Network Security: Policies and Guidelines for Effective Network Management

Jonathan Gana KOLO, Umar Suleiman DAUDA

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

jgkolo@gmail.com, usdauda@gmail.com

Abstract

Network security and management in Information and Communication Technology (ICT) is the ability to maintain the integrity of a system or network, its data and its immediate environment. The various innovations and uses to which networks are being put are growing by the day and hence are becoming complex and invariably more difficult to manage by the day. Computers are found in every business such as banking, insurance, hospital, education, manufacturing, etc. The widespread use of these systems implies crime and insecurity on a global scale. In addition, the tremendous benefits brought about by Internet have also widened the scope of crime and insecurity at an alarming rate. Also, ICT has fast become a primary differentiator for institution/organization leaders as it offers effective and convenient means of interaction with each other across the globe. This upsurge in the population of organizations depending on ICT for business transaction has brought with it a growing number of security threats and attacks on poorly managed and secured networks primarily to steal personal data, particularly financial information and password.

This paper therefore proposes some policies and guidelines that should be followed by network administrators in organizations to help them ensure effective network management and security of ICT facilities and data.

http://ljs.academicdirect.org