# 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

## 27 **2    ebXML participants**

28 We would like to recognize the following for their significant participation to the
29 development of this document.
30
31 Team lead;           James Whittle, e CentreUK
32
33 Editors;             Sue Probert, Commerce One;
34                      Mike Adcock, APACS
35
36 Team Participants;   Gait Boxman, TIE;
37                      Thomas Becker, SAP

# 3  Table of Contents

59 # 4  Introduction

60 ## 4.1  Summary of This Document

61 This document provides an overview explaining the relationship between the following
62 documents. (The terminology within these documents is defined in the ebXML Glossary
63 of Terms.)
64

65 ### 4.1.1  The specification documents are;
66

67 **I.**     ebXML Business Process specification schema Ver 0.90
68 **II.**    ebXML Methodology for the Discovery and Analysis of Core Components Ver
69         1.01
70 **III.**   ebXML Naming conventions for Core Components and Business Processes
71         Ver1.01
72 **IV.**    ebXML The role of context in the re-usability of Core Components and Business
73         Processes Ver1.01
74 **V.**     ebXML Specification for the application of XML based assembly and context
75         rules Ver 1.01
76

77 ### 4.1.2  The white paper documents;
78

79 - ebXML Business Process methodology guidelines
80 - Initial catalogue of common Business Processes
81 - Business Process work-sheet
82 - Initial catalogue of Core Components
83 - Example implementation of ebXML context rules in an XML environment
84

85 ## 4.2  Audience

86 The target audience is all participants of ebXML and other interested third parties.
87 However specific papers will be of more interest to individual readers than others. The
88 following table of potential readers indicates which documents may be of primary interest
89 to them.
90

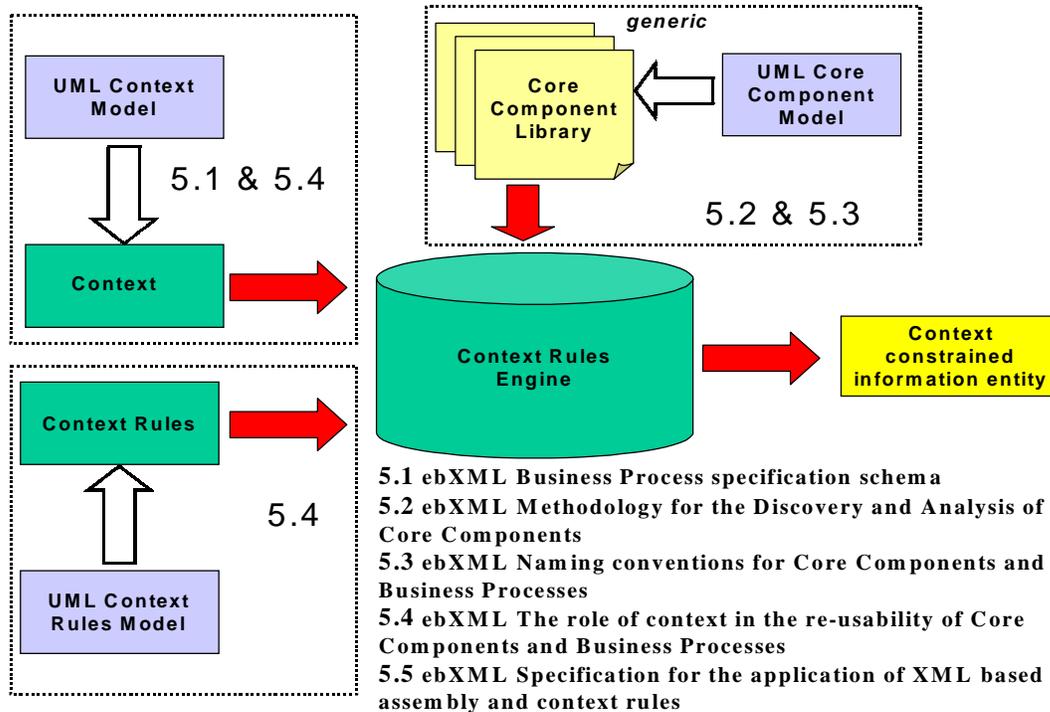| Audience | Corresponding Core Components Documents |
|---|---|
| Software developers | I. II. III. IV. V. |
| Business domain experts | I. II. IV. V. |
| Business IT developers | I. II. III. IV. V. |
| Standards experts | I. II. III. IV. V. |

