A Novel Approach based on Bucketization for Privacy Preserving Access Control Mechanism for Relational Data

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Abstract

In the today's world of digitalization of data, giving proper access of data to the users is a crucial part. Access control mechanisms are used to protect sensitive information from unauthorized users. Still there is a chance of compromising the privacy of the person by authorized user which may lead to identity disclosure. In this paper we proposed an efficient method called bucketization to preserve the privacy of the user. To anonymize and satisfy privacy requirements PPM uses suppression and generalization of relational data like k-anonymity and l-diversity, against identity and attribute disclosure. However, privacy is achieved at the cost of precision of authorized information. The proposed system is implemented and compared with the state of art techniques studied in literature survey.

References


Index Terms

Computer Science

Control Systems

Keywords

Access control, privacy, k-anonymity, query evaluation