

ABSTRACT

The tragedy of cyberattacks has now become a common occurrence on various websites. In 2022 Indonesia experienced an increase in cyber attack cases, in addition to attacks on websites being the top three attack incidents. This cyber attack also has the potential to occur on the website of the Al-Falah Surabaya Social Fund Foundation. In addition, cyber attacks such as data leaks and attacks on websites can cause losses to the company, so if vulnerabilities are found in the system such as SQL Injection vulnerabilities which can be classified as high risk vulnerabilities that can provide the possibility for hackers to obtain information from the website database and in certain cases are able to damage the content on the website page (Defaceing). The purpose of this research is to analyze the security of information systems on the YDSF - LAZNAS website using the ISSAF (Information System Security Assessment Framework) penetration test framework. Penetration Testing is one way to see the level of security of a system, helping to identify potential gaps in the system that can be exploited by attackers or hackers. ISSAF is also used to link pentesting steps with the aim of providing comprehensive guidance in conducting penetration testing. The success criteria of this research include increasing the awareness of YDSF - LAZNAS of information system security, and increasing the protection of donor data by providing penetration test results through the Final Report made using the ISSAF framework. Therefore, the penetration test conducted can provide several conclusions such as the discovery of several vulnerabilities, open ports and successful exploitation where protection and risk mitigation strategies along with improvements based on solutions to the vulnerabilities obtained need to be done. Due to this, priority improvements to information system security on the YDSF - LAZNAS website need to focus on several vulnerabilities identified during the penetration test.

Keywords— Information System Security, ISSAF, Pentest, OWASP, YDSF-LAZNAS