91

## 92    5   Definition and Scope

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



**5.1 ebXML Business Process specification schema**
**5.2 ebXML Methodology for the Discovery and Analysis of Core Components**
**5.3 ebXML Naming conventions for Core Components and Business Processes**
**5.4 ebXML The role of context in the re-usability of Core Components and Business Processes**
**5.5 ebXML Specification for the application of XML based assembly and context rules**

95

## 96    *5.1   ebXML Business Process specification schema*

97    The ebXML Specification Schema provides a standard framework by which business
98    systems may be configured to support execution of business transactions. The ebXML
99    Specification Schema provides for the nominal set of specification elements necessary to
100   configure a runtime system in order to execute collaboration through a set of ebXML
101   business transactions. This schema facilitates the infrastructure release of ebXML's
102   Transport Routing and Packaging, Trading Partner, and Registry Repository
103   specifications. Users of the Specification Schema will create business process
104   specifications as either UML diagrams, or eXtended Markup Language (XML)
105   documents. The Specification Schema supports the specification of Business
106   Transactions and the choreography of Business Transactions into Business
107   Collaborations. Each Business Transaction can be implemented using one of many
108   available standard patterns. These patterns determine the actual exchange of messages
109   and business signals between the partners to achieve the required electronic commerce
110   transaction.
111

112    The current version of the specification schema addresses collaborations between two
113    parties (Binary Collaborations). The current version does not address semantics of
114    economic exchanges and contracts, multi-party choreography, and context based content.

## 115 *5.2 ebXML Methodology for the Discovery and Analysis of Core*
## 116      *Components*

117    The discovery activity is conducted by business information experts in each domain area,
118    using appropriate techniques for extracting, gathering, and recording their "discovered"
119    Core Components. For each Core Component a precise definition is established, together
120    with any additional material pertinent to the specific domain.
121
122    To ensure cross-domain harmonisation a comprehensive and consistent analysis needs to
123    be conducted for each "discovered" component by a domain-neutral technical assessment
124    team.
125
126    The discovery and analysis processes result in a maintained library of Core Components
127    (see document ebXMLInitialcatalogueofcorecomponentsVer1.01). The following
128    diagram provides a picture of the overall discovery and analysis processes.
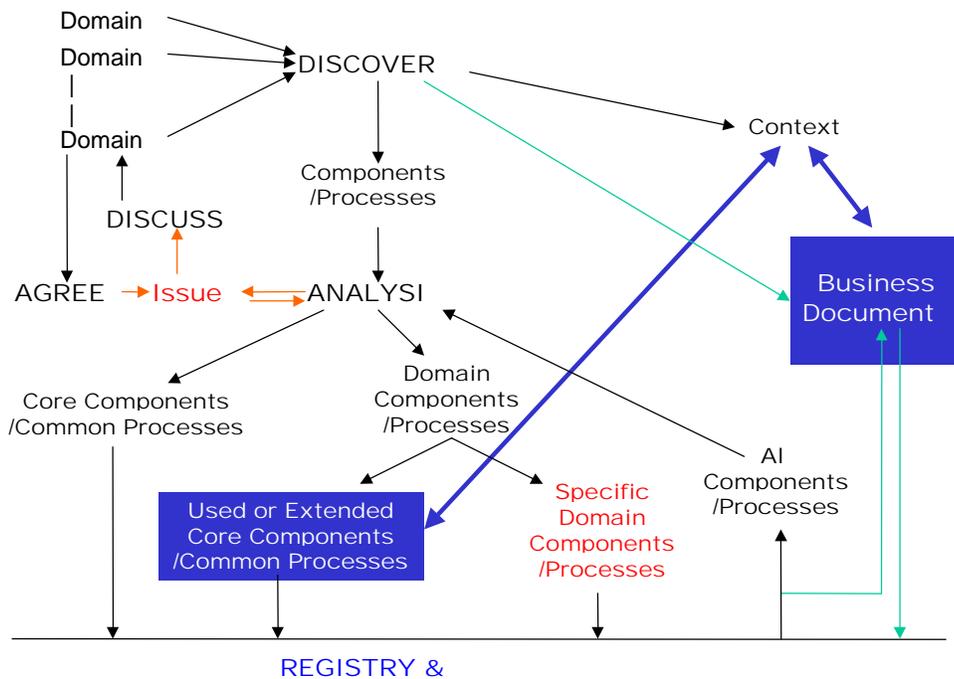


129

## 130 *5.3 ebXML Naming conventions for Core Components and*
## 131      *Business Processes*

132    This document describes the rules for naming ebXML Core Components and Business
133    Processes. These rules are based on the guidelines and principles described in document
134    ISO 11179-5, clause 6 (Guidelines for Structured Naming Conventions).

