

## **ABSTRACT**

Availability server link is important thing because it has correlation with availability of service. When server link failure it will disturb service, so it will decrease the trust costumers to providers.

IP Multipath is application technology to increase server link availability with system redundant interface. When main Network Interface Card (NIC) failure then IP Multipath automatically moving data traffic to the backup NIC, so server can keep the service. This final project assignment is about how the implementation of IP Multipath on UNIX system and analysis IP Multipath performance with delay data moving time IP Multipath, level availability and throughput protocol FTP and HTTP.

The implementation and experiment show that IP Multipath give system recovery from link failure so increasing level availability server, but delay data moving time (failover) IP Multipath decreasing throughput protocol FTP and HTTP. IP Multipath increasing level availability server up to 99,999%. FTP protocol throughput decrease 6,032% and protocol HTTP decrease 2,076%. When there is more server traffic then the performance will decrease.

From implementation and experiment show that IP Multipath delay data moving time (failover) is 0,422 second or 422 millisecond. The standard of failover from Solaris hardware driver is not more than 500 millisecond. So can be concluding the system is function well.

***Key words : IP Multipath, Failover, Redundant, Delay Data Moving Time***