R1

conf t

int f0/0

ip address 192.1.1.1 255.255.255.0

no shut

ip ospf 1 area 0

int Lo0

ip address 20.10.10.10 255.255.255.255

ip ospf 1 area 0

int Lo1

ip address 20.20.20.20 255.255.255.255

ip ospf 1 area 0

int Lo2

ip address 20.30.30.30 255.255.255.255

ip ospf 1 area 0

int Lo3

ip address 20.40.40.40 255.255.255.255

ip ospf 1 area 0

end

write

R2

conf t

ip cef

access-list 101 permit icmp 192.2.2.0 0.0.0.255 20.10.10.0 0.0.0.255

access-list 102 permit icmp 192.2.2.0 0.0.0.255 20.20.20.0 0.0.0.255

access-list 103 permit icmp 192.2.2.0 0.0.0.255 20.30.30.0 0.0.0.255

class-map match-all EF

match access-group 101

class-map match-all AF11

match access-group 102

class-map match-all AF23

match access-group 103

policy-map SETDSCP

class EF

set ip dscp 46

class AF11

set ip dscp 10

class AF23

set ip dscp 22

interface f0/1

service-policy input SETDSCP

exit

class-map match-all PREMIUM

match ip dscp 46

class-map match-all GOLD

match ip dscp 10

class-map match-all SILVER

match ip dscp 22

class-map match-all BEST-EFFORT

match ip dscp 0

policy-map EDGE

class PREMIUM

priority percent 40

class GOLD

bandwidth percent 20

class SILVER

bandwidth percent 15

class BEST-EFFORT

police 16000 2000 2000 conform-action set-dscp-transmit 0

int f0/0

service-policy output EDGE

exit

int f0/0

ip address 192.1.1.2 255.255.255.0

no shut

ip ospf 1 area 0

int f0/1

ip address 192.2.2.2 255.255.255.0

no shut

ip ospf 1 area 0

end

write

R3

conf t

int f0/0

ip address 192.2.2.3 255.255.255.0

no shut

ip ospf 1 area 0

end

write