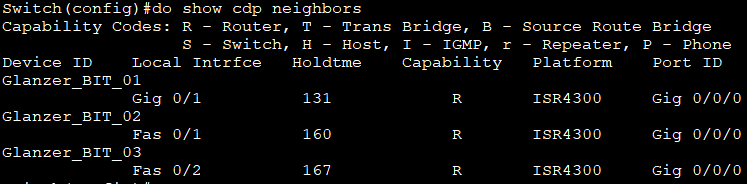
CSC387 Lab 03 – Multi Area OSPF

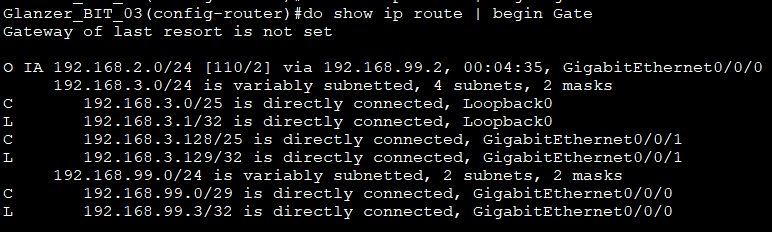
# Verification Steps

1. From router BIT\_01, when you run the **show neighbors command**, you should see both routers BIT\_02 and BIT\_03 listed in the output.

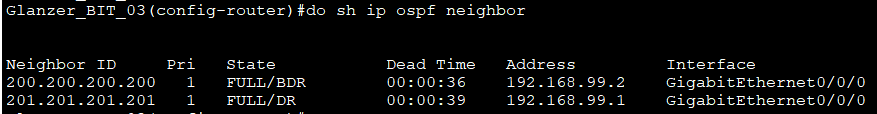
At this point we haven’t configured ospf yet, so I assume this is the show cdp neighbors command. From BIT\_01, I only get the switch displayed as a cdp neighbor, but from the switch I get all 3 routers displayed as cdp neighbors. My googling around found this similar question with a relevant top-answer:  
<https://learningnetwork.cisco.com/s/question/0D53i00000Kt5Xp/why-doesnt-cdp-go-one-switch-further>

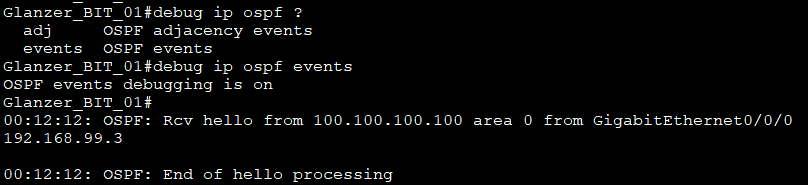
Apparently cdp doesn’t cross cisco devices (switches included.) Please let me know if this information is outdated/irrelevant/should not be the case. Same if this behavior is a result of any misconfiguration.

 All that being said: **I’m going to leave a screenshot of the switch in this step. Since it is currently displaying each router as described above.**

1. On router BIT\_03 run a **show ip route** and look at the routing table. You will see networks that belong to router BIT\_02 (**192.168.2.0/25** and **192.168.2.128/25**).

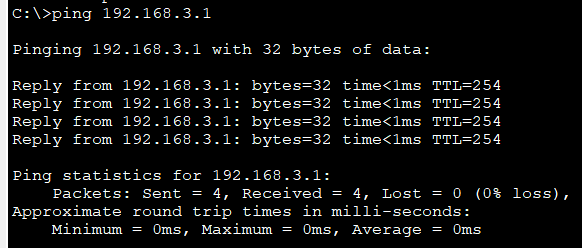
I believe it is showing 192.168.2.0/24 because I added the summarization for area 2 (which contains both subnets represented by the 25th bit) so BIT\_3 recognizes it as a single /24 link instead of two /25s

1. From router BIT\_03, run a **show ip ospf neighbor** and you should see the other routers in the output. Neighbor ID column will show the router IDs that you set. BIT\_01 Should be a DR and BIT\_02 will be a BDR. 
2. On routerBIT\_01, turn on OSPF debugging (**debug ip ospf packet**) and look for a hello packet. Remember, in a point-to-point network, these will happen every 10 seconds or so. Looks like this command has been changed to events instead of packet



1. Once everything is configured, you should be able to ping from Laptop 1 to BIT\_03’s

loopback adapter.



# What to Turn In

Go through each of the verification steps and take a screenshot. Please try to show each step in a single, clear screenshot to cut down the number of images. Also, paste all screenshots into a single Word/PDF document. Do not upload them to D2L as individual images – I won’t grade them.