**IFT 466 Advanced Computer Networks**

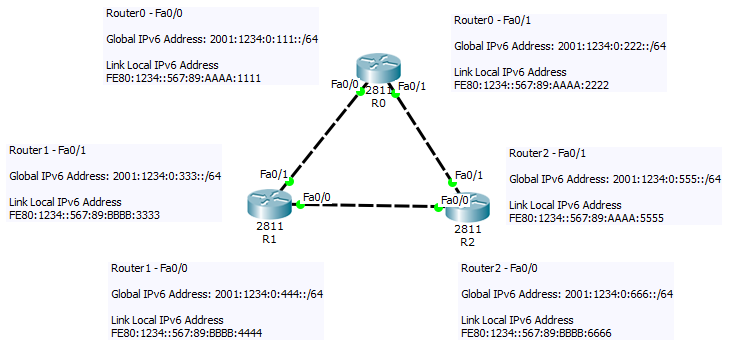
**Lab 14  
EIGRP – IPv6**

After you complete each step, put a ‘√’ or ‘x’ in the completed box

**Objective**To successfully configure EIGRP for IPv6. To configure EIGRP for IPv6, we will carry out the four following steps

* We will configure IPv6 addresses on the routers
* We will enable EIGRP globally on all the routers
* We will then enable EIGRP on the interfaces
* We will verify EIGRP for IPv6 is configured

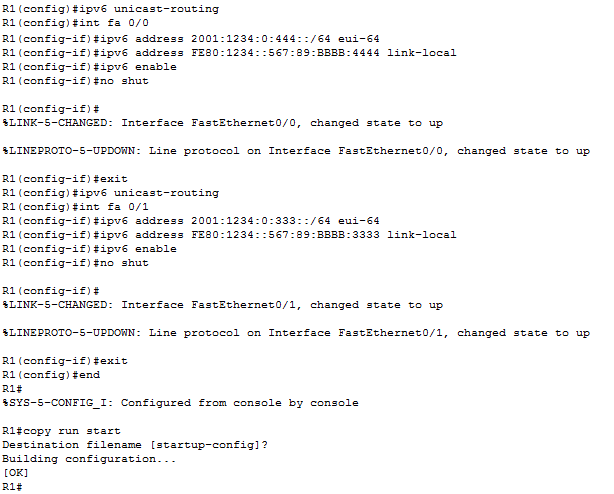
1. Setup the following topology in Packet Tracer



