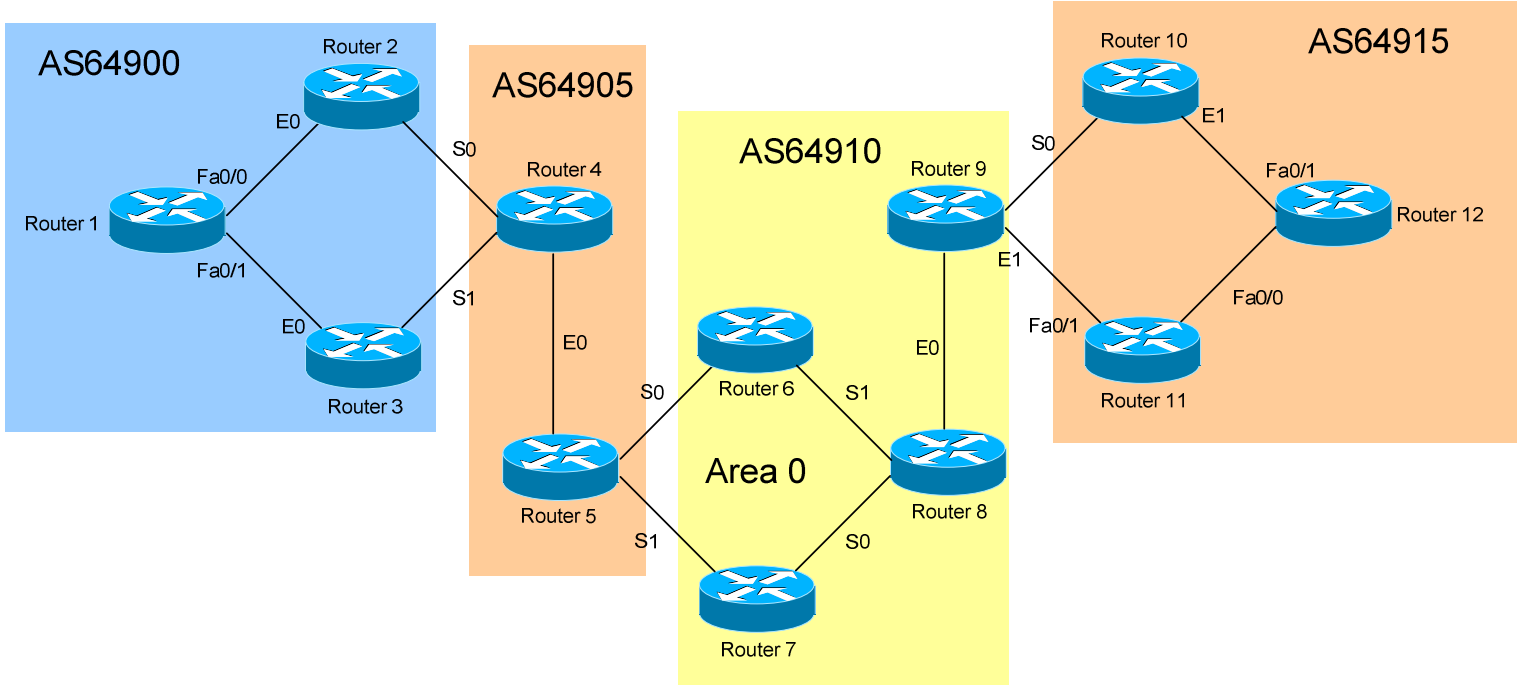


BGP Objectives:

4. Each autonomous system should be configured with an IGP as follows:
 - a. AS64900 – OSPF
 - b. AS64905 – RIP
 - c. AS64910 – EIGRP
 - d. AS64915 – OSPF

5. Do NOT configure the IGP on interfaces connecting to a different Autonomous System. For example, don't configure OSPF on Router 2's Serial0 interface. Ensure that IGP updates are *never* sent or received on these interfaces.

