

I LOVE YOU Worm

The I LOVE YOU worm was one of the most destructive malware programs ever created. It first started spreading in the Philippines on May 5, 2000. It appeared as an e-mail message with the subject line "ILOVEYOU."

Users who opened the e-mail were presented with an attachment that read "LOVE-LETTERi FORi YOU.txt.vbs." An attachment is a file sent via e-mail that can be downloaded by the e-mail recipient. When a recipient of the e-mail opened the attachment, it activated a "worm." A worm is a malware program designed to spread over a network of connected computers. In this case, the worm sent itself via e-mail to all of the e-mail contacts on the infected computer. Thus, the worm was able to continually infect computers on the same network and other networks as users unwittingly continued to download the attachment, activating the same cycle. The worm spread quickly because e-mails appeared to be sent by friends or acquaintances. In this way, users were tricked into believing the e-mail and the attachment were safe to open. Furthermore, users may have been tricked because part of the file extension (.txt) indicated the file was a text file, a file with plain text that cannot initiate installation. Because of a weakness in the Microsoft operating system, the ".vbs" part of the extension (short for Visual Basic Script), which can lead to installation, was hidden from users. Once the worm had infected a computer, it was able to access user data and destroy or modify the file system and operating system. The worm also succeeded in overwhelming e-mail systems because of the sheer number of e-mails it produced.

The I LOVE YOU worm devastated systems worldwide. Some experts calculated that nearly 1 in 10 of the world's computers were infected. The worm cost the world an estimated 24 billion dollars in lost hardware removal efforts.

Later in 2000, the worm was traced to have originated from the apartment of a computer science student in the Philippines. He and a partner were arrested, but were ultimately not charged with any crime, because at the time, the Philippines had no laws that made writing malware illegal.

- 1. A file that can be downloaded from an e-mail is called a(n) _____.**
 - A. attachment
 - B. worm
 - C. virus
 - D. program

- 2. The ILOVEYOU worm was able to spread because...**
 - A. it was more powerful than computer networks.
 - B. it tricked people into downloading it on to their computer.
 - C. it cost the world billions of dollars.
 - D. it overwhelmed e-mail systems.

- 3. Why did the malware authors use .txt as part of the file extension?**
 - A. So that people knew it was a worm
 - B. To be able to keep track of the number of infections
 - C. To hide their identities
 - D. Because .txt files cannot install programs on computers

- 4. Which was not an effect of the the ILOVEYOU worm?**
 - A. Crippled e-mail systems
 - B. Lost files
 - C. Lost operating systems
 - D. Demands for payment

- 5. The authors of the malware...**
 - A. went to jail for many years
 - B. were arrested
 - C. were ultimately charged with crimes
 - D. had to pay for damages

- 6. How did the worm use “contacts” to spread so quickly?**
 - A. When computer users saw an e-mail from someone they recognized they opened it and downloaded the attachment
 - B. When computers started sending thousands of e-mails across the same network, e-mail systems shut down
 - C. When users opened the e-mail from someone they recognized, the worm installed itself even if the attachment was not downloaded
 - D. By the time a user opened an e-mail, it was too late

- 7. A weakness in the Microsoft Operating system allowed the authors to...**
 - A. Hide the .txt part of the file extension so users would think the file was harmful
 - B. Hide the .txt part of the file extension so users would think the file was harmless
 - C. Hide the .vbs part of the file extension so users would think the file was harmless
 - D. Hide the .vbs part of the file extension so users would think the file was harmful