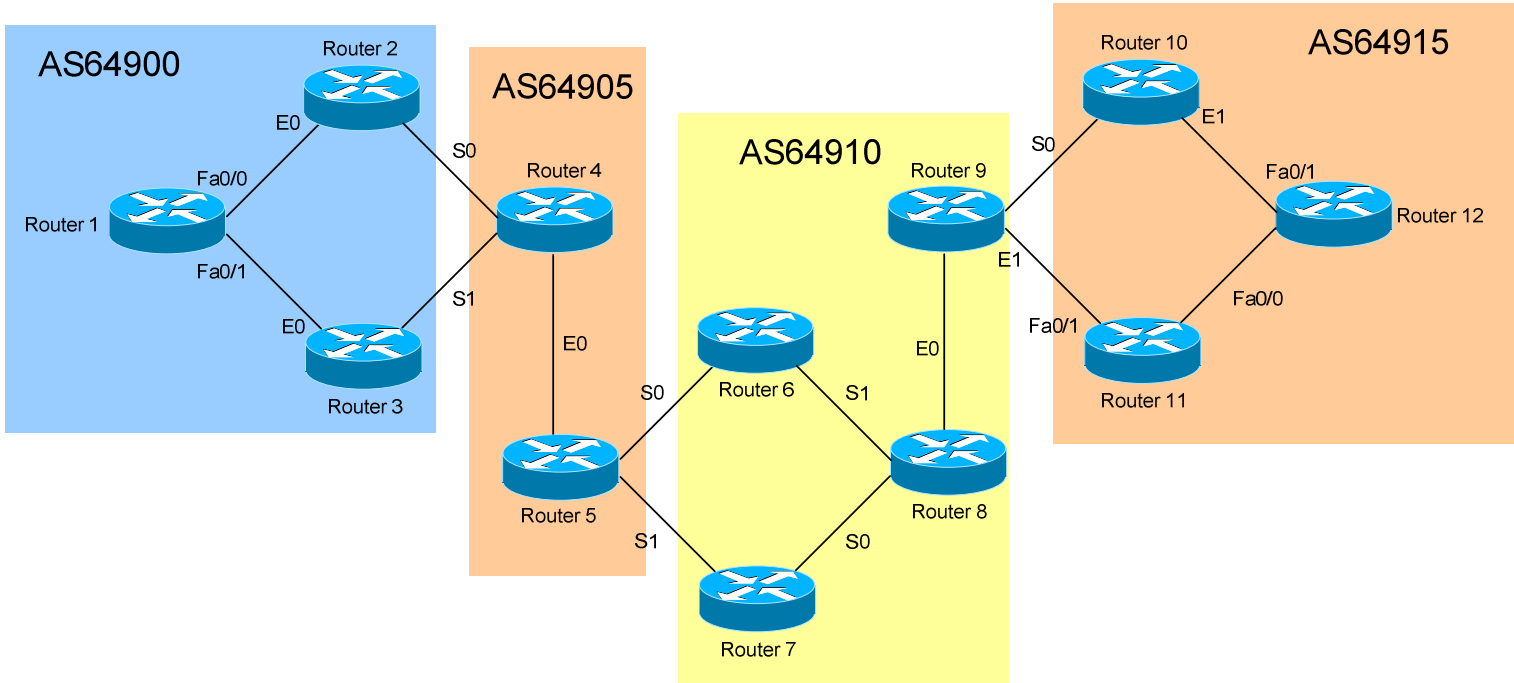


## - Basic BGP Lab -

### 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:
 

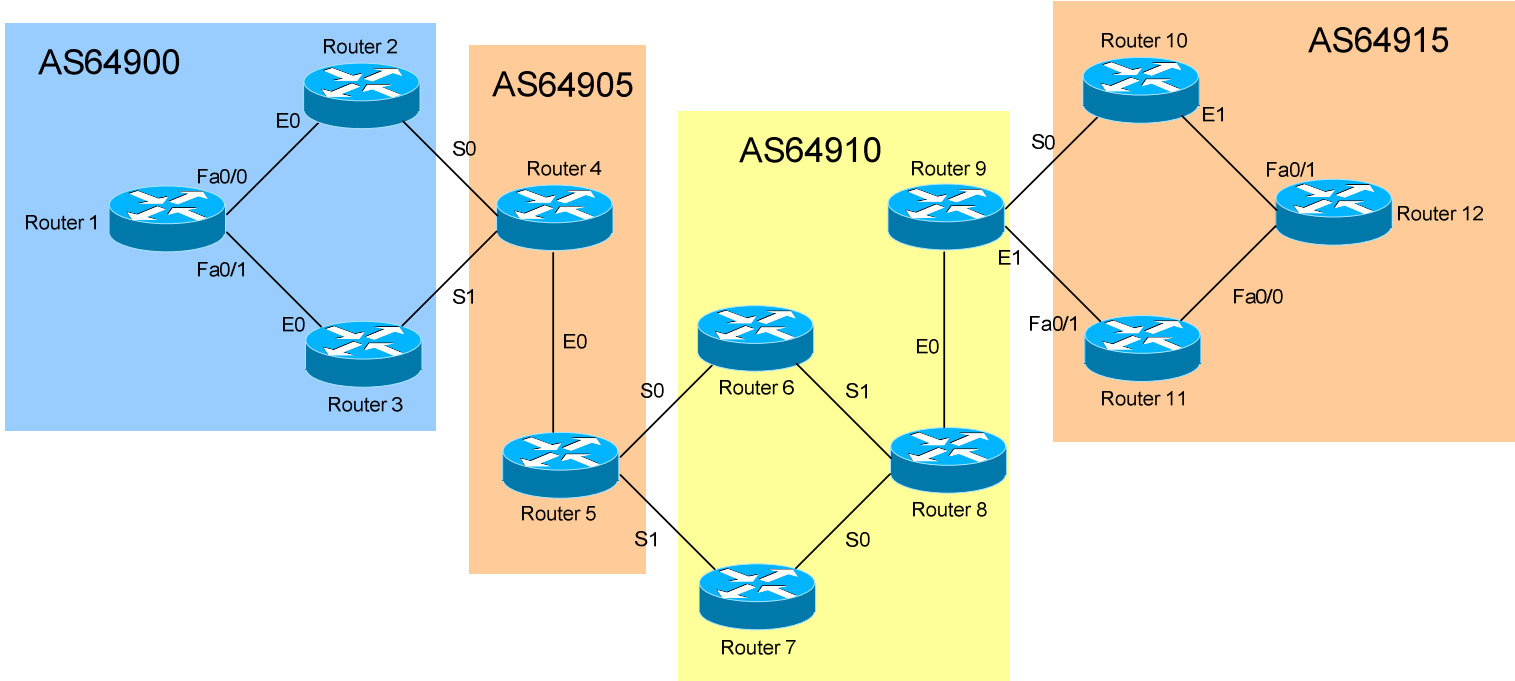
Router 1 – 2 = 192.168.12.x	Router 6 – 8 = 192.168.68.x
Router 1 – 3 = 192.168.13.x	Router 7 – 8 = 192.168.78.x
Router 2 – 4 = 192.168.24.x	Router 8 – 9 = 192.168.89.x
Router 3 – 4 = 192.168.34.x	Router 9 – 10 = 192.168.109.x
Router 4 – 5 = 192.168.45.x	Router 9 – 11 = 192.168.119.x
Router 5 – 6 = 192.168.56.x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



**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

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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.

