

Title:

Analysis of the Appropriate Security Models to Apply in a Distributed Architecture

Abstract:

The availability of information generated on a large scale has allowed sharing without considering the levels of risk that can be caused by not considering the confidentiality, integrity and authenticity of the information; any misuse, destruction, modification or unauthorized access with confidentiality, integrity and authentication information in an organization may affect the privacy or well-being of individuals and society. The objective is to perform the analysis of security models to generate a prototype of model to mitigate information security problems. The deductive method was used to review and analyse the referenced information and identify the ideal security models that allow to improve the security of information in a distributed architecture. Turned out a prototype model merging the characteristics of the BiBa model and the Bell-Lapadula model, creating a new model that offers integrity, confidentiality and access control as an alternative to improve the security of information. It was concluded that it is necessary to have an appropriate security model that conforms to the objectives, operational, tactical and strategic of the organization to mitigate the confidentiality, integrity and authenticity.