

## Language translation tool

### The Client

The customer is a leading manufacturer of water pollution monitoring products and chromatography instruments.

### The Challenge

The project was to develop a web based language translation tool for managing model specific strings and the translated strings in a central database repository for use by geographically dispersed users. The tool had to be capable of supporting new languages, which could be added to the system as and when required. The tool had to be role-based. The translators had to translate model specific strings from English to different languages, create and download complete binary file, which was created by merging the basic binary file with language strings. The system had to have the ability to convert extended ASCII characters to Unicode and save multi-lingual strings in the central database and convert back to extended ASCII characters for creating complete binary file to be placed into the Model's flash memory.

### The Solution

Our team developed the tool using web-based technologies. The solution was based on JSP technology running under Tomcat web-server hosted on Linux OS. JSP web pages were hosted on the Tomcat web-server, which could be accessed through a browser from the client's system. The middle tier logic was implemented using Java programming language. The middle tier components interacted with the database through JDBC. All resource related data and translated data was stored centrally in the MySQL database. It was possible to download latest model data from the database in the form of flat file for use with models and related applications.

### The Benefits

- The Web based Language Translation Tool was accessible to geographically dispersed users.
- The tool allowed authorized translators to translate strings from English to assigned language for all Models at their discretion.
- The central database repository enabled managing the models and translated strings centrally, which was much more efficient than earlier system based on flat files.
- Creation of complete binary file was automated. The tool is capable of interfacing with the utility for creating complete binary file, loaded into the Model's flash memory.

### The Technology

JSP, Tomcat web-server, Linux OS, Java, JDBC, MySQL.