

ABSTRACT

Development of technological area at the moment expand at full speed, society enthusiasme to telecommunications progressively increase. Along with increasing it of futur-fitur able to do, not only sending signal voice but also start to deliver signal data,video I, even most popular data communications network this time that is enamel trafic and of WWW (*World Wide Web*) and other services which needing many bigger bandwidth even very big.

To fulfill requirement of society in usage of telecommunications wishing capacities of is transfer of larger ones data, Therefore emerge technology of xDSL which in this time represent one of [the] best alternative which is compatible to be applied to quicken to access the transfer of data, besides xDSL use cable phone customer (subscriber) which have there (existing). One of the type of xDSL is ADSL, at this ADSL will incircuit to DSLAM . Besides using xDSL able to quicken to access the transfer of data is also used to incircuit its to backbone that is using DSLAM base on gigabit able to yield beet of rate and its [of] high him, This DSLAM function for the concentration of data trafik from various xDSL loop which later,then will [in] sending to network backbone to [in] to connecting again to other network. [At] network of DSLAM use system of ring.

The methods of research was using in the composing of the final project are study literature with reference from book or internet with solution items as base theory. Do setting up plans of device, evaluation, testing, and analysis.

Keyword : xDSL, ADSL, DSLAM base on gigabit, loop, Network Backbone, Ring.