



Creating A Single Global Electronic Market

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Guide to the Core Components Dictionary

ebXML Core Components

10 May 2001
Version 1.04

15 **1 Status of this Document**

16 This Technical Report document has been approved by the Core Component Project
17 Team and has been accepted by the ebXML Plenary.

18

19 This document contains information to guide in the interpretation or implementation of
20 ebXML concepts.

21

22 Distribution of this document is unlimited.

23

24 The document formatting is based on the Internet Society's Standard RFC format.

25

26 This version:

27 www.ebxml.org/specs/ccCTLG.pdf

28

29 Latest version:

30 www.ebxml.org/specs/ccCTLG.pdf

31

32 **2 ebXML participants**

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

35
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 37 Discovery Groups.

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81 **4 Introduction**

82 **4.1 Summary of Contents of Document**

83 In conjunction with the Context and Methodology sub-groups within BP/CC a framework
84 for the results of the core component's analysis was agreed. This framework is in the
85 form of a spreadsheet and this document describes the data captured in the framework.
86

87 The keywords MUST, MUST NOT, REQUIRED, SHALL, SHALL NOT, SHOULD,
88 SHOULD NOT, RECOMMENDED, MAY, and OPTIONAL, when they appear in this
89 document, are to be interpreted as described in RFC 2119.

90 **4.2 Audience**

91 The target audiences for this document include business domain experts and technical
92 experts.

93 **4.3 Related Documents**

94 See the document [ccDICT] Core Components Dictionary Ver 1.04 for a listing of all
95 core components defined to date.
96

97 See the document [ccSTRUCT] Core Component Structures Ver 1.04 for the structure of
98 the aggregates and core component types defined to date.
99

100 Other documents provide detailed descriptions, definitions and inter-connections that
101 relate to material contained in this document. They are listed and briefly described in the
102 document [ccOVER] Core Component Overview Ver 1.05.

103 **5 Design Objectives**

104 A standard set of core aggregate information entities derived from analysis of
105 components submitted by domain discovery groups.

106
107 Analysis was initially completed on the aggregate information entities and their
108 embedded entities as shown in the ebXML TR - Core Components Dictionary Ver 1.04
109 and the ebXML TR - Core Component Structures Ver 1.04. Since the ebXML
110 methodology for determining how aggregate information entities are derived was not
111 complete when the core component analysis was started, the initial analysis has been
112 through trial and error in applying the methodologies in development. However, when the
113 methodology is completed and approved, it will be applied to the current catalogue and
114 used in future work.

115
116 Additional aggregate and embedded entities have been submitted from the domain groups
117 and the analysis of these will be completed in future meetings.

118 **6 Dictionary Overview**

119 **6.1 Functionality**

120 This document describes the information contained in the documents ebXML TR - Core
121 Components Dictionary Ver 1.04 and the ebXML TR - Core Component Structures Ver
122 1.04 that are a result of the initial analysis of core components that have been submitted
123 by domain groups.
124

