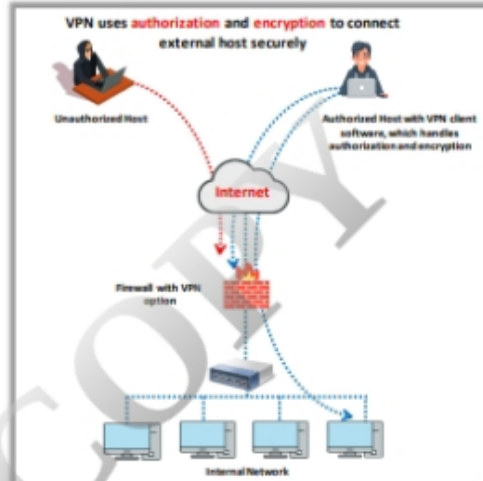


How VPN Works



- A client willing to connect to a company's network initially connects to the internet
- The client initiates a **VPN connection** with the company's server
- Before establishing a connection, Endpoints must be **authenticated** through passwords, biometrics, personal data, or any combination of these
- Once the connection is established the client can securely **access** the company's network



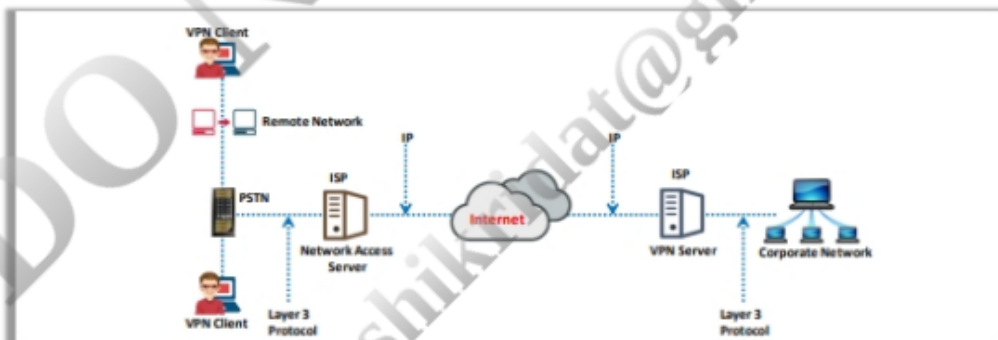
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VPN Components



VPN components

- VPN client
- Network access server (NAS)
- Tunnel Terminating Device (or VPN server)
- VPN protocol



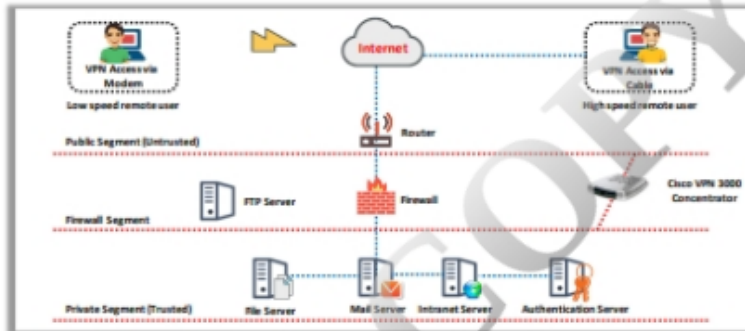
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VPN Concentrators



- A VPN Concentrator is a network device used to create **secure VPN connections**
- It acts as a VPN router which is generally used to create a remote access or **site-to-site** VPN
- It uses tunneling protocols to **negotiate security** parameters, create and manage tunnels, encapsulate, transmit, or receive packets through the tunnel, and de-encapsulate them



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Functions of a VPN Concentrator



- A VPN Concentrator functions as a **bi-directional** tunnel endpoint

The VPN Concentrator functions are:

1 Encrypts and decrypts data

2 Authenticates users

3 Manages data transfer across the tunnel

4 Negotiates tunnel parameters

5 Manages security keys

6 Establishes Tunnels

7 Assigns user addresses

8 Manages inbound and outbound data transfers as a tunnel endpoint or router

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