Core Component and Business Process
Document Overview
Version 1.01

ebXML Business Process & Core Components

16 February 2001

1 Status of this Document
This document is an ebXML White Paper for the eBusiness community.
Distribution of this document is unlimited.
The document formatting is based on the Internet Society’s Standard RFC format.

This version:
CC and BP Document Overview Ver 1.01
2 ebXML participants

We would like to recognize the following for their significant participation to the
development of this document.

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4 Introduction

4.1 Summary of This Document

This document provides an overview explaining the relationship between the following documents. (The terminology within these documents is defined in the ebXML Glossary of Terms.)

4.1.1 The specification documents are;

I. ebXML Business Process specification schema Ver 0.90
II. ebXML Methodology for the Discovery and Analysis of Core Components Ver 1.01
III. ebXML Naming conventions for Core Components and Business Processes Ver 1.01
IV. ebXML The role of context in the re-usability of Core Components and Business Processes Ver 1.01
V. ebXML Specification for the application of XML based assembly and context rules Ver 1.01

4.1.2 The white paper documents;

- ebXML Business Process methodology guidelines
- Initial catalogue of common Business Processes
- Business Process work-sheet
- Initial catalogue of Core Components
- Example implementation of ebXML context rules in an XML environment

4.2 Audience

The target audience is all participants of ebXML and other interested third parties. However specific papers will be of more interest to individual readers than others. The following table of potential readers indicates which documents may be of primary interest to them.

<table>
<thead>
<tr>
<th>Audience</th>
<th>Corresponding Core Components Documents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software developers</td>
<td>I. II. III. IV. V.</td>
</tr>
<tr>
<td>Business domain experts</td>
<td>I. II. IV. V.</td>
</tr>
<tr>
<td>Business IT developers</td>
<td>I. II. III. IV. V.</td>
</tr>
<tr>
<td>Standards experts</td>
<td>I. II. III. IV. V.</td>
</tr>
</tbody>
</table>
5 Definition and Scope

The diagram below presents an overview of the scope, showing the area to which each document relates.

5.1 ebXML Business Process specification schema

The ebXML Specification Schema provides a standard framework by which business systems may be configured to support execution of business transactions. The ebXML Specification Schema provides for the nominal set of specification elements necessary to configure a runtime system in order to execute collaboration through a set of ebXML business transactions. This schema facilitates the infrastructure release of ebXML’s Transport Routing and Packaging, Trading Partner, and Registry Repository specifications. Users of the Specification Schema will create business process specifications as either UML diagrams, or eXtended Markup Language (XML) documents. The Specification Schema supports the specification of Business Transactions and the choreography of Business Transactions into Business Collaborations. Each Business Transaction can be implemented using one of many available standard patterns. These patterns determine the actual exchange of messages and business signals between the partners to achieve the required electronic commerce transaction.
The current version of the specification schema addresses collaborations between two parties (Binary Collaborations). The current version does not address semantics of economic exchanges and contracts, multi-party choreography, and context based content.

5.2 ebXML Methodology for the Discovery and Analysis of Core Components

The discovery activity is conducted by business information experts in each domain area, using appropriate techniques for extracting, gathering, and recording their “discovered” Core Components. For each Core Component a precise definition is established, together with any additional material pertinent to the specific domain.

To ensure cross-domain harmonisation a comprehensive and consistent analysis needs to be conducted for each “discovered” component by a domain-neutral technical assessment team.

The discovery and analysis processes result in a maintained library of Core Components (see document ebXMLInitialcatalogueofcorecomponentsVer1.01). The following diagram provides a picture of the overall discovery and analysis processes.

5.3 ebXML Naming conventions for Core Components and Business Processes

This document describes the rules for naming ebXML Core Components and Business Processes. These rules are based on the guidelines and principles described in document ISO 11179-5, clause 6 (Guidelines for Structured Naming Conventions).
In addition to the naming convention rules that lead to a Dictionary Entry Name, the
document also provides rules for creating definitions. It also establishes the principle of
synonyms to cover the instances where a commonly-used business term equates to a well-
formed Dictionary Entry Name according to the rules.

5.4 ebXML The role of context in the re-usability of Core
Components and Business Processes

This document defines the way in which context is categorised. It describes the context
drivers that have been identified as most critical for facilitating the maximum re-use of
Core Components and Business Process.

The document contains the context definitions, the sources of classification value lists,
and examples of how these contexts will be applied in business use. It describes how to
build business documents drawing on the contents of a repository, and contains a pictorial
model of Core Component and Context Descriptor Relationships.

5.5 ebXML Specification for the application of XML based
assembly and context rules

The challenge of ebXML is to create a framework for automating trading partner
interactions that is both:

• Sufficiently generic to permit implementation across the entire range of business
  processes (in various industries, geographical regions, legislative environments, etc.)
• Expressive enough to be more effective than ad hoc implementations between
  specific trading partners.

This specification document describes the way in which rules can be formed and/or
derived, but is not a prescriptive specification. It is believed that rule mechanisms will be
achieved in different ways within different implementations/solutions.

This document deals with two specific aspects of the task:

• The assembly of core component schemas into full business document schemas,
• The modeling of core components for business documents that provide useful
  building blocks for real-world trading scenarios and, at the same time, are open
  enough to take into account the wide variety of document formats required by
  organizations with differing business practices and requirements.

Complicating this situation is the need for interoperability: companies must be able to
communicate business documents effectively with minimum human intervention, even
though the formats used may have a significantly different syntax.

Central to achieving this goal is the notion of context. Context provides a framework for
adapting generic core components to specific business needs, while keeping the
transformation process transparent so that the processing engine can find a useful set of common information for use by different trading partners. An example of a contextual category that is useful for business is industry: different industries will have different requirements for the syntax of core components. By starting with a generic core component and using context to derive a context-specific core component, we ensure that, at the very least, the information in the generic component will be useful when interacting with a trading partner in a different context (i.e. industry, region, etc.). This should be contrasted with the alternative: context-specific business documents that are not built from generic core components and therefore provide no common basis for interaction outside of that context.

In order to assemble full business documents from core components, rules are drawn specifying what components are to be included in the document, and how. In order to generate a context-specific core component, rules are associated with different values for each of the context categories. This document presents a proposed syntax for these context rules, and a methodology for applying them, in order to achieve maximum reuse of existing XML software development tools and libraries.

6 Disclaimer
The views and specification expressed in this document are those of the authors and are not necessarily those of their employers. The authors and their employers specifically disclaim responsibility for any problems arising from correct or incorrect implementation or use of this design.

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8 Copyright Statement

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To be agreed.