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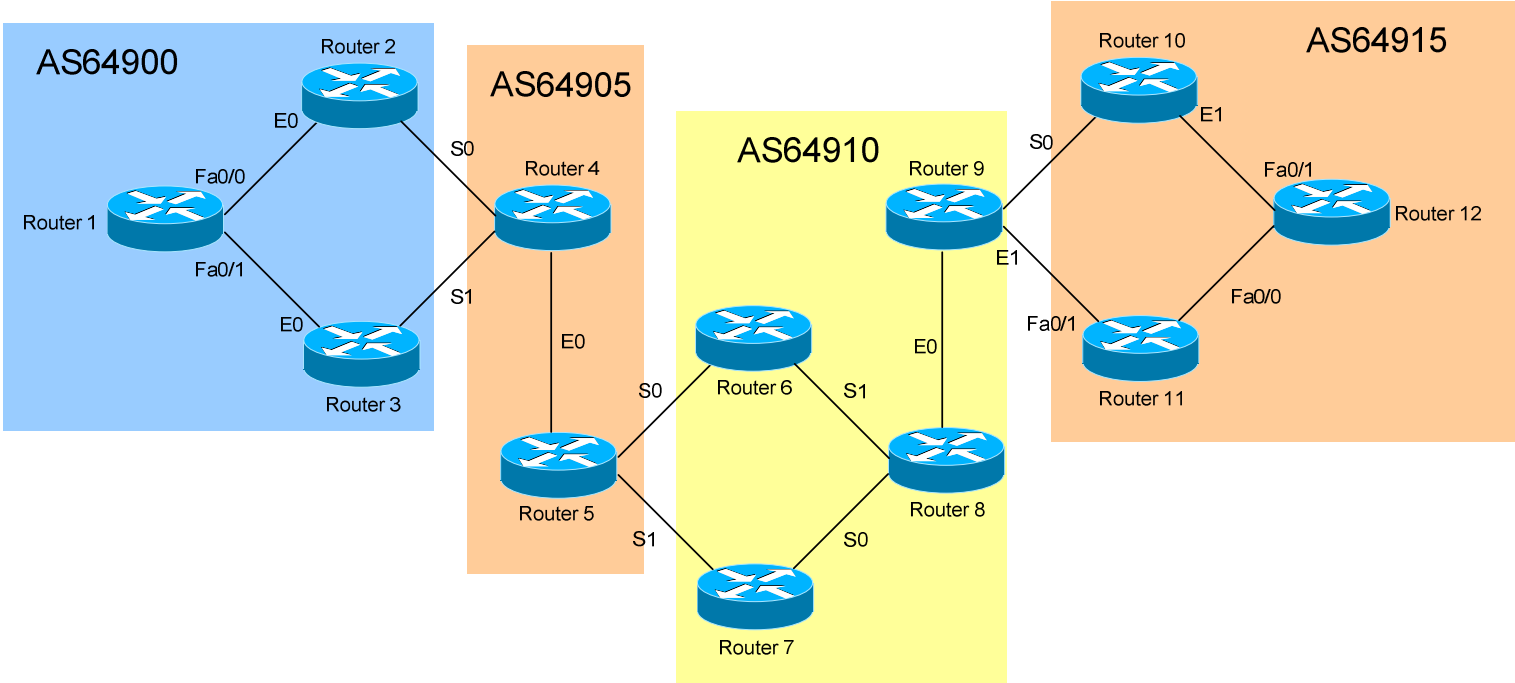
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### Configuring Basic BGP - Lab



### **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.

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

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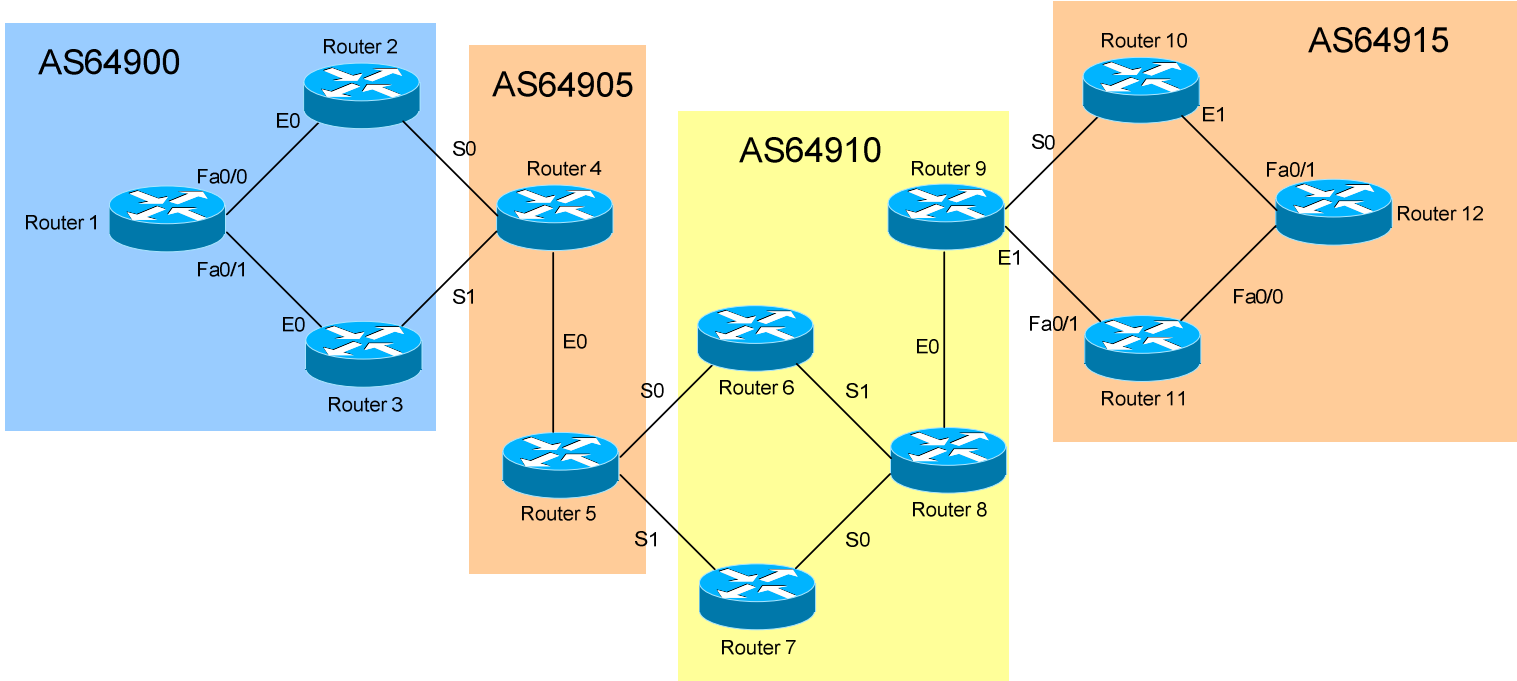
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**Configuring Basic BGP - Lab**



