9.2 - ECCF Registry Sept. 6, 2010

The semantic infrastructure inception team is planning to create demos and prototypes to refine the requirements and solicit additional input from the community. This section includes the following:

Scope and Objectives

The primary objective of the ECCF registry is to demonstrate how the registry can address the artifact management and service discovery and governance requirements. The prototype will:

- Identify all the key capabilities,
- Realize a core set of functions in the registry prototype as services, and
- Develop a user interface to demonstrate these capabilities to all the stakeholders.

The prototyping team will work with caEHR as a pilot customer and use the caEHR artifacts and specifications for all the demonstrations.

The registry working group comprising external stakeholders will inform all requirements and development work. This group is expected to be operational in the next few weeks and will play a key role in reviewing requirements and providing feedback.

The ECCF registry will demonstrate how all the all the different artifact types can be managed, starting with models and forms. The team will demonstrate how the artifacts can be integrated and leveraged by the caGRID 2.0 platform and the CTS2 terminology services. The registry will also demonstrate a pluggable architecture and support for multiple formats, and the ability to transform and create view of the information.

The enterprise architecture governance team will provide service governance requirements to the prototyping team.

In addition to developing the core services and interfaces, the prototype team will also develop the formal grammar and metadata for behavioral semantics and a SOA ontology that is informed by ECCF.

The goal of this exercise is not create fully functional software but to demonstrate a working prototype that realizes a subset of the requirements that require further clarification and refinement.

Capability Description

The periodic table to be provided in the architecture section provides a quick summary of the key capabilities that will be demonstrated in the prototype.

The prototype will not demonstrate all usage scenarios and functions of these capabilities. The goal of the prototype is to demonstrate a subset of functions within each capability. The following is a high-level summary of those capabilities.

- Storage and retrieval of models in different formats
- Model transformation
- Artifact metadata authoring
- Artifact lifecycle management
- Establish equivalence and dependency between artifacts
- Binding to terminology
- Service governance
- Service metadata authoring
- Integration with platform and forms authoring tools
- Ability to constrain models and value-sets (the registry is not a model authoring tool, but provides very limited editing capabilities)
- Artifact validation for consistency and conformance
- Support for conformance statements

Requirements Addressed

The prototype addresses all the artifact management, service discovery and governance and caGRID platform 2.0 requirements listed in section 5 - Semantic Infrastructure Functional Requirements.

The requirements will be further refined based on community feedback and all the content and code will be published for community review.

Conformance testing prototypes will also be developed to leverage the metadata to generate tests that validate services and artifacts for conformance. This activity is expected to be very limited in scope and will be closely coordinated with the platform team. The testing framework will be developed primarily by the platform team as the framework is expected to test services deployed on the caGRID 2.0 platform.

Community Feedback and Comments

TBD based on feedback and comments on the first draft and the prototype/demo.

Lessons Learned

TBD based on feedback and comments on the first draft and the prototype/demo.