

BGP + Route-map

AS2500



:

- BGP c AS 2500 ESR AS20;
- R2 198.51.100.0/24 , 28
- R2 203.0.113.0/24 , 30
- R2 203.0.100.0/20 , 24
- local-preference 200

!!!: eBGP route-map prefix-list, :

```
route-map BGP_OUT
  rule 1
    action permit
  exit
exit
router bgp 1
  address-family ipv4
    neighbor <ipaddr>
      remote-as 2
      route-map BGP_OUT out
    enable
  exit
  enable
exit
exit
```

:

BGP ESR:

```
router bgp log-neighbor-changes
router bgp 2500
  router-id 185.0.0.1
  neighbor 185.0.0.2
    remote-as 20
    update-source 185.0.0.1
    address-family ipv4 unicast
      enable
    exit
  enable
exit
address-family ipv4 unicast
  redistribute connected
exit
enable
exit

interface gigabitethernet 1/0/1
  ip firewall disable
  ip address 185.0.0.1/24
exit
interface gigabitethernet 1/0/2
  ip firewall disable
  ip address 172.16.1.1/24
exit
```

BGP:

```

route-map in
  rule 10
    match ip address 198.51.100.0/24 eq 28
  exit
  rule 20
    match ip address 203.0.113.0/24 ge 30
  exit
  rule 30
    match ip address 203.0.96.0/20 le 24
  exit
exit
route-map OUT
  rule 1
  exit
exit
router bgp log-neighbor-changes
router bgp 2500
  router-id 185.0.0.1
  neighbor 185.0.0.2
    remote-as 20
    update-source 185.0.0.1
    address-family ipv4 unicast
      route-map in in
      route-map OUT out
    enable
  exit
  enable
exit
address-family ipv4 unicast
  redistribute connected
exit
enable
exit

interface gigabitethernet 1/0/1
  ip firewall disable
  ip address 185.0.0.1/24
exit
interface gigabitethernet 1/0/2
  ip firewall disable
  ip address 172.16.1.1/24
exit

```

:

```

esr-200# show bgp neighbors
BGP neighbor is 185.0.0.2
  BGP state:                               Established
  Neighbor address:                         185.0.0.2
  Neighbor AS:                             20
  Neighbor ID:                             185.0.0.2
  Neighbor caps:                           refresh enhanced-refresh restart-aware AS4
  Session:                                 external AS4
  Source address:                          185.0.0.1
  Weight:                                  0
  Hold timer:                              140/180
  Keepalive timer:                         1/60
  Address family ipv4 unicast:
    Default originate:                     No
    Default information originate:         No
    Incoming route-map:                    in
    Outgoing route-map:                    OUT
  Uptime:                                  1588 s

esr-200#
esr-200# sh bgp ipv4 unicast neighbor 185.0.0.2 advertise-routes
Status codes: u - unicast, b - broadcast, m - multicast, a - anycast
                * - valid, > - best
Origin codes: i - IGP, e - EGP, ? - incomplete

      Network          Next Hop          Metric  LocPrf    Weight Path
*   u 172.16.1.0/24    185.0.0.1          --      --        -- 2500 ?
*   u 185.0.0.0/24    185.0.0.1          --      --        -- 2500 ?

esr-200#
esr-200# sh bgp ipv4 unicast neighbor 185.0.0.2 routes
Status codes: u - unicast, b - broadcast, m - multicast, a - anycast
                * - valid, > - best
Origin codes: i - IGP, e - EGP, ? - incomplete

      Network          Next Hop          Metric  LocPrf    Weight Path
*>  u 198.51.100.0/28  185.0.0.2          --      100        0   20 i
*>  u 203.0.96.0/23   185.0.0.2          --      100        0   20 i
*>  u 203.0.113.0/30  185.0.0.2          --      100        0   20 i

```

