

## ABSTRACT

*Computer networks LAN (Local Area Network) has been known by many people since the last decade. However, due to the development of its use, the Computer networks LAN changes in scalability. This problem can be resolved by using technology Virtual Local Area Network (VLAN). VLAN can solve the problems of scalability and flexibility can reset the network LAN virtually.*

*In fact, a computer network also requires a technology to fulfill availability (availability) requirements data traffic. One technology that can fulfill the availability requirements of data traffic is the Link Aggregation. Using Link Aggregation technology can increase the speed of the connection and provide recovery of link failure occur.*

*This final assignment implements the interVLAN network using Link Aggregation. Applications that are passed on the interVLAN network is streaming video applications and the communication is streaming video communications. Link Aggregation Tests is done by adding the load traffic on the network interVLAN and what happens to the system if link failure occur. The system is built by using link aggregation technology. The tools used of the system are a router, switch, and personal computer (PC). The analysis is based on ITU-T and Cisco at the testing stage.*

***Keywords: LAN, Link Aggregation, Link Failure, video streaming.***