

Abstract

Role based access control (RBAC) is a recent access control approach that provides flexibility and ease of privileges' management through the concept of roles. It addresses the rigidity found in mandatory access control (MAC) and the Trojan horse problem common in discretionary access control (DAC). Although the level of research in access control and RBAC in particular is high in the developed world, little has been done in the developing world. More so, most research findings are presented using complex methods that are hard to understand by users in such countries. In this research, a different approach to investigate access control based on systems in a financial institution in Uganda (an example of the developing world) is taken. The research findings are presented in a simple way to meet a special need by users in such parts of the world, to understand and address concerns that hinder adoption and implementation of access control systems. The challenges faced by the institution in its bid to control access to its information systems are presented, and the issues which need improvements are also discussed. The basics of setting up an access control system, RBAC in an organization are presented, and by use of the Solaris 9 operating system (OS) RBAC features, the benefits the mechanism offers are analyzed. Recommendations and some remedies to issues identified are given, and the direction of future research is also presented.