R&D Project Management with ODESeW

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Abstract. ODESeW allows developing ontology-based Web portals. We describe the functionalities offered by a specific deployment of the ODESeW application development platform, oriented to the management of EU R&D projects. As an example of this specific deployment, we focus on the project management functionalities currently provided for the EU KnowledgeWeb[1] Network of Excellence (NoE).

1 Introduction

One important aspect in EU R&D project management is the periodic generation of reports about its state. Project reporting requires inputs from every partner in the consortium. Project coordinators are normally responsible for the generation and submission of the consolidated information, which has to be globally consistent.

We show how we ameliorate this problem by using the Semantic Web application development framework ODESeW (Semantic Web Portal based on WebODE) [1] to create a project portal that provides, among other functionalities, a set of project management functions. These functions are based on knowledge about project management and reporting that has been formalised by a set of ontologies.

ODESeW offers developers a set of services and tools for developing Semantic Web applications and gives, by default, navigation and visualization models that allow visualizing, editing and navigating the content in a portal. Such models can be modified and extended easily, permitting developers to create specific visualization and navigation models. The technical details are provided in [1].

2 Periodic Progress Reports in ODESeW

Here we focus on one specific deployment of ODESeW that is valid for setting up and maintaining the Web site of an R&D project, including the creation of periodic progress reports for EU R&D projects.

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[1] Work supported by EU IST NoE Knowledge Web. http://knowledgeweb.semanticweb.org/

ODESeW includes a set of functionalities that help all members of the consortium, and particularly the coordinator, to generate and monitor management documents. On the one hand, it makes each partner be aware of the amount of information to be reported. On the other hand, it generates the activity and effort reports.

ODESeW can manage different domain ontologies. To describe R&D projects, we have used five project description ontologies (documentation, event, organization, person, and project), a user-role ontology (for managing different user profiles within the project), and a project management ontology (for managing R&D projects).

In the specific case study of Knowledge Web, the functionalities provided by the portal are divided according to the different users that can access it:

Partner user. This user is responsible of inserting his/her organization information and the information of all the participants in the project from his/her organization. If the partner is a WP leader, he/she is also responsible to upload deliverables inside the portal. Besides, this user can insert concrete meetings, conferences, workshops, etc.

Reporting users. the provided functionalities are oriented to guide the user through the different reports and the generation and submission of reports. The main tasks of this kind of user are:

❑ Workpackage (WP) progress reports, for each WP that the user's organization is leader of. This user must introduce the description of the progress done in a WP. Besides, the portal shows the user all the available deliverables that must be delivered in the current period report and all the delayed deliverables, so that the user can indicate their current status and the expected date of delivery.

❑ Effort report for the organization to which the user belongs. The technical annex of a project specifies the amount of effort that must be spent by each partner in different WPs during the overall project. In the management report the effort spent by partners in the different WPs during the period report should be shown.

Area managers. in this case, the functionalities are oriented to generate the area progress reports. In the context of Knowledge Web, WPs are organized in four areas: industrial, research, educational and management. In the activity report, area managers can include an overview about the general progress of the area.

Managing director. The managing director is a person that belongs to the project coordinator organization. The provided functionalities are oriented to monitor the evolution of all reports, to generate the complete reports and generate others management report concerning only to the coordinator partner.

Administrator. This user is in charge of creating new users, setting their read and write permissions and specifying which ontologies in the ontology server (WebODE) are being managed inside the portal. He/she is also allowed to change the ontologies inside the ontology server. Besides all administration issues, this user is in charge of including all the project definition information: WPs, deliverables, global efforts, etc.

Reference

1. López-Cima A, Corcho O, Gómez-Pérez A. 2006. A platform for the development of Semantic Web portals. In: Proceedings of the 6th International Conference on Web Engineering (ICWE2006). Stanford, July 2006.