

Complete Routing with Troubleshooting

A real time case study with around 500 routers would be created and the following concepts would be demonstrated live.

The following Topics are covered under the BGP/MPLS portion :

1. Identification of Networks by Access List.
2. Identification of Networks by Prefix list.
3. Identification of Networks by As-Path access-lists
4. Identification of Networks by Community list.
5. Identification of Networks by Expanded Community list.
6. Understanding the logic and flow by route maps.
7. Understanding MPLS routing and label distribution protocol concepts.
8. Understanding IBGP and EBGP Concepts
 - a. Fully Meshed BGP peering
 - b. Redistribution of BGP routes into IGP – One way redistribution
 - c. Redistribution of BGP routes into IGP – Two way redistribution
 - d. BGP Confederations and route reflector clients.
 - e. Enabling BGP free core with MPLS
9. Understanding BGP AS path attribute.
 - a. AS path prepending
 - b. AS Path Access List
10. Understanding BGP next hop attribute.
11. Understanding BGP local preference attribute.
12. Understanding multi exit discriminator attribute.
13. Understanding BGP weight attribute.
14. Understanding Origin Attribute.
15. Understanding BGP community attribute.
16. Understanding BGP route Aggregation.
 - a. Summary Only
 - b. Advertise MAP
 - c. Suppress MAP
 - d. Attribute MAP
17. Understanding the virtual routing and forwarding
18. Virtual routing and forwarding by OSPF, EIGRP, RIP and BGP (VRF Lite)
19. Inter VRF routing
20. Enabling MPLS layer 3 VPN
21. Enabling BGP MPLS core.
22. Route filtering by NRI route filtering :
 - a. By access list
 - b. By prefix list
 - c. By route maps
 - d. By by AS Path Access List
 - e. AS Path Community List