

**THE ANALYSIS OF ASYNCHRONOUS TRANSFER MODE (ATM)
NETWORK
PERFORMANCE BETWEEN AVAILABLE BIT RATES (ABR) AND
UNSPECIFIED BIT RATE (UBR) TRAFFIC DATA**

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ABSTRACT

The purpose of this project is to evaluate the concept and the application of the Asynchronous Transfer Mode (ATM) technology focus on the traffic management. The analysis of the project is based on the simulation model of ATM network using OPNET MODELER 8.1 software. The model was designed to analyze the performance of available bit rates (ABR) and unspecified bit rate (UBR) traffic data.

The design of ATM network is based on the point-to-point network topology consist of the campus network area. The ATM adaptation layer AAL 5 was selected for data transmission. The results for the model network were performed in the graph which has been generating by the software itself. The performance issues of the ATM were covered for transmission switching delay, cell loss probability, utilization and throughput of the ATM network model.

All the results were obtained to show the performance issues for ABR and UBR service category. Based on the results of these simulations, the UBR and ABR service category performance is not many different.

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