RIP
Routing Information Protocol

CyberQuince

Routing Information Protocol

RIP facts:

- Routers using RIP will send the entire routing table every 30 seconds through all active interfaces;
- If a router doesn’t hear back from one of its neighbors in 180 seconds (default value), it considers that neighbor no longer active, then it adjusts its routing table and propagates it further;
- The best routes are selected based on the number of hops (one router = one hop), and the maximum number of hops is 15;
- AD is 120;

RIP versions

RIP version 1 only supports classful addressing – routers using RIP will not propagate information on subnet masks to their neighbors.

RIP version 2 supports subnetting and will propagate information on subnet masks.

RIP — configuration

```
R1(config)# router rip
R1(config-router)# version 2
R1(config-router)# network 1.0.0.0
R1(config-router)# network 3.0.0.0
```

Disabling RIP:

```
R1(config)# no router rip
```

RIP — additional configuration

Passive interface – if RIP is used on a Gateway router, WAN interfaces should not send the routing table to the Internet. This is achieved by configuring the following:

```
Router(config-router)# passive-interface serial 0/0/0
```

No auto-summary – disables automatic summarization of routes:

```
Router(config-router)# no auto-summary
```

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