EIGRP - Things to Remember

1. The IP header of an EIGRP packet specifies protocol number 88. 2. To establish neighbor relationship, the neighbors must be in the same IP subnet. While EIGRP supports secondary IP addresses and subnets, EIGRP sources its messages always from the address in the primary subnet, so the IP addresses of neighbors must be in the subnet of the primary subnets. Routers will not form EIGRP neighbors over secondary networks. 3. Two sides must also match metric weights (K values) in order to form EIGRP neighbor adjacency. 4. Unlike OSPF, the hello and hold time parameters do not need to match to form EIGRP neighbor relationships. 5. By default, the hold time is three times the Hello interval; 180 seconds for low-speed non-broadcast multiaccess (NBMA) networks and 15 seconds for all other networks. 6. EIGRP auto-summarizes connected, internal routes across classful network boundaries. 7. ?*passive-interface*? command for an interface does not stop advertising of that interface in the EIGRP updates. 8. Default route can be advertised in the EIGRP domain several ways: e.g. (1) static route to 0.0.0.0, with the ?*redistribute static*? command, (2) ?*ip summary-address 0.0.0.0 0.0.0.0 ?*? command, and (3) ?*ip default-network* ...? command. 9. Unlike RIP, for EIGRP to propagate the default route, the network specified by the ?*ip default-network ?*? command must be advertised into EIGRP. 10. While generating default route, "*ip summary-address eigrp 100 0.0.0.0 0.0.0.0 250*" should be used along with higher administrative distance (floating route) if this router already has a default route in its routing table leaned via any other means. Otherwise the default route (to null interface) generated by this command, may black hole the traffic. 11. leak-map option ("*ip summary-address eigrp ... leak-map ...*") is only available under physical and virtual-template interfaces. Again, if the leak-map keyword is configured but the access-list does not exist or the route map does not reference the access list, the summary address and all component routes are sent. 12. leak-map option with ?*eigrp stub* ...? command has the same functionality as leak-map option with ?*ip summary-address ?*? command. 13. Unlike RIP, EIGRP only needs ?*neighbor ?*? command to send unicast updates. ?*passive-interface ?*? command should not be used along with it; otherwise it will stop sending EIGRP hello packets. 14. ?*passive interface ?*? command in the frame-relay physical interface does not inherited by the subinterfaces. So configuring this command on the frame-relay physical interface does not affect EIGRP process at all. 15. Unlike RIP, with EIGRP split horizon is enabled on all frame-relay multipoint interfaces (physical or subinterface). The ?*show ip interface*? command doesn't verify split horizon for EIGRP, the only way to verify it, is by checking running configuration. 16. In EIGRP authentication, key number must match along with key string on both sides. If configured with multiple keys, EIGRP only sends the lowest numbered valid key but accepts any valid key. 17. The administrative distance filtering technique only works for EIGRP internal routes, doesn't work for EIGRP external routes. The distance of external EIGRP cannot be changed on a per prefix basis. 18. The ?*default-metric ?*? command does not affect in EIGRP-to-EIGRP redistribution. 19. To change the EIGRP metric, it's better to use ?*delay*?, so it will not affect other protocols (OSPF) dependent on ?*bandwidth*?. 20. The ?*ip bandwidth-percent* ...? command can have values greater than 100 percent if the bandwidth is configured (by the ?*bandwidth ?*? interface configuration command) artificially low due to policy reasons. 21. A route becomes active when no feasible successor exists in its topology table. An active route becomes passive when a reply has been received from every queried neighbor. 22. A route map may be configured with both the ?*redistribute* ...? and the ?*distribute-list* ...? commands in the same routing process. 23. ?*gateway*? option in ?*distribute-list* ...? command is only available with prefix-list, but not with ACL. 24. EIGRP does not automatically summarize external routes. 25. The router originating the external route inserts its EIGRP router-id in the update. If an update is received back in with the router-id matching the local router-id, the update is dropped. * EIGRP - Things to Remember . Pdf | **Download** By Zakir A. Khan