## **ABSTRACT**

Platform as a Service (PaaS), is a cloud computing services that provide computing platform and solution stack. Cloud provider offers to developers (users) in the form of a web-based application, customers do not have to worry about the cost to buy and complexity to set up a hardware or software required for their apps, the customer use ton of software tools and libraries from the cloud provider. Users only need to focus on software development or application development. Openshift is a cloud computing Platform as a Service that supports multiple programming languages (Node.js, ruby, python, php, perl, java), databases (MySQL PostgreSQL, MongoDB), and frameworks (CodeIgniter, CakePHP, Django, Flask, etc.)

The problems that arise, whether the platform as a service is a convenience, or even increase the complexity of the overall system? What is the time efficiency that could result from building a Platform as a Service. Therefore, required an testing to users that ever try to build web application, and compare the time required to perform configuration between using PaaS and do it manually.

Based on test results, PaaS can provide acceleration time average in configuring the application environment 480% for newbie users, 274% for the average user, and 324% for expert users. With PaaS addition to the complexity of the system can provide a very large acceleration that PaaS is a need to build a web-based application at this time.

Keywords: Cloud Computing, Platform as a Service, Openshift