

Next-generation firewall (NGFW): This kind of firewall adds features like intrusion prevention, antivirus, malware detection, deep packet inspection, application awareness, identity awareness, and so on to the features of stateful inspection and application-level gateway¹. Consider it your system's virtual gatekeeper, regulating the flow of data into and out of it. Similar to how a physical firewall stops fires from spreading, a digital firewall stops hackers and dangerous malware from accessing your private data. In order to filter out potentially dangerous or suspicious content while permitting only authorized traffic to get through, firewalls inspect data packets as they move between your device and the internet.

Firewall with stateful inspection: An improved version of packet filtering firewall that keeps an eye on the connections' context and state. Among the prevalent kinds are: The most basic kind of firewall is called a packet filtering firewall, which looks at each data packet's header and compares it to a list of pre-established rules.

Firewalls can also be categorized as follows based on how and where they are installed: A hardware firewall is a physical device that is placed across a network's perimeter. IP addresses and port numbers of the sender and recipient are included in a packet that holds the data that is sent via a computer network. For instance, a firewall rule might instruct all inbound traffic to port 22, which is frequently used for SSH (secure shell) remote computer logins.

Firewall is an essential component of computer security because it creates a wall between your network or device and the potentially hazardous internet. It can give small networks or individual users greater customisation and freedom.