

MPLS Training for 5 days at RGMTTC, Meenambakkam, Chennai-16.

Pre - requisite for the students - Knowledge of basic networking

12 sessions of Theory and 8 sessions of practicals.

Rs.6000 inclusive of TAX. The full payment of the course fee in the form of DD should be made before the commencement of the course.

Cash/ cheque will not be accepted.

The fees will be collected through Demand Draft drawn in favour of "Sr AO (Cash), O/O CGM, BSNL,TN Circle, Chennai-2"payable at Chennai.

Day - 1

- OSI
- Circuit/packet/label switching
- Routing protocols
- Overview of MPLS
- MPLS Architecture - core routers, edge routes, access network

Day-2

- MPLS operation
- Labels, label header
- LSR, LER, LSP, etc
- FEC
- Label swapping
- Control plane, data plane
- Reserved labels
- TTL behavior

- LAB: MPLS lab visit, Hardware architecture of Routers CISCO 7613,12410, physical identification of router interfaces, demo on adding IP address to LAN, WAN, sh module, sh environment, CISCO 7613, 12410 card description

Day-3

- MPLS protocols
- PE-CE routing OSPF
- LDP protocol overview
- LDP peers
- LDP messages like discovery, session

- Advertisement and notification messages
- LDP header

LAB: configuring MPLS globally, PE-CE routing commands, MPLS monitoring commands

Day-4

- Introduction to VPN
- Overlay and peer-to-peer VPNs
- MPLS Layer3 VPN
- VRF
- Data structures associated with VRF
- RD
- RT
- VPNv4 address families
- MP-iBGP between PEs

LAB: configure VRF on PE and P routers, configure ipv4 address families, configure vpnv4 address families, running BGP between PE and CE routers, vpn creation

Day - 5

- Advanced concepts of MPLS
- Traffic engineering
- RSVP
- TE extension
- Constraint based routing and operation
- Tunnel creation
- QOS, COS
- Trouble shooting

Case Study : A real time case study, design and implementation of a large enterprise network through MPLS and the applications running on the network.