⬤ R1 – AS 65046

Connected to:

- R5 (AS 65150) → 10.150.46.0/24
- R6 (AS 65160) → 10.160.46.0/24

---

1 Start BGP

conf t

router bgp 65046

 router-id 10.46.0.1

 bgp log-neighbor-changes

---

2 Configure eBGP neighbors

 neighbor 10.150.46.150 remote-as 65150

 neighbor 10.160.46.160 remote-as 65160

---

3 Secure the neighbors

neighbor 10.150.46.150 password BGP46

neighbor 10.150.46.150 ttl maximum-hop 1

neighbor 10.160.46.160 password BGP46

neighbor 10.160.46.160 ttl maximum-hop 1

---

4 Advertise aggregated prefix

ip route 10.46.0.0 255.255.0.0 Null0

router bgp 65046

 network 10.46.0.0 mask 255.255.0.0

⬤ R5 – AS 65150

Connected to:

- R7 (AS 65170) → 10.170.150.0/24
- R1 (AS 65046) → 10.150.46.0/24

---

1 Start BGP

conf t

router bgp 65150

 router-id 10.150.0.1

 bgp log-neighbor-changes

---

2 Configure eBGP neighbors

 neighbor 10.170.150.170 remote-as 65170

 neighbor 10.150.46.46 remote-as 65046

---

3 Secure the neighbors

 neighbor 10.170.150.170 password BGP46

neighbor 10.170.150.170 ttl maximum-hop 1

neighbor 10.150.46.46 password BGP46

neighbor 10.150.46.46 ttl maximum-hop 1

---

4 Advertise aggregated prefix

ip route 10.150.0.0 255.255.0.0 Null0

router bgp 65150

network 10.150.0.0 mask 255.255.0.0

⬤ R6 – AS 65160

Connected to:

- R7 (AS 65170) → 10.170.160.0/24
- R1 (AS 65046) → 10.160.46.0/24

---

1 Start BGP

conf t

router bgp 65160

router-id 10.160.0.1

bgp log-neighbor-changes

---

2 Configure eBGP neighbors

neighbor 10.170.160.170 remote-as 65170

neighbor 10.160.46.46 remote-as 65046

---

3 Secure the neighbors

neighbor 10.170.160.170 password BGP46

neighbor 10.170.160.170 ttl maximum-hop 1

neighbor 10.160.46.46 password BGP46

neighbor 10.160.46.46 ttl maximum-hop 1

4 Advertise aggregated prefix

ip route 10.160.0.0 255.255.0.0 Null0

router bgp 65160

 network 10.160.0.0 mask 255.255.0.0

⬤ R7 – AS 65170

Connected to:

- R5 (AS 65150) → 10.170.150.0/24
- R6 (AS 65160) → 10.170.160.0/24
- R8 (AS 65180) → 10.180.170.0/24

1 Start BGP

conf t

router bgp 65170

 router-id 10.170.0.1

 bgp log-neighbor-changes

2 Configure eBGP neighbors

 neighbor 10.170.150.150 remote-as 65150

 neighbor 10.170.160.160 remote-as 65160

 neighbor 10.180.170.180 remote-as 65180

3 Secure the neighbors

 neighbor 10.170.150.150 password BGP46

neighbor 10.170.150.150 ttl maximum-hop 1

neighbor 10.170.160.160 password BGP46
neighbor 10.170.160.160 ttl maximum-hop 1

neighbor 10.180.170.180 password BGP46
neighbor 10.180.170.180 ttl maximum-hop 1

---

4 Advertise aggregated prefix

ip route 10.170.0.0 255.255.0.0 Null0

router bgp 65170
 network 10.170.0.0 mask 255.255.0.0

◍ R8 – AS 65180

Connected to:

- R7 (AS 65170) → 10.180.170.0/24

---

1 Start BGP

conf t
router bgp 65180
 router-id 10.180.0.1
 bgp log-neighbor-changes

---

2 Configure eBGP neighbor

neighbor 10.180.170.170 remote-as 65170

---

3 Secure the neighbor

neighbor 10.180.170.170 password BGP46

neighbor 10.180.170.170 ttl maximum-hop 1

4 Advertise aggregated prefix

ip route 10.180.0.0 255.255.0.0 Null0

router bgp 65180
 network 10.180.0.0 mask 255.255.0.0

☑ Final Verification Commands (Run Anywhere)

show bgp ipv4 unicast summary

show bgp ipv4 unicast

show ip bgp neighbors