



Plug-Ins

What are Plug-ins?

Plug-ins are extras that can be added to the browser on your computer (e.g. Internet Explorer, Netscape, Mozilla, Opera etc.) to provide additional capability and features beyond the standard.

Most browsers are limited to displaying images in standard formats such as JPEG and GIF, so common plug-ins such as Flash and Shockwave from Macromedia allow the browser to display animations. Another common plug-in, Apple's QuickTime, allows a browser to display digital movies and other multimedia content. Plug-ins are not limited to supporting media content such as video and audio however; there are also plug-ins for applications like spreadsheets and word processor files.

Plug-ins are actually pieces of software code which have been usually specifically written for the browser by third party developers and they can be obtained either by downloading them from the Internet or from another source such as a CD or floppy disk. Some of the most useful ones may be loaded automatically with the browser when it is first installed in a computer.

Very often you will see a prompt to download a particular plug-in as you are accessing a website via your browser. This is because a plug-in is associated with a particular type of file and the browser has noticed that your browser currently has no support for it. These plug-ins are usually self-installing and the associated data file (video, audio etc) will be accessed automatically when the plug-in installation is complete. Being mostly relatively small in size, they do not usually take long to download.

Security implications of Plug-ins

Most plug-ins are distributed free of charge via download over the Internet from a variety of download sites. However, users of plug-ins must be sure that the plug-in that they download and install in the browser on their computer won't compromise either its proper operation or its security. Remember - plug-ins have full access to data and programs on your computer!

A *poorly* written plug-in may cause the computer to behave erratically and perhaps crash. At worst it may damage files and programs irreparably. A *maliciously* written plug-in may open a security hole into your computer that could allow access to your data via your Internet connection - this is known as a Trojan horse program.

In recent years malicious Trojan horse plug-ins have caused computers to dial premium rate phone numbers causing huge telephone bills to be run up. More sinister are cases where data files have been accessed and downloaded from computers. This could have serious implications when sensitive information such as address and bank account information as well as personal medical details is stored on the computer.

Generally, you are less likely to encounter problems with plug-ins from a trusted major developer's site than from say an individual's site - in which case caution should be exercised. To counter such problems Microsoft and other vendors have introduced Digital Signatures that operate when a plug-in program requests to be installed and gives the user more confidence that the program is trustworthy.