

## **ABSTRACT**

Requirement of communication and entertainment that used internet base, is important to support modern lifestyle that increase significantly. So that, it need kind of services to fulfill the request of variation communication and entertainment in one single connection.

Triple Play is kind of services that accumulate some of service such as voice, data and video in one line of connection that run together. Because bandwidth request that always increase as same as the increase of user and time, so to implement accumulation technique, it needs reliable connection network that support high bandwidth assignment and level of QoS. For that, it use EPON (Ethernet Passive Optical Network) technology that based on single fiber optic which has symmetric 1,25 Gbps speed to support future use.

In this Final Assignment, it would analyze requirement of EPON network performance to fulfill bandwidth and QoS needed in “Triple Play” services. It conclude that “Triple Play” service would be exist in client resident network access.

**Key Words** : Triple Play, EPON, and QoS.