ABSTRACT

The rapid growth on information technology and telecomunication network caused of method in data storage. The data previously stored in hardware such as hard drives now can be stored in a cloud. Cloud is a technology that developed to centralized data storage functions in a server. OwnCloud is one of the technologies with the Infrastructure as a Service (IaaS), which means it may be developed alone in a private network .

In order to developed the cloud network it is needed some technology that may provide assurance of data transfer speeds and easy installation. The solution of that problem is BPLC. Broadband Powerline Communication (BPLC / BPL) is a telecommunication technology that utilizes the power distribution cable network as a medium for data transmission . On this final project, it will be analyze the results of the implementation ownCloud server for streaming video who has been transmitted on BPLC network.

Results of the analysis showed that the distance between the client and the server , the traffic loading, and other electric devices give effect to the video quality and QoS value. Experiment result show that the lowest throughput obtained when the experiment with background traffic at 60MB with 1.206763 Mbps throughput. Delay maximum of 27,501ms which still meets (ITU-G114) for one- way delay. Then the value of the measured packet loss maximum of 0.593800 % when done streaming video with 4 users simultaneously .

Kata kunci : *Owncloud, streaming video, BPLC, QoS*