

Web Services Working Group

June 2011 IM Buy-Out Report

IM Buy-Out Overview

The Web Services Working Group (WSWG) has received buy-out funds to support the development of a new web service-enabled personnel database (PersonnelDB). The design and development of this database began in February with a week-long meeting involving working group and LNO members and has continued through June 2011 with the completion and addition of several features.

Completed Work

The following PersonnelDB development tasks were completed using the IM buy-out funds described above:

1. Development of a MySQL database that stores personnel data, including identity, role, site affiliation, and contact information.
2. Development of an XML schema for exchanging personnel information between computers.
3. Development of a REST web service interface that allows reading and writing of personnel information, as well as ancillary information such as lists of sites and role types, using the XML schema described above.
4. Development of a graphical web interface that sends GET requests to the web service described above and displays the results in human-readable HTML format, allowing searching on name, site, role, and active/inactive status.
5. Development of a graphical web interface that sends PUT and POST requests to the web service described above, allowing addition and updating of personnel.
6. Development of XLS documents that transform documents in the XML schema described above into various human-readable HTML formats.

Outstanding Work

The following tasks have been identified as useful elements of the PersonnelDB project by the WSWG, but have not yet been developed or implemented:

1. A graphical web interface for adding new custom roles (support for this exists at the service layer, but there is no user-friendly interface yet).
2. A graphical web interface for batch personnel creation and editing (support for this exists at the service layer, but there is no user-friendly interface yet).
3. Per-site access controls, restricting the management of personnel to information managers or site representatives of the appropriate site.
4. Migration of the existing LNO personnel data into the PersonnelDB schema.
5. Documentation supporting the usage and continued development of the PersonnelDB application, web service, and web GUI.
6. Continued testing and bug fixes on the existing code base.

Summary

The PersonnelDB project has progressed from the design stages in February 2011 to a stable platform ready for testing and release in the near future. The buy-out funds awarded to the WSWG were essential in this rapid development, and have allowed the project to advance to a point where the remaining implementation details can be addressed by working group members on a volunteer basis.