ABSTRACT

In our modern digital landscape, websites serve as the primary means for individuals and organizations to communicate and share information online. However, this convenience also brings forth potential security vulnerabilities that malicious actors can exploit, jeopardizing confidential data. Therefore, a robust network security system is imperative to safeguard this sensitive information. PukulEnam, a company specializing in news and AI consulting, is acutely aware of the looming threat of cyberattacks that could compromise its valuable proprietary data. To proactively mitigate such risks, we are embarking on the essential first step of implementing a firewall within PukulEnam's website security framework. Firewalls, when effectively deployed, act as a formidable deterrent against potential threats and reduce the likelihood of confidential data breaches. Our project's core objective is to deploy Google's cloud-based firewall onto the PukulEnam website. Through the meticulous configuration of firewall rules tailored to our company's unique requirements, we aim to fortify our website's defenses against potential cyberattacks. The results obtained in implementing this firewall are in the form of correct responses and in accordance with the firewall rules that have been set, and with the highest response latency value below 1.4 ms, which means the response speed provided by the website is at a good value. Utilization of cloud application engine firewalls makes a positive contribution to the network security of the PukulEnam website.

Keywords: Website, Network Security, Firewall, Cloud Computing, PukulEnam.