Transitioning Applications to Ontologies

GOAL

Define a low-cost route to transitioning legacy systems to open semantic Service-Oriented Architectures (SOAs)

MAIN INNOVATION

- SWS bootstrapping via semiautomatic acquisition of domain ontologies
- Augmentation and integration of legacy content relative to the domain ontologies to enable ontology-based information access, including support for distributed semantic repositories
- Innovative infrastructure for transitioning legacy applications to semantic- and service-based ones by automated support for the developer in creating SWS definitions



Transitioning Process

WORK PLAN

- A WP1: A methodology covering all aspects of the Semantic Web Services (SWS) bootstrapping process
- A WP2: Learning domain ontologies from existing application documentation (specifications, UML diagrams, code documentation, software manuals, incl. images)
- A WP3: Methods for automatic semantic augmentation of legacy content, going beyond textual sources
- A WP4: Distributed knowledge repositories, capable of efficient indexing, query, and retrieval
- A WP5 will integrate all these into a transition support Integrated Development Environment (IDE)
- A WP6: Case study on transitioning an existing large-scale open-source system, code, documentation, and user support

POTENTIAL USERS

- A Main focus through the 2 case studies:
 - Product Lifecycle Management (PLM) in aerospace and automotive industries
 - Software applications maintenance and user support
- A Other areas: tourism, life sciences, publishing, and competitive intelligence

KEYRESULTS EXPECTED

Five major types of results:

- methodological recommendations;
- an integrated suite of software components, to include ontology learning services, legacy content augmentation tools, and scalable distributed knowledge stores;
- an information dissemination programme;
- contributions to standards;
- an exploitation strategy, for the commercial partners to undertake outside the project.

FACTS

- ▲ 6th framework STREP project no.: IST FP6 026460
- ▲ Duration: 36 months from March 1st 2006



▲ Budget: € 4,246,696
▲ EC Contribution: € 2,824,950

CONTACT DETAILS

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