

# Differences between hardware and software firewalls

Firewalls, both hardware and software, help protect computers from hackers and other online threats, by blocking malicious data from accessing the system.

While hardware firewalls provide full network protection from external threats, software firewalls installed on each computer can more closely examine data and block specific programs from sending. Data on the Internet.

On networks with high security concerns, combining both types of firewalls provides a more complete safety net.

## Hardware firewall

The hardware firewall is between the local computer network and the Internet. The firewall will check all data from the Internet, transmit secure data packets, and block potentially dangerous packets.

To properly protect the network without obstructing performance, hardware firewalls require expert setup and therefore may not be a viable solution for companies without separate IT departments.

However, for businesses with multiple computers, being able to control network security from a single device simplifies the task.

### Hardware Firewalls v/s Software Firewalls



Hardware firewalls protect the outside, and software firewalls protect each computer

## Software firewall

Software firewall installed on personal computers on the network. Unlike hardware firewalls, software firewalls can easily distinguish between programs on the computer.

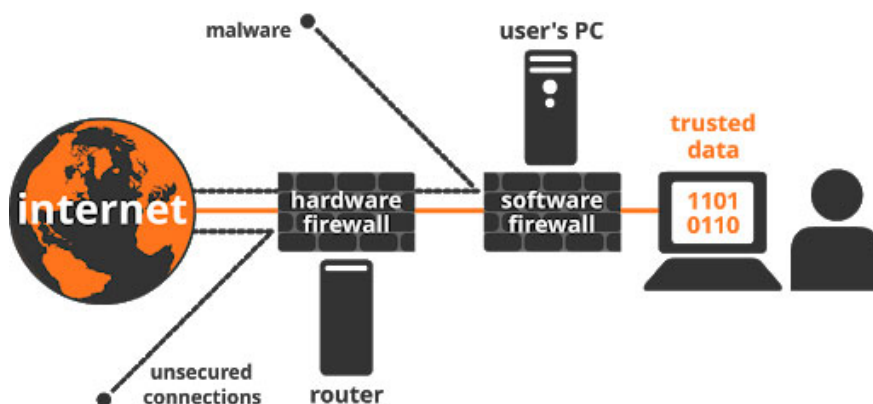
This allows them to put data into one program while blocking another. Software firewalls can also filter the data sent, as well as remotely respond to requests sent. The main disadvantage of enterprise software firewalls is that they require installation, update and administration on each individual computer.

## Router

To share the Internet connection between multiple computers, the router has to distinguish which part of data needs to be transferred to which computer. The data decomposition process works like a firewall: If unwanted data appears, the router will not identify it belongs to any computer and remove it immediately.

This level of protection is sufficient for home use. Together with the software firewall, it is sufficient to protect many enterprise networks that do not require high security. However, routers often lack the advanced options and features that dedicated hardware firewalls provide.

## Combine different types of firewalls



Using a combination of firewalls will enhance network security

Using a single software firewall together with the router or hardware firewall will enhance network security without causing any compatibility issues. However, using multiple software firewalls can cause conflicts, hindering proper functioning.

Businesses very concerned about network security can incorporate multiple hardware firewalls, minimizing every weakness in each network, but this requires careful setup from experts to avoid incompatibility and blocking legal data.

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