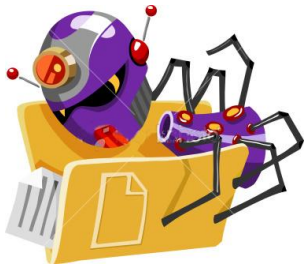# What are Viruses, Trojans, Worms & Spyware:

There are many different types of computer viruses circulating in the cyber world, including regular Computer Viruses, Worms, Trojans, and Spyware. Each is different in how they work, but they all share one thing in common; the ability to do a great deal of damage to your computer system.

Computer Viruses:

Have been around since the early 1980's. A computer virus is a program that gets into a computer system by means of hardware or software without the knowledge of the computer user, and then attaches itself to a program file. The virus then starts to replicate itself and do the damage it has been programmed to do. There are many different kinds of computer viruses out there and each has a different way that they work. They can be quite damaging to a computer system, so it is important that you have a good anti-virus program in place to protect your computer.

Computer Trojans:

A *Trojan* is not a computer virus in the sense that it doesn't get into your computer and self-replicate. The Trojan derives its name from the ancient Greek story of the Trojan Horse, where a group of warriors invades a city by hiding with a giant wooden horse. The residents of the city thought the horse to be a gift, never knowing what was hidden inside, so they rolled the horse in bringing their enemy within the city walls with it.

Computer Trojans cont'd

The Greek Trojan horse appeared to be something that it was not, just as the computer Trojan appears to be something that it is not. A computer Trojan is software that appears to function in a certain way (such as a program that you may have downloaded to remove viruses or spyware), when in reality it performs another action, unknown to the user. A Trojan is not always harmful and damaging to your computer, but it can be a *Backdoor*, for hackers to get into your computer and cause damage or retrieve information. A **good firewall** program is the most effective means to stop a Trojan Horse (also regular computer updates and an antivirus program help prevent Trojan Horses).

Computer Worms

Computer Worms are like a virus in the fact that they do self-replicate themselves within your computer system. However, a computer worm does not have to attach itself to a program in your system like a computer virus does in order to function. Also, unlike a computer virus that generally corrupts and modifies files on your computer to cause damage, a computer worm generally localizes its damage to the computer network by causing *increased bandwidth*. However, computer worms may have a "payload" that can delete files, encrypt files or email files on the host computer. A very common payload for a worm is to install a *backdoor* in the infected computer to allow the creation of a "zombie" computer under control of the worm author. Computer worms can often spread via email.

Computer Spyware:

Spyware is a newer type of program that damages your computer system. Spyware is also not a computer virus in the traditional sense, but it is harmful. Spyware works by getting into your computer system for the purpose of taking partial control over your use, or collecting personal information without your knowledge. Spyware often ends up on your computer after downloading and installing free software – be very careful of software you download, and which websites you download from!

Computer Protection Software

While different in the functions they perform, Viruses, Trojans, Worms and Spyware are all damaging to your computer. It is of the utmost importance that you make sure you have proper computer protection software in place that will protect you from these things so they cannot get into your computer and cause damage.