

RIPv2 - Things to Remember

1. The RIP process operates from UDP port 520. 2. The metric used by RIP is hop count, with 1 signifying a directly connected network of the advertising router and 16 signifying an unreachable network. 3. RIP sends periodic updates every 30 seconds minus a small random variable that prevents the updates of neighboring routers from becoming synchronized. 4. Default route can be advertised in the RIP domain several ways: e.g. (1) static route to 0.0.0.0, with the `?redistribute static?` command, (2) `?default-information originate?` command, and (3) `?ip default-network?` command. 5. With RIP, `?default-information originate?` command advertises a default route even if a default route does not exist in the routing table. The route map referenced in this command cannot use an extended access list; it can use a standard access list. 6. With RIP, `?ip default-network?` command will work only if (1) the network address is a classful network that is not directly connected, and (2) this classful network is in the local router's IP routing table, via any means. 7. `?ip default-network?` command will work only if (1) the network specified in the command is a classful network, and (2) the router must have a directly connected interface onto the specified classful network. 8. Unlike EIGRP the key numbers do not need to match for RIP authentication. 9. Unlike EIGRP the `?neighbor?` command under RIP process does not automatically suppress the sending of broadcast or multicast updates. The additional `?passive-interface?` command is required to accomplish this. 10. In RIP, route feedback may occur when generating summaries because RIP does not generate a route to Null0 like EIGRP, OSPF, and BGP. Possible solutions are static route to Null0, distribute-list inbound filtering. 11. Route feedback may also occur when generating a default route using `?default-information originate?` as RIP does not need to have a default route installed in the routing table. Possible solutions are static default route to Null0, distribute-list inbound filtering of default route. 12. Supernet advertisement (advertising any network prefix less than its classful major network) is not allowed in RIP route summarization (`?ip summary-address rip ?`). Only one summary address can be configured for each classful subnet. 13. Extended ACLs when called as distribute-list in IGP have a different meaning than in redistribution or as in BGP. In BGP and redistribution the `?source?` field in the ACL represents the network address, and the `?destination?` represents the subnet mask. In IGP distribute-list the `?source?` field in the ACL matches the update source of the route, and the `?destination?` field represents the network address; e.g. `?access-list 100 deny ip host 155.1.0.3 host 155.1.7.0?`. 14. The interface command `?ip rip triggered?` enables the router to send triggered updates only when there is a topology change. This command is only available on point-to-point serial links and must be configured on both ends of the link before taking affect. 15. `?validate-update-source?` does not validate source (if it is in the same subnet) of `?ip unnumbered?` interfaces. 16. If we want to prevent the sending of RIP updates to a new router upon joining in an existing RIP domain, we can configure either (1) RIP authentication, or (2) unicast RIP updates on the existing RIP routers. 17. The IP-RIP Delay Start feature (`?ip rip initial-delay ...?`) is used on Cisco routers to delay the initiation of RIPv2 neighbor sessions until the network connectivity between the neighbor routers is fully operational, thereby ensuring that the sequence number of the first MD5 packet that the router sends to the non-Cisco neighbor router is 0. 18. If we have high-end router on one side and low-speed router on other side, then we can use `?output-delay ??` command on the high-end router to increase the interpacket delay for RIP updates and we can use `?input-queue ??` command on the low-speed router to increase the size of RIP input queue. 19. If an interface is configured with secondary IP addresses and split horizon is enabled, updates might not be sourced by the secondary address. One routing update is sourced per network number unless split horizon is disabled. 20. If split horizon is enabled, neither automatic summary nor interface summary addresses are advertised. * RIPv2 - Things to Remember .Pdf | Download By [Zakir A. Khan](#)