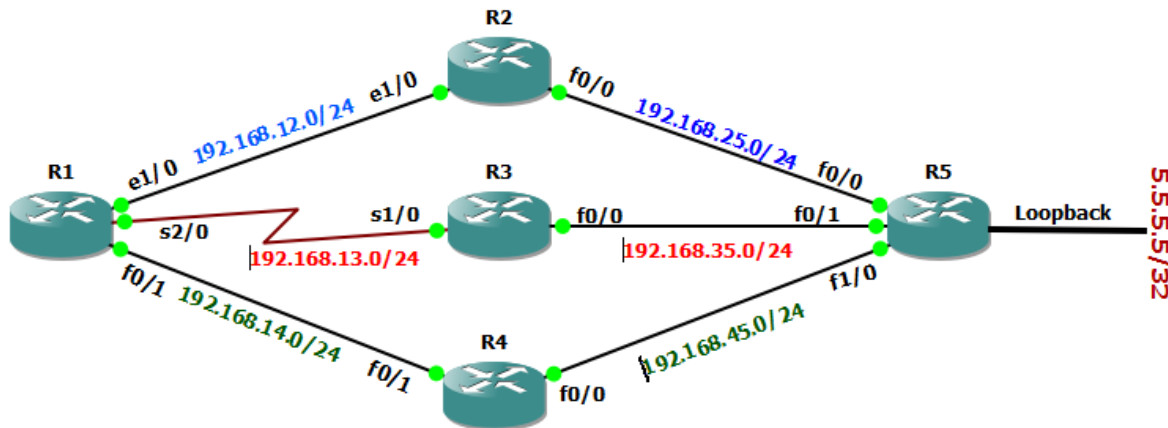


EIGRP Unequal Cost:

EIGRP can also balance traffic across multiple routes that have different metrics; this is called Unequal-Cost Load Balancing. The degree to which EIGRP performs load balancing is controlled by the variance multiplier router configuration command. The multiplier is a variance value, between 1 and 128, used for load balancing. The default is 1, which means equal-cost load balancing. The multiplier defines the range of metric values that are accepted for load balancing.



```
R1#show ip eigrp topology
```

```
EIGRP-IPv4 Topology Table for AS(1)/ID(192.168.14.1)
```

```
Codes: P - Passive, A - Active, U - Update, Q - Query, R - Reply,
       r - reply Status, s - sia Status
```

```
P 192.168.45.0/24, 1 successors, FD is 30720
   via 192.168.14.4 (30720/28160), FastEthernet0/1
P 5.5.5.5/32, 1 successors, FD is 158720 ————— Successor
   via 192.168.14.4 (158720/156160), FastEthernet0/1
   via 192.168.12.2 (412160/156160), Ethernet1/0
   via 192.168.13.3 (2300416/156160), Serial2/0
P 192.168.13.0/24, 1 successors, FD is 2169856
   via Connected, Serial2/0
```

Commands	Description
(config)#router eigrp 1 (config-router)#no auto-summary (config-router)#network 0.0.0.0	Apply this on all R1,R2,R3,R4 & R5 Disable auto summary Enable EIGRP for all networks
R1#show ip route eigrp	Check routing table for EIGRP one path only
R1#show ip eigrp topology	Check EIGRP topology table for all paths
412160 / 158720 = 2.6	Need variance 3 to install Ethernet1/0 path
R1(config)#router eigrp 1 R1(config-router)#variance 3	Enters EIGRP routing mode Set variance 3 to install other route
R1#show ip route eigrp	Check routing table for EIGRP two path now
2300416 / 158720 = 14.5	Need variance 15 to install S2/0 path
R1(config)#router eigrp 1 R1(config-router)#variance 15	Enters EIGRP routing mode Set variance 15 to install other route
R1#show ip route eigrp	Check routing table for EIGRP three path now
R1#show ip route 5.5.5.5	EIGRP is sharing traffic f0/1 240, S2/0 17 and E1/0 92 proportion
R1#traceroute 5.5.5.5	Apply many time to check path changing