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Catalogue of Context Drivers

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ebXML Core Components

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10 May 2001

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Version 1.04

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1   Status of this Document

14

15   This Technical Report document has been approved by the Core Component Project
16   Team and has been accepted by the ebXML Plenary.
17
18   This document contains foundation material based on ebXML Technical Specifications
19   or Reports.
20
21   The document formatting is based on the Internet Society's Standard RFC format.
22   Distribution of this document is unlimited.
23
24   This version:
25   www.ebxml.org/specs/ccDRIV.pdf

26 2 ebXML participants

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28 development of this document.
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55 # 3 Table of Contents

83

84   4 Introduction

85   *4.1 Summary of Contents of Document*

86   This document provides a catalogue of context drivers, which have been discovered to-
87   date by the Core Component project team. These are not definitive, and nor do they
88   represent a final complete list. This docume nt should be read in conjunction with the
89   document ebXML TR - Context and Re-Usability of Core Components Ver 1.04.
90
91   The keywords MUST, MUST NOT, REQUIRED, SHALL, SHALL NOT, SHOULD,
92   SHOULD NOT, RECOMMENDED, MAY, and OPTIONAL, when they appear in this
93   document, are to be interpreted as described in RFC 2119.

94   5   Context Classifications

95   *5.1 List of discovered Context Drivers*

96   A large number of different context descriptors have been considered as part of the
97   ebXML analysis effort, some of which were selected for full inclusion and definition.
98
99   This approach defines component re-use within business documents and now requires
100 that some implementation take place before final decisions can be made regarding the
101 value of all of these descriptors. It is intended that the thinking around possible
102 descriptors not be discarded until their worth can better be judged.
103

104 • Region *(Geopolitical)*
105 • Industry
106 • Business Process
107 • Product
108 • Official Constraints
109 • Role
110 • Temporal
111 • Information Structural Context
112 • Application Processing
113 • Service Level
114 • Business Purpose
115 • Virtual Marketplace
116 • Contractual
117

118   *5.2 Classifications*

119 The following context classifications are the ones recommended by the ebXML Core
120 Components Project Team. It has been recognized that other classification schemes may
121 be needed, and that it will be possible to reference other classification schemes for any of
122 the identified context descriptors.
123

124   *5.3   Business Process Context*

125 The Business Process context relies on a classification based on the list of core business
126 processes, but contains some additional information. It will be possible to indicate that
127 some minor variations have been made to an existing core process; that a process not in
128 the core is being used; or that an extension may be made at any level of the classification,
129 to accommodate existing business processes.
130
131 Further, to be used meaningfully in qualifying variation within information entity
132 structure, business process context descriptors may need to go to a finer level of detail
133 than merely specifying the overall business process of which they are a part. This is

134 especially true where both trading partners may be adding information to a single
135 functional aggregate at different points in the business process, and the optionality of that
136 information is being determined by where in the process the information entity is used.
137 (An example of these concepts can be found in ebXML TR – Core Component Discovery
138 and Analysis Ver 1.04.)
139
140 The requirement to identify a particular event in the overall business process is
141 complicated by the fact that there may be many players involved in a single business
142 process, and even in a single "leg" of the overall exchange. This occurs when one or both
143 trading partners have agents, as is often the case in payments processing where the
144 trading partner's banks are involved in the exchange, and providing services to facilitate
145 the overall business process. The existence of a portal - where a wide range of "en route"
146 services may be provided - further complicates the issue.
147

5.4 Regional Context

5.4.1 Regional classification

150 The regional classification allows one or more values to be associated with any business
151 message or component, according to the following structure.
152
153 Global
154   [Continent]
155   [Economic Region]
156   [Country] - ISO 3166.1
157   [Region] - ISO 3166.2
158 There is no single hierarchy.   At any level of the hierarchy, a value may be a single value,
159 a named aggregate, or cross-border value. These values are structured as follows:
160
161   **Single Value:** A single value as shown in the example shown in the next section,
162   indicating a single continent, economic region, country, or region, depending on
163   position within the hierarchy.
164
165   **Named Aggregate:** A related group of values (which may themselves be named
166   aggregates or cross-border constructions), which have been related and assigned a
167   name. A named aggregate contains at least two values.
168
169   **Cross-Border:** One or more pairs of values, designated "To", "From", or "Bi-
170   directional", indicating the direction of cross-border context. Values may be named
171   aggregates or single values.
172
173 Points in the hierarchy are specified by the use of the node value, or by the full or partial
174 path. There are cases where the full path is required to understand the hierarchy, as a
175 result of the use of the more complex constructs. A single-point specification is
176 understood to inherit all of the properties of the single-value hierarchy except where
177 otherwise specified**.**
178

