

## ABSTRACT

Virtualization technology that developed at this time can consolidate existing resources such as computers, operating systems and storage media to be used virtually on a cloud computing infrastructure. So many companies and agencies use cloud computing, because that reason so many alternative options to use a cloud from a variety of developers. This superbly made the company to have more than one environment that has multiple services such as storage, compute, virtualization, identity, and in network.

Therefore, one of the solutions to deal with these problems required an open source management platform for sophisticated virtual and cloud, including Linux containers. Red Hat CloudForm presents ManageIQ to enhance service provider, and allows administrators to focus on managing the environment of hybrid technology. ManageIQ is platform of cloud computing can improve against the public cloud, private cloud, and container-based platforms with improved metrics. ManageIQ can also enhance the ability for OpenStack, fixed management of tenants and introduces storage management for OpenStack and block storage services: Swift and Cinder.

In this research, the ManageIQ platform was implemented on Openstack and integrated with LDAP users using FreeIPA, and using ManageIQ can make tenants on Openstack (as the environment they have). In addition, the keystone platform can be said to work well, this is because every user request can be served well from starting to create a new user, creating a new image, and creating a new project. And Quality of Service measurements were carried out between ManageIQ servers and Openstack, which showed that the values for bandwidth is 84.26 Mbits / sec, delay is 0.180 ms, jitter is 0.260 ms, throughput is 77.9 Mbits / sec, and for packet loss is 0.0025%.

**Keywords:** LDAP, FreeIPA, ManageIQ, QoS, Cloud