

WEBSITE APPLICATION FIREWALL UNTUK WEB SEKOLAH DASAR NEGERI 6 RENAK DUNGUN

Nama : Lukman Nul Hakim
NIM : 6404221136
Dosen Pembimbing I : Agus Tedyyana, M.Kom
Dosen Pembimbing II : Pretti Ristra, S.Pd., M.Ed

ABSTRACT

The development of information technology encourages schools to utilize websites as effective and transparent media for information dissemination. However, SD Negeri 6 Renak Dungun currently does not have a web-based information system, causing information delivery to be conducted manually and in an unstructured manner. Moreover, the development of school websites without adequate security measures may pose risks of cyberattacks such as SQL Injection, Cross-Site Scripting (XSS), and illegal content injection. This research aims to design and implement a school website based on the Sekolahku CMS integrated with a Web Application Firewall (WAF) as a security system. The website is developed to provide school profile information, news, announcements, and online New Student Admission (PPDB) services, and is hosted on a Virtual Private Server (VPS) to enable optimal security configuration. The research methods include system design, implementation of the Sekolahku CMS, VPS and WAF configuration, as well as functional and security testing using black-box testing and simulated SQL Injection and XSS attacks. The expected result is the availability of an informative, manageable, and secure school website that enhances the effectiveness of information dissemination and increases public trust in the school information system.

Keywords: Website Sekolah, Content Management System (CMS), Web Application Firewall (WAF), Keamanan Aplikasi Web, Virtual Private Server (VPS), SQL Injection, Cross Site Scripting (XSS).