179 *5.4.2   List of Values*
180 The following example shows an extract of the basic, single-value hierarchy of
181 recommended values, based on the common ISO 3166 Country Codes.
182   Europe
183   Eastern Europe
184   AL – ALBANIA
185   AM – ARMENIA
186   etc.
187

188 ## 5.5   Official Constraints Context

189 The official constraints context driver describes data use contexts, which are the result of
190 standards, legal or regulatory requirements, contractual or business agreements, and
191 similar "official" drivers. This classification is outlined as follows:
192
193 • Regulatory And Legislative (includes customs)
194 • Standards (includes ISO, Milspecs, etc.)
195 • Guidelines (best practices, unofficial standards)
196 • Conventions And Treaties (these are different from Regulatory and Legislative)
197 • Contractual And Trading Partner Agreement
198
199 This classification shall be structured as either:
200 • A free-text field with a qualifying text field to put in "schema" or reference describing
201   what is contained in the text field (legal reference system, for example).
202 • A free text "code" field with the ability to reference the source.
203

204 ## 5.6 Product Context

205 The goods or services that the exchange of information describes or enables, e.g. the
206 subject of the transaction, or the set of things that is being described.
207
208 *5.6.1 Sources for Recommended Classifications*
209 • United Nations Standard Product and Service Code (UN/SPSC)
210   Custodian: United Nations
211 • Standard International Trade Classification (SITC Rev .3)
212   Custodian: United Nations Statistics Division (UNSD)
213 • The "Harmonized Commodity Description and Coding System" (HS)
214   Custodian: WTO
215 • Classification Of the purposes of non Profit Institutions serving households (COPI)
216   Custodian: UNSD (This provides a mapping between the first three.)
217
218 *5.6.2 Structure*
219 Context rules may be associated with each structure level, and more than one value may
220 be specified for defining the use of a particular information entity.
221

222   *5.7 Industry Context*

223   The industry or sub-industry in which the information exchange takes place. An Industry
224   is an organisation or group of organisations involved in service, commercial or
225   institutional activity.
226

227   *5.7.1 Sources for Recommended Classifications*

228   • International Standard Industrial Classification (ISIC)
229   Custodian: UNSD
230   • United Nations Standard Product and Service Code (UN/SPSC)
231   Custodian: United Nations
232   (Top-level Segment (digits 1 and 2) used to define industry.)
233

234   *5.7.2 Structure*

235   Hierarchical structure as defined by existing standard. Context rules may be associated
236   with each structure level, and more than a single value may be specified when describing
237   the use of an information entity.
238

239   *5.8 Role Context*

240   **Roles:** Roles specify the party types (buyer, seller, assembler, catalogue publisher, etc.)
241   that interactively perform interface activities that collaboratively achieve a business
242   objective.
243

244   **Role Types:** The ebXML Business Process Methodology Guidelines, which is a
245   specialization of the UN/CEFACT Unified Modelling Methodology (UMM), specifies
246   that roles must be one of the following role types:
247

248   **Organisational:** As the name implies, the "Organisational" role is for playing the
249   role of an "organization" such as an enterprise, a company, or a factory to cite a
250   few examples. Only an organization performs a particular role in an e-business
251   process. An employee does not perform these activities. Authorization to perform
252   an activity is granted at an organizational level.
253

254   **Employee:** The "Employee" role is used in business interactions that are
255   performed by employees of an organization. An employee for business/legal
256   reasons can only perform an employee role. Usually the details of the employee
257   must be captured and stored/transmitted to another partner for auditing/liability
258   processes when the two partner roles are not in the same organization.
259   Authorization to perform an activity is granted on an employee level.
260

261   **Functional:** The "Functional" role is for the cases when either an employee or an
262   organization can perform the interaction. So the functional role can be either an
263   organizational or an employee role.
264

265   **Initiator:** The "Initiator" is the role that initiates the business process and
266   contains the start state and initial activity.
267
268   **Responder:** The "Responder" is the role that interacts with the initiator in a
269   business process and commercial transaction.
270

