Intelligent signature detection for scanning Internet Worms

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Worms are widely regarded to be a major security threat faced by the Internet today. Active worms spread in an automated fashion, which can flood the Internet in a very short time. Incidents such as Conficker worm, detected in November 2008, a computer worm targeting the Microsoft Windows operating system, once infected 15 million hosts. In this study, we detect DNA signature by scanning internet worm using three algorithms. The first part, Intelligent Failure Connection Algorithm (IFCA) by using Artificial Immune System, is concerned with detecting the internet worm and stealthy worm in which computer infected by the worm. The second part, Traffic Signature Algorithm (TSA), is concerned with capturing traffic signature for the worm from infector computer. Finally, the third stage is DNA Converter Signature (DNACS) which converts traffic signature to DNA signature and sends it to DNA Filtering. In this study, we show that our proposed technique can detect DNA signature for MSBlaster worm. © 2012 Asian Network for Scientific Information.