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The missing link
Will ebXML bring true global B2B?

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> The United Nation and the OASIS group have joined together as unlikely allies in the ongoing turf war over B2B standards. Offering a new set of XML-based specification, ebXML makes the bold promise to enable a single global electronic marketplace.

XML, XTML, SOAP, xCBL, SGML, TCP/IP – the Internet has become a veritable alphabet soup of languages and standards. Do we really need yet another? According to OASIS and the United Nations, the answer is "yes."

Sponsored by the Organization for the Advancement of Structured Information Standards (OASIS) in partnership with the United Nations itself (under the Center for Trade Facilitation and Electronic Business, or CEFACT), "ebXML" hopes to be the definitive standard that will unite all existing and emerging XML standards.

"I'm excited about the ebXML effort because it's our only chance in this decade to establish an international e-commerce standard," says ebXML Transport/Routing and Packaging Chairman and Executive Steering Committee member Rik Drummond.

Indeed, enthusiasm for the standard is running at an all-time high after OASIS and UN/CEFACT presented a proof-of-concept demo of the ebXML technology at a news conference in San Francisco on December 12th, 2000. A similar demonstration was held the previous month in Tokyo. According to ebXML leaders, the final core technical infrastructure is near completion and is expected to be ratified next March -- two months ahead of schedule.

"We are very excited to report our progress is significantly ahead of schedule and that we are in a position to deliver the ebXML technical infrastructure in 90 days," says Klaus-Dieter Naujok, ebXML chairman and member of the UN/CEFACT Steering Committee. "The ebXML specifications for transport, routing and packaging, trading partner agreements, and registry/repository are stable and ready for evaluation and early adoption."

Naujok, the UN's ebXML spokesman as well as Netfish CTO, says, "When we said a year ago that we wanted to create these standards and get them ratified within 18 months, people said it was impossible. I remember Sun's Bill Smith and XML co-creator Jon Bozak saying that if we could get a team to do this in 18 months, we would deserve to win the Nobel Prize."

More than another acronym

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ebXML was designed to address one of the key failings of e-commerce, interoperability. The wide adoption of XML has helped the cause, but with it comes another hodgepodge of standards. For example, there are currently some 500 XML schema "standards" -- and counting. ebXML intends to rein in the melange, and provide a single *lingua franca* for business-to-business communications, thus taking worldwide e-commerce to the next level.

"Although the issues are technically and procedurally complex, the concept is simple," says Drummond. Namely, to "provide an open XML-based infrastructure enabling the global use of electronic business in an interoperable, secure, and consistent manner."

According to OASIS and UN/CEFACT, ebXML is an open XML-based standard designed for all types and sizes of businesses, aimed specifically at a world audience. Its stated goal is "to enable a global electronic marketplace where enterprises of any size and in any geographical location can meet and conduct business with each other through the exchange of XML-based messages."

Another primary ebXML-stated objective is to lower the barrier of entry to electronic business for small- and medium-sized businesses and developing nations, as many larger companies (including nearly all global Fortune 1000 companies) already have extensive systems in place.

In addition to the UN and OASIS, the ebXML initiative is led by four corporate partners, Cisco Systems, Sun Microsystems, Sterling Commerce, and XMLSolutions, along with fifteen other industry leaders. It boasts over 1,000 participants in its newsgroups and averages about 200 developers at its quarterly "town hall" meetings. Furthermore, a staggering 850,000 companies internationally, all members of the Global Commerce Initiative, have opted to use the ebXML standard for their Internet transactions.

"The adoption of ebXML by the world's largest manufacturers and retailers is a significant sign that the ebXML initiative is moving forward from development to deliverables," said Naujok in a press release. "Although we have much work ahead of us, ebXML specifications are robust and usable

What ebXML means for e-business
The potential benefits to electronic business are certainly promising. For example, the use of ebXML would standardize trading partnerships by classifying the technical boundaries of trading partner profiles and agreements using TPA. It would also standardize contracts and enable extensive supply chain information to be included in a standard electronic business document.

Benefiting e-business was a project priority from the start. "From the outset the technical architecture team approached the project from the standpoint of business work flow, selecting the objects common to many business processes, such as address, party, location," says Naujok. "When you do business using ebXML, you get the capability to discover the trading capabilities of your partner, so you know what you're going to have to have in order to do business with them. We're not just saying, 'Here's a purchase order.' We're tying it to a business process."

In contrast to vertically focused standards such as RosettaNet and the Open Applications Group Integration Specification (OAGIS), ebXML is a horizontal standard, to be developed in depth for use within any vertical industry.

Says Robert S. Sutor of IBM, vice chairman of ebXML and chairman of the OASIS board of directors, "ebXML provides the infrastructure for e-business who use XML and Internet-based technologies. [It] defines a common set of standards that can be used across all vertical industries."

ebXML will not provide any sort of reference implementation of its specifications, however. That will be left up to the companies involved to adopt the standards and provide their own implementations.

Says Drummond, "Our focus is to construct a general-purpose message, with a header that supports multiple payloads, while allowing sufficient digital signatures within and among related messages."

While the full impact of ebXML remains to be seen, many see its evolution as a boon for the world of electronic business, architecture and Web services development. "This is great news for Web developers who want to get a jump start on creating electronic commerce applications built on global standards," adds Naujok.

Will ebXML be the master key that finally unlocks the full potential of B2B? Only time will tell, but for now it's a tempting and fairly risk-free experiment.

Resources

- Further information on the ebXML standard can be found at www.ebxml.org.
- The United Nations Center for Trade Facilitation and Electronic Business is on the Web at www.unece.org/cefact/.
- The OASIS home page is at www.oasis-open.org/.

About the author

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What do you think of this article?

Killer! (5)   Good stuff (4)   So-so; not bad (3)   Needs work (2)   Lame! (1)

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