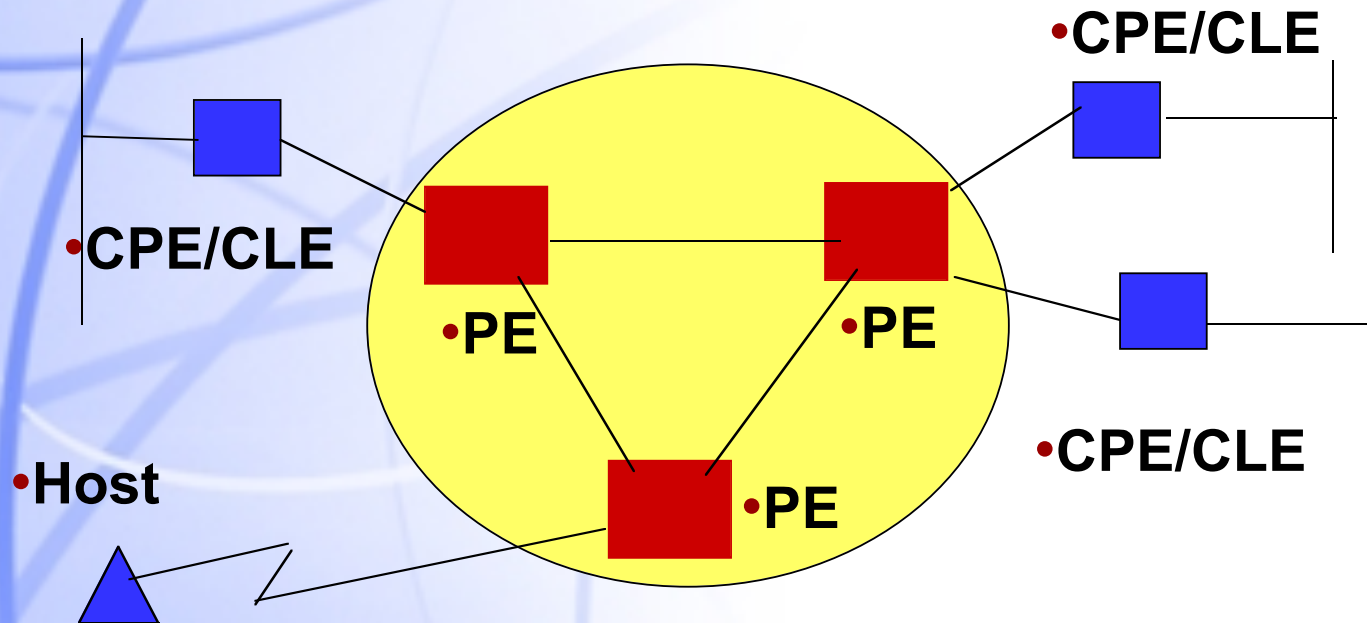




IPSEC VPN overview

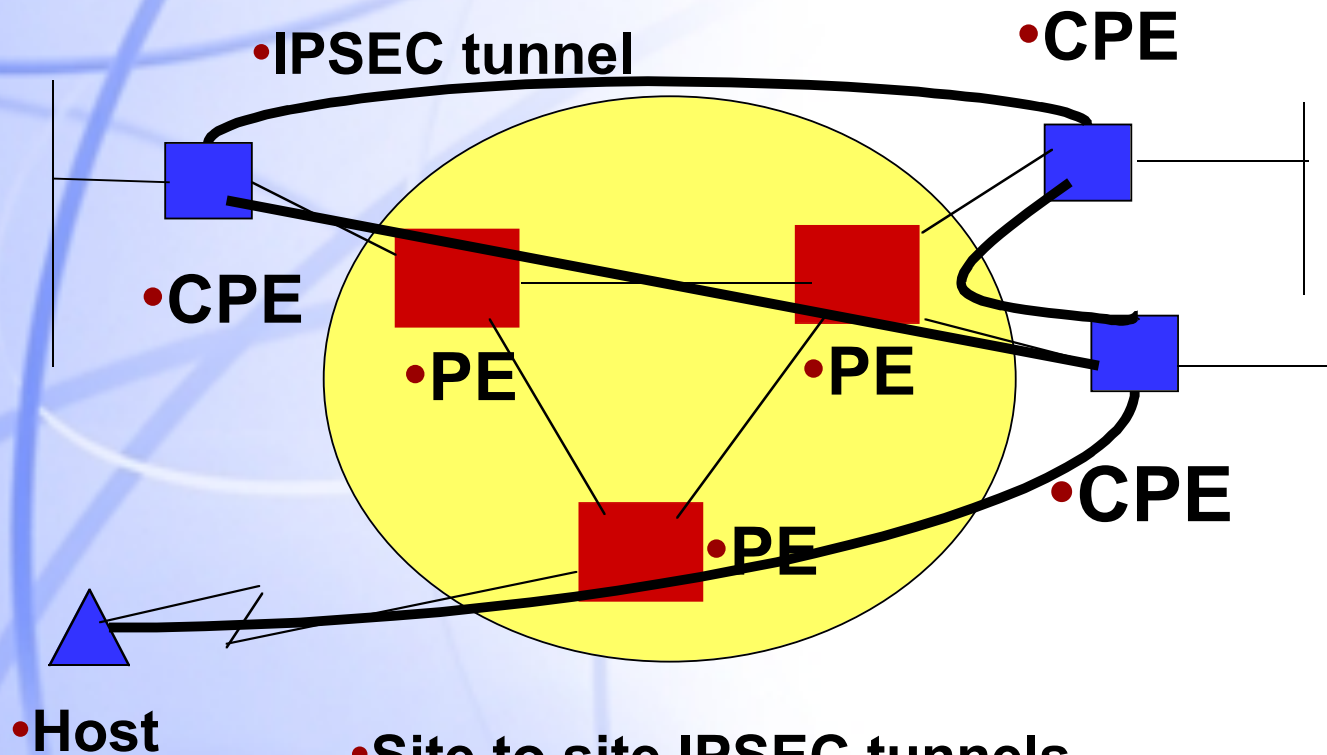
Basic VPN Architecture



•IPSEC can be used for :

