

***Implementation of Load Testing Method with Apache Jmeter on Website-Based
Information System of Population and Civil Registration Office
of Situbondo Regency***

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ABSTRACT

Website-based information systems are increasingly used by government agencies to improve the efficiency of services to the public. The Population and Civil Registration Service of Situbondo Regency developed the Online Population Administration Service Information System (SILAO) to make it easier for the public to access population services. However, system performance is an important factor in ensuring smooth user access. This study aims to test the performance of the SILAO application with the Load Testing method using Apache JMeter. Testing was carried out with various scenarios of the number of users, ranging from 30 to 400 users, to measure the stability and capacity of the system. The test results showed that the system was able to handle up to 30 users at one time without significant obstacles, but experienced a decrease in performance when tested with 400 users, causing failure to respond to user requests. Based on the test results, it is recommended that there be optimization of the server infrastructure and increased efficiency of the application code to increase the capacity of the SILAO service. This study is expected to be a reference in the development of website-based information systems that have optimal performance in handling high user loads.

Keywords: *Load Testing, Apache JMeter, Information System, Website Performance, SILAO*