

Secure and Optimized Converged Networks

Lecture Week 36

VPN, MPLS, MPLS VPN

- 1. VPN : What is a VPN?**
- 2. IPSec VPN :Confidentiality , Integrity , Autentication, Tunneling , Cryptosystem, Hashing, Key Management, Certificate of Authority Service**
- 3. IPSec security protocols (AH & ESP), IKE, ISAKMP,Transform set, IPSEC SA, Crypto**
- 4. GRE, GRE VPN**
- 5. Basic Multiprotocol Label Switching (MPLS) Features , Application of MPLS**
- 6. MPLS Operation**
- 7. CEF Switching**
- 8. MPLS Architecture (Control Plane, Data Plane)**
- 9. Label Switch Routers**
- 10. MPLS labels, Label Format**
- 11. Label Distribution and Advertisement**
- 12. Overlay VPNs & Peer-to-peer VPNs**
- 13. MPLS VPN Architecture**
- 14. MPLS VPN: Route Distinguishers, VPNV4 address**
- 15. MPLS VPN: Route Targets**
- 16. MPLS VPN Routing**