Semantic Interoperability

THE *Open* GROUP
Making standards work®

Semantic interoperability

The Internet and the World-Wide Web have solved the basic problems of information transmission; the next major advance will come from resolving the deeper issues of semantic interoperability. This problem is well understood throughout the world of information technology, from commercial enterprises looking for a new competitive edge, to military organizations looking to gain battlefield superiority.

Who we are

The Open Group established its Semantic Interoperability Work Group to advance understanding and the state-of-the-art of semantic interoperability, further the use of semantic technology within the enterprise, and show how it can add business value.

The Semantic Interoperability Work Group is a Work Group of the joint Customer and Supplier Councils of The Open Group. Every Silver, Gold, and Platinum member can participate in its activities.

What we do

The objectives of the Semantic Interoperability Work Group are to:

- Develop a common understanding of types of semantic conflict
- Identify means based on open standards to resolve those conflicts
- Describe how enterprise architecture can cater for different kinds of information, both structured and unstructured, and support strategies for their interoperation, in a way that could be included in a future version of TOGAF™

Boundaryless Information Flow
™

The need for semantic interoperability

Service-Oriented Architecture (SOA) is starting to be widely adopted. It provides enterprise agility, and can make enterprise information available throughout the enterprise as needed, delivering Boundaryless Information Flow™.

This implies that resources, including software services and human resources, must process information of different kinds, represented in different ways, and including both structured and unstructured data. That is, it requires Semantic Interoperability.

The need for Semantic Interoperability will become still greater if current expectations are realized for how SOA will develop, in combination with Web 2.0, and how enterprises will develop, with externalization of information.

Activities

The Semantic Interoperability Working Group will undertake a range of projects to produce deliverables that prove semantic technology is real today. Projects under discussion include:

- UDEF: The UDEF Project will continue to pursue its Charter. The realization of this effort is to establish the UDEF as part of the big semantic picture.
- Semantics & SOA: SOA is being treated as the enablement platform of the future. If SOA is about integration at the syntactic level, semantic technology will provide that next level of interoperability.
- Vocabulary Management: The understanding of vocabulary is integral in the success of semantic technology; in order to make semantic technology real in the enterprise the processes, governance, and tools around semantic technology need to be furthered.
- Semantics & TOGAF Information Architecture: This project will work on the integration of semantic technology in TOGAF™.
- Semantic Framework & Reference Model: This project will produce an analysis of types of semantic conflict, and identify important semantic standards.

Semantic Interoperability

Becoming a member

If you want to understand and shape the deployment of Semantic Interoperability in your organization, you should join the Semantic Interoperability Work Group.

If your organization is a member of The Open Group, you can participate. To do this, you must subscribe to the si mail list. This will give you access rights to log in to the Semantic Interoperability Work Group web pages.

Go to www.opengroup.org/projects/si for further information.

About The Open Group

The Open Group is a vendor-neutral and technology-neutral consortium, whose vision of Boundaryless Information Flow™ will enable access to integrated information within and between enterprises based on open standards and global interoperability. The Open Group works with customers, suppliers, consortia, and other standards bodies. Its role is to capture, understand, and address current and emerging requirements, establish policies, and share best practices; to facilitate interoperability, develop consensus, and evolve and integrate specifications and Open Source technologies; to offer a comprehensive set of services to enhance the operational efficiency of consortia; and to operate the industry's premier certification service. Further information on The Open Group can be found at www.opengroup.org.