

# VPN

1. Introduction
  - a. What is VPN?
  - b. Types of VPN (IPSEC & SSL)
  - c. Main benefits of VPN
2. Ciphers, keys & RSA Tokens
3. Hashes & Algorithms
4. How Diffie Hellman (DH) works?
5. IKE (Internet Key Exchange) - Introduction
6. Comparison between DES & AES
7. ISAKMP Negotiation Phases
8. SkeyID
9. Exchange of Main Mode
10. How EIGRP Authentication works?
11. Why we need ESP?
12. Security Parameter Index (SPI)
13. Exchange of Quick Mode
14. Types of VPN configuration
15. Practical configuration on S2S VPN & Policy based VPN on IOS and ASA
16. Implementation Configurational Faults
17. Practical Lab- VPN between Routers But ASA in between the routers
  - ESP Inspection
  - Initiate traffic from outside to inside
18. Introduction- Route Based VPN
19. GRE (Generic Routing Encapsulation) + Practical Lab
20. VPN PKI + Practical Lab
21. How to configure Windows as CA Server + Practical Lab
22. Remote Access VPN (RAVPN) + Practical Lab
23. RAVPN on ASA + Practical Lab
24. DMVPN (Phase 1 & Phase 2)+ Practical Lab
25. GET VPN + Practical Lab
26. Virtual Routing and Forwarding (VRF)
27. COOPKS (Cooperative KS)
28. IKEv2

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## Bonus Topics

