HydroLog4 Professional Tools

Duration: 1 day

Synopsis
This course describes the use of the Open Database Tools for user programming of reports, data import & export, analysis and modelling functions. It also teaches how to use the Task Master Scheduler utility for automating key functions, including the publishing of time-series data to a web site. This course is based around the 'clients' data, so individuals can learn to manipulate data appropriate to their needs. This course is intended for users of HydroLog4 – Professional edition.

Prerequisites
Delegates wishing to take this course should already have a working knowledge of Hydrolog4. They should normally have taken the HydroLog4 Standard Modules course or have prior experience in the core elements of HydroLog4. A complete understanding of the Open Database Tools also requires advanced use of Excel, including some understanding of macros and VBA.

Outcomes
After taking this course, delegates should be able to import time series data from almost any file format and save it in HydroLog's time series archive. They should be able to export HydroLog's archive data into Excel, for further analysis. Delegates should be able to operate the Task Master scheduler for File Manipulations and timetabled jobs. They should also be able to Publish Time Series data in a browser format.

Content
The course describes use of the Open Database Tools to directly access the HydroLog archive. The main use of the tools is to store and retrieve time series data and certain station details from outside HydroLog. The open database tools have been incorporated into the XLReader, XLTabulator and XLFormulator, which can be adjusted to handle different file formats and reporting needs. The course also teaches the use of the Task Master to schedule data processing and file manipulation jobs. The course content is adjusted to focus on the needs and abilities of participants and includes some or all of the following:

- Open database tools imports: How to configure the XLReader to the format of data files, declare the station and parameter to which it belongs and import the data into the HydroLog4 archive.
- Participants are given practise in converting different types of data file, including comma separated data, text files containing values separated by another delimiter and Excel data files (*.XLS).
- The XLReader form in HydroLog4 is described, in order to demonstrate how to setup a template to import from multiple data files.
- Open database tools outputs: Using the XLTabulator and XLFormulator to produce Excel reports from archive data.
- Open database tools user-customised applications: The XLReader, XLTabulator and XLFormulator are applications of the Open database tools that are supplied with HydroLog4. Other applications can be written by users and this course introduces how this may be achieved using VBA.
- Task Master scheduler: Setting up, configuring and submitting jobs as timetables for the Task Master scheduler.
- Task Master maintenance: Suspending, changing and deleting Timetabled jobs.
- Time Series Publisher: Publishing data on the internet or across a local area network.

Tuition uses a hands-on approach, with no more than six participants per tutor. The main features of each topic are explained using a projector, with full reference to the User Guide material. Participants are then given appropriate tasks to illustrate the techniques. Exercises are used for extension and consolidation, so participants can work through a sequence of operations that are typical of the sort of things that may need to be done with live data.