

## ABSTRACT

The use of orientation to the methodology of objects has proliferated in the development of software causing a change in the information structure and organization. However, most applications demand storage and retrieval of information in a mechanism of persistence. Due to prevalence of relational database on data management, its use is frequently demanded instead of an object database since maturity and reliability of SGBDs are perceivable and acquired after years of development and performance adjustments.

An object oriented application using a relational database must have the capacity to retrieve its data to local memory and return them on time of execution. Several issues arise in this road due to incompatibility among record and object oriented representations such as relationships, competition, transparency and coupling. Solution proposals for this technological clash converge to the concept of a data access abstraction layer, decreasing the application coupling with reference to the data storage mechanism.

This work proposes a framework that performs the object persistence in a relational database which treats incompatibility among these technologies by means of a relational mapping model of objects. Its use is transparent, exempting the programmer from the SQL command syntax learning process and from the data storage technology by using reflection and *bytecodes* manipulation concepts.

Key-word: Object Persistence, Object to Relational Mapping, Relational Database, Metadata, Framework, Object Oriented Programming Language.