

Q1 Explain firewall design principles.

Ans Firewall is a combination of software and hardware components that controls the traffic that flows between a secure network and an insecure network.

- The firewall sits at the gateway of a network or site at a connection between the two networks.
- All traffic from network to the other, passes through the firewall.
- The firewall stops or allows traffic based on the security policy as defined in rules table.

The secure trusted network is said to be "inside" the firewall, the insecure untrusted network is said to be "outside" the firewall.

Principally, the philosophy behind firewall can be thought of as a part of mechanism such as:

- (i) It exists to block traffic
- (ii) It permits traffic

In brief, the basic of firewall is provided only one exit to the network. There are firewalls that blocks the undesirable, another allows traffic.