

**OPEN SOURCE XMPP PERFORMANCE ANALYSIS: USING LARGE
VOLUME TRAFFIC FROM HONEYPOT SENSOR**

By

Kevin Junta Kurniawan

12111008

BACHELOR'S DEGREE

in

INFORMATION TECHNOLOGY

FACULTY OF ENGINEERING AND INFORMATION TECHNOLOGY

SWISS GERMAN UNIVERSITY


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EduTown BSDCity
Tangerang 15339
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August 2015

Revision after the Thesis Defense on 11 August 2015

STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in this thesis.

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ABSTRACT

OPEN SOURCE XMPP PERFORMANCE ANALYSIS: USING LARGE VOLUME TRAFFIC FROM HONEYPOT SENSOR

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In this thesis the performance Extensible Messaging and Presence Protocol server will be tested, until this point of time XMPP is a well-known for near real-time message-oriented middleware and for near real time data exchange. But the performance of XMPP server under huge load itself is still unclear, number of XMPP clients that can be handled by XMPP server, numerous factor that affect it's performance, and the throughput of message transmission.

The experiment was done by load testing XMPP server by using Tsung to test XMPP server with huge number of connection, and XMPP clients from honeypot sensors. The result from XMPP server performance test is reaching it's peak when it reach 1000 concurrent connection established and joining a MUC room. This shows that XMPP is robust but it have a limit on how many concurrent request it is able to handle.

Keywords: XMPP, server performance, protocol, honeypot, Instant Messaging, sensor



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DEDICATION

I would like to dedicate this research project to my beloved country, Indonesia. I believe this thesis research can contribute to the advancement of science and technology in Indonesia, no matter how subtle.



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I would like to thank all of my friends for their companionship, and to the countless number of people who have helped me throughout this thesis working, either directly or indirectly.



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