

## ROUTERGODS CCNP ROUTE EIGRP Part 2

Topology Used - Topology 11 with basic IP addressing

Start eigrp on all routers/interfaces

### Task 1 - Passive Interface

R6 wants to advertise the 10.10.67.0/24 network to EIGRP R5, but doesn't want to neighbor up with R7

- Use the passive interface command to accomplish this

### Questions

- What exactly does the passive interface command do?
- Is there any difference in using passive interface in EIGRP versus RIP or OSPF?
- What would you do if you WANTED to neighbor up with R7, but didn't want to send any updates to it.

### Task 2 - Distribute Lists

- Configure a distribute list on R6 to block EIGRP updates to R7
- Configure a distribute list on the appropriate router so that R4 doesn't receive a network update about the 99.99.99.0/24 subnet on its Fast0/0 interface. All other routers and interfaces should receive the update normally.

### Questions

- Why would you want to use a distribute list? Or asked another way, is there a good reason why you wouldn't want every route advertised to a neighbor?
- What are the dangers of using a distribute list?

### Task 3 - Summarization

- The network admin wants all the 100.100.0.0/24 addresses summarized. Configure R4 to send out summaries out the appropriate interfaces

### Questions

- What does summarization do to the routing table?
- What are the benefits of summarization?
- What are the dangers of summarization?

## Task 4 - Summarization and query messages

- Start a debug on R3 and R5 to look at eigrp packets
- Delete lo2 from R4
- Notice the debugs (you might want to copy the output to a text program like Notepad++)
- Now kill lo0 from R4 and notice the debugs .... any differences?

## Questions

- What is the normal behavior of eigrp queries (like when an interface dies)?
- What does summarization do to the eigrp queries?

When you have a summary route, your router still sends the query to the neighbor, BUT your neighbor say, "you FU\*&(\*&\*& idiot, you're the one with that route, don't ask me"

## Additional Resources

PacketLife EIGRP goodbyes - <http://packetlife.net/blog/2008/aug/14/eigrp-goodbyes/>

Petri.co.il EIGRP distribute lists -

<http://www.petri.co.il/how-to-use-a-distribute-list-to-filter-out-routing-updates-in-cisco-ios.htm>

RouterGods YouTube - <http://www.youtube.com/watch?v=u7hKjMdyt14>