5.8.1 Sources for Recommended Classifications

272   Code List 3035 (UN/EDIFACT)
273
274   Data Element 98 (X12)
275

276 # 6 Registry Support for Taxonomies

277 ## *6.1 Set of Data required to be published*

278 The Registry Metamodel supports the requirement of attaching an arbitrary number of
279 Classification Nodes to any Registered Entry. This is achieved by means of a
280 Classification, which can be associated with a Registered Entry; each instance of the
281 Classification identifies a Classification Node. The top-level node in the Classification
282 Node tree can identify the type of classification (e.g. Geography) by means of its name. If
283 this name does not give the unambiguous context within which the Registered Entry is
284 classified then the Classification may optionally be associated with another Classification
285 Node that provides the context for the Classification (e.g. Located In).
286
287 The Classification Node is in itself a Registered Entry and by this means benefits from
288 the versioning facility of the Registry.
289

290   **7   Context-controlled Core Component Metamodel**
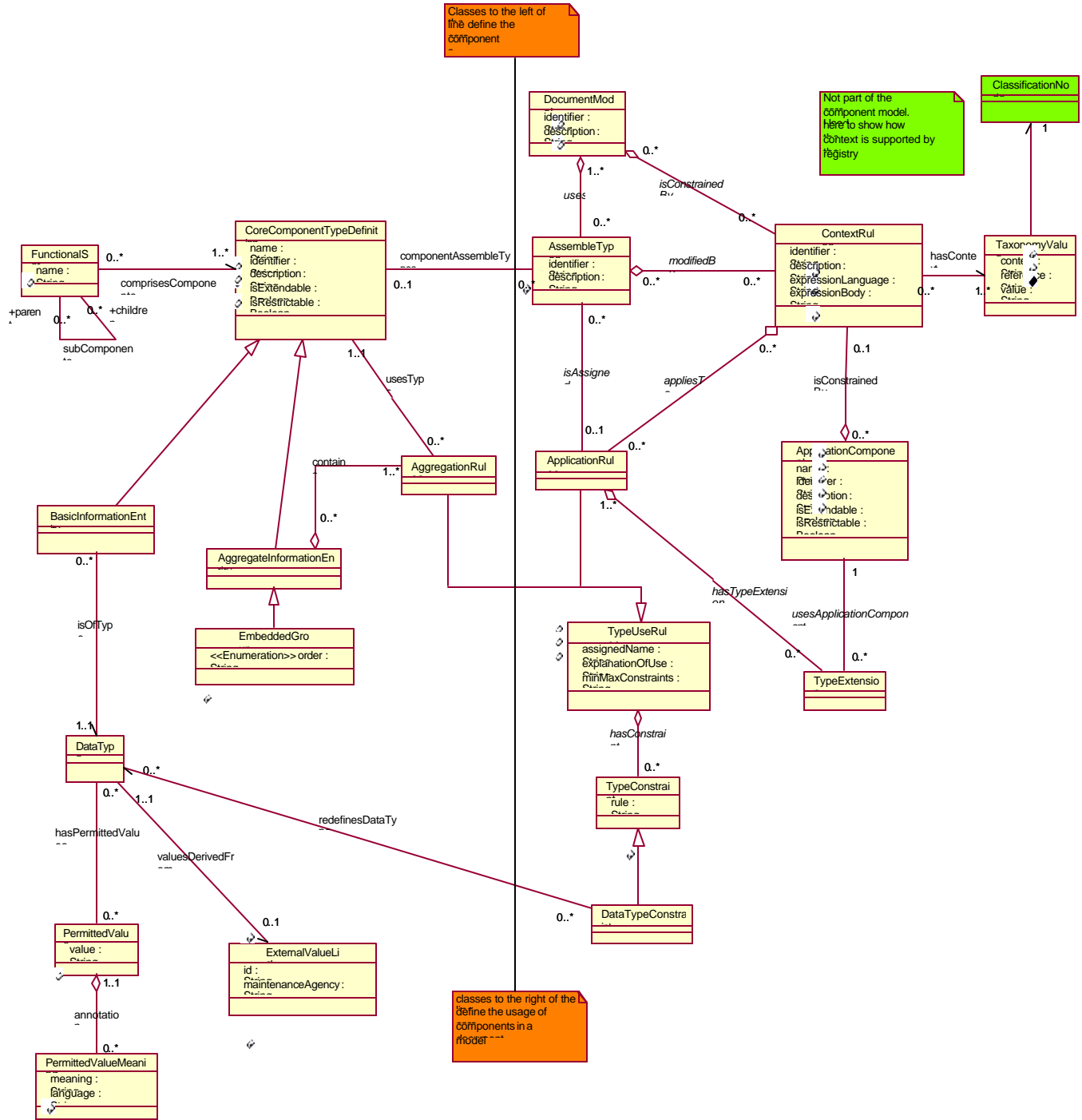
292 ## 8 Disclaimer

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294 not necessarily those of their employers. The authors and their employers specifically
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296 or use of this design.

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