

## BGP Community Lab:

### Configuration Example (Reference Purpose Only):

#### Client Router:

##### IPv4 Configuration Example:

```
configure terminal
ip bgp-community new-format
!
ip prefix-list IPV4-TRANSIT-PREFIX seq 5 permit 172.16.20.0/24
!
route-map IPV4-SET-COMMUNITY permit 10
  match ip address prefix-list IPV4-TRANSIT-PREFIX
  set community 17821:4
!
route-map IPV4-SET-COMMUNITY permit 20
!
router bgp 17821
  address-family ipv4
    neighbor 172.16.11.65 send-community both
    neighbor 172.16.11.65 route-map IPV4-SET-COMMUNITY out
  !
write
clear bgp ipv4 unicast 172.16.11.65 out
```

##### IPv6 Configuration Example:

```
configure terminal
ip bgp-community new-format
!
ip prefix-list IPV6-TRANSIT-PREFIX seq 5 permit network 2406:6400:A000::/48
!
route-map IPV6-SET-COMMUNITY permit 10
  match ip address prefix-list IPV6-TRANSIT-PREFIX
  set community 17821:4
!
route-map IPV6-SET-COMMUNITY permit 20
!
router bgp 17821
  address-family ipv6
    neighbor 2406:6400:18::1 send-community both
    neighbor 2406:6400:18::1 route-map IPV6-SET-COMMUNITY out
  !
write
clear bgp ipv6 unicast 2406:6400:18::1 out
```

#### PoP Router:

```
configure terminal
ip bgp-community new-format
ip community-list 10 permit 17821:4
!
```

```
route-map CUST-SET-LP permit 10
  match community 10
  set local-preference 200
!
route-map CUST-SET-LP permit 20
!
router bgp 17821
  address-family ipv4
  neighbor 172.16.11.66 route-map CUST-SET-LP in
!
  address-family ipv6
  neighbor 2406:6400:18::2 route-map CUST-SET-LP in
!
write
clear bgp ipv4 unicast 172.16.11.66 in
clear bgp ipv6 unicast 2406:6400:18::2 in
```