**THE HISTORY OF COMPUTER VIRUSES.**

 2 November, 1988, Robert Morris younger (Robert Morris), graduate student of informatics faculty of Cornwall University (USA) infected a great amount of computers, connected to Internet network. This network unites machines of university centres, private companies and governmental agents, including National Aeronautics Space Administration, as well as some military scientific centres and labs.

 Network worm has struck 6200 machines that formed 7,3 % computers to network, and has shown, that UNIX is not okay too. Amongst damaged were NASA, Los Alamos National Lab, exploratory center VMS USA, California Technology Institute, and Wisconsin University (200 from 300 systems). Spread on networks Apra Net, Mil Net, Science Internet, NSF Net it practically has removed these network from building. According to "Wall Street Journal", virus has infiltrated networks in Europe and Australia, where there were also registered events of blocking the computers.

 Here are some recalls of the event participants: Symptom: hundreds or thousands of jobs start running on a UNIX system bringing response to zero.

 Systems attacked: UNIX systems, 4.3BSD UNIX & variants (e.g.: SUNs) any send mail compiled with debug has this problem. This virus is spreading very quickly over the Mil net. Within the past 4 hours, it has hit more than 10 sites across the country, both Arpanet and Mil net sites. Well over 50 sites have been hit. Most of these are "major" sites and gateways.

 Method: Someone has written a program that uses a hole in SMTP Send mail utility. This utility can send a message into another program.

 Apparently what the attacker did was this: he or she connected to send mail (i.e., telnet victim machine 25), issued the appropriate debug command, and had a small program compiled. (We have it. Big deal.) This program took as an argument a host number, and copied two programs -one ending in VAX.OS and the other ending in SunOS - and tried to load and execute them. In those cases where the load and execution succeeded, the worm did two things (at least): spawn a lot of shells that did nothing but clog the process table and burn CPU cycles; look in two places - the password file and the internet services file - for other sites it could connect to (this is hearsay, but I don't doubt it for a minute). It used both individual host files (which it found using the password file), and any other remote hosts it could locate which it had a chance of connecting to. It may have done more; one of our machines had a changed super user password, but because of other factors we're not sure this worm did it.

 All of Vaxen and some of Suns here were infected with the virus. The virus forks repeated copies of itself as it tries to spread itself, and the load averages on the infected machines skyrocketed. In fact, it got to the point that some of the machines ran out of swap space and kernel table entries, preventing login to even see what was going on!

 The virus also "cleans" up after itself. If you reboot an infected machine (or it crashes), the directory is normally cleaned up on reboot. The other incriminating files were already deleted by the virus itself.

 4 November the authors of the virus - Morris - come to FBI headquarters in Washington on his own. FBI has imposed a prohibition on all material relating to the Morris virus.

 22 January, 1989, a court of jurors has acknowledged Morris guilty. If denunciatory verdict had been approved without modification, Morris would have been sentenced to 5 years of prison and 250 000 dollars of fine. However Morris' attorney Thomas Guidoboni immediately has lodged a protest and has directed all papers to the Circuit Court with the petition to decline the decision of court... Finally Morris was sentenced to 3 months of prisons and fine of 270 thousand dollars, but in addition Cornwall University carried a heavy loss, having excluded Morris from its members. Author then had to take part in liquidation of its own creation.

THE HISTORY OF COMPUTER VIRUSES

**1. Mind new words from the Text:**

1) graduate student – аспирант 2) to infect – заражать 3) to unite – соединять, объединять 4) to be not okay – быть не в порядке (о системе) 5) spread on – зд. распространившись на 6) to remove – удалять, уничтожать 7) to infiltrate – проникать, просачиваться 8) recalls – отзывы 9) debug – отладка программы 10) hit – зд. пораженный 11) a hole – дыра, отверстие 12) utility – обслуживающая программа 13) apparently – как видно, ясно, очевидно 14) victim – жертва 15) to compile – составлять 16) Big deal. – Хорошая сделка. 17) to execute – приводить в исполнение 18) to succeed – достигнуть, добиться 19) spawn – множественное размножение 20) shell – оболочка (пользовательский интерфейс) 21) clog – препятствие 22) hearsay – слух, сплетня 23) to average – достигать, проделывать в среднем 24) to skyrocket – быстро увеличиваться, расти (в размерах, о количеству, объёме) 25) it got to the point – он достигает цели 26) to reboot – перезагружать (компьютер) 27) to acknowledge smb guilty – признавать кого-л. виновным 28) denunciatory verdict – обвинительный приговор 29) to be sentenced to prison and fine – приговорить к тюрьме и штрафу 30) attorney – адвокат 31) to lodge a protest – подать протест 32) to decline – отклонить 33) to carry a heavy loss – понести тяжелые потерю

