ALBUS SECURITY

Network-Layer Protocols

The network layer of the TCP/IP protocol suite encompasses various protocols that facilitate communication between different networks. Some examples of protocols operating at the network layer include:

1. CLNS (Connectionless-mode Network Service): It is a protocol that provides connectionless data transmission services in a network.
2. DDP (Datagram Delivery Protocol): DDP is a protocol used in AppleTalk networks to deliver datagrams between devices.
3. EGP (Exterior Gateway Protocol): EGP is an older routing protocol that was used to exchange routing information between different autonomous systems.
4. EIGRP (Enhanced Interior Gateway Routing Protocol): EIGRP is a Cisco proprietary routing protocol that efficiently calculates routing paths and exchanges information within a network.
5. ICMP (Internet Control Message Protocol): ICMP is responsible for sending error messages and operational information between devices on an IP network.
6. IGMP (Internet Group Management Protocol): IGMP is used by hosts to report their multicast group memberships to multicast routers.
7. IPsec (Internet Protocol Security): IPsec provides security services such as authentication and encryption for IP network traffic.
8. IPv4/IPv6 (Internet Protocol): IPv4 and IPv6 are the core protocols responsible for addressing and routing packets across the internet.

9. IPX (Internetwork Packet Exchange): IPX is a network layer protocol used in Novell NetWare networks for packet delivery.
10. OSPF (Open Shortest Path First): OSPF is a link-state routing protocol that determines the best path for routing IP packets in a network.
11. PIM (Protocol Independent Multicast): PIM is a multicast routing protocol that allows efficient distribution of multicast traffic in a network.
12. RIP (Routing Information Protocol): RIP is a distance-vector routing protocol that dynamically shares routing information among routers in a network.