



REQUIREMENTS

0. Do basic configuration: no ip domain-lookup, passwords, description etc
1. Configure according to the diagram shown above.
2. Disable auto-summary in EIGRP.
3. Configure passive and non-passive interfaces for EIGRP as appropriate, including loopbacks.
4. Create a static default route on R1.

5. Configure OSPF router ID.
6. Ensure that all loopback interfaces are advertised in OSPF with the correct masks.
7. Configure passive and non-passive interfaces for OSPF as appropriate including loopbacks.
8. Summarize the loopback interfaces on R2 to the backbone with the most efficient mask
9. Redistribute EIGRP onto OSPF with a metric of 1000, but do not include the network 10.10.10.0/24 .

10. Configure R3 to be in BGP AS 65100 and R4 to be in BGP AS 65400 .
11. Peer appropriately on R3 and R4 using BGP.
12. Advertise R4's loopback 1 interface into BGP.
13. Make BGP on R3 advertise the 172.16.0.0/16 network.
14. Make AS 65100 prefer the T3 link to AS 65400 networks by modifying the LocalPreference on R3.
15. Make AS 65400 prefer the T3 link to AS 65100 networks by modifying the MED on R3.

16. Make BGP on R4 send to all peers a default route, using: **neighbor x.x.x.x default-originate**
17. Configure R3 to send this default-route to R2, using OSPF .

18. Configure IPv6 addresses on the R1-R2 link and on loopback 6 on R1.
19. Configure dynamic IPv6 routing on R1 and R2.

SOME CHECKPOINT

- A) On R1: ping 192.168.4.1 source 172.16.1.129
- B) On R4: ping 172.16.1.129 source 192.168.4.1
- C) No explicit static routes, no redistribution (except EIGRP into OSPF on R2) but implicit rules are OK like
 "ip route 0.0.0.0 ???? ???? " and
 "ip route ???? ???? null 0"
- D) On R2: ping R1's lo6-interface using IPv6