Semantic Infrastructure Requirements Analysis Roadmap

The VCDE Requirements Elicitation Team produced a collection of requirements for the new semantic infrastructure during Spring 2010. This resulted in a collection of 112 requirements at different requirements levels: some functional, some non-functional, some that were high level software requirements for capabilities, some that were individual tool enhancement requests. In analyzing the process, one of the goals was to produce software artifacts that would be suitable for hand-off to the solution architects. Semantic and Technology Roadmaps (whitepapers) were in process as of Summer 2010. The requirements generated from this requirements elicitation exercise will feed into that roadmap development.)

The roadmap below depicts:

- the steps that were taken in this project as reflected in the Semantic Infrastructure Concept of Operations Initiatives - Requirements Master List
- what role in the software engineering process is recommended to undertake each part of the process (vertical lines between End-Users, Business Analysts, Requirements Analysts, Business Architects, Solution and Systems Architects)
- how both the enterprise viewpoint of the Business Process and Capability Services and initial ideas about Technical Services can be identified from requirements analysis (last column reflecting development of the conceptual model in the Services Aware Interoperability Framework (SAIF))
- how domain-specific ontologies can support the entire process (bottom of chart showing progression through Domain-specfic lexicon and ontologies; RM-ODP Enterprise Language; Roles, activities, objectives, information artifacts; Service taxonomy and ontology; Information and technology ontology)

A more detailed description of this chart can be found in a paper written by one of the analysts.