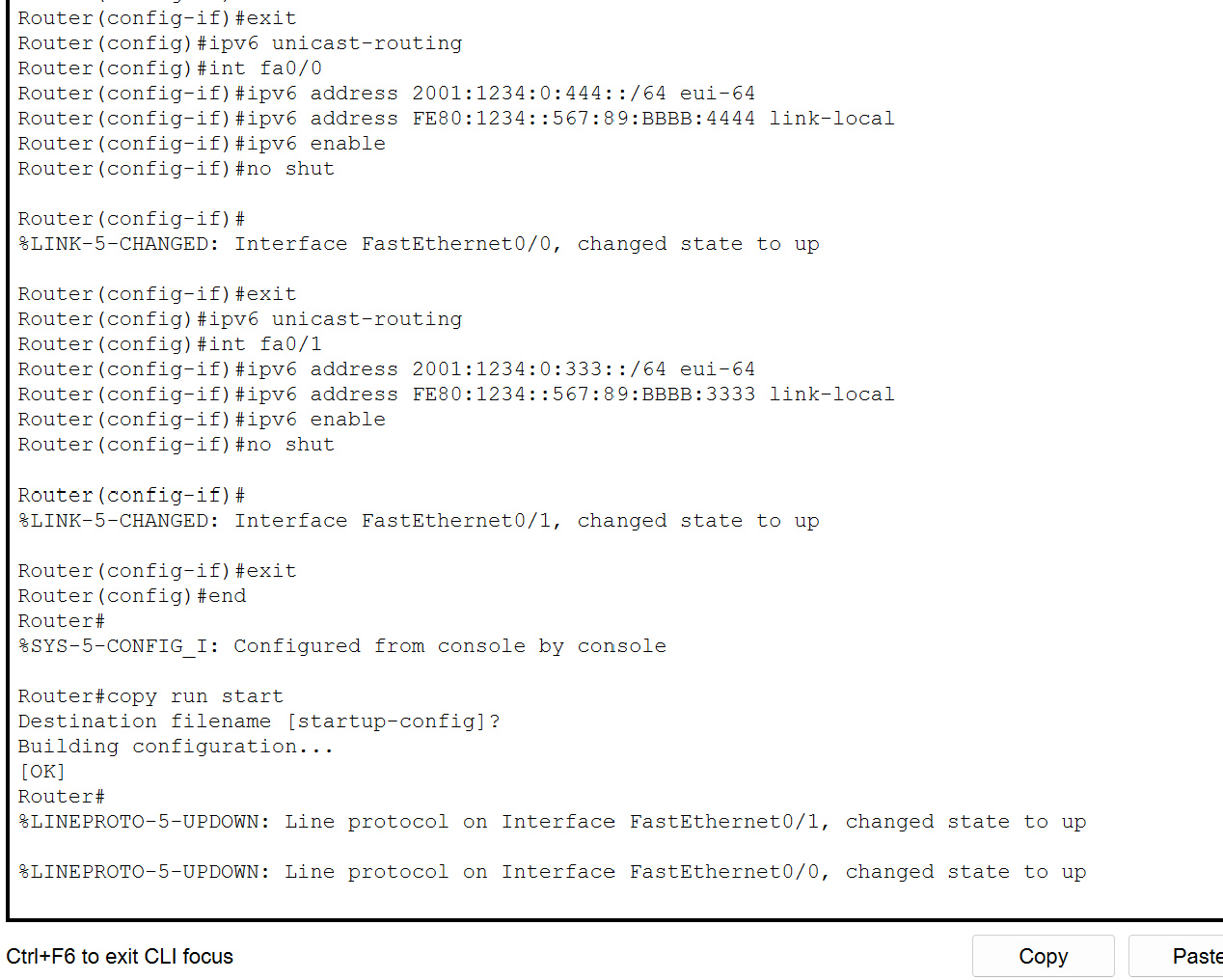


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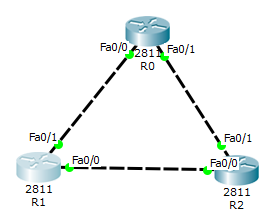
1. Configure IP addresses on all 3 routers. R1 is shown below.

  
 ✓

When you finish the configuration, all the interfaces will be up on R1.   
  
Now perform the same configuration on R0 and R2

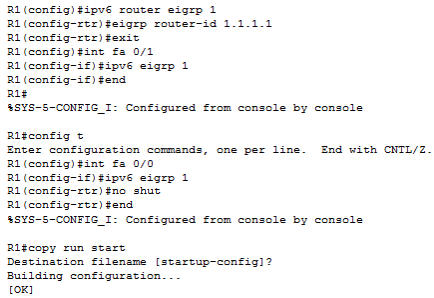


When you complete the configuration on R0/R2, the topology should look like the following image



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1. Now we will configure EIGRP on interfaces and globally on the routers  
     
   We will start with R1





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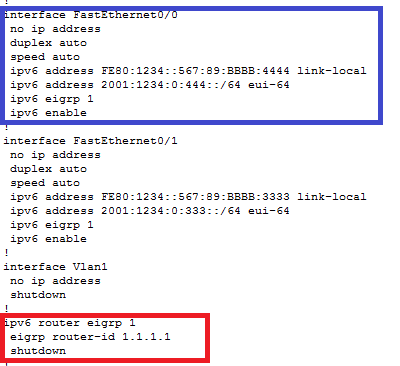
1. Now repeat for R0 & R2



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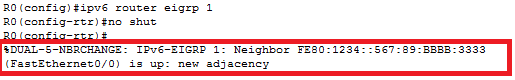
1. You can now see the configuration via show run on r1

As you can see, EIGRP for IPv6 is here (red) & IPv6 configuration is under the interfaces (blue).

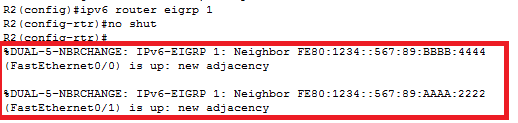


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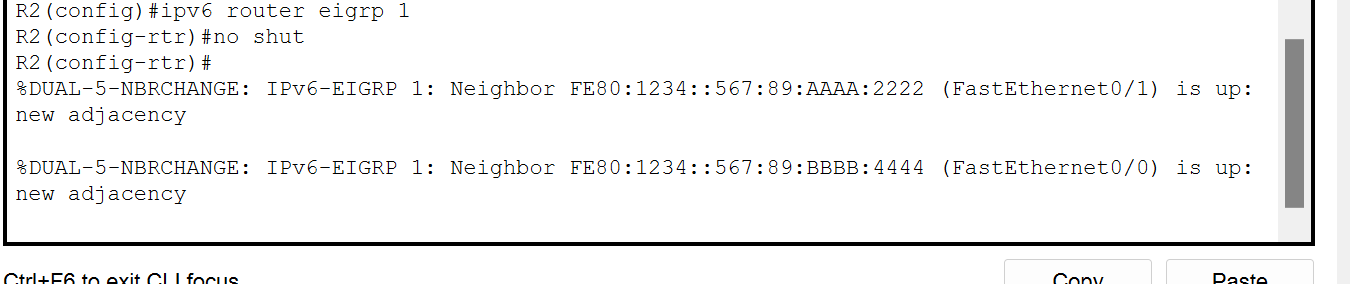
1. Notice the neighbor adjacency pop up when we turn on EIGRP on R0



