

ABSTRACT

VULNERABILITY ANALYSIS AND SECURITY TESTING IN PROFILE WEBSITE ABC USING PENETRATION TESTING EXECUTION STANDARD (PTES)

The times have made the use of information technology an obligation in order to survive and advance to be more developed than others. The ABC regional government has an agency in charge of serving the community for regional administration purposes. Information management in the ABC area is managed by the Communication and Informatics Agency (DISKOMINFO). DISKOMINFO uses the website as a media in the exchange of information and communication for people who need information about the ABC area. However, there are still many websites that can be said to have minimal security so that there is an attack on the website for the benefit of a party. This research was conducted to determine the level of vulnerability of a website and an attempt to attack with several techniques that will be carried out based on methods that are often used as experiments by hackers or often referred to as Vulnerability Assessment and Penetration Testing. By following the guidelines or standards of the Penetration Testing Execution Standard (PTES), Scanning experiments were carried out using several tools, namely Zenmap, OWASP ZAP, Arachni, and Vega to scan a website's security vulnerabilities and continued with penetration testing to prove the scan results were truly valid. From the scan results found vulnerabilities using OWASP ZAP with no high risk level, medium 3, low 4, and informational 3. With Arachni found no high risk, medium 1, low and no informational. With Vega found the risk of high 3, medium 1, low 1, and informational 3.

Keywords—Website, Vulnerability Assesment, Penetration Testing, PTES.