

## ***Abstract***

Information and communication technology is growing from time to time, information and communication technology that has developed a lot, one of which is instant messaging (Instant Messaging). The development of instant messaging has so far been inseparable from the role of protocols that function to regulate the traffic within it. One such protocol is the XMPP protocol. The XMPP protocol is a standard for real-time communication based on text, sound and video with open XML technology. The XMPP protocol has many advantages offered in developing instant messaging services, especially in terms of servers. Many servers registered in the XMPP protocol include Jabberd 2 server, Ejabberd, Openfire. In this final project a comparative analysis of the XMPP platform was carried out. Testing server performance comparison using the stress test method with the Tsung tool. The results of the analysis show server performance comparisons when handling user activities in the form of parameters for Response time stability, Network Load, Throughput, and Errors, while parameters for scalability are seen from CPU usage, Memory usage and Errors.

Keyword: XMPP, instant messaging, stability, scalability, server, Tsung