

An OASIS White Paper

'The ebBP' (ebXML Business Process Specification Schema)

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For OASIS

OASIS (Organization for the Advancement of Structured Information Standards) is a not-for-profit, international consortium that drives the development, convergence, and adoption of e-business standards. Members themselves set the OASIS technical agenda, using a lightweight, open process expressly designed to promote industry consensus and unite disparate efforts. The consortium produces open standards for Web services, security, e-business, and standardization efforts in the public sector and for application-specific markets. OASIS was founded in 1993. More information can be found on the OASIS website at <http://www.oasis-open.org>.

Business processes are key components to enable and drive collaborating partner relationships for electronic business (eBusiness). The ebXML Business Process Specification Schema (BPSS or ebBP) provides capabilities to drive those eBusiness collaborative processes. As a part of the original eBusiness eXtensible Markup Language (XML) [ebXML] framework of specifications, the ebBP is targeted for monitoring of collaborative business processes among parties or business partners. Today, ebBP has evolved to integrate use of other specifications and emerging technologies as part of eBusiness solutions focused on Service-Oriented Architecture.

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Executive Summary

Business processes are key components to enable and drive collaborating partner relationships for electronic business (eBusiness). The ebXML Business Process Specification Schema (BPSS or ebBP) provides capabilities to drive those eBusiness collaborative processes. As a part of the original eBusiness eXtensible Markup Language (XML) [ebXML] framework of specifications, the ebBP is targeted for monitoring of collaborative business processes among parties or business partners.

The ebBP (ebXML Business Process Specification Schema) defines a standard language to configure business systems for business collaboration execution between collaborating parties or business partners. It provides:

- ❖ Standard and extensible business transaction patterns
- ❖ Support for modular definitions to complex nested activities
- ❖ Support for use of web service, hybrid and ebXML assets
- ❖ Semantic tailoring for business processes and business documents

In the second quarter 2006, the OASIS ebBP v2.0.3 set of packages are moving towards OASIS standard. The changes and capabilities defined in the v2.0.x packages have substantially increased the business value-add for using standard process definitions. These definitions support tailoring of eBusiness processes and business documents to serve our user community.

The ebBP focuses on an integrated eBusiness adaptable approach in order to support heterogeneous environments, particularly Small- to Medium-Enterprises. As with other specifications and capabilities, ebBP can be leveraged with other ebXML and/or emerging web services technologies.

It is the 'community at large' that has emboldened the development of ebBP and likely will drive its adoption.

Introduction

Business processes are key components to enable and drive collaborating partner relationships for electronic business (eBusiness). The ebXML Business Process Specification Schema (BPSS or ebBP) provides capabilities to drive those eBusiness collaborative processes. As a part of the original eBusiness eXtensible Markup Language (XML) [ebXML] framework of specifications, the ebBP is targeted for monitoring of collaborative business processes among parties or business partners.

At the onset, these set of specifications focused on leveraging investment in existing technologies, and to enable Small-Medium Enterprises, using an integrated eBusiness approach flexible enough to support heterogeneous environments. Today, the focus is still grounded in that basis and has expanded using key integration patterns that realize SOA benefits in a pragmatic iterative manner and leverage emerging technologies.

The ebBP (ebXML Business Process Specification Schema) defines a standard language to configure business systems for business collaboration execution between collaborating parties or business partners.

Business Transactions and Collaborations

An ebBP definition, describes interoperable business processes whether modular and targeted or complex, nested and involve multiple business partners. Important ebBP v2.0.x capabilities include:

- ❖ Standard and extensible business transaction patterns
- ❖ Support for multiple role bindings
- ❖ Flexibility for complex transaction activities
- ❖ Support for use of web service, hybrid and ebXML assets
- ❖ Late binding capabilities such as for timing
- ❖ Semantic tailoring for business processes and business documents

The OASIS v2.0.3 ebBP technical specification and packages are considered in an OASIS Committee Specification vote, and promotion to OASIS Standard is anticipated soon.

Use of ebBP with Other Technologies

The ebBP can be used with other process, configuration, registry, and business document specifications and/or emerging technologies. Two examples are:

- ❖ Heterogeneous support for web services, ebXML or hybrid implementations in conjunction with the ebXML Collaboration Protocol Profile and Agreements (CPP/CPA). This enables monitoring of business processes, sessions and the shared aspects in the business collaboration protocols.
- ❖ Support for tailoring of logical business document assembly, such as for use of Universal Business Language (UBL) and the Small Business Subset (SBS). Additional logic and/or semantic information can now be associated with those documents.

Although ebBP is only just entering its final stretch on standardization, the many enhancements and core functionality of this technology has garnered interest in several user communities and large domains. For example:

An open-source editor has been released at: <http://sourceforge.net/projects/freebxmlbp>

This draft editor was developed through two European Commission funded projects, including Artemis. More updates are planned this year.

In addition, modular process definitions supporting UBL v1.0 and small business have been released and approved as Committee Specifications (see public ebBP site for continuous updates on these Universal Business Processes). These modular process definitions, based on the core set of UBL business documents, are ample for small business and user communities to begin to define, build and refine their standardized processes.

A template based on the OASIS ebXML Implementation, Interoperability and Conformance TC for ebBP is also under development. Another informal collaboration is also underway with Object Management Group (OMG), so visualization of business processes adequately supports eBusiness, choreography, and business transactions.

Other domains or user communities considering ebBP include:

- ❖ Knit wear industry in Italy
- ❖ Transport communities in Asia (through UBL)
- ❖ eGovernment in the Netherlands (Criminal Justice)
- ❖ Health care in the United States (See Integrating the Health Enterprise) [see open source draft tool]

What has become clear from user community, vendor and other standards body input is: Analysts, business users, and communities desire standard, modular, accessible and easily understood mechanisms to express and monitor their eBusiness processes. That shared visibility and the flexibility it provides are increasingly important to meet community business goals. The ebBP provides those core capabilities as its focus is on collaborative processes for those communities.

Current and Future Plans for Community and Domain Involvement

The success of ebBP depends on engaging user communities and domains of interest, and focusing on their business requirements, constraints, and future needs. To that end, ebBP has engaged several worldwide communities and other standards technical committees or groups such as OMG, RosettaNet, Integrating the Health Care Enterprise (IHE) and others.

Standards Involvement

The ebBP team has been clearly focused on other standard-based expert communities and user domains. Substantial input has been received via the public comment process from domains which include:

- ❖ Italian knitwear
- ❖ Asian transport
- ❖ eGovernment in the Netherlands, Canada and United Kingdom
- ❖ Experts in document management within OASIS
- ❖ Telecommunications and energy markets in Europe

Technical Plans

No specification realizes its potential unless: 1) It is used, 2) It continues to evolve, and 3) It continues to focus on the community and their needs. Here are some of the anticipated futures for ebBP.

- ❖ Business entities, validation, extended late binding capabilities
- ❖ Enhanced multi-party support such as for role and context (building on current core v2.0.x capabilities)
- ❖ More monitoring enhancements, sub-state visibility (for shared events)
- ❖ Coordination and addressing

References

The latest examples and ebBP packages can be found at: http://www.oasis-open.org/committees/tc_home.php?wg_abbrev=ebxml-bp.

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