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Key Attributes

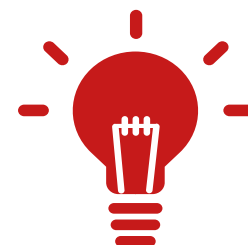|	
Protocol Type/Class:	Path-Vector
Algorithm:	Comp. Metric
Type:	EGP (Exterior Gateway Protocol)
Metric:	Composite Metric based on multiple factors
No. of packet types:	4 (Open, Update, Keepalive, Notification)
Admin Distance:	20 (eBGP), 200 (iBGP)
No. of Neighbor States:	6
Transport:	TCP (Port179)
Standard:	IETF RFC4271 (BGPv4 - 2006)
Authentication Support:	YES (MD5)

BGP Types

eBGP	iBGP
Admin Distance = 20	Admin Distance = 200
Peering between Routers in different AS	Peering between Routers in same AS
TTL = 1 *(means, only directly connected Peers can talk to each other)*	TTL = 255 *(means, Peers which are hops away from each other can still talk to each other)*
Does NOT require Full Mesh Topology	Full Mesh Topology Required (or any remedy for it e.g. Router Reflectors, Confederations, …)
Next-hop is changed to Local Router in advertisements to peers	Next-hop is NOT changed to Local Router in advertisements to peers
Loop Prevention Mechanisms: AS-PATH	Loop Prevention Mechanisms: Split Horizon
AS is prepended/added in the AS-PATH attribute in advertisements	AS is NOT prepended/added in the AS-PATH attribute in advertisement
Does not send the LOCAL-PREF attributes in advertisements	Sends the LOCAL-PREF attributes in advertisements

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BGP Neighbor States

1. Idle
2. Connect
3. Active
4. OpenSent
5. OpenConfirm
6. Established

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BGP Packets (Message Types)

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Open Message ❶	**U**pdate Message ❷	**K**eepalive Message ❸	**N**otification Message ❹
Set up and establish BGP adjacency	Advertise, update & withdraw routes	Ensure that BGP neighbors are still alive	Error Condition notification
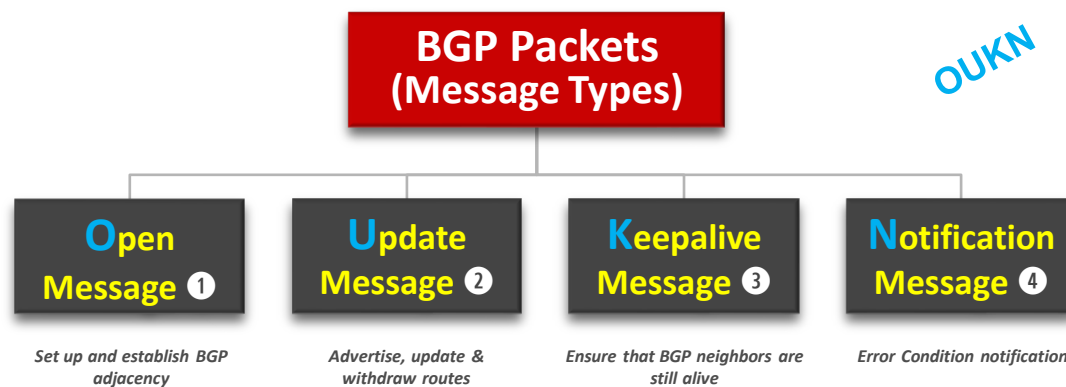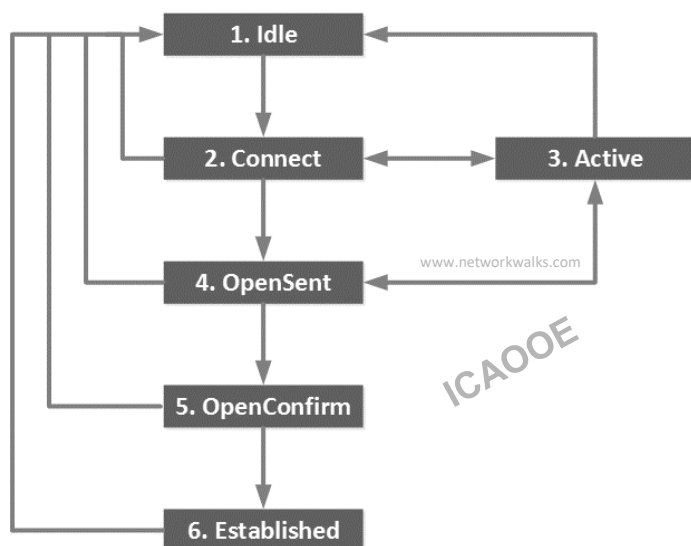
BGP Origin Codes

Code	Detail
i	**IGP:** Route injected into the BGP tables using the network statement
e	**EGP:** Not used anymore
?	**Incomplete:** Redistributed into BGP (either from static or a dynamic routing protocol)

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