## **ABSTRACT**

Talking about computer networks, not in spite of a collection of several computers that connected together and communicate with each other. Computer network itself is very closely related to our daily lives because with the presence of the computer network it have many benefits that we can get. Various network technology vendors such as CISCO, Juniper, ZTE, or Huwawei also participate in supporting the implementation of the computer network. The number of existing network technology vendor does not make the application of computer network technology running correctly. This is due to the difference in configuring, managing, and maintaining the device of each vendor network technology itself.

OpenStack system may be one solution to these problems. OpenStack is an SDN (Software Defined Network) operating system based on OpenSource which can control and manage network devices in a variety of vendor control. OpenStack has a service which consists of several parts of the block that are the dashboard, compute, storage, and network identity. In this final task will only be made of service identity that serves as security providers in the implementation of the exchange of information between the existing service. Identity itself using a keystone in its application platform.ation

From the results of the design identity service in this final task can be concluded that the performance of keystone platform can be said run well from start to manufacture a new user, manufacture a role, manufacture a tenant, manufacture a service, manufacture an endpoint, and the endpoint location is visible on the client side. Beside that, identity service that provides security service is also resistant to SQL injection attacks, XSS (Cross Site Scripting) attack, DDOS (Distributed Denial of Service) attack, and brute force attack. With this OpenStack system, cloud computing system will be more effective and efficient.

Keywords: SDN, OpenStack, Icehouse, Identity, Keystone