



## **Connecting a hydrological database with a GIS database**

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**Abstract** The introduction and keeping the evidence of data are important elements of managing a database in order to satisfy different demands of the users. The system of database management is represented by the software used as a level of interposing between the database and the user. Data is stored in the database which is integrated and partitioned. The purpose of the of the application is the solving of certain requests of hydrological type, referring to the identification of the hydrometric stations on the rivers, displaying values and certain data referring to the occurrence and evolution of hydrological phenomena, and also the physical and geographical characteristics of the representative hydrometric stations. The application has three stages: system analysis, projection of the database and making the application. The Access database has a collection of elements organized on categories in view of simplifying and accelerating of data finding. SQL is the specific language, implemented for the manipulation of relational algebra in the management and operation of a database. The words reserved in the SQL language, displayed in uppercase are the actions that the interrogation will perform. Linking the project to the Access Database is made with the help of an ODBC open communication protocol. Dual systems can thus insure some of the requirements of the OpenGis standards, by linking to external databases via ODBC open communication protocols. By connecting to the Access database, by running the "SQL Connection" command, a table of interest is attached which will later upload the data into the digital database.

**Key words:** database, SQL language, communication protocol, representative basins