

BGP Summaries

```
root> show bgp summary
Groups: 1 Peers: 1 Down peers: 1
Table Tot Paths Act Paths Suppressed History Damp State Pending
inet.0 0 0 0 0 0 0 0 0
Peer AS InPkt OutPkt OutQ Flaps Last Up/Dwn State|#Active/Received/Accepted/Damped...
13.59.0.2 592 0 0 0 0 0 59 Idle
root>
```

```
R2# show ip bgp summary
BGP router identifier 2.2.2.2, local AS number 592
BGP table version is 1, main routing table version 1

Neighbor V AS MsgRcvd MsgSent TblVer InQ OutQ Up/Down State/PfxRcd
13.59.0.1 4 591 8 7 1 0 0 00:04:20 0
13.59.0.6 4 593 7 5 1 0 0 00:02:58 0
13.59.0.10 4 594 3 2 1 0 0 00:00:26 0
R2#
```

```
R3#show ip bgp summary
BGP router identifier 16.59.0.1, local AS number 593
BGP table version is 1, main routing table version 1

Neighbor V AS MsgRcvd MsgSent TblVer InQ OutQ Up/Down State/PfxRcd
13.59.0.5 4 592 5 8 1 0 0 00:03:36 0
15.59.0.2 4 594 4 3 1 0 0 00:01:04 0
R3#
```

```
R4# show ip bgp summary
BGP router identifier 17.59.0.129, local AS number 594
BGP table version is 5, main routing table version 5
4 network entries using 576 bytes of memory
6 path entries using 480 bytes of memory
5/3 BGP path/bestpath attribute entries using 680 bytes of memory
4 BGP AS-PATH entries using 96 bytes of memory
0 BGP route-map cache entries using 0 bytes of memory
0 BGP filter-list cache entries using 0 bytes of memory
BGP using 1832 total bytes of memory
BGP activity 4/0 prefixes, 6/0 paths, scan interval 60 secs

Neighbor V AS MsgRcvd MsgSent TblVer InQ OutQ Up/Down State/PfxRcd
13.59.0.9 4 592 13 11 5 0 0 00:05:26 2
15.59.0.1 4 593 13 11 5 0 0 00:05:15 2
R4#
```

IP Routes before Route policy

```
root> show route protocol bgp

inet.0: 11 destinations, 11 routes (11 active, 0 holddown, 0 hidden)
+ = Active Route, - = Last Active, * = Both

14.59.0.0/24 *[BGP/170] 00:00:21, MED 0, localpref 100
              AS path: 592 ?
              > to 13.59.0.2 via em4.0
16.59.0.0/24 *[BGP/170] 00:00:21, localpref 100
              AS path: 592 593 I
              > to 13.59.0.2 via em4.0
17.59.0.0/25 *[BGP/170] 00:00:21, localpref 100
              AS path: 592 594 I
              > to 13.59.0.2 via em4.0
17.59.0.128/25 *[BGP/170] 00:00:21, localpref 100
                AS path: 592 594 I
                > to 13.59.0.2 via em4.0

root>
```

```

R2#show ip route bgp
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
E1 - OSPF external type 1, E2 - OSPF external type 2
i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
ia - IS-IS inter area, * - candidate default, U - per-user static route
o - ODR, P - periodic downloaded static route, H - NHRP, l - LISP
+ - replicated route, % - next hop override

```

Gateway of last resort is not set

```

      12.0.0.0/24 is subnetted, 2 subnets
B       12.59.0.0 [20/0] via 13.59.0.1, 00:06:34
B       12.59.1.0 [20/0] via 13.59.0.1, 00:06:04
      16.0.0.0/24 is subnetted, 1 subnets
B       16.59.0.0 [20/0] via 13.59.0.6, 00:03:34
      17.0.0.0/25 is subnetted, 2 subnets
B       17.59.0.0 [20/0] via 13.59.0.10, 00:01:54
B       17.59.0.128 [20/0] via 13.59.0.10, 00:01:54

```

R2#

```

R3# show ip route bgp
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
E1 - OSPF external type 1, E2 - OSPF external type 2
i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
ia - IS-IS inter area, * - candidate default, U - per-user static route
o - ODR, P - periodic downloaded static route, H - NHRP, l - LISP
+ - replicated route, % - next hop override

```

Gateway of last resort is not set

```

      12.0.0.0/24 is subnetted, 2 subnets
B       12.59.0.0 [20/0] via 13.59.0.5, 00:08:27
B       12.59.1.0 [20/0] via 13.59.0.5, 00:08:27
      14.0.0.0/24 is subnetted, 1 subnets
B       14.59.0.0 [20/0] via 13.59.0.5, 00:02:27
      17.0.0.0/25 is subnetted, 2 subnets
B       17.59.0.0 [20/0] via 15.59.0.2, 00:19:40
B       17.59.0.128 [20/0] via 15.59.0.2, 00:19:40

```

R3#

```

R4# show ip route bgp
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
E1 - OSPF external type 1, E2 - OSPF external type 2
i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
ia - IS-IS inter area, * - candidate default, U - per-user static route
o - ODR, P - periodic downloaded static route, H - NHRP, l - LISP
+ - replicated route, % - next hop override

```

Gateway of last resort is not set

```

      12.0.0.0/24 is subnetted, 2 subnets
B       12.59.0.0 [20/0] via 13.59.0.9, 00:00:05
B       12.59.1.0 [20/0] via 13.59.0.9, 00:00:05
      14.0.0.0/24 is subnetted, 1 subnets
B       14.59.0.0 [20/0] via 13.59.0.9, 00:00:05
      16.0.0.0/24 is subnetted, 1 subnets
B       16.59.0.0 [20/0] via 15.59.0.1, 00:18:58

```

R4#

IP Routes after route policy

```
R3#show ip route
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2
       i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
       ia - IS-IS inter area, * - candidate default, U - per-user static route
       o - ODR, P - periodic downloaded static route, H - NHRP, l - LISP
       + - replicated route, % - next hop override

Gateway of last resort is not set

12.0.0.0/24 is subnetted, 1 subnets
B    12.59.0.0 [20/0] via 13.59.0.5, 00:38:11
13.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C    13.59.0.4/30 is directly connected, GigabitEthernet2/0
L    13.59.0.6/32 is directly connected, GigabitEthernet2/0
14.0.0.0/24 is subnetted, 1 subnets
B    14.59.0.0 [20/0] via 13.59.0.5, 02:26:58
15.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C    15.59.0.0/30 is directly connected, GigabitEthernet1/0
L    15.59.0.1/32 is directly connected, GigabitEthernet1/0
16.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C    16.59.0.0/24 is directly connected, FastEthernet0/0
L    16.59.0.1/32 is directly connected, FastEthernet0/0
17.0.0.0/25 is subnetted, 2 subnets
B    17.59.0.0 [20/0] via 15.59.0.2, 02:26:58
B    17.59.0.128 [20/0] via 13.59.0.5, 02:26:40
R3#
```