XML Initiatives and Standards Convergence
Agenda

- Part One: Conceptual Model for Understanding XML-based Standards Components
- Part Two: Current Snapshot of Specific XML Initiatives
- Part Three: RosettaNet XML Standards Convergence Perspective
Prefacing Statements

- The following information was developed based on input from a wide variety of respected business and technology leaders both inside and outside the RosettaNet community.

- Most of the XML organizations referred to herein have been given the opportunity to provide input on the conceptual model (Part One) and update the snapshot of their XML initiatives (Part Two).

- The standards convergence perspective (Part Three) was developed by RosettaNet based on current information and trends it sees in XML standards development and adoption.

- While RosettaNet has made significant attempts to accurately and objectively reflect the information contained in this document, other organizations may have differing or alternative perspectives.

- This information is a snapshot in time and is expected to change on a regular basis as XML standards mature.
The Current State of B2B & XML

• For B2B e-business to become pervasive, it requires the availability of common vertical and horizontal business process and supporting standards.

• XML is key in the development of today’s business process standards and new XML initiatives are announced on a regular basis.

• While most of these XML initiatives are complementary, the number of announcements has led to mass confusion for many end-users.

• This confusion is leading many companies into:
  - Wait and see mode
  - Analysis paralysis mode
  - Less than optimal decision making mode
RosettaNet seeks to increase the speed of B2B business process integration by:

- Reducing confusion through a conceptual model that puts individual XML component standards into context
- Evaluating existing and new XML initiatives against the conceptual model
- Embracing horizontal XML initiatives as they become proven and universally accepted
- Maintaining a leadership role in the development of XML business process standards required to meet the specific needs of the high technology industry
Part One: Conceptual Model for Understanding XML-based Standards Components
The standards required to support the transfer, routing, packaging (TRP) and digital signature of information shared between trading partners via the Internet.
The standards required to support the electronic discovery and configuration of business processes, or e-services, between trading partners.

Also includes the dynamic creation and management of trading partner agreements between partners.
The standards required to structure, and the aggregation of all content fields, elements, constraints, code lists and objects used within electronic business processes.
The standards required to structure form, fit and function attributes of products and services.

- Universal Specification Schema & Architecture
- Supply Chain Business Processes
- Supply Chain Technical Dictionary Content
- Business Model Business Processes
- Universal Business Processes
- Universal Technical Dictionary Structure
- Universal Business Dictionary Structure & Content
- Universal Registry & Repository Structure
- Universal Messaging Service
The standards required to automate relatively common business processes between trading partners across almost any supply chain or business model.

It is generally accepted that an XML business process standard should include both a content (payload) and choreography (dialogue) component.
The standards required to automate business processes between trading partners that are fairly unique to a given business model.

It is generally accepted that an XML business process standard should include both a content (payload) and choreography (dialogue) component.
The standards required to commonly describe the form, fit and function attributes of like products and services within a given supply chain or industry.
The standards required to automate business processes between trading partners that are fairly unique to a given supply chain.

It is generally accepted that an XML business process standard should include both a content (payload) and choreography (dialogue) component.
The standards required to define the context and relationships of the horizontal and vertical standards components below.
Part Two: Current Snapshot of Specific XML Initiatives
XML Standards Snapshot
Open XML Initiatives

- Development
- Pilot Testing
- Early Production
- Mass Production

Universal MetaModel & Architecture

Supply Chain Business Processes (Content & Choreography)

Supply Chain Specific Technical Dictionary Content

Business Model Specific Business Processes

Universal Business Processes (Content & Choreography)

Universal Technical Dictionary Structure

Universal Business Dictionary Structure & Content

Universal Registry & Repository Structure

Universal Messaging Service

RosettaNet

ebXML (Oasis/UN)

OAG

IT, EC
SM

IT, EC
SM

Plan to Become Agnostic

Primarily Content

Agnostic Position

IT, EC
<table>
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<th>XML Standards Snapshot</th>
<th>Open XML Initiatives</th>
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**Development**

- Universal MetaModel & Architecture
- Supply Chain Business Processes (Content & Choreography)
- Supply Chain Specific Technical Dictionary
- Business Model Specific Business Processes
- Universal Business Processes (Content & Choreography)
- Universal Technical Dictionary Structure
- Universal Business Dictionary Structure & Content
- Universal Registry & Repository Structure
- Universal Messaging Service

**Pilot Testing**

- Small Subset Method for Managing Multiple Messages
- Security Only Requirements

**Early Production**

- Security Only Requirements

**Mass Production**

- Security Only Requirements

**Choreography Only**

- TPA Policy Only
- Requires SOAP
# XML Standards Snapshot

## Open Electronic Component XML Initiatives

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<tr>
<th>Initiative</th>
<th>Stages</th>
<th>Components</th>
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- Working w/RosettaNet
XML Standards Snapshot
Proprietary XML Initiatives

- **cXML (Ariba)**
  - Plan to adopt ebXML
  - Primarily Content
  - Content Only
  - Built on SOAP
  - Plan to Become Agnostic

- **eXtensible Commerce Business Language (XCBL, CommerceOne)**
  - Primarily Content

- **BiZTalk Framework (Microsoft)**
  - Plan to adopt ebXML
  - Content Only

*Not the same as BizTalk Server which is a commercial software product.*
XML Initiatives to be Included in Future

- Open XML Initiatives
  - Horizontal: OBI (CommerceNet)
  - Vertical: UCC (Grocery & General Merchandise)