Configuring Basic BGP - Lab

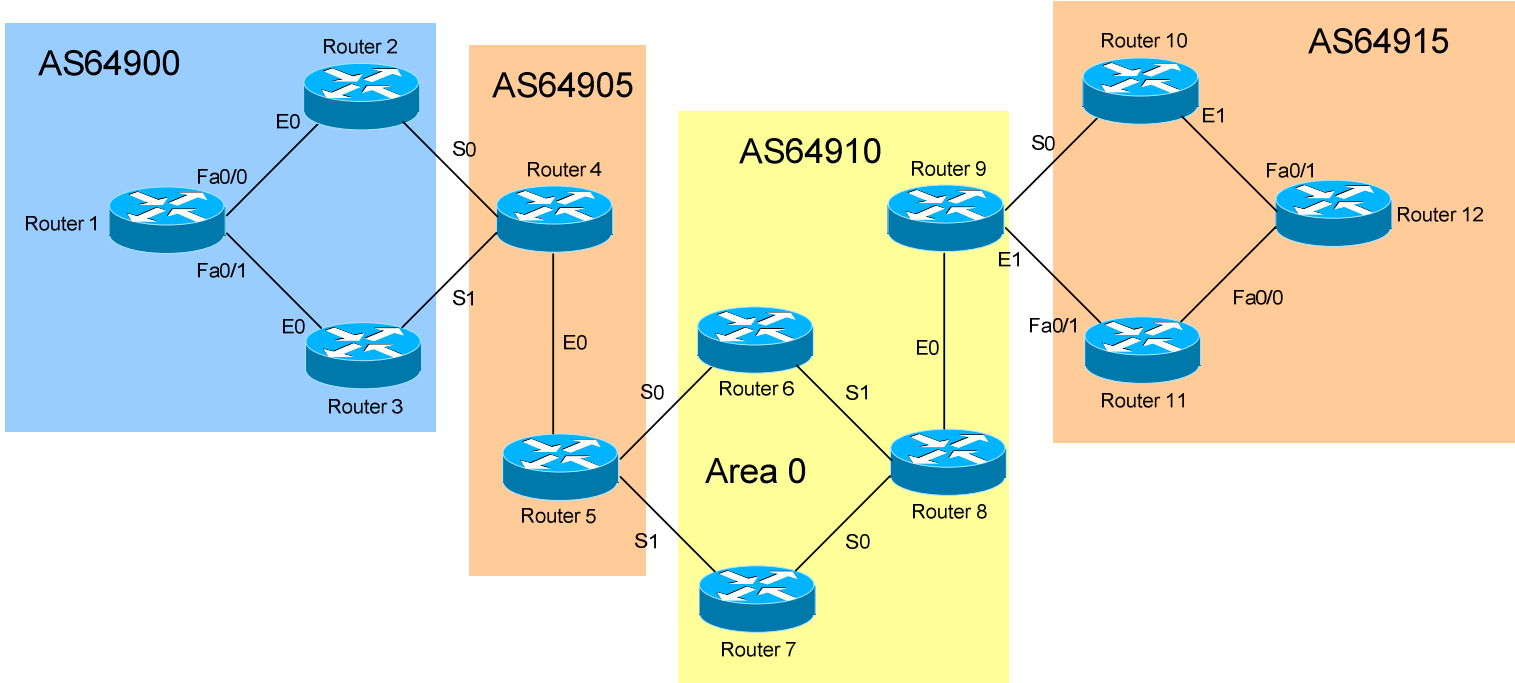


BGP Objectives:

6. Ensure that the loopback interfaces are also included in the IGP process. For the OSPF AS's, place the loopback interfaces in an area other than Area 0.