**2. Define and write down the point of the text. Write what damage Robert Morrison caused to FBI headquarters in Washington, Cornwall University and other users.**

**3. Write out the Text all words which are connected with the word “virus”. Translate them.**

**WHAT IS IT A COMPUTER VIRUS?**

A computer virus is a computer program that can copy itself and inflect a computer without the permission or knowledge of the owner. The term “virus” is also commonly but erroneously used to refer to other types of malware, adware, and spyware programs that do not have the reproductive ability. A true virus can only spread from one computer to another (in some form of executable code) when its host is taken to the target computer; for instance, because a user sent it over a network or the Internet, or carried it on a removable medium such as a floppy disk, CD, DVD, or USB drive. Viruses can increase their chances of spreading to other computers by inflecting files on a network file system or a file system that is accessed by another computer. The term “computer virus” is sometimes used as a catch-all phrase to include all types of malware. Malware includes computer viruses, worms, Trojan horses, most root kits, spyware, dishonest adware, crime ware, and other malicious and unwanted software, including true viruses. Viruses are sometimes confused with computer worms and Trojan horses, which are technically different. A worm can exploit security vulnerabilities to spread itself to other computers without needing to be transferred as part of a host, and a Trojan horse is a program that appears harmless but has a hidden agenda. Worms and Trojans, like viruses, may cause harm to either a computer system’s hosted data, functional performance, or networking throughput, when they are executed. Some viruses and other malware have symptoms noticeable to the computer user, but many are surreptitious. Most personal computers are now connected to the Internet and to local area networks, facilitating the spread of malicious code. Today’s viruses may also take advantage of network services such as the World Wide Web, E- mail, Instant Messaging, and file sharing systems to spread.

WHAT IS IT A COMPUTER VIRUS?

**1. Mind new words from the Text:**

1. to inflect – заражать, инфицировать

2. erroneously – неправильно, ошибочно

3. agenda – профиль, программа

4. malware, adware, and spyware programs – почтовые, вспомогательные и шпионские программы

5. reproductive ability – репродуктивная способность, способность воспроизводить

6. executable code – выполнимый, осуществимый код

7. catch-all phrase – всеохватывающая фраза

8. malicious – злостный, злоумышленный, вредный

9. to exploit – использовать, эксплуатировать

10. vulnerabilities – слабые места

11. to cause harm – причинять вред

11. surreptitious – потайной, тайный, подпольный

12. facilitating – облегчать, помогать, способствовать

**2. True or False?**

1) A computer virus is a computer program that can copy itself and inflect a computer without the permission or knowledge of the owner.

2) A true virus cannot spread from one computer to another (without any form of executable code) when its host is taken to the target computer.

3) Viruses can increase their chances of spreading to other computers by inflecting files on a network file system or a file system that is accessed by another computer.

4) The term “computer virus” cannot be used as a catch-all phrase to include all types of malware.

5) Malware includes computer viruses, but doesn’t deal with worms, Trojan horses, most root kits, spyware, dishonest adware, crime ware, and other malicious and unwanted software, including true viruses.

6) A worm can exploit security vulnerabilities to spread itself to other computers without needing to be transferred.

 **3. Put the proper words into sentences:**

1. A true virus can only… one computer to another when its host is taken to the target computer; for instance, because a user sent it over a network or the Internet, or carried it on … such as a floppy disk, CD, DVD, or USB drive.

2. Viruses can … their … of spreading to other computers by inflecting files on …. or a file system that is accessed by another computer.

3. … are sometimes confused with computer worms and Trojan horses, which are technically different.

4. … is a program that appears harmless but has a hidden agenda.

5. Worms and Trojans, like viruses, may cause harm to either a computer system’s hosted data, functional performance, or…, when they are executed.

6. Most … are now connected to the Internet and to local area networks, facilitating the spread of ….

**Personal computers, spread from, increase… chances, networking throughput, a network file system, viruses, malicious code, a removable medium, a Trojan horse**.

Сaмостоятельные рaботы:

-Состaвить aннотaцию к тексту (по выбору). Зaписaть в тетрaдь для с.р. Что тaкое aннотaция и взять текст из этого семестрa.

-Состaвление словaря профессионaльных терминов.

-Перевод текстов по специaльности. (Будет текст про вирусы).

-Подготовить сообщение(или презентaцию) по теме: Неполaдки в компьютере.

-Тестовые зaдaния по грaммaтике.