

UBL and Industry XML Standards

UBL Marketing Subcommittee

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The Problem with XML Industry Standardization

XML was designed to specify multiple data formats optimized for different data exchange applications. So the recent explosion of XML specifications resulting from the efforts of industry associations to develop domain-specific markup languages is neither unexpected nor detrimental. In one area, however, these otherwise beneficial XML industry initiatives are creating interoperability problems and impeding the development of inexpensive software. That area is the specification of XML schemas for common business documents such as purchase orders and invoices.

While different industries frequently do have slightly different requirements for these common business forms, their similarities far outweigh their differences, and most of the work devoted to the design of these forms in each industry segment is simply wasted effort that would better be deployed in work on XML schemas for the data that is truly specific to a given industry. The goal of UBL is to standardize XML schemas for common business documents so that industry organizations can concentrate on the part of the data interchange problem in which they have special expertise and truly divergent needs.

The OASIS UBL TC

The OASIS UBL (Universal Business Language) Technical Committee is an open, publicly accountable, nonprofit initiative to define a common XML library for basic business documents like purchase orders, invoices, and advance shipping notices. UBL will provide a set of XML building blocks together with a framework that will enable trading partners to unambiguously identify and exchange basic e-commerce documents in specific business contexts.

The OASIS UBL effort builds on the Electronic Business XML (ebXML) infrastructure developed by OASIS and the United Nations. The ebXML specifications provide for XML registry services, reliable XML messaging, standardized trading partner agreements, a standard data dictionary, and a business context methodology. However, UBL documents will be usable in a wide variety of other ecommerce frameworks as well.

UBL will unite and harmonize a number of currently existing XML and EDI business libraries into a set of internationally recognized de jure standards. The arrival of a standard set of XML business schemas will solve major interoperability problems for both vendors and users and speed the entry of small and medium-size businesses into the electronic

marketplace. UBL will be freely available to everyone without legal encumbrance or licensing fees.

OASIS, the Organization for the Advancement of Structured Information Standards, is a nonprofit corporation founded in 1993 to advance interoperability in data exchange through the use of SGML, the precursor to XML. Over the last two years, OASIS has become known for its partnership with UN/CEFACT in the ongoing ebXML initiative to establish a standard XML-based framework for electronic commerce. As a member of the international Management Group that coordinates the bodies responsible for global electronic commerce standards, OASIS is well positioned to develop the common business library and to advance it through its partner bodies to the status of an international standard recognized as a legal basis for world trade.

The UBL Value Proposition for Industry Associations

The separate development of basic business documents in multiple industry consortia is not just a waste of effort; it is also a recipe for noninteroperability. It is a rare business that needs to exchange data only within its own industry. A company in the chemical industry, for example, may need to buy containers from a company in the steel products industry so that it can sell paint to a company in the automobile industry.

The amount of customization needed to configure systems for data exchange across industry boundaries is in inverse proportion to the amount of standardization achieved in the definition of the data formats. But true cross-industry standardization can only occur in an effort that stands outside of any particular industry while providing an organizational structure that promotes global consultation among industries. UBL is such an effort.

The Advantages of Joint Development

Pooling resources to develop a single set of XML schemas for generic business documents has a number of advantages.

- Joint development is the only way to promote the interoperability of basic business documents across industry boundaries.
- Outsourcing the development of "vanilla" business documents to a joint effort enables each industry association to focus on the documents that are unique to that industry.
- Pooling our business and technical expertise will ensure a better set of standards, one that addresses a larger body of business cases and exhibits a superior design.
- Joint development is a much more effective use of resources than the separate development of the same basic documents in multiple standards organizations.

- Placing ownership of the resulting work in a nonprofit organization open to all interested parties and dedicated to the free publication of its specifications will ensure that the joint work will remain free of proprietary control.
- The development of a common XML business library will enable the creation of inexpensive, off-the-shelf tools for performing everyday supply-chain operations.

The Role of Industry Associations in UBL

Defining a set of standard XML business schemas that will support legacy EDI systems across industry boundaries is challenging work; doing it without the contribution of expert labor would be impossible. An open, nonprofit effort like UBL can succeed only if we all do our part to make it happen.

Industry associations have a special role to play in UBL. The goal of interoperability requires that every category of potential users must certify that the UBL schemas will support the data exchanged in their business transactions with suppliers and customers. As the owners of industry-specific business expertise, industry consortia are the organizations best qualified to perform this function.

The UBL Liaison Subcommittee

To coordinate the review of UBL schemas by industry organizations, the UBL TC has established a special group, the UBL Liaison Subcommittee, whose members are individuals formally appointed by industry consortia to represent their interests in the UBL work. The members of the UBL Liaison Subcommittee currently include RosettaNet (IT industry), EIDX (electronics industry), ACORD (insurance industry), ARTS (retail sales), and XBRL (accounting professionals).

Members of the Liaison Subcommittee make the following commitments to UBL:

1. To join OASIS as individual or organizational members. Individual membership in OASIS costs USD 250 per year; see <http://www.oasis-open.org/join> for details.
2. To attend Liaison SC phone conferences every two weeks. Travel is not necessary.
3. To arrange for periodic reviews of UBL specifications by business experts within each liaison organization.
4. To help schedule UBL TC meetings in a way that minimizes conflict with industry conferences and other important events and promotes cooperation between the industry organizations represented in UBL.
5. To participate in a cross-industry alliance dedicated to the definition of free vendor-neutral XML business standards.

Information about UBL

More information on UBL can be found on its web page at

<http://oasis-open.org/committees/ubl>

A white paper on UBL is available at

<http://oasis-open.org/committees/ubl/msc/200112/ubl.pdf>

Conclusion

The UBL effort represents a conversation among the world's industry organizations that aims to arrive at a worldwide consensus on the form of common business data. If your organization wishes to take part in this conversation, please contact the chair of the UBL TC, Jon Bosak <jon.bosak@sun.com>.