

ABSTRACT

The objective of this project is to use OPNET software to study PURE ALOHA and CSMA protocols in making change the two main parameters which are Data rate and Packet size, and to Design Data Communication network which consists of Multiple Star Network.

The OPNET stand for OPTimized Network Engineering Tools is a comprehensive engineering system capable of simulating large communication networks with detailed protocol modeling and performance analysis.

Before we are going to the main objective of our project we have to learn how this software works. That is we have followed the steps in OPNET Tutorial Manual. In this tutorial we have studied M/M/1 Queue, Basic Process, and CSMA/CD. Then we analyze and compare the output characteristics of each chapter with the theory.

