

Information Security Newsletter Series: Firewalls

Computer attacks are on the rise, and it makes sense to be concerned about your family's safety while surfing the internet. Unfortunately, many of us have a false sense of security because of the "it won't happen to me" mentality; the truth is that it does happen to ordinary people everyday. Hackers steal identities and wreak havoc on people's private lives. The good news is that there are ways to prevent these attacks.

A first step in protecting your computer and the information stored on it should be to invest in a firewall. A firewall is a piece of software or hardware that works by blocking intruders from gaining access to your PC.

Although a firewall can cost anywhere from \$50 - \$250 dollars, the benefits of having one greatly outweighs the purchasing cost. This is especially true when the cost of a security breach is factored into the equation. When connected to the Internet, a computer can potentially have 65,535 open "doors," or ports, that are exposed to everyone on the Internet. A firewall will "close" these ports for you and make sure that other computer systems can't "see" your computer. What this boils down to is that it is a lot harder for an unauthorized user, such as a hacker, to access a computer, especially from the outside world. This is especially important for people who use a broadband Internet connection.

While there are benefits of using a firewall, there are also some limitations. Firewalls cannot protect against viruses or worms, so it is important to also install, use, and regularly update anti-virus software. Also, firewalls are like any other piece of computer equipment; they must be maintained. Once you have installed a firewall on your home computer system, it is important to regularly check for software and hardware (also know as "firmware") updates; most firewalls will have a built-in mechanism to do this.

So, what is the best firewall on the market? There are actually many good firewalls out there. It will be well worth your time to use an Internet search engine to do a little bit of consumer research before you make a purchasing decision; take some

time to read product reviews from reputable sources. Look for a firewall that monitors incoming and outgoing traffic, and make sure the firewall is user-friendly. Some firewalls come with wizards and helpful configuration screens that will help you make sound decisions about what type of configuration you would like to have, while others are more sophisticated and require more knowledge on your part. A recent trend in firewalls to consider is the bundling of other security features: several firewalls now come with spam filters, pop-up blockers, parental controls, cookie filters, and intrusion detection systems. While these added features may slightly increase the price, you might find them worth the trouble.

With more people falling victim to the increased amount of internet crimes and other malicious activity, it is very important to keep information security a top priority at work and at home. Installing and using a firewall is a good step towards peace of mind and should be part of an overall information security strategy. We'll learn about more steps you can take to protect yourself and your family from online threats in upcoming newsletters.