Routing Protocol Comparison

	RIP v1	RIP v2	IGRP	EIGRP	OSPF	IS-IS	BGP
Interior/Exterior?	Interior	Interior	Interior	Interior	Interior	Interior	Exterior
Type	Distance Vector	Distance Vector	Distance Vector	Hybrid	Link-state	Link-state	Path Vector
Default Metric	Hopcount	Hopcount	Bandwidth/Delay	Bandwidth/Delay	Cost	Cost	Multiple Attributes
Administrative Distance	120	120	100	90 (internal) 170 (external)	110	115	20 (external) 200 (internal)
Hopcount Limit	15	15	255 (100 default)	224 (100 default)	None	None	EBGP Neighbors: 1 (default) IBGP Neighbors: None
Convergence	Slow	Slow	Slow	Very Fast	Fast	Fast	Average
Update timers	30 seconds	30 seconds	90 seconds	Only when change occurs	Only when changes occur; (LSA table is refreshed every 30 minutes, however)	Only when changes occur	Only when changes occur
Updates	Full table	Full table	Full table	Only Changes	Only Changes	Only changes	Only changes
Classless	No	Yes	No	Yes	Yes	Yes	Yes
Supports VLSM	No	Yes	No	Yes	Yes	Yes	Yes
Algorithm	Bellman-Ford	Bellman-Ford	Bellman-Ford	DUAL	Dijkstra	Dijkstra	Best Path Algorithm
Update Address	Broadcast	224.0.0.9	224.0.0.10	224.0.0.10	224.0.0.5 (All SPF Routers) 224.0.0.6 (DR's and BDR's)		Unicast
Protocol and Port	UDP port 520		IP Protocol 9	IP Protocol 88	IP Protocol 89		TCP port 179

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