

Course Name : MTCTCE & MTCUME

Course Time : 24 Hrs.

Course Prerequisites : MTCNA

Course Outline

❖ Packet flow diagram

- Why this diagram is necessary?
- Full overview of all things covered by diagram
- Simple examples how packet travels through the diagram (routing, bridging, connection to router etc.) + LAB
- More complex examples of diagram usage +LAB

❖ Firewall filter/nat/mangle

- Connection tracking
- Filter + LAB
- NAT + LAB
- Mangle + LAB
- Some complicated rule "conditions" covered ("advanced", "extra" tab) + LAB
- uPNP

❖ Quality of Service

- HTB
- Burst + LAB
- Queue types
- Simple queues + LAB
- Simple queue and queue tree interaction

❖ DNS client/cache

- Basic configuration + LAB
- Static DNS Entry + LAB

❖ DHCP client/relay/serve

- DHCP communication analysis
- DHCP-client identification/ configuration + LAB
- DHCP server configuration: + LAB

❖ **PPP**

- PPP Profile + LAB
- PPP Secret + LAB
- IP Pool

❖ **PPTP/L2TP**

- PPTP and L2TP
- PPTP Client configuration + LAB
- PPTP Server configuration + LAB
- L2TP Client configuration + LAB
- PPTP Server configuration + LAB

❖ **PPPoE**

- PPPoE server and client
- PPPoE client configuration + LAB
- PPPoE Server configuration + LAB
- Encryption + LAB
- Interface ECMP

❖ **PPP Bridging**

- L2TP and EoIP + LAB
- L2TP and VPLS + LAB
- L2TP and BCP + LAB
- Multilink Protocol
- MLPPP [optional]

❖ **IPSec**

- Introduction
- IPSec Peer
- Policy
- Installed-SA
- Create IPSec between two routers with NAT + LAB

❖ **HotSpot**

- Introduction
- HotSpot Login Methods + LAB
- Users + LAB
- Monitor Users
- Profile + LAB
- Bypass HotSpot
- Customize HotSpot + LAB

❖ **RADIUS**

- RADIUS client + LAB
- RADIUS server
- User Manager + LAB
- RADIUS incoming