AIDS Trojan, also called PC Cyborg, was the first ransomware 328 International Journal of.2.1 Communication Networks and Information Security (IJCNIS) Vol.On each infected system, it displayed a loving poem, "It will get on all your disks; It will infiltrate your chips; Yes, it's Cloner!" [14]. Basit and Amjad, two Pakistani brothers, developed Brain Boot Sector Virus in 1986 to infect MS-DOS computers, which was the first virus to infect the MS-DOS system [15]. They designed this virus to test their company's software and to prove that it was not a secure platform. This virus was replicating with the help of a floppy disk. Authors designed this virus to point out loopholes in their system rather than cause damage or harm to the system. PCwrite Trojan was one of the earliestTrojans designed in 1986 to erase all the user files once affected [16]. It was spreading through a shareware program called PC-Writer [17]. In 1988, Robert Tappan Morris, a graduate student at Cornell, drafted a program that would check a computer system's configuration to jump from one computer to another utilizing UNIX's sendmail program and the Internet's SMTP protocol [18]. It caused an increase in network traffic and eventually caused the Internet to crash at that time. Morris was arrested for creating this worm and convicted by the Computer Fraud and Abuse Act from 1986 [19]. Stoned is a boot sector virus that appeared in 1987 and infected floppy disks. It would sometimes display a message on the infected machine upon startup that would read: "Your computer is now stoned" [20].An accepted definition of a computer virus was crafted by Fred Cohen to be "a program that can infect other programs by modifying them to include a possibly evolved copy of itself" [9]. Viruses can spread throughout a computer system or network. The difference between viruses and worms is that a virus usually requires human interference such as opening an infected file to start replicating, whereas worms can replicate without an intervention [10]. A common characteristic for malware in this phase is that they do not try to remain hidden from the user. Most would display a message or image on the computer's screen. The first instance of a worm was developed by Robert H Thomas in 1971 and was called Creeper worm. It could move from one system to another and display a message that read "I'm the creeper: catch me if you can" [11].The mutation engine or Dark Avenger Mutation Engine (DAME), a toolkit from Virus Creation Laboratory, was the next innovative step in malware evolution [25].Elk Cloner is one of the first epidemic self-replicating viruses developed by a 15-year old named Richard Skrenta to infect PCs.Early Phases of Malware Evolution (1949 – 1991) Nowadays, malware is the most significant threat faced by the modern digital world.John Von Neumann introduced the first virus as an idea of "self-replicating string of code" in 1949. He designed a "self-reproducing automata", which was able to transform a new version by itself [8].