Computer Viruses © DP Computing 2002

by David Perkovic

What is a virus?

A computer virus is a computer program designed to replicate and spread on its own, preferably without a user's knowledge.

Computer viruses spread by attaching themselves to things such as a computer program, word processing or spreadsheet document, disks or email. Email is currently the most prolific way viruses spread. When an infected file is executed the virus starts. Depending upon the type of virus it can stay dormant, waiting to for an event to happen (such as a specific date) or become active straight away.

When the virus becomes active it can do a number of things such as:

- Delete and / or rename files on your computer.
- Send an email to one person or many people. The email can contain a predefined message, a copy of one of your emails or even a file on your computer
- Cause your computer not to even switch on or work (by modifying or erasing your BIOS).
- Display a certain message.
- Allow people to hack into your computer.

Computer viruses are increasing at an unprecedented rate. In 1986, there was one known computer virus; three years later, that number had increased to six and by 1990, the total had jumped to 80. By November of that year, viruses were being discovered at the rate of one per week. Today, between 10 and 15 new viruses appear every day. In fact, from December 1998 to October 1999, the total virus count jumped from 20,500 to 42,000. (Update: In March 2001 the antivirus software product, Norton Antivirus protected against 48,755 viruses as of October 2002 this figure jumped to 62,181.)

How do viruses spread?

Computer viruses spread whenever infected diskettes or files are exchanged. This can happen by people exchanging computer disks or viewing email attachments. People often do not know that the file they are sending you is infected so it pays to be wary of any program and email you open.

Why do people write viruses?

There are many reasons why people write computer viruses, some reasons are:

- The thrill of it. Just like an arsonist or a vandal, people want to see what kind of destruction they can create and if they can get away with it.
- To show off to people and prove to their peers how smart they are.
- To exploit a weakness in a product.

You do not have to be particularly smart to write a virus as there are many "virus writing kits" available on the Internet. Using these kits a person can easily change one or more features and send their creation out onto the Internet via email or spread the virus via other means.

How can you protect yourself from viruses?

- 1) Have an Antivirus program installed on your computer
- 2) Regularly scan the computer for viruses (at least once a week).
- 3) Keep your virus definition files (ie the list of viruses the antivirus knows about and can fix) up to date (at least once a month, more times if possible).
- 4) Keep updated in regards to the latest security patches for your operating systems and applications.
- 5) Do not open email attachments that are from people you don't know especially ones that end in ".vbs", ".exe", ".pif", ".bat" or ".scr". Even be wary with email from people you do know and trust. If you are not expecting an email from the person and it contains an attachment contact the person before you open the file.

Further Information

Further help and information can be obtained via the Internet at the following sites:

Symantec Asia Pacific Antivirus Research Centre http://www.symantec.com/region/au_nz/avcenter/

McAfee Clinic

http://www.mcafee.com/myapps/clinic/ov_clinic.asp

Virus Bulletin http://www.virusbtn.com/

Further Help and Assistance

If you need further help or assistance on this or any other computer problem please contact DP Computing at the address below.

This article is part of a series of articles by David Perkovic of DP Computing aimed at helping users gain effective use from their computers. Other articles in the series can be found at: http://www.dpcomputing.com.au/articles

DISCLAIMER: We will not be held responsible for any damage or data loss to your system. If you are in doubt over something or if the steps are different than what you see on your computer contact a professional.

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