



DEVELOPMENT OF BANDWIDTH MANAGEMENT STRATEGY USING IP TRAFFIC ANALYSIS

EMMANUEL, A. A.¹, MUHAMMED, B. M.^{2*} AND BUBA, B.²

¹Information and Communication Technology Directorate,

²Department of Electrical Engineering,
Ahmadu Bello University, Zaria

ABSTRACT

This work studied the Internet Protocol (IP) traffic on the Ahmadu Bello University Zaria network in order to develop a systematic Bandwidth Management strategy. Bandwidth Management is the process of measuring and controlling the communications (traffic, packets etc) on a network link, to avoid loading the link to capacity or overloading the link, which would result in [network congestion](#) and poor performance. This work used a packet sniffer on the network for analysis of different types of Internet Protocol (IP) traffic, their usage and the bandwidth consumed by each of these protocols. It is concluded that by denying access to certain sites like Internet mails and other facilities (chat) on those sites alone, bandwidth usage on the network dropped considerably which definitely translates into faster browsing speed. The percentage of the Hyper-Text Terminal Protocol (HTTP) traffic also dropped drastically to 25%. This confirmed that most of the HTTP traffic generated on the network is IP-based.

Keywords: Bandwidth, traffic, network, internet protocol, hyper-text terminal protocol

*Correspondence: mbmuazu@abu.edu.ng

How to cite this article:

Emmanuel, A. A., Muhammed, B. M. and Buba, B. (2011). Development of bandwidth management strategy using ip traffic analysis. *Nigerian Journal of Scientific Research*, 9 &10: 73-79.