Thesis Title

Ethernet Simulation for Performance Evaluation

Student

Mr.Pramote Pateepkamol

Thesis Advisor

Mr.Surasit Vanakrairoj

Level of Study

Master of Science in Computer Science and

Information Technology

Department

Mathematic and Computer Science Department

Faculty of Science

King Mongkut's Institute of Technology Ladkrabang

Year

1997

Abstract

This thesis presents Ethernet simulation model for evaluation of Ethernet performance. This model can be used to investigate network's capacity, throughput, the rate of channel and the transmission packet delay. Futhurmore, this simulation model also allows to modify some parameters as follows: number of node, packet size, length of bus and total offered load to simulate many situations.

This research used Discrete Event Simulation Model which assumption is sure to be defined as follows: packet arrival will be poisson distribution and all stations are identical and can generate a new packet independently after the old packet has been successfully transmitted.

In this experiment the reliability of model is tested comparing with Shoch's model