

Water Information System

Department of Water



Department of Water: The Water Information system (WIN) is used to store data collected in the field by DoW staff. This includes statistics on groundwater, stream flow, wetlands, dam capacity, rainfall, water quality and contaminants etc. The data is extracted and used by engineers and other professionals to trigger activities such as water allocation and management of water resources.

Background: The WIN system has been in operation for several years, having replaced the State Water Resources Information System (SWRIS), which Zoodata staff had also helped to develop. In mid-2009, in agreement with key users, Zoodata introduced several Agile techniques in the application build process. The use of Agile allowed changes to be made on an ongoing basis and the key users were instrumental in prioritising iterations throughout the development phase.

THE BRIEF

From 2008, we worked closely with key users to enhance WIN. New functionality to the system include data extraction and uploading extracted data to the Bureau of Meteorology (BOM) for the National Water Initiative.

Throughout the engagement with DoW, our developers sat with key users to:

- Clarify requirements
- Make changes to align with the business processes
- Frequent testing of application changes by the clients
- Provide ongoing technical feedback on users requirements
- Embedded within the application build process were:
 - Automated builds
 - Frequent releases of working software for testing
 - Continuous client feedback
- The total system solution includes:
 - Database migration to Oracle 10g from Oracle 6i
 - Data extraction/upload to BOM
 - Application enhancements which aligns to Business Process.

CLIENT BENEFITS

- Developers are responsive to changes requested by client
- Changes can be made up to the last minute
- Regular testing reduces unforeseen problems.

TECHNICAL DATA

The main technologies used are:

- Oracle 10g & 6i
- Oracle Forms & Reports
- Oracle Server