

Firewalls Security

Introduction to Firewalls

When you are connected to the Internet, anyone can access your computer any time. This makes your computer susceptible of being attacked. You can restrict outside access to your computer and the information in it using a firewall. Firewall acts as a barrier between your system and the outside world. Firewall can be configured to block data from certain locations while allowing the relevant and necessary data through. It provides protection against attackers by shielding your computer or network from malicious or unnecessary Internet traffic. It is especially important for users who rely on "always on" connections such as cable or DSL modems, firewalls are offered in two forms:

- a) **Hardware (external)**
- b) **Software (internal)**

While both have their advantages and disadvantages, the decision to use a firewall is far more important than deciding which type to use.

1. **Hardware Firewall**

These external devices are positioned between your computer or network and your cable or DSL modem. Many vendors and some Internet Service Providers (ISPs) offer "routers" that also include firewall features. Hardware based firewalls are particularly useful for protecting multiple computers. They also offer a high degree of protection for a single computer. They have the advantage of being separate devices running their own operating system, so they provide an additional line of defense against attacks. But hardware firewalls are costlier than software firewalls.

2. **Software Firewall**

These are programs that perform the function of a barrier. Some operating systems include a built-in firewall like Windows Firewalls. Thus it is important to enable it. If you do not have a built-in firewall, you can obtain a software firewall for relatively little cost from your local computer store, software vendor, or ISP. It is better to install the firewall from a CD, DVD, or floppy disk rather than downloading from the Internet because of potential virus risks.

Configuring a Firewall

Most commercially available firewall products, both hardware- and software-based, come configured. You may need to read and understand the documentation that comes with the firewall. In order to determine whether or not the default settings on your firewall are sufficient for your needs. Additional assistance may be available from your firewall vendor or from your ISP (either from tech support or a website).

Exercise:

- 1: What is Firewalls?**
- 2: How many types of Firewalls?**
- 3: What are the advantages of Firewall?**