

Open source web-application for acquisition and exchange of borehole data

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During the last years, the Swiss Geological Survey (SGS) developed a *Borehole Data Management System* (BDMS). One of its main purposes is the management of a large amount of borehole data stored in the IT infrastructure of the Confederation. Since the BDMS applies the SGS standards for describing borehole data it helps to harmonize and standardize the huge variation of available data from various public and private entities. Currently swisstopo is using a commercial desktop application, which is continuously being enhanced to meet the requirements of the SGS and its partners. The application is connected to a centralized database, different other internal databases and applications.

So far, data import into the database can be done via the application itself or – for external users - via a standalone light-version of the application. As a connection to the internet is not yet established, this project was initiated to fill this gap. The goal is to develop a dynamic *open source* web-based interface to facilitate data acquisition and exchange not only for external users and the SGS but also for external users and their own databases (e.g. cantonal databases). Furthermore, the web-interface allows harmonized data management using the SGS standards and an exchange and synchronisation between single database instances of different users and the central database.

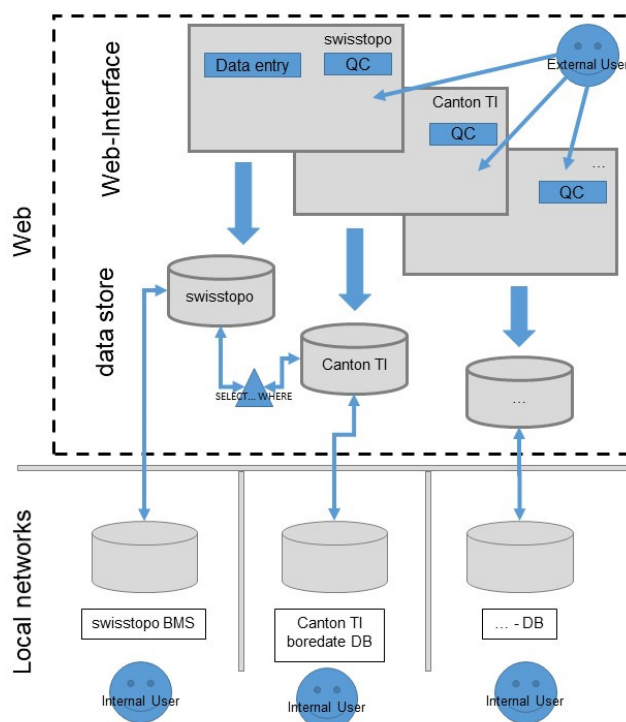


Figure 1. Model of the architecture for the *open source* web-based BDMS.

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