ABSTRACT

ACCURACY ANALYSIS OF MALWARE DETECTION IN ANTIVIRUS SOFTWARE USING STATIC ANALYSIS METHOD

By

LEIDY KURNIA HATIKA

1202154343

Malware is software that performs malicious actions and is designed to damage, regulate computers, open confidential information and control the system remotely without being noticed by the user. Based on the Cyber Security Business report written by Steve Morgan in 2016, said that the whole world had lost data, some of which were caused by malware and expected to harm the world more than the US $ 6 trillion in 2021. With these problems, the antivirus was created to protect computers from malware attacks. Antivirus uses signatures to detect malware, but the use of antivirus to detect malware attacks has different results. Therefore the analysis is needed to understand what is done by malware and analyze the accuracy of detection of malware on antivirus. In this research, the analysis was carried out using static analysis methods and scanning malware samples on antivirus software. Analysis of antivirus software is done by scanning malware samples in the Virus Total by seeing the most scanning results, then proceed to find out the characteristics of the tested malware samples. From the tests, the results obtained by using static analysis focuses only on the value's string found in the malware samples and compared with the characteristics of malware based on the most scanning results on antivirus. This is intended to see whether the results of malware detection on software are in accordance with the results of the analysis obtained by static analysis methods. From this research, only three out of ten malware samples can be analyzed and the results of the accuracy of detection in the first sample as Spybot were obtained by 100%, the second sample as a Trojan by 75% and the third sample as a Trojan by 87.5%.

Keywords: *malware, malware analysis, static analysis malware, antivirus.*