135
136   In addition to the naming convention rules that lead to a Dictionary Entry Name, the
137   document also provides rules for creating definitions. It also establishes the principle of
138   synonyms to cover the instances where a commonly-used business term equates to a well-
139   formed Dictionary Entry Name according to the rules.

140   ### *5.4  ebXML The role of context in the re-usability of Core
141   ### Components and Business Processes*

142   This document defines the way in which context is categorised. It describes the context
143   drivers that have been identified as most critical for facilitating the maximum re-use of
144   Core Components and Business Process.
145
146   The document contains the context definitions, the sources of classification value lists,
147   and examples of how these contexts will be applied in business use. It describes how to
148   build business documents drawing on the contents of a repository, and contains a pictorial
149   model of Core Component and Context Descriptor Relationships.
150

151   ### *5.5  ebXML Specification for the application of XML based
152   ### assembly and context rules*

153   The challenge of ebXML is to create a framework for automating trading partner
154   interactions that is both:
155   •   Sufficiently generic to permit implementation across the entire range of business
156       processes (in various industries, geographical regions, legislative environments, etc.)
157   •   Expressive enough to be more effective than ad hoc implementations between
158       specific trading partners.
159
160   This specification document describes the way in which rules can be formed and/or
161   derived, but is not a prescriptive specification. It is believed that rule mechanisms will be
162   achieved in different ways within different implementations/solutions.
163
164   This document deals with two specific aspects of the task:
165   •   The assembly of core component schemas into full business document schemas,
166   •   The modeling of core components for business documents that provide useful
167       building blocks for real-world trading scenarios and, at the same time, are open
168       enough to take into account the wide variety of document formats required by
169       organizations with differing business practices and requirements.
170
171   Complicating this situation is the need for interoperability: companies must be able to
172   communicate business documents effectively with minimum human intervention, even
173   though the formats used may have a significantly different syntax.
174
175   Central to achieving this goal is the notion of context. Context provides a framework for
176   adapting generic core components to specific business needs, while keeping the

177   transformation process transparent so that the processing engine can find a useful set of
178   common information for use by different trading partners. An example of a contextual
179   category that is useful for business is industry: different industries will have different
180   requirements for the syntax of core components. By starting with a generic core
181   component and using context to derive a context-specific core component, we ensure
182   that, at the very least, the information in the generic component will be useful when
183   interacting with a trading partner in a different context (i.e. industry, region, etc.). This
184   should be contrasted with the alternative: context-specific business documents that are
185   not built from generic core components and therefore provide no common basis for
186   interaction outside of that context.
187
188   In order to assemble full business documents from core components, rules are drawn
189   specifying what components are to be included in the document, and how.
190
191   In order to generate a context-specific core component, rules are associated with different
192   values for each of the context categories. This document presents a proposed syntax for
193   these context rules, and a methodology for applying them, in order to achieve maximum
194   reuse of existing XML software development tools and libraries.
195

196   ## 6  Disclaimer

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

201   ## 7  Contact Information

202   Team Leader
203     Name          James Whittle
204     Company     e centre$^{UK}$
205     Street          10, Maltravers Street
206     city, state, zip/other London
207     Nation         UK
208
209     Phone:       +44-20-7655-9022
210     EMail:         james.whittle@e-centre.org.uk
211
212   Vice Team Lead
213     Name          Mike Adcock
214     Company     APACS
215     Street          Mercury House, Triton Court, 14 Finsbury Square
216     city, state, zip/other London EC2A 1LQ
217     Nation         UK
218

219     Phone:        +44-20-7711-6318
220     EMail:        mike.adcock@apacs.org.uk
221
222   Editor
223     Name           Thomas Becker
224     Company        SAP AG
225     Street         Neurottstrasse 16
226     city, state, zip/other D-69189 Walldorf
227     Nation         Germany
228
229     Phone:         +49-6227-741862
230     EMail:         thomas.becker@sap.com
231

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235    To be agreed.