**EIGRP CONFIGURATION**

**Router R0 Configuration**

Router(config)#interface fastEthernet 0/0

Router(config-if)#ip address 10.0.0.1 255.0.0.0

Router(config-if)#no shutdown

Router(config-if)#exit

Router(config)#interface fastEthernet 0/1

Router(config-if)#ip address 192.168.1.1 255.255.255.252

Router(config-if)#no shutdown

Router(config-if)#exit

Router(config)#

Router#show controllers serial 0/0/0

Interface Serial0/0/0

Hardware is PowerQUICC MPC860

DCE V.35, clock rate 2000000

[Output omitted]

Router# configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#interface serial 0/0/0

Router(config-if)#ip address 192.168.1.245 255.255.255.252

Router(config-if)#clock rate 64000

Router(config-if)#bandwidth 64

Router(config-if)#no shutdown

Router(config-if)#exit

Router(config)#router eigrp 20

Router(config-router)#network 10.0.0.0 0.0.0.255

Router(config-router)#network 192.168.1.244 0.0.0.3

Router(config-router)#network 192.168.1.0 0.0.0.3

Router(config-router)#

Router#show ip route eigrp

D 20.0.0.0/8 [90/35840] via 192.168.1.2, 00:31:21, FastEthernet0/1

192.168.1.0/24 is variably subnetted, 7 subnets, 2 masks

D 192.168.1.0/24 is a summary, 00:31:22, Null0

D 192.168.1.4/30 [90/30720] via 192.168.1.2, 00:31:21, FastEthernet0/1

D 192.168.1.8/30 [90/33280] via 192.168.1.2, 00:31:21, FastEthernet0/1

D 192.168.1.248/30 [90/2689536] via 192.168.1.2, 00:31:16, FastEthernet0/1

D 192.168.1.252/30 [90/2177536] via 192.168.1.2, 00:31:21, FastEthernet0/1

Router#

Router#show interface serial0/0/0

Serial0/0/0 is up, line protocol is up (connected)

Hardware is HD64570

Internet address is 192.168.1.245/30

MTU 1500 bytes, BW 64 Kbit, DLY 20000 usec,

reliability 255/255, txload 1/255, rxload 1/255

Encapsulation HDLC, loopback not set, keepalive set (10 sec)

Last input never, output never, output hang never

Last clearing of "show interface" counters never

Input queue: 0/75/0 (size/max/drops); Total output drops: 0

Queueing strategy: weighted fair

Output queue: 0/1000/64/0 (size/max total/threshold/drops)

Conversations 0/0/256 (active/max active/max total)

Reserved Conversations 0/0 (allocated/max allocated)

Available Bandwidth 48 kilobits/sec

5 minute input rate 102 bits/sec, 0 packets/sec

5 minute output rate 104 bits/sec, 0 packets/sec

426 packets input, 25543 bytes, 0 no buffer

Received 0 broadcasts, 0 runts, 0 giants, 0 throttles

0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored, 0 abort

423 packets output, 25289 bytes, 0 underruns

0 output errors, 0 collisions, 1 interface resets

0 output buffer failures, 0 output buffers swapped out

**Router R1 Configuration**

Router>enable

Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#interface serial 0/0/0

Router(config-if)#ip address 192.168.1.246 255.255.255.252

Router(config-if)#no shutdown

Router(config-if)#exit

Router(config)#interface serial 0/0/1

Router(config-if)#ip address 192.168.1.249 255.255.255.252

Router(config-if)#clock rate 64000

Router(config-if)#bandwidth 64

Router(config-if)#no shutdown

Router(config-if)#exit

Router(config)#router eigrp 20

Router(config-router)#network 192.168.1.244 0.0.0.3

Router(config-router)#

%DUAL-5-NBRCHANGE: IP-EIGRP 20: Neighbor 192.168.1.245 (Serial0/0/0) is up: new adjacency

Router(config-router)#network 192.168.1.248 0.0.0.3

Router(config-router)#

**Router R2 Configuration**

Router>enable

Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#interface serial 0/0/1

Router(config-if)#ip address 192.168.1.250 255.255.255.252

Router(config-if)#no shutdown

Router(config-if)#exit

Router(config)#interface serial 0/0/0

Router(config-if)#ip address 192.168.1.253 255.255.255.252

Router(config-if)#clock rate 64000

Router(config-if)#bandwidth 64

Router(config-if)#no shutdown

Router(config-if)#exit

Router(config)#router eigrp 20

Router(config-router)#network 192.168.1.248 0.0.0.3

Router(config-router)#

%DUAL-5-NBRCHANGE: IP-EIGRP 20: Neighbor 192.168.1.249 (Serial0/0/1) is up: new adjacency

Router(config-router)#network 192.168.1.252 0.0.0.3

Router(config-router)#

**Router R3 Configuration**

Router>enable

Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#interface fastEthernet 0/0

Router(config-if)#ip address 192.168.1.6 255.255.255.252

Router(config-if)#no shutdown

Router(config-if)#exit

Router(config)#interface fastEthernet 0/1

Router(config-if)# ip address 192.168.1.9 255.255.255.252

Router(config-if)#no shutdown

Router(config-if)#exit

Router(config)#

Router(config)#router eigrp 20

Router(config-router)#network 192.168.1.8 255.255.255.252

Router(config-router)#

%DUAL-5-NBRCHANGE: IP-EIGRP 20: Neighbor 192.168.1.10 (FastEthernet0/1) is up: new adjacency

Router(config-router)#network 192.168.1.4 255.255.255.252

Router(config-router)#

**Router R4 Configuration**

Router>enable

Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#interface fastEthernet 0/0

Router(config-if)#ip address 192.168.1.5 255.255.255.252

Router(config-if)#no shutdown

Router(config-if)#exit

Router(config)#interface fastEthernet 0/1

Router(config-if)# ip address 192.168.1.2 255.255.255.252

Router(config-if)#no shutdown

Router(config-if)#exit

Router(config)#

Router(config)#router eigrp 20

Router(config-router)#network 192.168.1.4 255.255.255.252

Router(config-router)#

%DUAL-5-NBRCHANGE: IP-EIGRP 20: Neighbor 192.168.1.6 (FastEthernet0/0) is up: new adjacency

Router(config-router)#network 192.168.1.0 255.255.255.252

Router(config-router)#

%DUAL-5-NBRCHANGE: IP-EIGRP 20: Neighbor 192.168.1.1 (FastEthernet0/1) is up: new adjacency

Router(config-router)#

**Router R5 Configuration**

Router>enable

Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#interface fastEthernet 0/0

Router(config-if)#ip address 20.0.0.1 255.0.0.0

Router(config-if)#no shutdown

Router(config-if)#exit

Router(config)#interface fastEthernet 0/1

Router(config-if)#ip address 192.168.1.10 255.255.255.252

Router(config-if)#no shutdown

Router(config-if)#exit

Router(config)#

Router(config)#interface serial 0/0/0

Router(config-if)#ip address 192.168.1.254 255.255.255.252

Router(config-if)#no shutdown

Router(config-if)#exit

Router(config)#router eigrp 20

Router(config-router)#network 20.0.0.0 255.0.0.0

Router(config-router)#network 192.168.1.252 255.255.255.252

Router(config-router)#

%DUAL-5-NBRCHANGE: IP-EIGRP 20: Neighbor 192.168.1.253 (Serial0/0/0) is up: new adjacency

Router(config-router)#network 192.168.1.8 255.255.255.252

Router(config-router)#



