The Global Standard for Electronic Business
The Internet is Growing Up

Web Services

Info Appliances

Net Clients

B2C

B2C

B2B
## Making Sense of It All

### Vertical Market Vocabularies

<table>
<thead>
<tr>
<th>WSDL</th>
<th>FPML</th>
<th>HRXML</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPML</td>
<td>WML</td>
<td>XFRML</td>
</tr>
<tr>
<td>NEWSML</td>
<td>FINML</td>
<td><em>many others...</em></td>
</tr>
</tbody>
</table>

### Industry Initiatives

<table>
<thead>
<tr>
<th>UDDI</th>
<th>Rosetta Net</th>
<th>OTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOAP</td>
<td>ebXML</td>
<td><em>many others...</em></td>
</tr>
<tr>
<td>XAML</td>
<td>OASIS</td>
<td></td>
</tr>
</tbody>
</table>

### Core XML Standards (W3C)

<table>
<thead>
<tr>
<th>XML 1.0</th>
<th>XQuery</th>
<th>Reg/Rep</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAX</td>
<td>XLink</td>
<td>DTD’s</td>
</tr>
<tr>
<td>DOM</td>
<td>XSL</td>
<td>Schema</td>
</tr>
<tr>
<td></td>
<td>XSLT</td>
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</tr>
</tbody>
</table>
Electronic business today

- EDI - limited to large organizations
- Expensive implementations that many companies can't afford
- High cost-of-entry; inflexible.
- No business communicates solely in its supply chain
  - need to exchange messages outside industry boundaries
- XML initiatives underway for specific industries
  - attempts at verbatim translation of EDI to XML
- Consensus required on common requirements
- No common infrastructure means incompatibility, reinvention and segregated pockets of communication
The Future of Electronic Business

Source: Gartner Group

2000

• 75 percent of fortune 500 enterprises expected to use XML in at least one prototype project; 25 percent expected to use it in at least one production project.

2003

• 80 percent of application-to-application traffic over public networks expected to be in XML format.
• At least 75 percent of all XML documents expected to be matched with different internal non-XML data formats.

2004

• More than 75 percent of new B2B projects expected to use XML messaging.
“Never plan further than 24 months out. Everything is going to be so different by then, why do it?”

*Number One of Gartner’s Top 10 E-Business Imperatives*
Enter ebXML

- Worldwide project to standardize the exchange of electronic business data
- XML-based infrastructure to enable consistent, secure and interoperable message exchange
- Supported by hundreds of industry consortia, standards bodies, companies and individuals from around the world
- Sponsored by OASIS and the United Nations CEFACT
ebXML enables anyone, anywhere to do business with anyone else over the Internet
A global electronic market

where enterprises of any size, anywhere can:

• Find each other electronically
• Conduct business through the exchange of XML based messages
  – using standard message structures
  – according to standard business process sequences
  – with clear business semantics
  – according to standard or mutually agreed trading partner agreements
• Using off the shelf purchased business applications
**ebXML Characteristics**

- Participation is free and open to anyone, anywhere

- Complement, not compete
  - EDIFACT, X12,…
  - protect existing infrastructure investment
  - “extend-and-embrace” versus “rip-and-replace”

- Focus on needs of SME
  - easy, low cost, rapid development & deployment
  - plug and play shrink wrapped solutions
  - built on open, available, proven standards

- Modular and inclusive
  - implement what applies to you
Main ebXML concepts

- Business Processes – Defined as models, Expressed in XML
- Business Messages – Expressed in XML
- Trading Partner Agreement – Specifies parameters for businesses to interface with each other – Expressed in XML
- Business Service Interface – Implements Trading Partner Agreement – Expressed in XML
- Transport and Routing Layer – Moves the actual XML data between trading partners
- Registry/Repository - Provides a “container” for process models, vocabularies, and partner profiles.
• United Nations Center for Trade Facilitation and Electronic Business

• Sets worldwide policy and technical development in trade facilitation and electronic business

• Developed international EDI standard, UN/EDIFACT
  – one of only four international bodies able to set de jure standards
  – plans to officially accredit ebXML on completion

