

Water Information Concept Study

The Open Geospatial Consortium (OGC, USA) has completed a Water Information Concept Development Study of the application of OGC Web Services standards in the domain of water information, specifically to investigate architectures and practices for cataloguing, discovering, and accessing selected water resources data from very large numbers of distributed datasets.

David Maidment, director, Center for Research in Water Resources, University of Texas at Austin and leader of the Consortium of Universities for the Advancement of Hydrologic Science (CUAHSI) project on Hydrologic Information Systems said, "The Concept Development Study was very useful to the CUAHSI team to set our work on water web services development on a sound framework of established OGC standards. We are confident that this framework will provide a solid foundation for the further development of water web services in the future. The study advances the progress of transferring results from research into the best practices for government and industry to use to meet the nation's needs for hydrologic information."

Just for the historical time series records of surface freshwater resources data compiled by US national agencies, there are over 23 million distributed datasets available today. Cataloguing and searching efficiently for specific content from this many datasets presents a challenge to current standards and practices for digital geospatial catalogues.

This OGC Water Information Concept Development Study was requested and sponsored by CUAHSI. It builds on the most current best practices within OGC, as well as experimental research by CUAHSI and other OGC members of the Hydrology Domain Working Group. It resulted in an OGC Public Engineering Report, [document 11-013r6](#) that will provide the basis for further development and possible future OGC Interoperability Program projects.

The OGC Water Information Services Concept Development Study Engineering Report provides guidelines and recommendations for open information system architectures that support publishing, cataloguing discovering and accessing water observations data using open standards. The intended audience is US federal, state and local agencies as well as international organisations and agencies and universities and research organisations that collect water data and need to make the data broadly available. The audience also includes data consumers who need to discover, access and integrate data from multiple sources in studies related to hydrological science and water resources management.

In a related event, the OGC Hydrology Domain Working Group and the OGC Meteorology and Oceanography Domain Working Group, both of which are Joint Working Groups of the World Meteorological Organisation (WMO) and the OGC, will hold a public [Oceans/Meteorology/Hydrology Water Cycle Summit](#) on 21st September 2011 at NCAR Center Green in Boulder, Colorado. The IEEE, ICEO, OGC, and other sponsors will host the GEOSS Workshop XLIII: Sharing Climate Information and Knowledge, 23rd September 2011 at the same venue.