



COMPUTER VIRUSES

OVERVIEW

Any program that has the ability to reproduce and attach itself to other programs is referred to as a computer virus. Learning about viruses can help you to keep your computer free from viruses and ensure the safety of your files. The following information will help you understand what a virus is and how you can prevent viruses from infecting your computer.

VIRUSES

Computer viruses can spread to a hard disk or removable disk whenever an infected computer program or system is used and the uninfected disk is accessed. (Listing directories, executing programs, printing files, and starting computers are examples of accessing a disk.)

In addition to being able to reproduce, viruses may be designed to perform different destructive functions. According to the Tech Encyclopedia, a computer virus "may be a simple prank that pops up a message on screen out of the blue, or it may destroy programs and data right away or on a certain date. It can lie dormant and do its damage once a year. For example, the Michelangelo virus contaminates the machine on Michelangelo's birthday."

After viruses infect files, they may wait for a signal before performing their destructive tasks. There are two types of signals that may invoke viruses to perform destructive tasks: time bombs and logic bombs. Time bombs are signals activated by a specific time of day, date, or hour. Logic bombs are activated when specific functions are performed. For additional information about viruses, visit the [ITS Virus Information Page](#). This page contains anti-virus software downloads, links to documents containing information about the software, as well as links to virus-related news and sites.

COMMON VIRUS INFECTION SYMPTOMS

Viruses can affect your computer in many ways. Although there are no telltale signs of a virus, there are a few symptoms that may suggest that your computer has a virus, courtesy of Dr. Duane Whitmire of BGSU.

- Unexplained messages appear on the screen
- Specific files are mysteriously deleted
- Unknown files are added to a disk
- An entire disk or drive is erased
- The keyboard does not work properly
- Unexplained modifications are made to data or documents
- Application software seems to be changed
- Operating system software appears to be modified
- Unexplained printing problems occur

Of course, these are not the only symptoms that may present themselves if you have a virus. The best way to detect a virus is to use anti-virus software, which is described in the following sections.

TIPS

Viruses can come from many different origins, so it is important to protect yourself from potential problems. Below are three common strategies for avoiding problems caused by viruses, courtesy of Dr. Duane Whitmire, BGSU.

BACK UP YOUR WORK

Backing up your work on several removable disks or hard drives is often a surefire way to avoid losing data due to viruses. If a virus infects your hard drive, your data will be safe on the removable media and vice versa.

RUN NEW SOFTWARE WITH CAUTION

Always be leery of new software, especially if the software is not coming from a sealed package, such as software borrowed from a friend. Always use your anti-virus software to scan the new software first before loading it. This goes for software downloaded from the Internet as well. Also, it may be a good idea to make a copy of the original and run the software from the copy if possible. This way, your originals will not be infected by viruses your computer may already have.

USE ANTI-VIRUS SOFTWARE

Using anti-virus software is the single most effective way to protect yourself from viruses. Many different programs exist on both the Mac and PC platforms. Most anti-virus software protects your system from viruses and eradicates virus that have been contracted. Newer versions of anti-virus software also offer security features and hacking protection. The following section reviews some of the most popular software and links to web sites dealing with anti-virus software.

ANTIVIRUS SOFTWARE

Anti-virus software is any software that protects your computer from viruses, or eradicates viruses that have already been contracted on the computer. Below are some popular anti-virus programs and links to their corresponding web pages. It should be mentioned, however, that many of these sites (as well as other sites) may offer free software or trial software. Also, here at BGSU, you can obtain free copies of virus software. An un-keyed version of virus software can be downloaded from the BGSU software server at <http://software.bgsu.edu/> when students are on campus. BGSU has a site license for McAfee VirusScan for the PC and Virex for the Mac.

ALADDIN ESAFE



Aladdin eSafe

Aladdin's eSafe offers protection from a variety of viruses, spam emails, and other options for business owners.

MCAFEE VIRUSSCAN



McAfee

McAfee's VirusScan offers protection from viruses spread through email, the Internet, downloads, shared disks, and synchronization with your PDA. The program also alerts you to suspicious activity on your computer that may be viruses. It also prevents hackers from entering your system, and offers new updates for the coverage of new viruses.

SYMANTEC NORTON ANTIVIRUS



Norton Antivirus

Symantec's Norton Antivirus is a program that removes viruses automatically, protects you from threats from email and instant messaging, and automatically updates itself to defend you against new viruses.