

# 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

