

# Computer Virus Fact Sheet



## What is a computer virus?

Computer viruses have impacted a significant number of computers worldwide over the past few years. There are over 10,000 known computer viruses. Over 200 new viruses are being discovered every month. A computer virus is a (hidden) program, which invades your computer; much like a biological virus invades a living cell. A computer virus contains code that has the potential to cause damage and/or perform unwanted/unauthorized functions.

## How does a virus work?

A computer virus performs two basic functions: it copies itself from machine to machine (self-reproducing), and it executes the instructions the perpetrator has planned.

A computer virus exhibits three characteristics: a replication mechanism, an activation mechanism, and an objective. The replication mechanism searches for other programs to infect, if it finds any, it inserts the hidden instructions in the program then it modifies the execution sequence of the program's instructions such that the hidden code will be executed whenever the program is invoked. The activation mechanism checks for the occurrence of some event. When the event occurs, the computer virus executes its objective.

## What damage can a virus do?

A computer virus is only one of the many kinds of threats to the security and integrity of UHD's computing resources. Like other threats, a computer virus can cause unwanted alteration or loss of data.

The damage done depends on the computer virus. There are viruses that do no harm, others that just annoy the user, and still others that can completely destroy all your data files. In some cases, your machine can even be rendered unusable.

## How many viruses are out there?

Computer viruses have impacted a significant number of computers over the past few years. There are currently over 10,000 known computer viruses worldwide. Over 200 new viruses are being discovered every month.

## How do they spread?

Viruses are usually spread by media/programs swapped through electronic bulletin boards or the internet.

What are the symptoms and indications of a computer virus infection?

Some computer viruses alert you to their presence by putting an unexpected message on your screen. Others use more subtle methods.

Things to watch for:

- programs taking longer to start or running more slowly than usual
- disk accesses seem excessive for simple tasks
- access lights turn on for non referenced devices
- unexplained decreases in the amount of available memory or system resources
- programs or files mysteriously disappear
- a sudden reduction in disk space
- executable files change size and unexplained hidden files appear

### **How do I check my computer or media for viruses?**

You need to use a virus-scanning program to check your computer or diskette for viruses. A number of software companies market anti-virus packages. The Division of Information Technology provides McAfee VirusScan program for all faculty and staff PCs at UHD.

### **How can I obtain a copy of a free anti-viral software?**

Our license agreement with Network Associates allows us to distribute McAfee VirusScan program to faculty and staff for their home PCs free of charge. Faculty and staff members can obtain a copy through our software downloads page on eServices.

### **What is Information Technology doing about viruses?**

Information Technology takes all computer viruses very seriously. Our Information Technology Security Office addresses all security concerns within the UH-Downtown computing community. All PCs on campus have McAfee VirusScan software installed on them, which is capable of detecting and eradicating computer viruses.

If you have any questions, comments, or concerns about computer viruses, please contact the Division of Information Technology at 713-221-8031. In addition, if you receive any e-mail messages regarding virus warnings, please forward them to [spamadmin@uhd.edu](mailto:spamadmin@uhd.edu) immediately.