

ABSTRACT

Performance Analysis of *Ethernet Switch* Network Connections in *Local Area Networks* (LAN) . Electrical Engineering Thesis, Faculty of Engineering, University of Islam Negeri Sunan Gunung Djati Bandung. The development of telecommunications networks today is progressing very fast. Various kinds of telecommunications technology facilities continue to be developed so that *users* can communicate practically, wherever *the user's location* is. This study aims to find out what process of sending data packets is, such as calculating the speed of data packets sent (Throughput), lost data packets (Packet Loss), and *the delay* in data transmission time. The methodology used in this study is to use literature studies by collecting data in the field with the aim of calculating *the throughput, delay and packet loss* of a packet sent in an *Ethernet switch network*. From the research results obtained from each experiment that is, *through put*, comparison of *the throughput* of each field of work can be seen the highest and values in each field. And *delay* the fastest and longest data transmission times. And *packet loss* gets a good average value according to ITU G.114 standards with a percentage value of 0%.

Keywords: *Ethernet Switch, Throughput, Packet Loss, Delay*

