

COMPUTER VIRUS



Q1. What is a computer virus?

A computer virus is a malicious software program that can generate multiple copies of itself, developed with the intent of destroying data, application programs and system programs.

New Computer Virus Spreads From Ukraine To Disrupt World Business

More than a day after it first struck, companies around the world were still wrestling with the fallout while cyber security experts scrambled to find a way to stem the spread.

[World](#) | [Reuters](#) | Updated: June 29, 2017 2:18 am IST

FRANKFURT/MOSCOW/KIEV: A new cyber virus spread from Ukraine to wreak havoc around the globe on Wednesday, crippling thousands of computers, disrupting ports from Mumbai to Los Angeles and halting production at a chocolate factory in Australia.

The virus is believed to have first taken hold on Tuesday in Ukraine where it silently infected computers after users downloaded a popular tax accounting package or visited a local news site, national police and international cyber experts said.

ILOVEYOU - Message (Rich Text)



File Edit View Insert Format Tools Actions Table Help

Reply Reply to All Forward [Print icon] [List icon] [Flag icon] [Dropdown arrow]

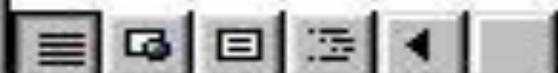
From: John Doe Sent: Thu 5/4/00 11:29 AM
To: John Doe
Cc:
Subject: ILOVEYOU

kindly check the attached LOVELETTER



LOVE-LETTER-FOR-Y
OU.TXT.vbs

coming from me.





CREATOR OF
I LOVE YOU
VIRUS

Onel de Guzman, Inventor of One of The
Most Destructive Computer Viruses Ever.

Q2.How does computer virus transfer / spread?

Computer virus transfers/spreads in the following ways:

- a) Through the Internet
- b) Through virus infected pen drive
- c) Through pirated software
- d) Through the email

Q3. Mention the types of computer viruses.

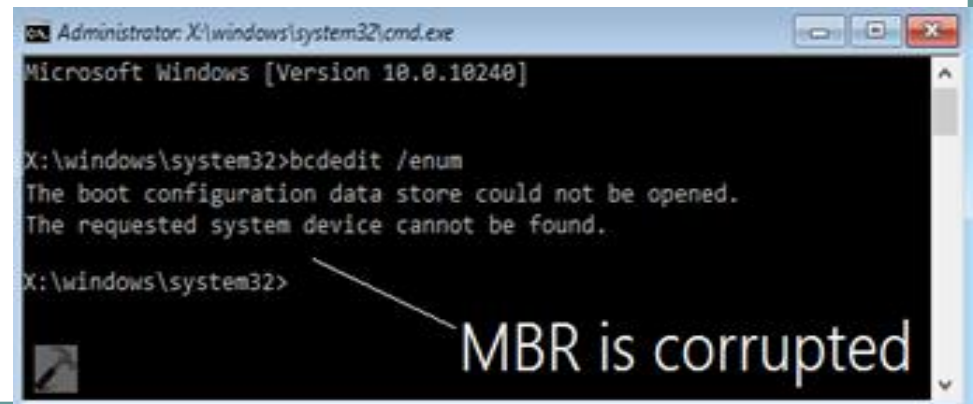
The followings are the types of computer viruses:

- a) Boot sector virus
- b) Program virus
- c) Multipartite virus
- d) Polymorphic virus
- e) Stealth virus
- f) Macro virus

Q4. What is a Boot sector virus?

It is a computer virus designed to infect the boot sector of the disk. It modifies or replaces the executable program in the boot sector of the disk preventing the computer from being able to boot or start up.

eg. Disk killer,
Danish boot etc.



The screenshot shows a Windows command prompt window titled "Administrator: X:\windows\system32\cmd.exe". The window displays the following text:

```
Microsoft Windows [Version 10.0.10240]

X:\windows\system32>bcdedit /enum
The boot configuration data store could not be opened.
The requested system device cannot be found.

X:\windows\system32>
```

A white arrow points from the text "MBR is corrupted" to the error message in the command prompt.

Q5. What is program/file infecting virus?

Program / file infecting virus is a computer virus that infects executable program files having extensions such as .exe, .com, .dll etc. It modifies the content of executable files interfering them from running.

eg. Alien.298, Crazy.A

Q6. What is Multipartite virus?

It is a virus with both the combined features of boot sector virus and program virus.

eg. Invader, Tequila etc.

Q7. What is polymorphic virus?

It is a virus that changes its virus signature every time it replicates and infects a new file so that an anti virus program may not detect it.

eg. Phoenix, Evil etc.

what is virus signature?

A **virus signature** is the fingerprint of a **virus**. It is a set of unique data, or bits of code, that allow it to be identified. **Antivirus** software uses a **virus signature** to find a **virus** in a computer file system, allowing to detect, quarantine, and remove the **virus**. Apr 26, 2017

Table 1: Examples of viruses string signature

<i>Virus Name</i>	<i>String Pattern (Signature)</i>
Accom.128 0	89C3 B440 8A2E 2004 8A0E 2104 BA00 05CD 21E8 D500 BF50 04CD
Die.448	B440 B9E8 0133 D2CD 2172 1126 8955 15B4 40B9 0500 BA5A 01CD
Xany.979	8B96 0906 B000 E85C FF8B D5B9 D303 E864 FFC6 8602 0401 F8C3

Q8. What is stealth virus?

It is a virus that hides itself making hard to detect.

eg. Frodo, Joshi

Q9. What is Macro virus ?

It is a virus that infects the software documents like MS-Word, MS-Excel etc. causing a sequence of actions to be performed automatically when the application is started.

eg. DMV, nuclear etc.

Q10. What are the symptoms of virus infection in the computer?

The followings are the symptoms of virus infection in the computer:

- a) It takes a long time to load program.
- b) The computer system either shuts down or restarts automatically.
- c) The computer system hangs from time to time.
- d) Strange message and unwanted figure can be seen on the screen.
- e) It renames the files with different names.

Q11. Write the preventive measures to protect the computer from virus infection.

The followings are the preventive measures to protect the computer from virus infection:

- a) Do not use pirated software.
- b) Install a good anti virus program and update it regularly.
- c) Scan the mail and unknown files of the Internet before opening them.
- d) Never load an unknown disk into your system unless you make sure it is virus free.
- e) Use the password system to avoid unauthorized use of the computer.

Q12. What is anti virus software? Give examples.

Anti virus software is a program designed to detect and remove viruses from the computer system.

- eg.
- a) Norton Anti Virus
 - b) McAfee
 - c) AVG
 - d) Kasparsky