6/18/2020 EIEmary

The Egyptian International Journal of Engineering Sciences & Technology, Vol 8, No 1 (2004)

## A Reconfiguration Strategy for Improving the Performance of Local Network that Utilize CSMA Protocol

Ibrahim ElEmary

## Abstract

In this paper, an advanced technique to improve the performance of Local Area Network

(LAN) **that** uses CSMA protocol as an access technique was presented. The used LAN is flood

network based on a meshed topology with only point to point links, so as to accommodate various
types of data channels such as optical links. A key feature of the system is the use of very simple

nodes for the routing of data packet as well as using different types of retransmission strategies for

handling network collisions. Efficiency of the proposed configuration was checked by simulation

runs and has been found that it performs better than the traditional topologies,