ABSTRACT

ANALYSIS OF POTENTIAL SECURITY IN REGIONAL GOVERNMENT HEALTH WEBSITE XYZ USING AUTOMATIC TESTING METHOD IN KALI LINUX

By

JELITA PUTRI DEVIARINDA

NIM : 1202160132

The importance of website security is a top priority after data leakage or damage occurs. Website is a web page that is interconnected and contains a collection of information and can be accessed through the home page using a browser and internet network. According to the ministry of communications and information, 50% of the government's website is under threat from hacker attacks that can harm private information. The KPAI website in September 2019 was hacked by hacker due to lack of security and gave him access to the site. Vulnerability assessment or process of identifying the weaknesses of a system can be an effective way to control and prevention against risks that occur. With this problem, it is necessary to analyze the potential security gaps on the regional government health website xyz with a vulnerability assessment aimed at preventing security gaps. The gaps that you get will then be used as a benchmark to make recommendations. In this study the analysis of potential website security loopholes was performed using automatic testing method it is scanning. The test is carried out with a vulnerability assessment using tools that are available on Linux and run on a virtual machine. Kali Linux is an operating system that has many tools including penetration testing, ethical hacking and network security assessment. This research was conducted using sqlmap tools, uniscan, burpsuite, and nmap by scanning the target URL and assisted by using a web browser. The result of the test and analysis is to find the vulnerability that exists on the regional government health website xyz it is testing with uniscan existing directory listings, testing with nmap generating port information, testing with Burp Suite Generates security gaps with 1 high level, 4 low levels, and 2 information levels, and clear text transmission of sensitive information via HTTP.

Keywords: Security, Website, Vulnerability Assessment, Automatic Testing, Scanning, Kali Linux