

## ABSTRACT

*Triple play services from PT Telkom Akses indihome are fiber optic installation services that are most in demand by the public. So that what makes the trouble come up. One of the obstacles is the difference in licenses from each provider. The ONT carried by field technicians is also sometimes different in type from OLT which serves the new installation request area. This is because the OLT and ONT devices must have the same type.*

*Referring to these constraints, it is necessary to Open ONT Study on GPON network. Open ONT is ONT can be connected even though different type of OLT. Different types of OLT and ONT can be connected by opening a license from the OLT and ONT devices used, so that configuration can be done. Configuration is done by a trial method so that different types of OLT and ONT can be connected. The device standard and signal quality standards in this Final Project use the FTTH standard from ITU-T G984.*

*This Final Project Goals is Designing FTTH Networks Using different types of OLT and ONT to getting connected even though they types are both different. This trial tests of internet services to see the Quality of Service (QoS). QoS values on internet services with a value of 1.051 Mbps, 295 ms delay and 0.55407% packet loss. Based on the results of QoS, different types of OLT and w ONT have good QoS values.*

*Keywords : FTTH, ONT, OLT,GPON*