**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.

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

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

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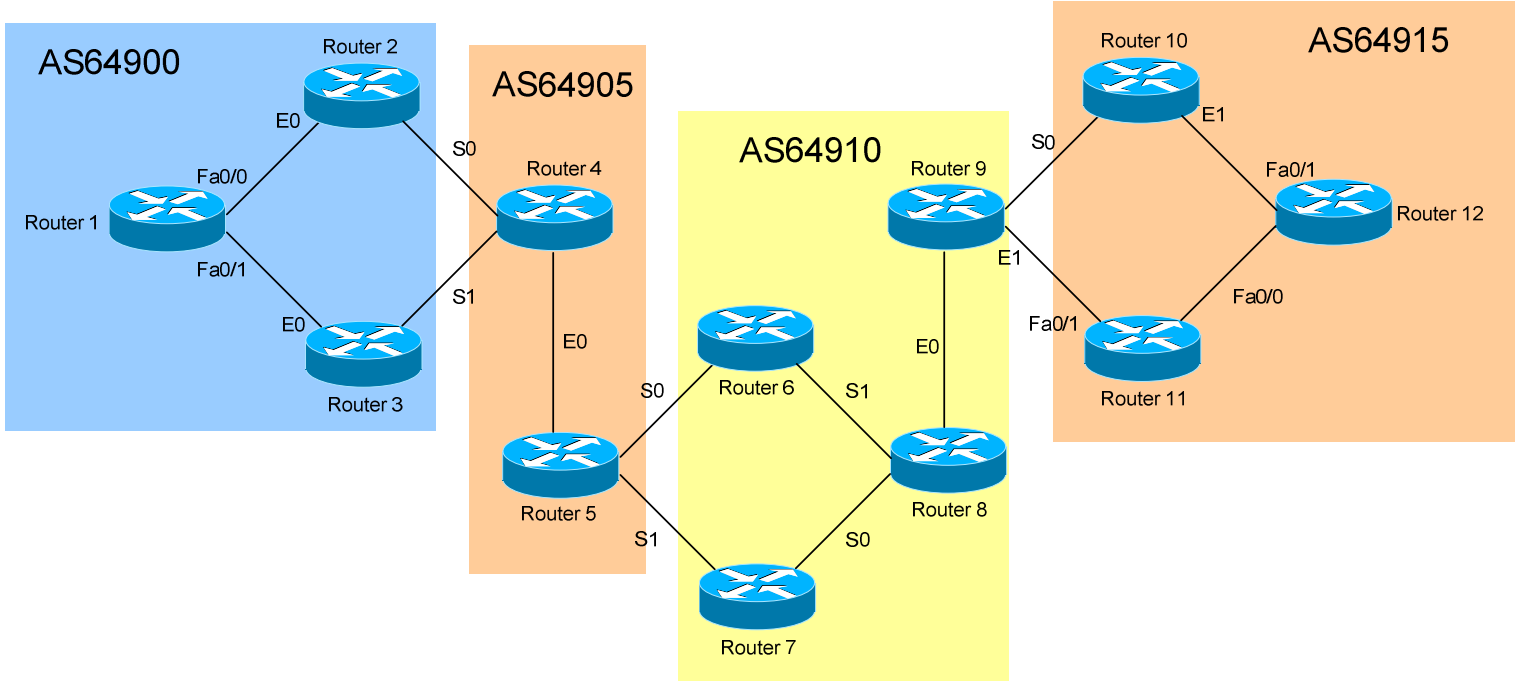
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### Configuring Basic BGP - Lab



### **BGP Objectives:**

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

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

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