Versatile Database

Christian Andreetta, Domenico Guardini 22nd April 2005

In this directory are given some scripts that allow a user with a PostgreSQL server, to create a versatile database where relations between entities are implemented by arcs. It is sufficient to call the 005_versatile.sh script to create the database. The script can be run only by a user with the database administrator privileges. A user with not such privileges can create manually the database and call himself in sequence the other SQL scripts.

The SQL scripts create functions and tables in order to have a versatile, but stable database with the possibility to implement permission on the entities of the database.

The versatile database was created, for a thesis project, to manage the electrical consumptions of many companies and it was called ACC database. In Chapter 3 of the thesis.pdf file is given a deeper description of the database realization, while in Chapter 5 is described a possible way to implement the permissions. It is also given a python script that makes some tests on the permission insertion, deletion and extraction and realizes the graph structure shown in Figure.

Have Fun!

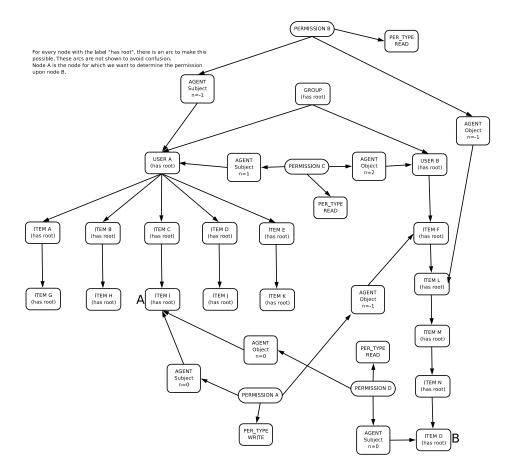


Figure 1: Graph realized for testing the Permissions