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Morris Worm

On November 2, 1988, Robert Tappan Morris released a worm into the internet. The experimental worm was the first of its kind. It replicated itself and programmed itself, so it ended up spreading much faster than Morris expected. It self-programmed and self-replicated at an exponential rate in a manner that had never been seen before. Morris knew this worm was not necessarily ethical, for he released it out of MIT instead of his own Cornell University. In due course, many computers across the United States had crashed because of Morris. Once he discovered how much damage the worm had been causing, he reached out to a friend at Harvard looking for a solution to stop it. They attempted in sending an anonymous message to the network with directions that could kill the worm, but the message came through too late since they system was clogged. Many significant computers at colleges, businesses and the military became infected. The cost to fix each computer ranged from $200 to over $53,000. The worm exploited vulnerabilities in computer systems and in the UNIX email software. Within 24 hours of releasing the worm, thousands of people were aware something was unusual. Eventually, it would infect ten percent of all computers using the internet. The Morris Worm was the largest malware case ever to reach this percentage. However, the percentage was so high due to the fact that the number of computers was much less than today. The computers it impacted included significant systems, such as Stanford's, Berkley's and NASA's. The effects of the worm halted infected computers for about 72 hours. Morris did, in fact, get caught and was the first person convicted of a felony charge under the Computer Fraud and Abuse Act. He claims that he merely did this to determine the size of the internet and the worm just got out of control on its own. The worm did take advantage of weak passwords and eventually resulted in the spreading of the significance of having stronger passwords. On the other hand, Morris released the worm out of MIT instead of his own Cornell University. If he had not been trying to hide or cover something up, he might have just let it out at

Cornell instead of disguising it elsewhere. In addition, it was decided that Morris definitely should have tested this worm out on a simulator first before letting it loose into the entire internet. The maximum estimated cost of damage from the worm was ten million dollars and some people certainly believe that his punishment have been much to light. Even though this was a felony conviction, Morris received 400 hours of community service, three years of probation and various fines. Nowadays, Morris is a professor at MIT. He is also considered a great mind in computer science and an entrepreneur. Positive effects of releasing this worm include password security awareness, a better understanding of possible security threats to the internet, and enforcing the new computer science acts that the United States had implemented.

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