

Learning and Organisational Resources for Communities of Practice

Type of resource: Managing, supporting and evaluating (individual and collective, and informal and formal) learning

Type of scenario: Identity development

DefineOntology: How to define an ontology

Summary

- Objective: design an ontology in order to classify CoP documents.
- Scenario: organisation of a discussion in order to identify the main concepts related to the CoP domain.
- Tools: online services for building and managing ontology.

Objectives

The objective of this LOR is to help CoPs that want to use BayFac (<http://palette.ercim.org/content/view/161/119/>) or any ontology-based service to design their own ontology.

Scenario

An ontology is a representation of a domain, with the different concepts implied and relations between these concepts. The aim of the ontology is to propose an unambiguous and unanimous view of the domain addressed. BayFac is a tool based on ontology: the facets chosen to classify and search CoP resources are taken from the ontology of the CoP. In fact, BayFac exploits only a part of the ontology of the CoP domain.

The ontology represents the different concepts intervening in the CoP practice. As the list of thematic are specific to each CoP, it is up to CoP members to build their own ontology. It is an important step that involves CoP members, and their view of their practice. The members, with help of researchers, have to design their own practice ontology, which will be exploited by BayFac.

1. The CoP moderator asks members who wants to work on the ontology definition.
2. CoPs members identify the thematic and main concepts that are commonly shared within their CoP. From the list of these concepts, the ontology is at its beginning and can be deployed through the relations between the concepts and their properties. A tool like Protégé (<http://protege.stanford.edu>) can be used to build such an ontology.
3. CoP moderator proposes this ontology to all CoP members and asks for validation of it.
4. Once the ontology is designed, facets are determined by choosing some concepts or relations to exploit. Facets are then created by developers in BayFac following the information listed in the BayFac Installation Guide (see the tools below).

Tools to support activity

- BayFac User Guide: <http://palette.ercim.org/content/view/161/119/>
- Protégé: <http://protege.stanford.edu>

Example of use by a community of practice

The ontology definition has been done with members of the CoP e-learning (a CoP of trainers involved in e-learning projects in companies and administrations). Once it was decided to use BayFac as a shared repository for CoP members, the moderator and 4 members (focus group) have started to work on the thematic of the CoP. After a meeting, members have started to review their collective documents and have listed the topics that were exchanging about. A member of the CoP has worked with a developer of BayFac to understand the way the facets (elements of the ontology) were used in the tool. She has helped the members of the focus group to define the ontology and the facets to put into the tool. Once members of the focus group have finished building the ontology, they have presented it during a face-to-face meeting to all CoP members. Feed-backs and questions have allowed focus group members to propose to BayFac developers a finalized ontology and the different facets to add to BayFac.

Further resources

- Tifous, A., El Ghali, A., Dieng-Kuntz, R., Giboin, A., Evangelou, C., Vidou, G. *An Ontology for Supporting Communities of Practice*. The Fourth International Conference on Knowledge Capture (K-CAP'2007), 28-31 October 2007, Whistler, BC, Canada. <http://palette.ercim.org/images/Publications/kcap2007-tifous-et-al-final.pdf>
 - Tifous, A., El Ghali, A., Giboin, A., Dieng-Kuntz, R. *O'CoP, an Ontology Dedicated to Communities of Practice*. 7th International Conference on Knowledge Management (i-KNOW'2007), 5-7 September 2007, Graz, Austria. http://palette.ercim.org/images/Publications/iknow2007_tifous-et-al_final.pdf
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