Features of BGP:

- Open Standard Protocol
- It is a Exterior Gateway Protocol used to route the information between different Autonomous system.
- Designed for huge inter-network like Internet.
- Updates are incremental and trigger.
- Slowest Routing protocol in the world.
- It is an application layer protocol user TCP Port 179.
- It sends the update to the manually defined neighbour as unicast.
- Metrics Attributes
- Administrative Distance:

20 for External BGP (EBGP)

200 for Internal BGP (IBGP).

BGP Neighbour:
BGP Neighbour router is also known as BGP Peer.
As Neighbour is manually defined, unlike other routing protocol it doesn't form neighbourship automatically.
TCP Connection is formed with the manually defined neighbour using TCP port 179.
• TCP is used for retransmitting the lost data, to avoid duplicate data, Check summing (accurate transmission).

BGP Tables:

Neighbour Table:

Information about all the list of manually defined neighbour will be managed in the neighbour table. #show ip bgp neighbors

#show ip bgp summary

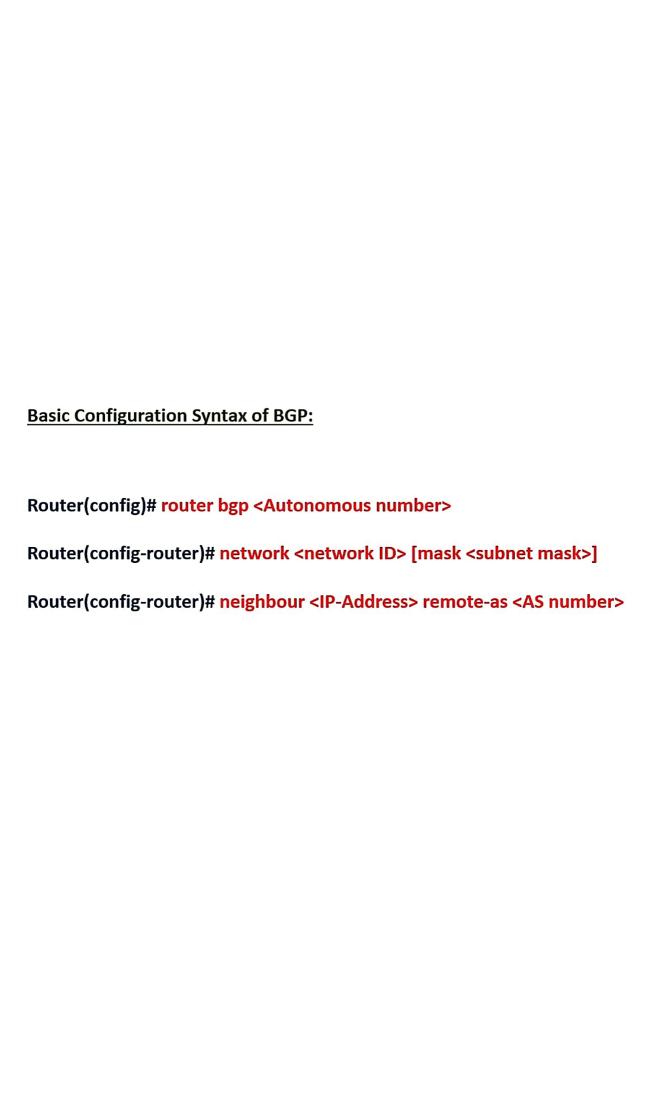
BGP Database table:

The list of all possible network learnt by BGP will be managed along with there attributes and path. **#Show ip bgp**

Routing Table:

The list of only the best path will be available in the ip routing table.

#show ip route



BGP Message Types:

Open:

It is used to initiate a BGP session between 2 routers. Includes the below:

BGP version Sender AS number Hold Time (Cisco default 180 seconds) BGP identifier optional parameter

Keepalive Message:

- This Message is used to maintain the BGP session between the BGP Peers
- It will be sent once in one-third the "hold time". The default timer in cisco device is 60 seconds.

Update:

If any new route added and existing route deleted. Path Attributes

Notification:

Terminate or rejects a BGP connection.

Can include error message (" BGP version not supported")

BGP States:

