RIP

***RIP- Routing information protocol***

* ***Open standard***
* ***Layer 7 protocol***
* ***Uses UDP port no 520***
* ***Default Administrative Distance value – 120***
* ***Multicast address -224.0.0.9***
* ***Metric of RIP –Hop count***
* ***Maximum reachable metric = 15***
* ***16 is unreachable***
* ***RIP has two version***

***Version 1, version 2***

RIP v1 and RIP V2

*V1*

* Update are sent as broadcast
* It does not support classless route
* Does Not support authentication.

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V2

* Update are sent as multicast
* Support classless route
* It support authentication

RIP Timer

* *Update - 30 sec*
* *Invalid Time -180 sec*
* *Hold down – 180 sec*
* *Flush - 240 sec*

*Update:- Every 30 sec the same update will be sent periodically.in which router sends a complete copy of routing table out to all neighbors.*

*Invalid:- If route is present inside routing table and update are not receive from more than 30 sec then route is declared as invalid.*

* *The invalid route is not removed route from routing table update the end of invalid time.*

*Hold down:- The invalid is over and hold down has started .The route remains table even hold down timer has started by default 180 sec*

*Flush :- The route entry is flushed from routing table if flush timer is over by default flush timer = 240 sec*

* *Split horizon:- It is method of preventing routing loops in RIP protocol by prohibiting a router from advertising a router back onto the interface from which it was Received.*

*Passive interface – this is used to start and suppress routing protocol updates on interface where update are not needed. In RIP update are not forward on passive interface but update are always received.*