• Has put XML initiatives on hold until ebXML delivers
UN/CEFACT’s vision for ebXML

• ‘Framework’ using BPM, UML, and XML
• Standards bodies create models that define common processes to achieve a specific business goal
• Models are stored and registered globally
• Trading partners register their particular paths through the models
• ebXML-defined business process models, vocabularies, and messaging ensures interoperability
World’s largest independent, non-profit organization dedicated to the standardization of XML applications

More than 150 member companies plus individuals

Operates XML.ORG Registry, the open community clearinghouse of XML application schemas

Technical work on XML interoperability includes XML conformance and XML Registries/Repositories

General XML technical resource
ebXML Management

Executive Committee
- 2 OASIS Members
- 2 UN/CEFACT Members

Steering Committee
- ExC + PT Leads

Project Team 1
- PT Lead
- PT Editor
- PT Members

Project Team 2
- PT Lead
- PT Editor
- PT Members

Project Team 9
- PT Lead
- PT Editor
- PT Members
ebXML Project Teams

User Community Business and Technical Requirements

Requirements

Requirements Group

Business Process

Core Components

Registry & Repository

Trading Partner

Trading, Routing and Packaging

Technical Architecture

Quality and Review

Steering Committee

ebXML Work Group

Marketing, Awareness & Education

Technical Implementation

Cascading Levels of Detail

Proof-of-Concept Demos
ebXML Architecture

Business Process and Information Models

UML to XML conversion

Registration

Repository

Retrieval of new or updated ebXML Models

Internal Business App

Implementers

Shrink-wrap Application

Build

Retrieval of new or updated ebXML Models

Retrieval of ebXML Specifications & Models

TPA

Business Message

BSI Interface

ebXML Transport

BSI Interface

Business Message
ebXML Architecture

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BSI Interface

Business Message
Usage Example

1. Request ebXML specification
2. Build System
3. Send ebXML specification
4. Register company profile
5. Query about Company X
6. Send Company X’s Profile
7. Submit TPA
8. TPA Accepted
9. Request Company X’s Scenario
10. Send Company X’s Scenario
11. Send ebXML specification
“ebXML is our only chance this decade to establish an international e-commerce standard.”
“ebXML provides a platform on which to build standards ... that are developed faster and yet supported by a rich set of software tools.”
“It is clear that ebXML will soon become the standard for all global trade. By implementing ebXML, GCI takes advantage of the excellent work that’s being accomplished to streamline many EDI processes and remove waste and redundancy from supply chains.”
Industry Groups Support ebXML

The Open Healthcare Group

Accredited Standards Committee X12

ACORD™

OPEN TRAVEL Alliance
<table>
<thead>
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<th>ebXML Timeline</th>
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<tbody>
<tr>
<td>ebXML Requirements</td>
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<tr>
<td>Business Processes</td>
</tr>
<tr>
<td>Core Components</td>
</tr>
<tr>
<td>Transport Routing/Pkg</td>
</tr>
<tr>
<td>Registry &amp; Repository</td>
</tr>
<tr>
<td>Trading Partner</td>
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<tr>
<td>Open Comment Period</td>
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</tbody>
</table>
How to Participate in ebXML

- Subscribe to general e-mail list and project team lists
- Participate in open email dialogue & discussions
- Attend the next quarterly face-to-face meeting
ebXML for your strategic planning

- It’s real and it’s coming fast
- The only complete and integrated b2b infrastructure available
- Now in deliverable phase
  - multi-vendor, proof-of-concept demonstrations
  - vendor support announcements
  - adoption by verticals
Summary

• Global in scope, participation and support
  – participation is free and open to anyone, anywhere
  – focus on needs of businesses not using EDI
  – UN CEFACT, OASIS & >1,200 participants around the world

• Evolutionary development and deployment
  – simple, low cost, technologies (HTTP, SMTP, XML, UML)
  – complement, not compete with EDI
  – modular architecture; use what you need

• Now in delivery stage
  – specifications & Proof of Concept demos
  – core infrastructure specifications coming soon
Get involved.

http://www.ebxml.org