EIGRP

EIGRP AS 100

192.168.1.96 /27
64 kbps

172.31.0.0 /16

R1 — .101 S0/0/0 — .102 S0/0/0 — R2 — S0/0/1 .1 — .2 — Internet

192.168.1.0 /27

.1 Fa0/0

.1 Fa0/0

172.16.1.0 /24

172.17.2.0 /24
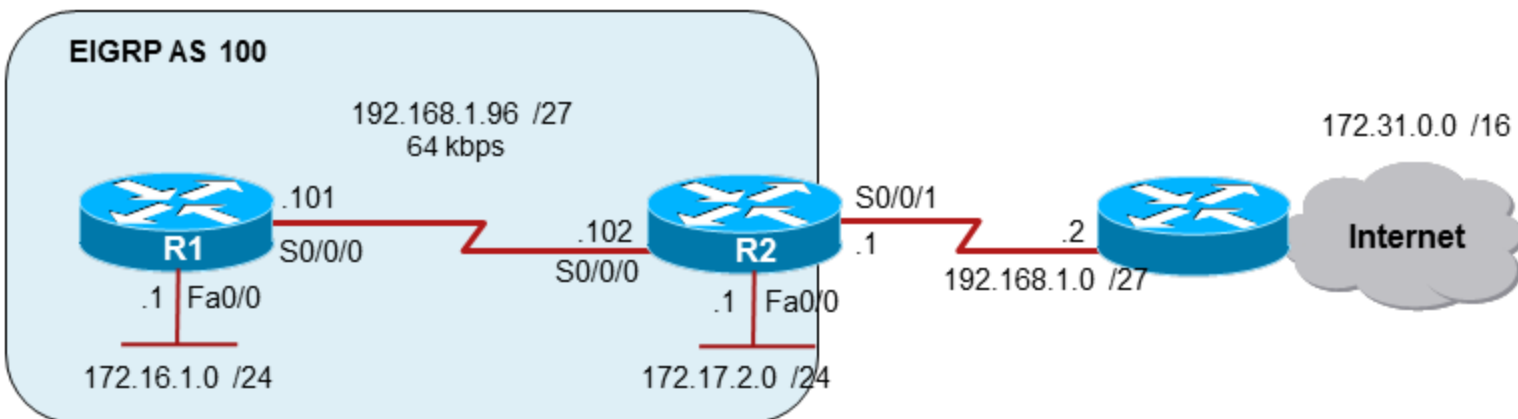
1. Basic configuation on interface

R1(config)#interface fastEthernet 0/0
R1(config-if)#ip address 172.16.1.1 255.255.255.0
R1(config-if)#no shutdown
R1(config)#interface serial 0/0/0
R1(config-if)#ip address 192.168.1.101 255.255.255.224
R1(config-if)#bandwidth 64
R1(config-if)#no shutdown

R2(config)#interface fastEthernet 0/0
R2(config-if)#ip address 172.17.2.1 255.255.255.0
R2(config-if)#no shutdown
R2(config)#interface serial 0/0/0
R2(config-if)#ip address 192.168.1.102 255.255.255.224
R2(config-if)#bandwidth 64
R2(config-if)#no shutdown
R2(config)#interface serial 0/0/1
R2(config-if)#ip address 192.168.1.1 255.255.255.224
R2(config-if)#bandwidth 64
R2(config-if)#no shutdown

```
R1#show ip protocols
Routing Protocol is "eigrp 100"
  Outgoing update filter list for all interfaces is not set
  Incoming update filter list for all interfaces is not set
  Default networks flagged in outgoing updates
  Default networks accepted from incoming updates
  EIGRP metric weight K1=1, K2=0, K3=1, K4=0, K5=0
  EIGRP maximum hopcount 100
  EIGRP maximum metric variance 1
  Redistributing: eigrp 100
  EIGRP NSF-aware route hold timer is 240s
  Automatic network summarization is not in effect
  Maximum path: 4
  Routing for Networks:
    172.16.1.0/24
    192.168.1.96/27
  Routing Information Sources:
    Gateway      Distance    Last Update
    (this router)     90     00:23:11
    192.168.1.102     90     00:22:40
  Distance: internal 90 external 170
```

2. Basic EIGRP configuration

R1(config)#router eigrp 100
R1(config-router)#network 172.16.1.0 0.0.0.255
R1(config-router)#network 192.168.1.96 0.0.0.31
R1(config-router)#no auto-summary

R2(config)#router eigrp 100
R2(config-router)#network 192.168.1.96 0.0.0.31
R2(config-router)#network 172.17.2.0 0.0.0.255
R2(config-router)#no auto-summary

3. TSHOOT

```
R1#show ip route eigrp
     172.17.0.0/24 is subnetted, 1 subnets
D      172.17.2.0 [90/40537600] via 192.168.1.102. 00:21:27.
R2#show ip route eigrp
     172.16.0.0/24 is subnetted, 1 subnets
D      172.16.1.0 [90/40537600] via 192.168.1.101, 00:21:16,
Serial0/0
```

```
R2#show ip eigrp topology
IP-EIGRP Topology Table for AS(100)/ID(192.168.1.102)
Codes: P - Passive, A - Active, U - Update, Q - Query, R - Reply,
     r - reply Status, s - sia Status

P 192.168.1.96/27, 1 successors, FD is 40512000
     via Connected, Serial0/0
P 172.16.1.0/24, 1 successors, FD is 40537600
     via 192.168.1.101 (40537600/281600), Serial0/0
P 172.17.2.0/24, 1 successors, FD is 281600
```

```
R2#show ip eigrp neighbors
IP-EIGRP neighbors for process 100
H  Address            Interface      Hold Uptime  SRTT  RTO  Q
Seq
                        (sec)       (ms)    Cnt Num
0   192.168.1.101      Se0/0       13 00:26:36   23  2280  0  9
     via Connected, FastEthernet0/0
```

```
R2#show ip eigrp accounting
IP-EIGRP accounting for AS(100)/ID(192.168.1.102)
Total Prefix Count: 3  States: A-Adjacency, P-Pending, D-Down
State Address/Source  Interface     Prefix  Restart  Restart/
                        Count   Count   Reset(s)
 A   192.168.1.101   Se0/0            1      0      0
```

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