



## **Design and Implementation of a Software Intercom on LAN**

Jonathan Gana KOLO, Umar Suleiman DAUDA, Gyet ALI-NOCK

*Department of Electrical and Computer Engineering, Federal University of Technology,  
Minna, Nigeria*

E-mails: [jgkolo@gmail.com](mailto:jgkolo@gmail.com), [usdauda@gmail.com](mailto:usdauda@gmail.com)

### **Abstract**

In a developing economy like Nigeria financial resources are scarce commodity. Hence, cheaper means of accomplishing tasks even within the presence of scarce resources are always explored.

This paper presents the design and implementation of a software intercom on local area network (LAN). The design provides a solution that eliminates the use of expensive hard-wired intercoms and Private Automatic Branch Exchange (PABX) by making use of only LAN and full multimedia computer allowing network users the opportunity to still communicate audibly despite the meager resources.

The design enables the use of LAN that is mostly dedicated to data traffic only to be used as a cheaper means of communication using voice and video media, presented in real-time between peers by the use of software.

The software intercom designed provided network users with cost effective, easy and reliable multimedia communication over LAN, in essence giving the users a truly multimedia experience.

### **Keywords**

Software; Intercom; Multimedia; Communication; LAN