

Simple object-relational technology

Intro

Let's have a situation when we need to develop a mid-ranged web application by hand. Because the project is not trivial, the underlying relational data model isn't simple. In reality, it's very complex and sometimes also too complex to let the programmer successfully finish the project.

Details

For that case, we have developed a technology, concerning the data storage logic, which has the following features:

- the higher layer (usually the application logic)
 - gets always the data in a form of an object
 - communicates over a simple interface
- the lower layer (usually an SQL server)
 - stores the data in partially relational form

The engine

The engine itself is composed only from a *data splitter*. This splitter splits all the incoming data into two pieces, one which is pure relational and one which contains the non-relational data. This splitting itself is done using the schema of the object-relational database (it's because the schema holds the information about what is relational and what is not). The function of the splitter can be reversed, so it starts composing complex data from the foreign keys and from the stored XML data.

Schematically

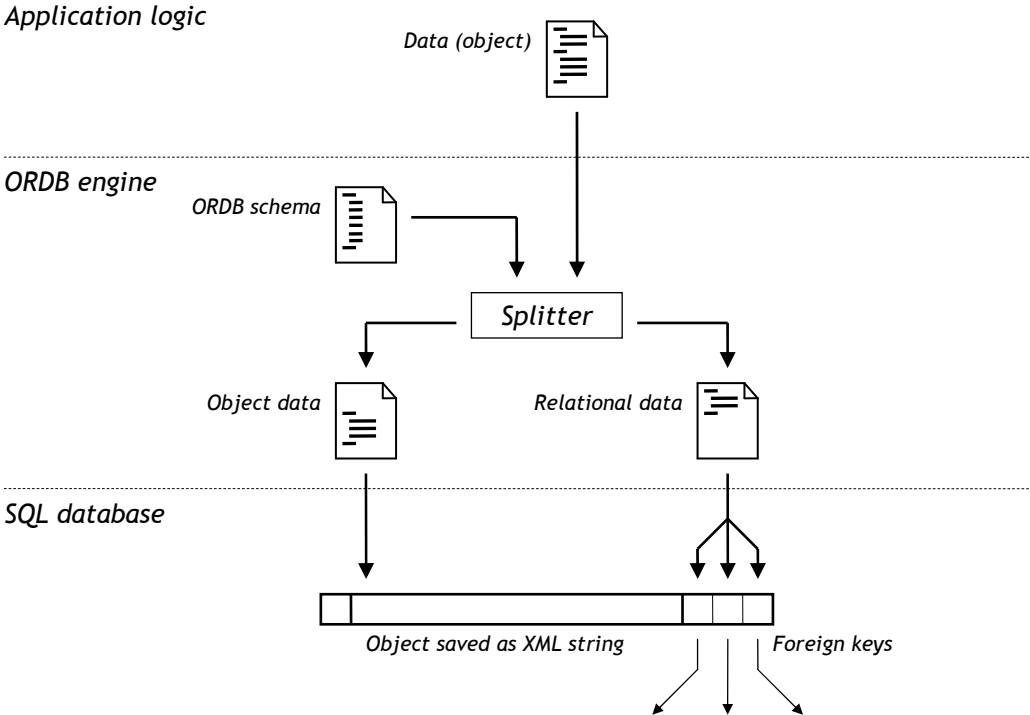


Fig.1: Schema of the proposed object-relational technology