

R7: Summarization with Attributes

```
Router bgp 400
aggregate-address 20.1.0.0 255.255.0.0 as-set summary-only attribute-map RM-R7
```

```
route-map RM-R7 permit 10
set community none
route-map RM-R7 permit 20
```

```
Remove attribute-map
router bgp 400
no aggregate-address 20.1.0.0 255.255.0.0 as-set summary-only attribute-map RM-R7
exit
```

Advertise Map:

```
-----
router bgp 400
aggregate-address 20.1.0.0 255.255.0.0 as-set summary-only advertise-map RM-R77
exit
```

```
ip prefix-list 20-1-1-0 seq 5 permit 20.1.1.0/24
ip prefix-list 20-1-1-0 seq 10 permit 20.1.2.0/24
```

```
route-map RM-R77 permit 10
match ip address prefix-list 20-1-1-0
```

Conditional Routing on R5:

```
-----
ip prefix-list MONITOR seq 5 permit 10.23.1.0/24
!
ip prefix-list NW7 seq 5 permit 10.7.7.0/24
```

```
route-map RM-ADV-MAP permit 10
match ip address prefix-list NW7
!
route-map RM-NEM permit 10
match ip address prefix-list MONITOR
exi
router bgp 300
neighbor 10.25.1.2 advertise-map RM-ADV-MAP non-exist-map RM-NEM
ex
```

BGP backdoor

```
-----
R2:
conf t
int s2/0
Desc Eigrp link connected to R3
ip add 10.23.1.2 255.255.255.0
no sh
int e0/0
```

```
Desc conn to R1-ebgp
ip add 10.12.1.2 255.255.255.0
no sh
int lo 0
Desc ebgp peering
ip add 2.2.2.2 255.255.255.255
int lo 1
Desc LAN
ip add 20.0.0.2 255.0.0.0
exit
```

```
R3:
conf t
int s2/0
Desc Eigrp link connected to R3
ip add 10.23.1.3 255.255.255.0
no sh
int e0/0
Desc conn to R1-ebgp
ip add 10.13.1.3 255.255.255.0
no sh
int lo 0
Desc ebgp peering
ip add 3.3.3.3 255.255.255.255
int lo 1
Desc LAN
ip add 30.0.0.3 255.0.0.0
exit
```

```
R1
conf t
int e0/0
Desc conn to R2-ebgp
ip add 10.12.1.1 255.255.255.0
no sh
int e0/1
Desc conn to R3-ebgp
ip add 10.13.1.1 255.255.255.0
no sh
int lo 0
Desc ebgp peering
ip add 1.1.1.1 255.255.255.255
int lo 1
Desc LAN
ip add 10.0.0.1 255.0.0.0
exit
```

```
R3:
ip route 1.1.1.1 255.255.255.255 10.13.1.1
router bgp 300
bgp log-neighbor-changes
network 30.0.0.0
neighbor 1.1.1.1 remote-as 100
neighbor 1.1.1.1 update-source Loopback0
neighbor 1.1.1.1 disable-connected-check
```

```
R2:
ip route 1.1.1.1 255.255.255.255 10.12.1.1
router bgp 200
  bgp log-neighbor-changes
  network 20.0.0.0
  neighbor 1.1.1.1 remote-as 100
  neighbor 1.1.1.1 ebgp-multihop 255
  neighbor 1.1.1.1 update-source Loopback0
```

```
R1
ip route 2.2.2.2 255.255.255.255 10.12.1.2
ip route 1.1.1.1 255.255.255.255 10.13.1.3
```

```
router bgp 100
net 10.0.0.0
neig 2.2.2.2 remote-as 200
neig 2.2.2.2 update-source lo 0
neig 2.2.2.2 ebgp-multihop 255
neig 3.3.3.3 remote-as 300
neig 3.3.3.3 update-source lo 0
neighbor 3.3.3.3 disable-connected-check
exit
```

! BGp backdoor config

```
R3
router bgp 300
net 20.0.0.0 m 255.0.0.0 backdoor
exit
R2
router bgp 200
net 30.0.0.0 m 255.0.0.0 backdoor
exi
```