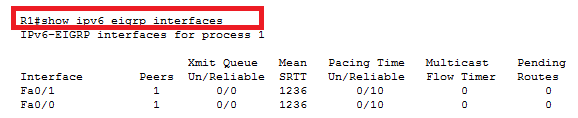
Same for R2



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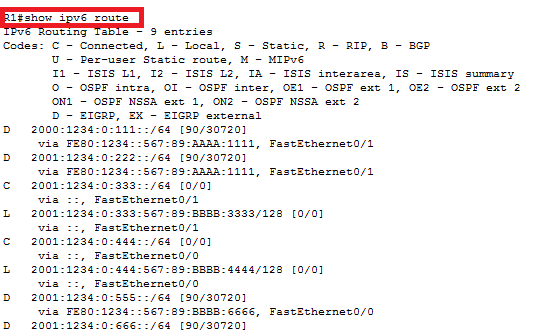


1. Lets now verify the EIGRP configuration on R1. As you can see, fa 0/0 and fa 0/1 are here



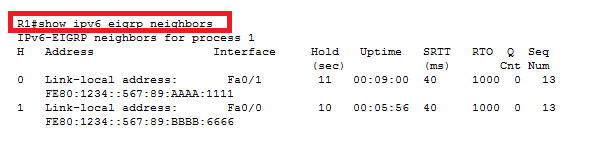
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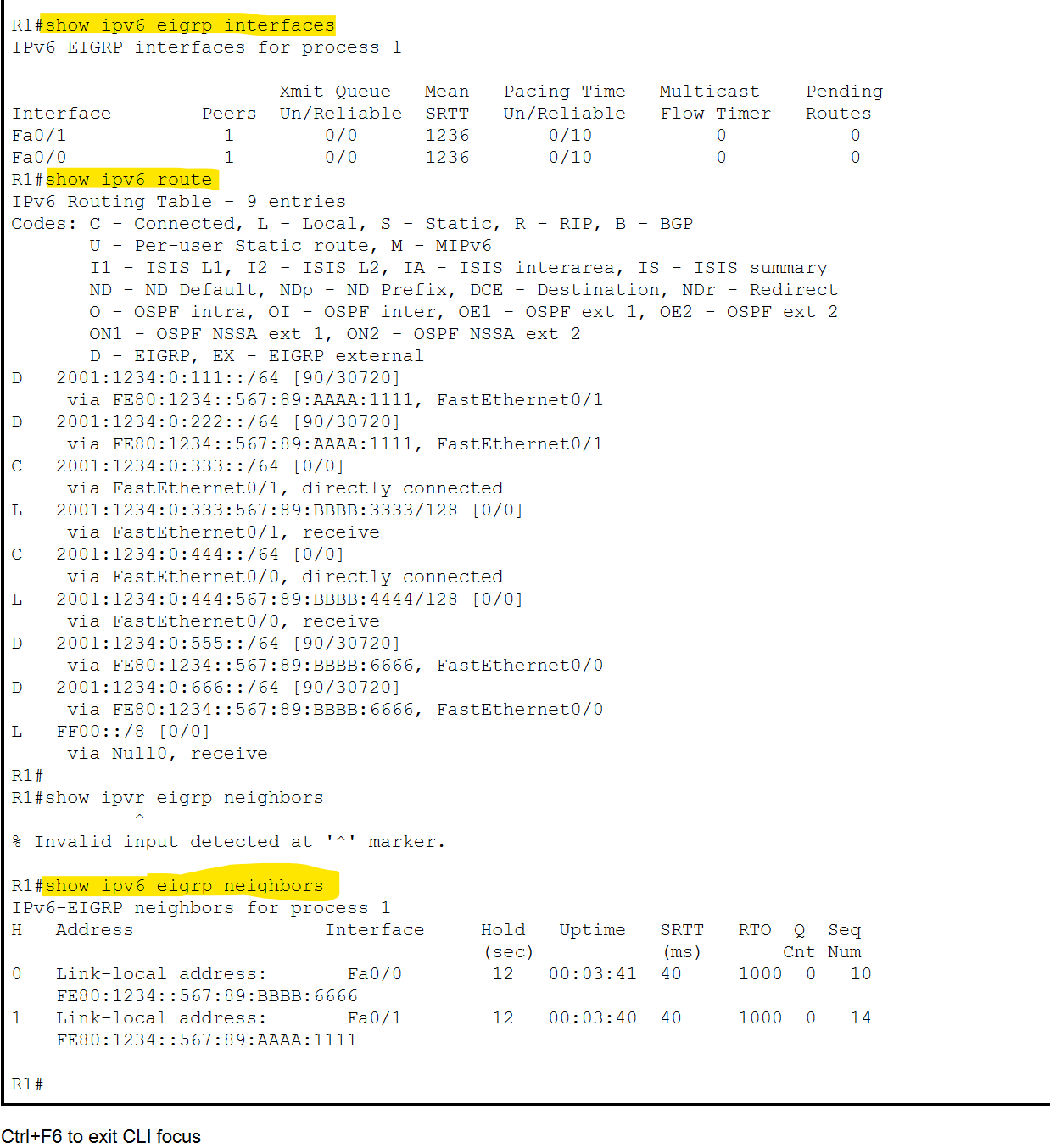
1. Let check out the routes via the show ipv6 route



