MCH UML Model

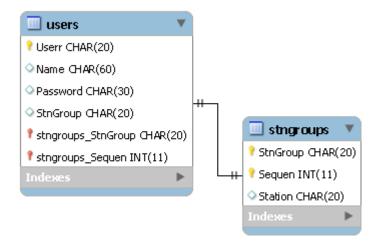
MCH Initial deploy

The MCH is a modular database, have an initial configuration with a series of tables for a specific purpose and other tables for the system variables.



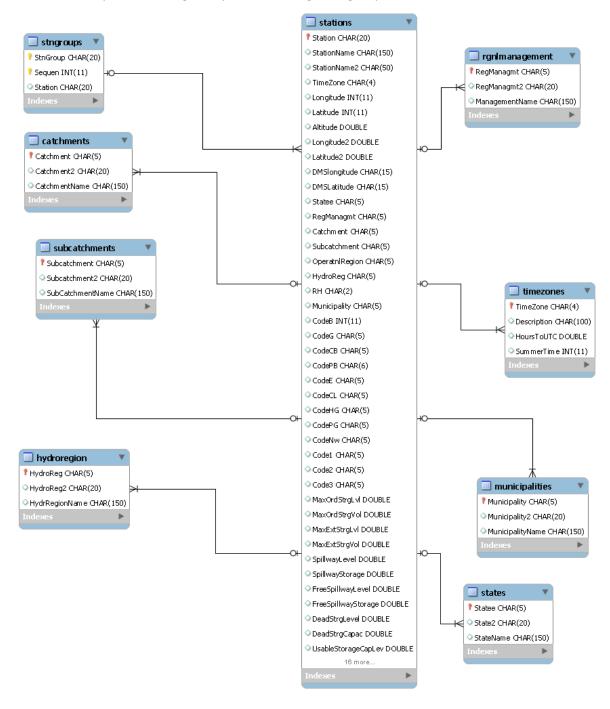
User model

The system has different levels of access, the first is through the database user, and the second level is through the system user. System users have attributes defined in the system and may have restrictions as to which parts of the system they can access.



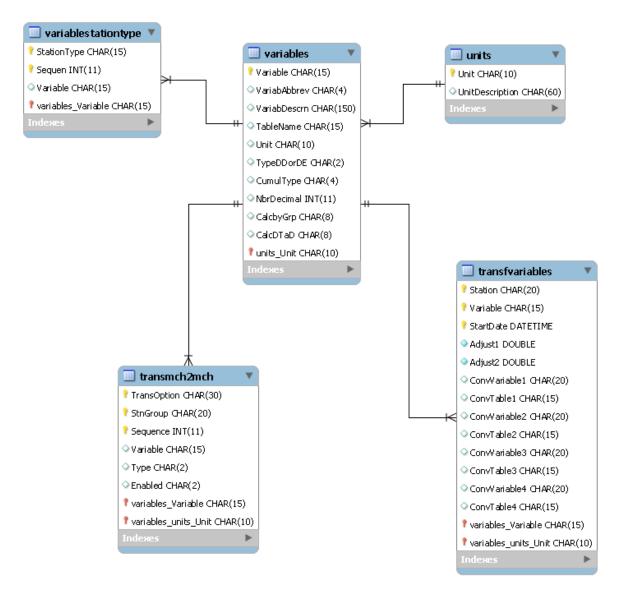
Station model

The definition of the stations and their metadata are structured as shown in the following figure. The natural way of consulting the system is through the groups of stations.



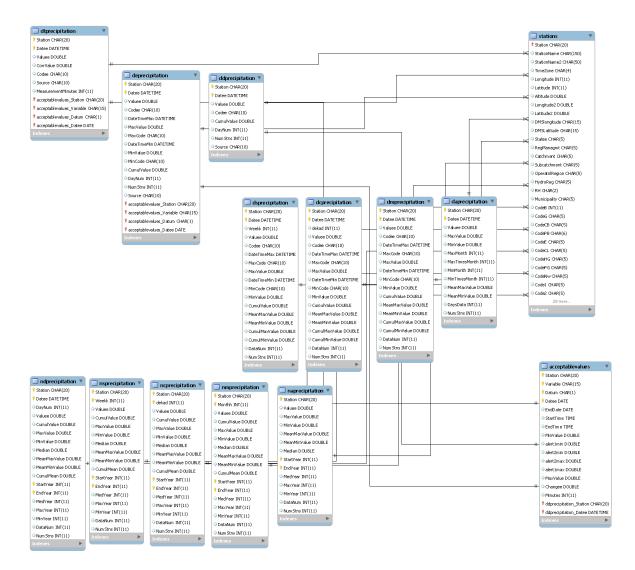
MCH variable model

The system initially consists of a set of defined variables, but you can create all the additional variables that are required. The variables have the following structure.



Data record model

For each variable there is a set of tables in which each type of data defined in the system is stored, such as daily, monthly, annual, hourly, normal daily, normal monthly, normal annual, etc. The records with the following structure are constructed. The input registers are validated with the quality controls defined for each variable and station in the table acceptablevalues



Automatic stations

For the handling of the data coming from automatic stations, the following structure was implemented, a table where the metadata of the station reside, the second where the structure of the message is located, the third where the quality controls are applied and the last where it specifies the periodicity of the readings.

