ABSTRACT

Development of information and communication technology is growing rapidly. Internet usage as a result of the development of technology is also spreading widely. Most of government institutions, companies, universities, schools, and many other institutions are using the internet for many purposes. By this rapid development of technology there are also threats to the computers them selves. It causes knowledge about the weaknesses of the computer system is highly required in order to fix the weaknesses and keep the computer safe. To do such task, there is a test that is usually known as penetration testing.

In this final project, a software had been built to analyze weaknesses of a system. This stage is known as scanning and usually needs several tools such as nmap, netcat, and other tools. The software is built using Python and Shell Script. It will analyze the results of the scanner tools. Beside that, some recommendations to re-configure the system will be displayed based on the examination in order to help the system to be safer.

The program which has been made in this final project could be used to scan both Windows and Linux. Flaws and recommendations are also displayed according to the scanning results. The scanning on Windows needs 140,83 seconds in average and 36,43 seconds on Linux.

Keyword : system security, python, shell, scanning