

INTISARI

Sistem Web Otomatisasi Penilaian Kerentanan *Website* Desa Terintegrasi (WHOIS, WhatWeb, Nmap, dan OWASP ZAP)

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Penggunaan *website* di tingkat desa semakin berkembang seiring dengan perkembangan teknologi, tetapi *website* desa sering menjadi tujuan peretasan dan pengalihan ke situs judi *online* yang banyak dilaporkan oleh media. fenomena ini terjadi karena keterbatasan pengetahuan, kesadaran, dan kemampuan teknis di tingkat desa terkait keamanan siber. Untuk mengatasi permasalahan tersebut, dikembangkan sebuah Sistem Web Otomatisasi Penilaian Kerentanan *Website* Desa Terintegrasi (WHOIS, WhatWeb, Nmap, dan OWASP ZAP).

Sistem ini dibuat untuk mempermudah proses identifikasi celah keamanan bagi pengelola desa. Melalui pengujian pada sebuah *website* desa, sistem ini terbukti berfungsi dengan baik, menghasilkan laporan yang lengkap dari setiap alat terintegrasi. Antarmuka yang sederhana memudahkan penggunaan, sementara laporan yang dihasilkan mencakup informasi awal *website* (domain, teknologi, dan *port*), serta detail kerentanan, dilengkapi dengan indikator tingkat risiko dan visualisasi warna, laporan juga dilengkapi dengan versi sederhana. Fitur-fitur ini bertujuan membantu pengguna dengan pemahaman keamanan yang terbatas agar dapat memahami potensi ancaman keamanan *website* dengan lebih mudah.

Kata Kunci: Kerentanan *Website* Desa, Penilaian Kerentanan, Otomatisasi, Integasi Sistem, WHOIS, WhatWeb, Nmap, OWASP ZAP

ABSTRACT

Automated Web System for Village Website Vulnerability assessment Integrated with WHOIS, WhatWeb, Nmap, and OWASP ZAP

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The use of village websites is rapidly growing alongside technological advancements. However, it is concerning that many media outlets report these websites frequently becoming targets of hacking and redirection to online gambling sites. This phenomenon primarily stems from limited knowledge, awareness, and technical capability concerning cybersecurity among village officials. To address these issues, an Automated Web System for Village Website Vulnerability assessment Integrated with WHOIS, WhatWeb, Nmap, and OWASP ZAP has been developed.

This system is designed to simplify the process of identifying security vulnerabilities for village administrators. Through testing on a sample village website, the system proved to function effectively, generating comprehensive reports from each integrated tool. Its simple interface facilitates ease of use, while the produced reports include initial website information (domain, technology, and ports), as well as detailed vulnerability findings, accompanied by risk level indicators and color visualization. The reports are also provided in a simplified version. These features aim to help users with limited security understanding to comprehend potential website security threats more easily.

Keywords: *Village Website Vulnerability, Vulnerability assessment, Automation, System Integration, WHOIS, WhatWeb, Nmap, OWASP ZAP*