

ABSTRACT

The failure of the web server can interfere with the client's process of accessing information from the web server. The number of requests that exceeds the capacity causes the web server to go down so that it cannot process every request sent by the client. Distributed Denial of Service (DDoS) attacks prevent legitimate clients on a network from accessing web server services. Security is an aspect that must be maintained in a computer network system. The application of modsecurity and Deep Packet Inspection (DPI) as network security offers solutions to network security issues. This study compares the implementation of mod security with DPI, which aims to determine differences in performance based on 3 test parameters, namely CPU usage, delay, and response time. The test was carried out with 4 scenarios, with each scenario being carried out 10 times. The test results with CPU usage parameters, DPI is superior than modsecurity with an average gain of 12.1% for DPI and 12.3% for modsecurity. In the test results with response time parameters, modsecurity is superior than DPI with an average gain of 146 seconds for modsecurity and 158.5 seconds for DPI. In the test results with the delay parameter, modsecurity is superior than DPI with a value of 2.572923 ms for mod security and 2.775679 ms for DPI.

Key Words : *Web Server, Modsecurity, Deep Packet Inspection*