# R&S Quick Notes ? IGP?s

RIP] - Know your filters: Offset-list, Distribute-lists, distance command. - With filters read carefully: ?between 25 & 45? or ?from 25 to 45?. - Know your prefix-lists or alternatively using ACL's instead. - ?passive interface? command, ONLY stops the sending of updates out the interface. Interface will still receive and process those updates. Passive interfaces will still be advertised in other updates. EIGRP - Advertising a default route out one interface: ?ip summary-address eigrp [AD 0.0.0.0 0.0.0.0? - To see if a neighbor is configured as STUB, ?show ip eigrp neighbors [detail? as look for ?CONNECTED SUMMARY' - On frame-relay multipoint interfaces, don't forget to disable split-horizon. ] - External EIGRP routes AD (admin distance = 170) can NOT be changed on per prefix basis. ] - Metric weight values: 1 0 1 0 0 = Default 0 0 1 0 0 = Only DLY 1 0 0 0 0 = Only BW 3 0 1 0 0 = BW has 3 times more weight reference than DLY - Metric formula: Metric = ((107 / BW) + (DLY/10) ) * 256 OSPF - The Neighbor IP used with OSPF distance command is the Neighbors Router-ID. ] - ?area range? summarize type 3 LSA'. - ?summary-address? summarize type 5 & 7 LSA's. - Auto-cost reference BW (Default = 100mb), formula = Ref-BW/Int-Bw. - Switches do no support the interface command ?ip ospf {pid} area {area-id}? . - OSPF path selection: O > O*IA > O*E1 > O*E2. - Using E1 metric type : Packets will be routed out the closest exit point of the network. - Using E2 metric type : If you want packets to exit your network at the closest point to their external destination. - Don't forget with hub and spoke topology, ?ip ospf priority 0?. - PITFALL, when forbid to use RID, Loopbacks created later on might change the DR on you network after a reload. - PITFALL, when forbid to use RID, Later requested to configure the same loopback on two routers, could break your adjacencies, as two router cant peer with the same RID. - ?no capability transit? ? Mimics OSPFv1 behaviour for all data traffic to pass through Area-0. - ?max-metric? ? Configures OSPF stub configurations ] - ?max-lsa? ? Limit amount of non-local LSA's - ?timers throttle lsa all? ? Slow down update rate. - ?timers pacing lsa-group? ? Group more LSA's together in updates. - ?no ip ospf flood-reduction? ? Disables every 30-min LSA DB refresh. - ?ip ospf database filter all out? ? Breaks RFC, Stop sending LSA's, but still receive LSA's by CCIE 24163