Chapter – 4

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Security Technology

- PAT : Port Address Translation (PAT) is **an extension of Network Address Translation (NAT)** that permits multiple devices on a LAN to be mapped to a single public IP address to conserve IP addresses.

- NAT : NAT stands **for network address translation**. It's a way to map multiple local private addresses to a public one before transferring the information. Organizations that want multiple devices to employ a single IP address use NAT, as do most home routers.

Difference between PAT & NAT

PAT	NAT
PAT stands for Port Address Translation	NAT stands for Network Address Translation
Private IP addresses are translated into the public IP address via Port numbers.	Private IP addresses are translated into the public IP address.
PAT is a dynamic NAT.	NAT can be considered PAT's superset.
PAT uses IPv4 address but with port number.	NAT uses only IPv4 address.

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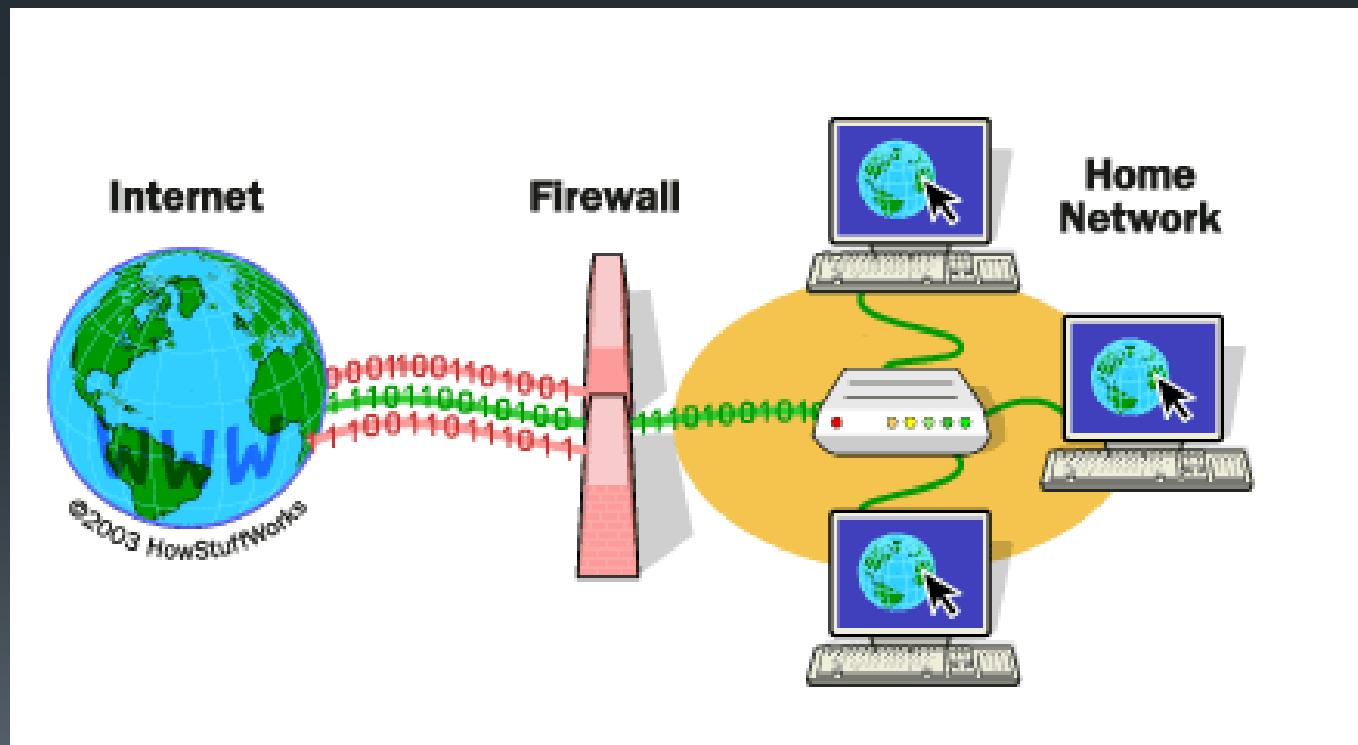
VPN(**Virtual private network)**

- A virtual private network extends a private network across a public network and enables users to send and receive data across shared or public networks as if their computing devices were directly connected to the private network.