

Topic Area/Track: Applications

Title: Managing Schemalets Using the OASIS ebXML Registry

Keywords:

Registry, Repository, Web Services, ebXML, Content Management, Semantic Web, Java, Meta data, Ontology, Distributed Systems, E-business, E-Government, eCommerce, HTTP binding, XML, Query language

Brief Session Description:

This paper describes how fine grained XML Schema artefacts (referred to as Schemalets) may be published, managed, discovered, reused and assembled into larger XML Schemas with the help of an ebXML Registry.

Technical Needs: No special needs.

Abstract

The rise in adoption of XML has led to a proliferation of XML Vocabularies. These XML Vocabularies are typically expressed in schema languages such as XML Schema and Relax NG. Such XML Vocabularies tend to be composed of finer grained definitions of vocabulary elements such as definitions of namespaces, attributes, types and elements. These vocabulary building block elements are referred to in this paper as *Schemalets* or mini-schemas.

Organizations are finding that in the absence of proper tools, XML Vocabularies are being developed in an ad hoc manner with little coordination. This creates much duplication of effort resulting in inconsistent and incompatible XML Schemas. Often there are multiple schemalets for representing the same information element.

The paper shows an XML Vocabulary Management application of the ebXML Registry that is used as a tool to address the problems created by ad hoc development of XML Vocabularies. The tool uses the content and metadata management capabilities of an ebXML Registry to manage Schemalets, facilitate their discovery and subsequent reuse when assembled into complete schemas.

The intended audience includes those that are interested in XML tools and specifically XML Vocabulary Management tools. This includes systems architects, developers as well as managers. The paper assumes moderate technical background in XML and Web Services. However, anyone with little or no technical background will be able to understand the business aspects of the presentation.

The audience is first introduced to the concepts behind XML Vocabulary development

and the common problems when XML Vocabulary is developed in an ad hoc manner. Next, a set of requirements are identified for a tool that manages XML Vocabulary elements.

With this introduction, much of the remainder of the paper then describes in detail the *Schemalet Manager Application* and shows how it meets the requirements identified and addresses the problems identified in Vocabulary Management.

The paper concludes with an assessment of how well the *Schemalet Manager Application* met its objectives, identifies areas for improvement in the application as well as ebXML Registry standard and shares some useful links.