ABSTRACT

A computer network is a network connected from one computer to another that is connected to each other using intermediary media. On computer networks there are a collection of several computers and other devices that are interconnected, such as devices such as routers, switches, and access points.

Telkom University or commonly referred to as Tel-U is a college in West Java precisely located in Bandung district. Telkom University has a student dormitory building for temporary residence, totaling 18 dormitory buildings consisting of dormitories men and women.

This research will be done by configuring bandwidth on a logical network that has been designed and calculating throughput on each bandwidth to be used. This research uses Cisco Packet Tracer and GNS3 which is software for the implementation of a computer network, especially internet computer network where we can create a virtual computer networking.

Bandwidth is a measure of the amount of information channeled from one place to another and measured in bits per second, bandwidth is divided into two types of data namely digital and analog data.

The results of this study showed throughput value that is not much different in each network protocol used in the design of Telkom University dormitory computer network.

Keyword : *Computer Network, Bandwidth, Cisco Packet Tracer, GNS3*