

## ABSTRACT

*Many internet services are provided by many internet network provider companies, one of which is Indonesia Comnets Plus (ICON+) which is an internet network provider with fiber optic infrastructure that has a service called Iconnet. Iconnet is a high speed prepaid internet service using the latest reliable and stable fiber optic technology for retail and residential areas. One of the problems that exist in the Iconnet internet network service is about the problems that exist in the network equipment, one of which is the lack of supervision of the Optical Line Terminal (OLT) so that it remains in normal condition for the distribution of the internet network where the device directly leads to the customer.*

*In this final project, a system design and analysis of OLT monitoring with Zabbix Server and notifications on the Telegram application is carried out. This system is implemented at PT ICON+ SBU West Java to facilitate the identification of OLT disturbances. Survey data was collected using a questionnaire given to the employee concerned and a simulation test was carried out by taking into account the time period from disturbance to normal.*

*The results of the questionnaire that have been carried out by this system can make it easier for workers at PT ICON+ to efficiently handle problematic OLT. In system testing, the smallest time value is 2 minutes 32 seconds for notifications when the device has problems in telegram notifications and 1 minute 12 seconds when the device is normal..*

**Keywords:** *internet service, Iconnet, OLT, Zabbix, monitoring*