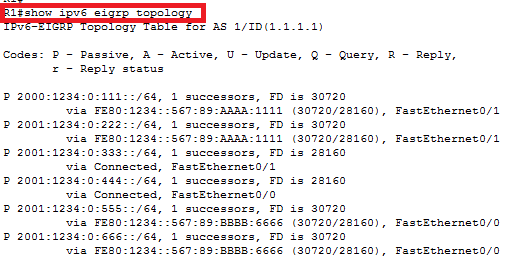
  
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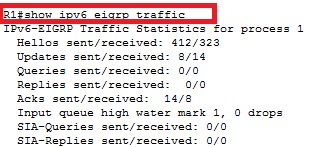
1. Let’s check out more configurations via the 1) show ipv6 eigrp neighbors 2) show ipv6 eigrp topology and 3) show ipv6 eigrp traffic





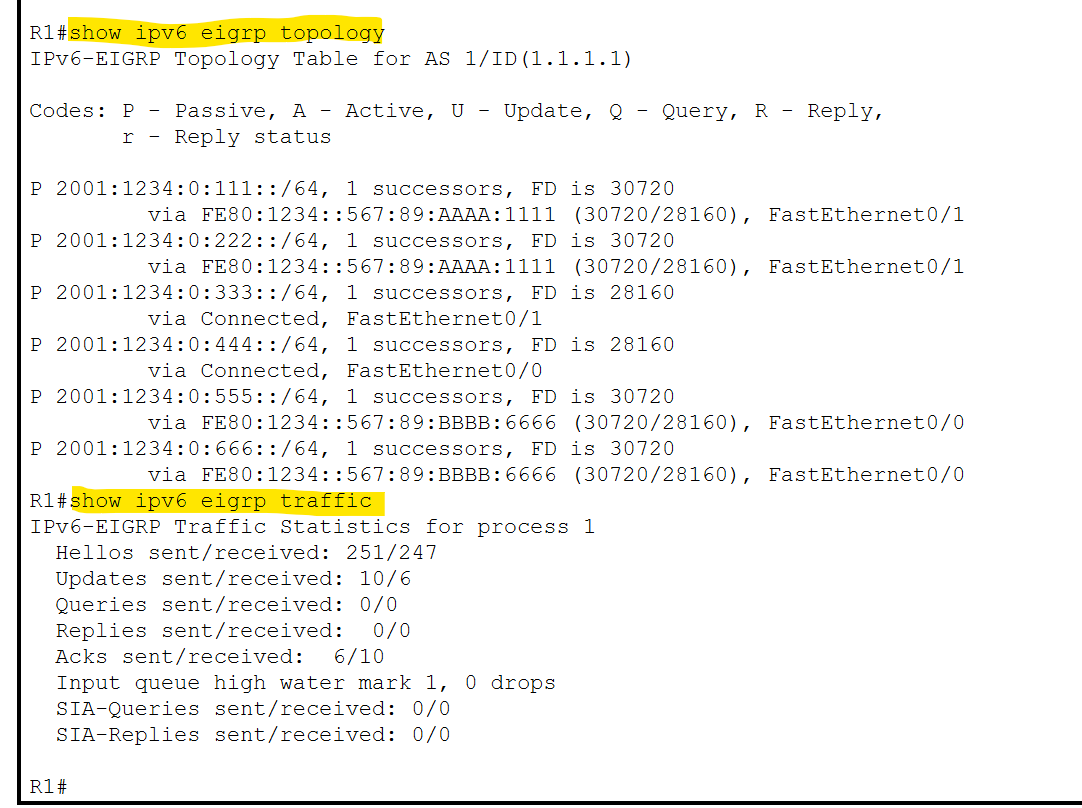
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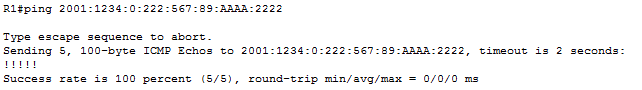




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1. Let us verify by pinging the other routers. Ping R0 (fa 0/1) from R1



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