

Performance Evaluation and Modeling of Internet Traffic of an Academic Institution: a case study of the Federal University of Technology, Akure, Ondo State, Nigeria.

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Abstract

Academic institutions require internet services to facilitate research and learning processes for the students and members of staff. More so, the Federal University of Technology, Akure, a technologically oriented institution, deserves a viable internet services for these purposes. Optimal performance and continual delivery of adequate service to users would be enhanced by evaluating the performance of the existing internet. This study presents results of finding on the performance of internet service in the university with special reference to parameters such as number of users, protocols used, bytes used, uptime and downtime and dropped packets. Traffic data flows were experimentally captured and measured over a period using relevant measuring tools. The results presented summarize the performance of the university network and recommendations needed to enhance optimal performance, available and adequate service to all users.

Keywords: internet, traffic measurement, performance evaluation, modelling

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Received: 2014/07/02

Accepted: 2014/09/05

DOI: <http://dx.doi.org/10.4314/njtr.v9i2.10>