CCNP BSCI Notes - EIGRP Principles

Supports routed protocols like IP and IPv6 via protocol-dependent modules Uses Reliable Transport Protocol (RTP, Cisco proprietary) for some traffic (updates, queries, and replies) Uses hellos to identify/monitor neighbors Uses the Diffusing Update Algorithm (DUAL) to select routes EIGRP is IP protocol 88. EIGRP supports proportional unequal-cost load-balancing among feasible routes. Packet types #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #160; #

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load - 8-bit value, not considered by default

 Advertised distance - Cost advertised by a neighbor to get to a destination

Feasible successor - All other neighbors which meet the feasibility requirement Split-horizon - A network is not advertised on the link from which is learned. Queries When a router loses its successor and has no feasible successors, it will query all remaining neighbors for a new route. Queries are recursive and will be forwarded to other neighbors until either a route is found, or a summarization boundary is reached. Stuck in Active (SIA) - Queries which do not return a route before the active timer expires (usually 3 minutes), the router is considered stuck in active mode. EIGRP Tables Neighbor table Stores information about neighboring EIGRP routers: Network address (IP)

Connected interface

Queue count - number of packets waiting in queue; a high count indicates line congestion Topology table Holds all routes received from neighbors, is built from updates, calculated by DUAL, and contains all the information required by the routing table Routing table Route types:

Internal - Paths directly within EIGRP &#