An experience of collaborative work: Re-engineering of IsisMarc. Walking towards ABCD

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Keyword:

ISISMARC, COLLABORATIVE SOFTWARE ENGINEERING, CLIENT SERVER ARCHITECTURE, ABCD, OPEN SOURCE SOFTWARE, OPEN SOURCE TOOLS.

Summary

1. Objectives:

<u>1.1: General Objective</u>: To formalise a first experience of cooperative work between SIU Consortia and CVI (R&D group from National University of Tucumán), interacting through distributed synchronous and asynchronous tools for collaborative software development.

1.2: Specific Objectives:

- Re-enginieering of the product IsisMarc for its operation under Client-Server architecture, creation of the server internationalized interface using PHP language and BIREME's wxis-modules for interacting with Isis databases.
- Integrate development with BIREME-ABCD, tending to converge on the same architectures and storage, so as to facilitate the progressive migration from current users of IsisMarc towards this tool.

2. Materials and Methods:

2.1: It has been succeeded in establishing a strategic alliance between the SIU Consortia and the University's R&D group to conduct a common and cofinanced work.

2.2: The methodology for interacting of the development team was carried out through the use of the following tools: 1) googlecode: Enables a repository of source code (SVN), administration of events (errors, improvements, tasks) as their transitions of states, a wiki and a space for tarball downloads, E-mail – discussion groups and Virtual meetings and conferences: Gtalk and SKYPE.

3. URL of server component.

http://bdu.siu.edu.ar/ismserver

4. Results:

IsisMarc client-server is a version of IsisMarc to which, drawing on the division in originally existing layers in the tool, has been replaced the layer of storage by a set of web services invocations that allow you to face a radical change of architecture virtually without noticed by the user, at least in regard to the interface and behaviour of the tool that uses daily (except for the logical response remote times).

It comprises two major components: <u>IsisMarc client</u> and <u>IsisMarc server</u>.

The server component: 1) Has a "controller" like Model View Controller (MVC) one, which validates the requirements of clients and runs a default set of actions. 2) The protocol of communication between client and server consists in XML codified under UTF-8. 3) It has been provided a basic set of functionalities which are dedicated to the edition of the databases FDT21, FMT21 and PFT21. 4) It adds a conceptual structure for the administration of blockades of records in view an outline of cataloguing cooperative based on the Internet. 5) It introduces the concept of "virtual field" representing the relationship between bibliographic and authorities databases. 6) Has been added new tracks for importing MARC records implementing UTF-8 codification that is the way that tends most of the free Z39.50 sources.

5.-Conclusion:

This work presents the experience of a collaborative work using typical tools of the draft open software limited to a small academic community, generating a case of redesign product which aims to resolve current needs and to the same time contribute to the gradual adoption of a tool that will generate innovations of disruption in the technological field of libraries Latin America: BIREME-ABCD