



Introduction

Unicorn Solutions is thrilled to participate in the upcoming Fourth Semantic Interoperability for E-Government Conference, February 9-10, 2006. This document is not a Call For Participation in the sense of a speaking proposal or panel discussion, but rather to ensure we are able to participate in the Vendor Exhibition Hall, as we have done each of the past 4 years.

Unicorn Evangelism About Federal Information Management Problems and Ontologies

Unicorn has continued to be active with customers in both the government/public and in the commercial sectors. In addition, Unicorn has continued to evangelize about the importance of ontologies and semantic technologies to the US Federal Government, most recently in a 2-part series of articles entitled: "Ontology Management for Federal Agencies" in DM Review. In these articles, Unicorn and Stabourne Communications Design explain the specific information management challenges within government agencies, focusing on the benefits of ontologies and the need to manage them wisely. The URLs for those 2 articles are http://www.dmreview.com/editorial/newsletter_article.cfm?articleId=1030240 and http://www.dmreview.com/article_sub.cfm?articleId=1036701.

Government Information Challenges

Government competes on the strength of information transparency, integrated processes, and the efficiency and agility of the IT systems. However, Government enterprises have accumulated thousands of IT systems, each storing critical business information using incompatible "data languages." The uncontrolled distributed approach to IT can no longer support the business needs of the enterprise.

In response, Government has mandated various enterprise architectures (the Federal Enterprise Architecture Framework (FEAF) and the Department of Defense Architecture Framework (DoDAF), among others) to coordinate critical aspects of the business across the entire enterprise. One key aspect of this coordination is the implementation of a common business language for describing citizens, legislative mandates, financial statements, and the key business processes they engage in.

Government enterprises are also creating an enterprise-wide management layer for their IT - a detailed map of their databases, applications and hardware, and the structures and interdependencies therein. This is commonly referred to as metadata and is used for discovery, reuse, impact analysis and rationalization to deliver agility and IT efficiency.

A Unicorn Government Customer (Name Not Allowed To Be Used)

Most recently, a large Unicorn Government client has been using the Unicorn System to capture and represent the semantics of its information. Two models form the basis of this effort: (1) An Enterprise Data Architecture (EDA) created in standard Entity-Relationship format via Erwin and (2) an industry standard model around the Common

Information Model (CIM) expressed as a UML class model in Rational Rose. These two models are reconciled using semantic modeling. By semantically integrating the two models, the project level metadata assets are mapped to the central information model. The mapping with its accompanying business rules accurately expresses the semantics of the customer's information.

Unicorn & Metamodels

The Unicorn Universal Repository provides enterprise-scale storage and management for technical metadata and for enterprise architecture artifacts, including the Ontology Model and Semantic Mappings. It uses an OMG MOF-based flexible Metamodel to ensure that all types of technical metadata and enterprise architecture artifacts are stored and cross-referenced. Configurable descriptors for documenting metadata are included by default with the Dublin Core standard. The metamodel is extensible at runtime with a graphical interface, supporting both manual and batch scanning, metadata synchronization, and administration of large bodies of metadata using hierarchical packages. The Unicorn Universal Repository also provides a secure environment with permissions management, multi-user collaboration, and versioning.