

# What is Computer Virus

## Dictionary Definition of Virus

A virus is a small infectious agent that replicates only inside the living cells of an organism. Viruses can infect all types of life forms, from animals and plants to microorganisms, including bacteria and archaea. Viruses are found in almost every ecosystem on Earth and are the most numerous type of biological entity.

A Computer Virus is a piece of code which is capable of copying itself and typically has a detrimental effect, such as corrupting the system or destroying data. Viruses can only replicate themselves by infecting a host cell and therefore cannot reproduce on their own. A computer virus, much like other viruses, is designed to spread from host to host and has the ability to replicate itself.

## Technical Definition of Virus

**Norton Symantec** says 'In more technical terms, a computer virus is a type of malicious code or program written to alter the way a computer operates and is designed to spread from one computer to another. A virus operates by inserting or attaching itself to a legitimate program or document that supports Macro\* in order to execute its code\*\*. In the process, a virus has the potential to cause unexpected or damaging effects, such as harming the system software\*\*\* by corrupting or destroying data''.

Macro\*-a single instruction that expands automatically into a set of instructions to perform a particular task.

Code\*\*-in a general sense, is the language understood by the computer. Coding is what makes it possible for us to create computer software, apps, and websites. Your browser, your OS, the apps on your phone, Facebook, and this website – they're all made with code. Python, Java, C, C++ are some examples of coding language.

Software\*\*\*-the programs and other operating information used by a computer.

Techopedia definition-**Software**, in its most general sense, is a set of instructions or programs instructing a computer to do specific tasks. Software is a generic term used to describe computer programs. Examples of application software include office suites, gaming applications, database systems, and educational software.

## Purpose of Virus

The purpose of creating a **computer virus** is to infect vulnerable systems, gain

admin control and steal user sensitive data. Hackers design computer viruses with malicious intent and prey on online users by tricking them. One of the ideal methods by which viruses spread is through emails – opening the attachment in the email, visiting an infected website, clicking on an executable file, or viewing an infected advertisement can cause the virus to spread to your system. Besides that, infections also spread while connecting with already infected removable storage devices, such as USB drives. A computer virus (a type of malware) comes in different forms to infect the system in different ways. Some of the most common types of viruses are, Direct Action Virus, Multipartite Virus, Overwrite Virus, Polymorphic Virus, etc

## **worst computer Viruses**

Some of the worst computer Viruses of all times are

1. The Morris Worm-The Morris Worm was a self-replicating computer program (worm) written by Robert Tappan Morris, a student at Cornell University, and released from MIT on November 2, 1988. It unintentionally caused denial-of-service (DoS) for around 10% of the 60,000 machines connected to ARPANET in 1988.

2. CryptoLocker-Released in September 2013, CryptoLocker spread through email attachments and encrypted the user's files so that they couldn't access them. This was one of the worst malware which asks money to release your files. It was called Ransomware. With 500,000 victims, CryptoLocker made upwards of \$30 million in 100 days. Yatron Ransomware, the latest one, encrypts targeted files and delete encrypted files if the victim fails to make payment within 72 hours.

3. ILOVEYOU-This is one of the most well-known and destructive viruses of all time. In 2000 it was the most damaging malware event of all time. The virus was sent The malware was a worm that was downloaded by clicking on an attachment called 'LOVE-LETTER-FOR-YOU.TXT.vbs'. in an email with a subject line that said: "I love you".

4. MyDoom-This is a record-holder malware and was the fastest-spreading email-based worm ever. MyDoom hit tech companies like Microsoft, and Google with a Distributed Denial of Service (DDoS) attack. MyDoom spammed junk mail through infected computers, with the text that said "andy; I'm just doing my job, nothing personal, sorry".

5. Trojan-A Trojan horse or Trojan is a type of malware that is often disguised as legitimate software. Trojans can be employed by cyber-thieves and hackers trying to gain access to users' systems. Users are typically tricked by some form of social engineering into loading and executing Trojans on their systems. Once activated, Trojans can enable cyber-criminals to spy on you, steal your sensitive data, and gain backdoor access to your system. Astaroth Trojan emerged as the latest computer virus in 2017. It targets antivirus tools to steal username and passwords. Trojan Glupteba is another worst computer virus that has several

variants with different functionalities.

6.KOOBFACE-A network worm that attacks Microsoft Windows, Mac OSX and Linux platforms. It spreads via social networking sites like FaceBook, Twitter, Skype, etc. It spreads through the fake video player. If you click on one of the links which Koobface has posted online, you'll end up at a web page – typically a fake YouTube or Facebook Video page.

## **Strange Computer viruses**

1. The Bounce Joke Virus-Joke.Bounce is a joke program that causes the active window and mouse cursor to bounce up and down, making the computer difficult to use. It does not harm a computer but makes it difficult to use.

2. The Implant Virus-The Techno Virus is confusing and entertaining at the same time. This pest will fill your screen with the text "Techno" while techno music plays in the background.

3.MacMag Virus-Upon taking over your screen, this virus will deliver a message of world peace and then promptly delete itself from the host computer. Although MacMag is apparently not designed to be malicious, infected systems can display a variety of problems.

4. Stoned Virus-This virus brings a message to your computer screen "Your PC is now Stoned!" with "Legalize Marijuana".This is a simple virus that seems to have been designed to be harmless.

5.Ika-tako Virus-A virus created in Japan in 2010 that infected between 20,000 and 50,000 computers through file-sharing networks. The virus would replace files with thousands of images of a red squid.

### **History of Virus**

Robert Thomas, an engineer at BBN Technologies developed the first known computer virus in the year 1971. The first virus was christened as the "Creeper" virus, and the experimental program carried out by Thomas infected mainframes on ARPANET. While it didn't do much damage to the computer, it did a lot to weird people out with a teletype message appearing on the screen saying, "The Creeper is Watching You. Catch me if you can".

It is often said that Linux and Mac, these two operating systems are the less vulnerable to virus attack