- Proprietary XML Initiatives
  - Horizontal: E-Services (Hewlett-Packard)
Part Three: RosettaNet XML Standards Convergence Perspective
RosettaNet Convergence Strategy

- Keep RosettaNet’s current standards developing and evolving on a fast track
- Leverage RosettaNet’s leadership role and production implementation experience
- Ensure that RosettaNet can “plug into” universal, horizontal standards
- Reduce confusion and create clarity around B2B standards in the marketplace
- Work closely with B2B standards groups that have complementary goals
- Move toward more cost effective implementation solutions for small and medium sized businesses
RosettaNet Convergence Perspective –
Current Snapshot for IT, EC & SM Supply Chains

• RosettaNet was created to develop vertical XML business process standards specific to the IT, EC and SM industry. In the absence of critical horizontal standards, RosettaNet met this challenge by developing a number of horizontal components to provide a robust solution for its supply chains.

• Since RosettaNet’s formation, a number of viable horizontal XML standards have materialized and are in various stages of development and acceptance.

• Limited interoperability exists between the various vertical and horizontal XML standards initiatives in development.
## RosettaNet Convergence Perspective –
Current Solution Set for IT, EC & SM Supply Chains

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<thead>
<tr>
<th>Universal Specification Schema &amp; Architecture</th>
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<td>Universal Business Dictionary Structure &amp; Content</td>
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<td>Universal Registry &amp; Repository Structure</td>
<td>UDDI &amp; Si2</td>
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<tr>
<td>Universal Messaging Service</td>
<td>RosettaNet &amp; ebXML &amp; BizTalk Framework</td>
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RosettaNet Convergence Perspective
Short-Term Prediction for IT, EC & SM Supply Chains

- RosettaNet will continue its XML standards efforts in all current component areas to support the 2001 production implementation goals of its IT, EC and SM supply chains

- RosettaNet will develop a plan to support other proven and universally accepted messaging service standards

- RosettaNet will support both UDDI and ebXML registry and repository standards

- RosettaNet will monitor ebXML progress on various horizontal components to assess their viability and acceptance as universal standards in a production environment
<table>
<thead>
<tr>
<th>Universal Specification Schema &amp; Architecture</th>
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<td>Supply Chain Business Processes</td>
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<tr>
<td>Supply Chain Technical Dictionary Content</td>
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RosettaNet Convergence Perspective
Mid-Term Prediction for High Technology Supply Chains

• RosettaNet will continue to focus the majority of its efforts on vertical supply chain and business model specific e-commerce process standards, with an emphasis on rapid adoption and production implementation in the high technology industry

• RosettaNet will embrace and provide a smooth migration path to universally accepted horizontal standards components at such time as they are proven in a production environment

• RosettaNet will continue horizontal standards efforts only in areas where no universally accepted and proven horizontal standards exist
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| Universal Messaging Service | }
• B2B integration requires both horizontal and vertical XML standards in order to support business process complexity and interoperability goals between supply chains

• Although many XML standards initiatives are complementary, the groundswell of XML activity has created confusion among end-users

• Providing a context with which to understand current and new XML initiatives will reduce confusion and speed adoption of B2B integration

• Long-term predictions on the viability of specific horizontal XML standards are challenging at best, given many are still in the development phases
## Glossary of Terms

<table>
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<tr>
<th>Term</th>
<th>Description</th>
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<tr>
<td>authXML</td>
<td>Authentication and Authorization Information in XML</td>
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<tr>
<td>BPML</td>
<td>Business Process Modeling Language</td>
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<tr>
<td>BPMI</td>
<td>Business Process Management Initiative</td>
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<td>BTP</td>
<td>Business Transaction Protocol</td>
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<tr>
<td>cXML</td>
<td>Commercial Extensible Mark-up Language</td>
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<tr>
<td>ebXML</td>
<td>E-business XML Initiative</td>
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<tr>
<td>ECIX</td>
<td>Electronic Component Information Exchange</td>
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<td>IEC</td>
<td>International Electrotechnical Commission</td>
</tr>
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<td>JETIA</td>
<td>Japan Electronics and Information Technology Industries Association</td>
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<tr>
<td>NEMI</td>
<td>National Electronic Manufacturing Initiative</td>
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<th>Full Form</th>
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<tr>
<td>OAG</td>
<td>Open Applications Group</td>
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<td>OASIS</td>
<td>Organization for Advancement of Structured Information Standards</td>
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<tr>
<td>OBI</td>
<td>Open Buying on the Internet</td>
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<tr>
<td>S2ML</td>
<td>Security Services Mark-up Language</td>
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<tr>
<td>Si2</td>
<td>Silicon Integrated Initiative</td>
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<tr>
<td>SOAP</td>
<td>Simple Object Access Protocol</td>
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<td>TpAML</td>
<td>Trading Partner Agreement Mark-up Language</td>
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<td>UDDI</td>
<td>Universal Description Discovery and Integration</td>
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<td>UCC</td>
<td>Uniform Code Council</td>
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<td>UN</td>
<td>United Nations</td>
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<td>VFIIP</td>
<td>Virtual Factory Information Interchange Project</td>
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<td>W3C</td>
<td>World Wide Web Consortium</td>
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<td>xAML</td>
<td>Transaction Authority Mark-up Language</td>
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<tr>
<td>xCBL</td>
<td>XML Common Business Library</td>
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