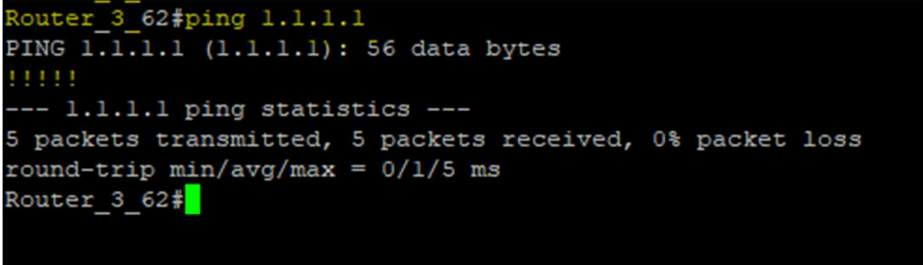


OSPF Redistribute BGP

Purpose	Redistributing BGP learned routes into OSPF.
Test setup	
Test configuration	<p>Router 1</p> <p>Router 2</p> <pre> ! interface Loopback0 ip address 10.10.10.10 255.255.255.255 no ip directed-broadcast ! interface Loopback100 ip address 100.1.1.1 255.255.255.255 no ip directed-broadcast ! interface GigEthernet0/1 ip address 192.168.2.10 255.255.255.0 no ip directed-broadcast ipv6 enable ipv6 address autoconfig ipv6 dhcp client na ip http firewalltype 0 ! interface GigEthernet0/2 ip address 192.168.1.1 255.255.255.0 no ip directed-broadcast ip http firewalltype 0 ! router ospf 1 network 100.1.1.1 255.255.255.255 area 0 network 192.168.1.0 255.255.255.0 area 0 redistribute bgp 65000 ! </pre>

	<pre> router bgp 65000 no synchronization bgp log-neighbor-changes network 10.10.10.10/32 redistribute connected neighbor 192.168.2.1 remote-as 64000 ! Router 3 ! interface Loopback1 ip address 2.2.2.1 255.255.255.255 no ip directed-broadcast ip ospf password 0 test ! interface Loopback5 ip address 5.5.5.5 255.255.255.255 no ip directed-broadcast ! interface Loopback200 ip address 200.1.1.1 255.255.255.255 no ip directed-broadcast ! interface GigaEthernet0/2 ip address 192.168.1.2 255.255.255.0 no ip directed-broadcast ip http firewalltype 0 ! router ospf 1 network 5.5.5.5 255.255.255.255 area 0 network 192.168.1.0 255.255.255.0 area 0 </pre>
<p>Procedure</p>	<p>Configure BGP and OSPF on R2. Redistribute BGP learned routes into OSPF. Redistribute connected networks into BGP.</p> <p>Configure BGP on R1 Configure OSPF on R3</p>
<p>Test result</p>	 <pre> Router_3_62#ping 1.1.1.1 PING 1.1.1.1 (1.1.1.1): 56 data bytes !!!! --- 1.1.1.1 ping statistics --- 5 packets transmitted, 5 packets received, 0% packet loss round-trip min/avg/max = 0/1/5 ms Router_3_62# </pre>

```
Router_3_62#sh ip route
Codes: C - connected, S - static, R - RIP, B - BGP, BC - BGP connected
       D - BEIGRP, DEX - external BEIGRP, O - OSPF, OIA - OSPF inter area
       ON1 - OSPF NSSA external type 1, ON2 - OSPF NSSA external type 2
       OE1 - OSPF external type 1, OE2 - OSPF external type 2, L - Local
       DHCP - DHCP type, L1 - IS-IS level-1, L2 - IS-IS level-2
       IA - ISIS inter-level, I - IPSEC type

VRF ID: 0

O E2 1.1.1.1/32          [150,100] via 192.168.1.1(on GigaEthernet0/2)
C    2.2.2.1/32          is directly connected, Loopback1
C    5.5.5.5/32          is directly connected, Loopback5
O E2 50.1.1.1/32       [150,100] via 192.168.1.1(on GigaEthernet0/2)
O    100.1.1.1/32       [110,2] via 192.168.1.1(on GigaEthernet0/2)
S    172.16.253.0/24    [1,0] via 172.16.254.1(on GigaEthernet0/0)
C    172.16.254.0/24    is directly connected, GigaEthernet0/0
C    192.168.1.0/24     is directly connected, GigaEthernet0/2
C    200.1.1.1/32       is directly connected, Loopback200
Router_3_62#
```

```
Router_2_20#sh ip route
Codes: C - connected, S - static, R - RIP, B - BGP, BC - BGP connected
       D - BEIGRP, DEX - external BEIGRP, O - OSPF, OIA - OSPF inter area
       ON1 - OSPF NSSA external type 1, ON2 - OSPF NSSA external type 2
       OE1 - OSPF external type 1, OE2 - OSPF external type 2, L - Local
       DHCP - DHCP type, L1 - IS-IS level-1, L2 - IS-IS level-2
       IA - ISIS inter-level, I - IPSEC type

VRF ID: 0

B    1.1.1.1/32          [20,0] via 192.168.2.1
O    5.5.5.5/32          [110,2] via 192.168.1.2(on GigaEthernet0/2)
C    10.10.10.10/32      is directly connected, Loopback0
C    20.20.20.20/32      is directly connected, Loopback20
B    50.1.1.1/32         [20,0] via 192.168.2.1
C    100.1.1.1/32        is directly connected, Loopback100
S    172.16.253.0/24     [1,0] via 172.16.254.1(on GigaEthernet0/0)
C    172.16.254.0/24     is directly connected, GigaEthernet0/0
C    192.168.1.0/24      is directly connected, GigaEthernet0/2
C    192.168.2.0/24      is directly connected, GigaEthernet0/1
Router_2_20#
Router_2_20#
```

	<pre> Router_1_10#sh ip route Codes: C - connected, S - static, R - RIP, B - BGP, BC - BGP connected D - BEIGRP, DEX - external BEIGRP, O - OSPF, OIA - OSPF inter area ON1 - OSPF NSSA external type 1, ON2 - OSPF NSSA external type 2 OE1 - OSPF external type 1, OE2 - OSPF external type 2, L - Local DHCP - DHCP type, L1 - IS-IS level-1, L2 - IS-IS level-2 IA - ISIS inter-level, I - IPSEC type VRF ID: 0 C 1.1.1.1/32 is directly connected, Loopback0 B 10.10.10.10/32 [20,0] via 192.168.2.10 B 20.20.20.20/32 [20,0] via 192.168.2.10 C 50.1.1.1/32 is directly connected, Loopback50 B 100.1.1.1/32 [20,0] via 192.168.2.10 S 172.16.253.0/24 [1,0] via 172.16.254.1(on GigaEthernet0/2) C 172.16.254.0/24 is directly connected, GigaEthernet0/2 B 192.168.1.0/24 [20,0] via 192.168.2.10 C 192.168.2.0/24 is directly connected, GigaEthernet0/1 Router_1_10# </pre>
Status	R3 routing table getting OSPF External type 2 routes, which are redistributed from BGP. And R3 able to ping to R1 networks.