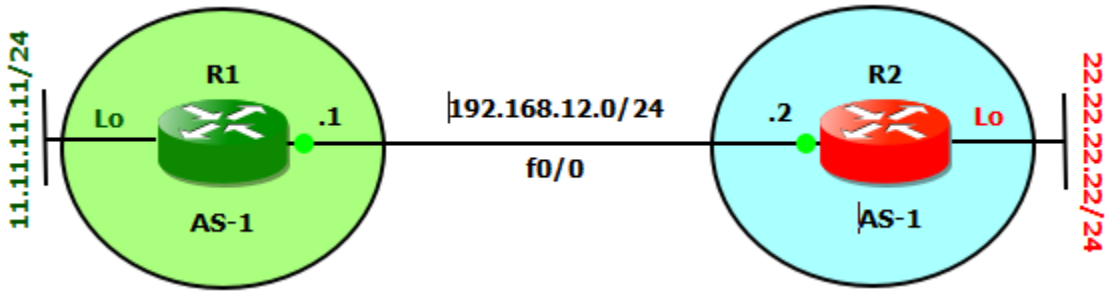
BGP Flavors:

There are two flavors of BGP Internal BGP and External BGP.

IBGP (Interior Border Gateway Protocol):

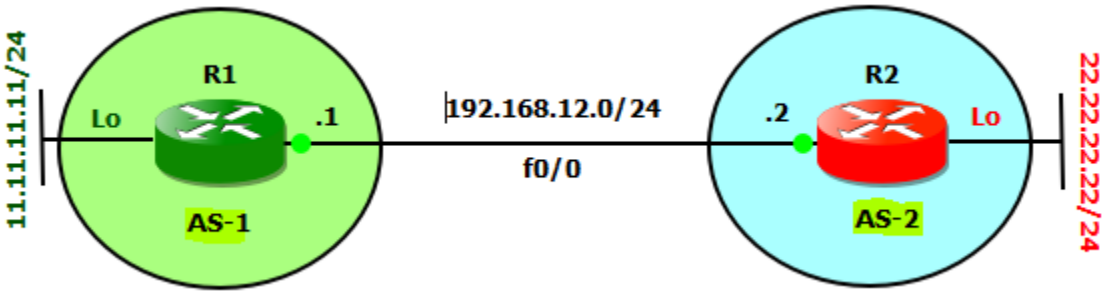
- If the peers are in the same AS called Internal BGP (iBGP).
- The IBGP stands for Internal Border Gateway Protocol.
- Internal BGP (IBGP) is between same Autonomous System Number.
- It runs between two BGP routers in the same autonomous system.
- Routes learned from IBGP peer will not be advertised to other IBGP peers.
- By default, the Internal BGP (IBGP) peers are set with TTL value = 255
- Internal BGP (IBGP) routes have Administrative Distance of 200.
- Next hop remains unchanged when route is advertised to IBGP peer.
- Internal BGP (IBGP) peers do not need to be directly connected.
- IBGP routes received from IBGP peer cannot be advertised to another IBGP.
- IBGP routes received from IBGP peer but can be advertised to an EBGP peer.
- In IBGP peers, attributes like local preference are sent in the messages.
- When route is advertised to IBGP peer, next hop remains unchanged.



R1 Configuration
R1(config)#router bgp 1 R1(config-router)#neighbor 192.168.12.2 remote-as 1 R1(config-router)#network 11.11.11.0 mask 255.255.255.0
R2 Configuration
R2(config)#router bgp 1 R2(config-router)#neighbor 192.168.12.1 remote-as 1 R2(config-router)#network 22.22.22.0 mask 255.255.255.0

EBGP (Exterior Border Gateway Protocol):

- EBGP stands for External Border Gateway Protocol.
- If peers are in a different AS called external BGP (eBGP).
- EBGP is peering between two different Autonomous System (AS).
- It runs between two BGP routers in different autonomous system.
- Routes learned from eBGP peer will be advertised to other peers.
- EBGP peers are set with TTL = 1, means neighbors directly connected.
- External BGP (EBGP) routes have Administrative Distance of 20.
- Next hop changed when it is advertised to EBGP peer by default.
- External BGP (EBGP) the neighbors need to be connected directly.
- EBGP routes received from EBGP peer can be advertised to EBGP & IBGP.
- It is used between the organization or between the organization and ISP.
- When route is advertised to EBGP peer, next hop is changed to local router.
- In EBGP peers, attributes like local preference are not sent int the message.



R1 Configuration
R1(config)#router bgp 1 R1(config-router)#neighbor 192.168.12.2 remote-as 2 R1(config-router)#network 11.11.11.0 mask 255.255.255.0
R2 Configuration
R2(config)#router bgp 2 R2(config-router)#neighbor 192.168.12.1 remote-as 1 R2(config-router)#network 22.22.22.0 mask 255.255.255.0