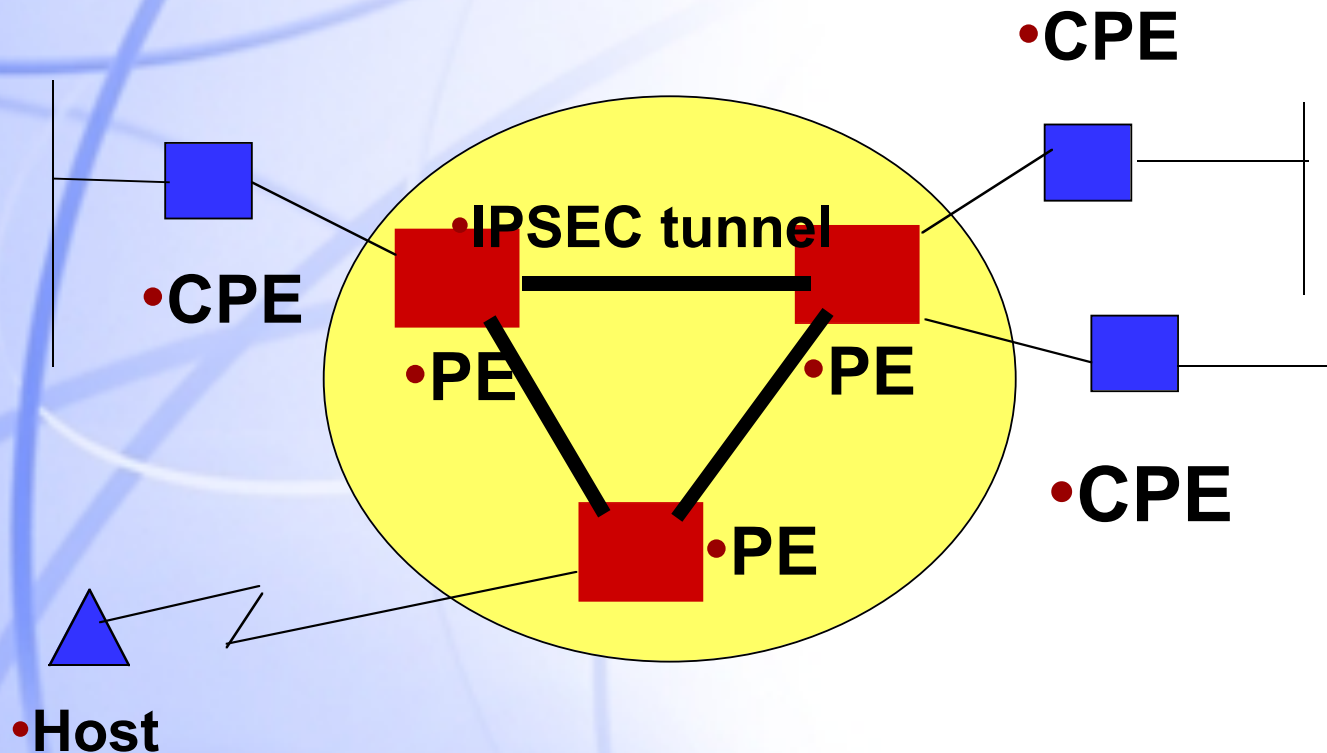
- CPE to CPE
- PE to PE
- PE to CPE

CPE to CPE IPSEC tunnels



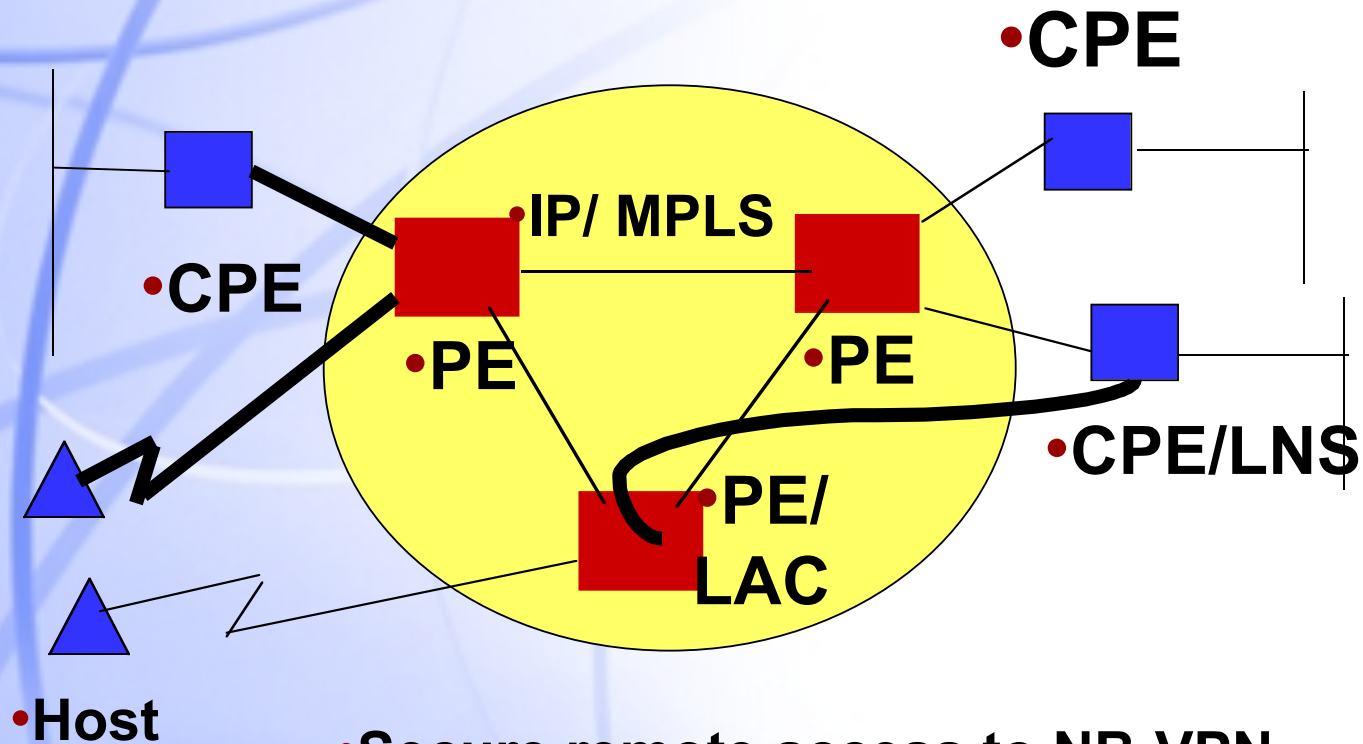
- Site to site IPSEC tunnels
- Voluntary IPSEC tunneling

PE to PE IPSEC tunnels



• Can be used for both Layer 3 + Layer 2 VPNs

CPE to PE IPSEC tunnels



- Secure remote access to NB-VPN
- Compulsory L2TP/IPSEC tunneling

Current IPSEC WGs

- **IPSEC**
- **IPSEC Policy (IPSP) - allows configuration of IPSEC policy for hosts + security gateways, security gateway discovery for hosts etc**
- **IPSEC Remote Access (IPSRA) - extend IPSEC to allow for remote client user authentication and configuration**

Requirements Solicited - some possibilities are:

- **Ability to associate an IPSEC tunnel with a VPN (e.g. add VPN-ID to IKE phase 2 negotiation)**
- **Ability to run routing protocols over an IPSEC tunnel (possible issue with wildcard QM client IDs)**
- **Allow null encryption / null authentication option**
- **More flexible diffserv marking rules**

Thank You!