NETWORK PROGRAMMING

How does Firewall help to secure PC?

Firewalls are the integral part of security for any network. A firewall is a software-based or hardware-based or combination of both that prevents unauthorized access to and from computer. Firewalls are security system that controls traffic which comes and goes over network. It also prevents unauthorized users from accessing private networks connected to the Internet (usually referred to as Intranet). It has an access control feature which distinguishes between good and bad traffic.

Any message that enters or leaves the intranet passes through the firewall where they are examined and are blocked if the security criteria are not met. Firewall only allows messages from source that are defined within the firewall. We need Firewall to protect the confidential information from being disclosed to the malicious users.

Some functions performed by Firewall – Carrying out defined security policies, Gateway Defense, Hiding and protecting internal network address, Reporting on threats.

A software-based Firewall is installed on to the computer and protects computer from traffic. When a virus or other threats tries to enter into the network then firewall blocks it from intercepting computers or system. For example, one of the ways to block unwanted traffic is packet filtering.

Firewall functions by allowing specific communications while excluding others based on certain parameters and guidelines. However these guidelines can be customized to fit in the need of the user and the firewall works on the new set of access control list. There are several different methods firewalls use to filter out information, and some are used in combination. These methods work at different layers of a network, which determines how specific the filtering options can be.

However Firewall may fall short in protecting system against Malware (malicious software) which can easily be acquired by simply browsing through websites. Also they are not adequate for business use.

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