7. Configure BGP on *all* routers, using the diagrammed Autonomous System numbers.

Configuring Basic BGP - Lab



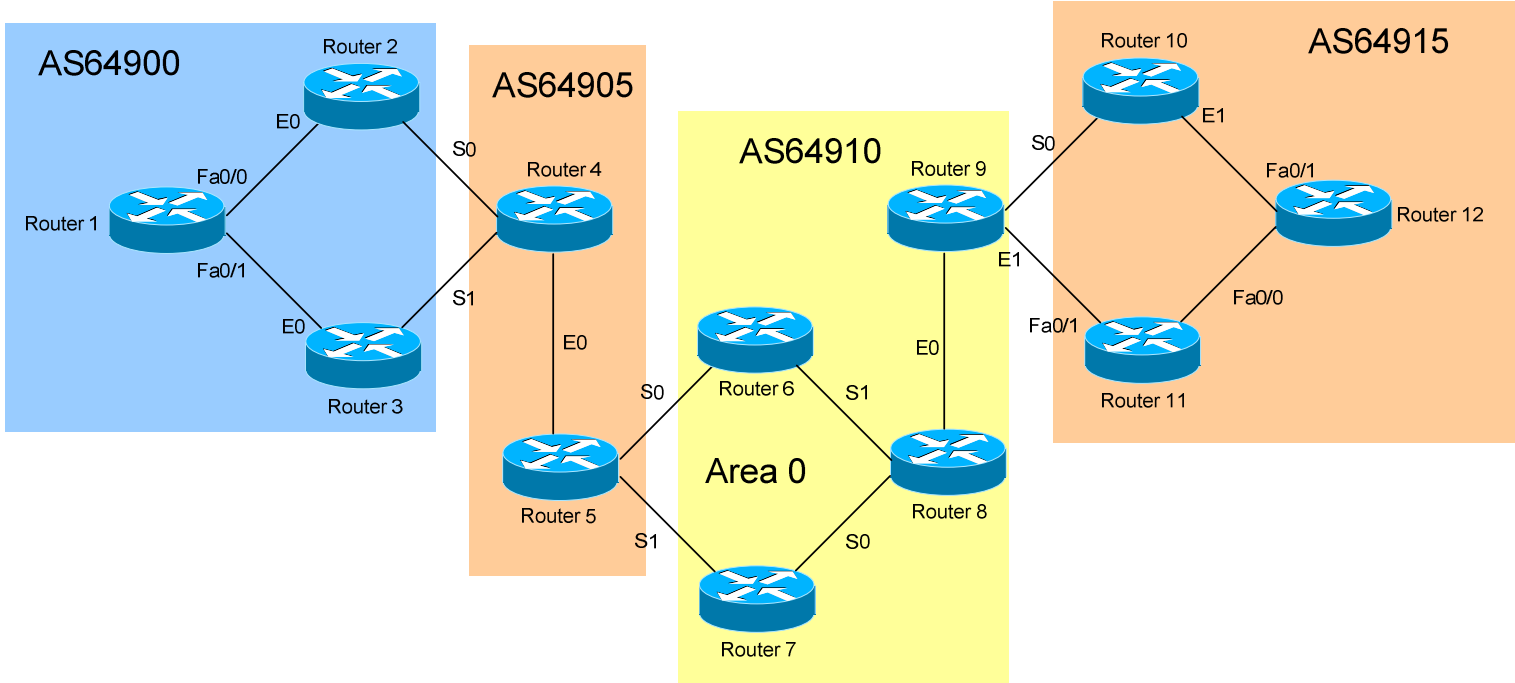
BGP Objectives:

- Form iBGP and eBGP neighbor relationships where appropriate. However, configure Router 1, Router 8, and Router 12 as Route Reflector servers in their respective AS's.

- View your BGP neighbor table. Ensure all neighbors are established.

- Advertise all loopback interfaces within an AS to EBGP peers, *without* using the redistribute command.

Configuring Basic BGP - Lab



BGP Objectives:

11. View the BGP table to ensure the routes have been injected into BGP.

12. Ensure reachability to these loopback interfaces throughout all AS's.

* * *