125 **6.2 Scope**

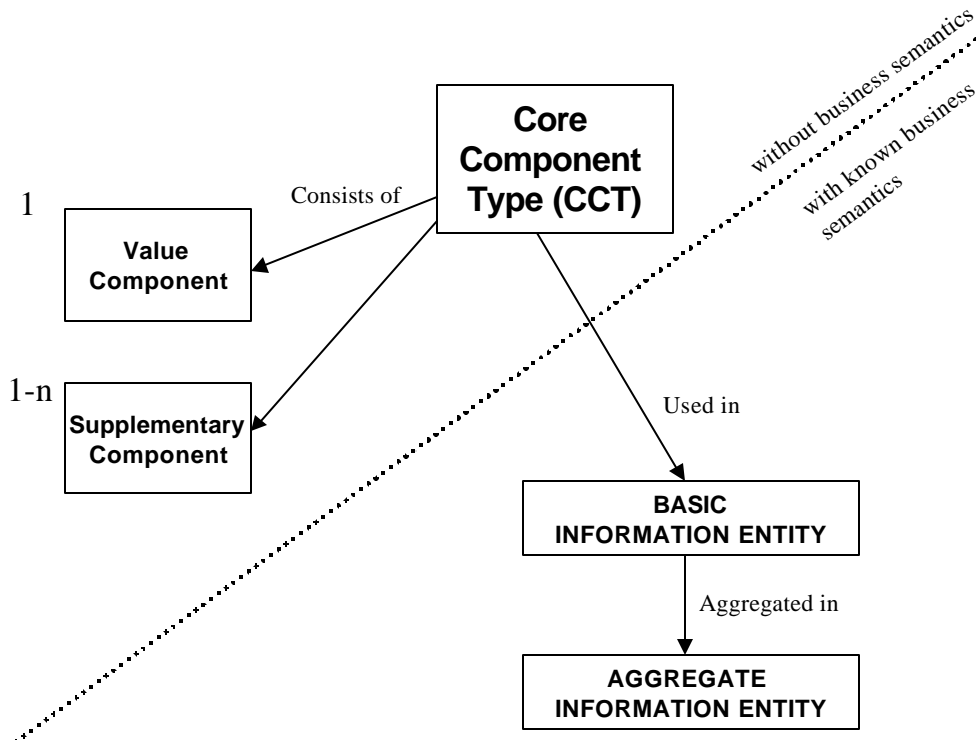
126 The scope of this document is to describe the three core component category types and to
127 provide understanding for reviewing the ebXML TR - Core Components Dictionary Ver
128 1.04 and the ebXML TR - Core Component Structures Ver 1.04.
129

130 **6.3 Definition and Scope**

131 Analysis has initially been completed on a small number of aggregate information entities
132 and the core component types used in the aggregates.
133

134 **6.4 Result of Analysis**

135 The catalogue consists of three categories of entry (Category Type). Each entry is given a
136 unique identifier (UID), which will be used as a registry key. This registry key can be
137 used as an implementation key, e.g. in implementation guidelines, for mapping or as an
138 XML tag with a suitable alpha prefix.
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Core Component Type (CCT)

Core Component Types are core components that have no business meaning on their own. When they are reused in a business context, they become Basic Information Entities. For example, quantity on its own has no business meaning, whereas the quantity shipped does have business meaning.

Core Component Types consist of one component that carries the actual value (value component) plus others that give extra definition to the value (supplementary component(s)). For example, the value component 12 has no meaning on its own, but 12 kilometres or 12 Euros do have meaning.

The representation type of the business information entity determines which CCT can be re-used. An example list of Business Information Entities, their CCTs and the corresponding Representation Types included in them follows:

Representation Type	Datatype	Core Component Type	Example
Code		Code Type	country. code (000032)
Identifier		Identifier Type	party. identifier (000016)
Date		Date Time Type	birth. date (000012)
Date and Time		Date Time Type	product service start. date and time (000159)
Time		Date Time Type	
Amount		Amount Type	charge price. amount (000127)

Quantity		Quantity Type	chargeable. quantity (000121)
Name		Text Type	person. name (000098)
Text		Text Type	location description. text (000063)
Measure		Measure Type	
Content	String		code. value (000091)
Indicator	Boolean		charge price. tax inclusion. indicator (000130)
Percent	Decimal		
Rate	Decimal		currency exchange. rate (000120)
Value	String		code. value (000091)

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Core Component Type Examples:

- date time. type – A particular point in the progression of time with relevant supplementary information.
 - date time. content – The particular point in the progression of time.
 - date time. format. text – The format of the date/time.
- amount. type – A number of monetary units specified in a currency where the unit of currency is explicit or implied.
 - amount. content – A number of monetary units specified in a currency where the unit of currency is explicit or implied.
 - amount currency. identification. code – The currency of the amount.

Basic Information Entity

A Basic Information Entity is a singular concept that has a unique business semantic definition.

A Basic Information Entity adds semantic meaning to a single datatype or a Core Component Type (CCT).

Aggregate Information Entity

An Aggregate Information Entity contains two or more Basic Information Entities or Aggregate Information Entities that together form a single business concept (e.g. postal address). Each Aggregate Information Entity has its own business semantic definition.

Embedding aggregates within an aggregate is only allowed when they are sub-types. For example, the Person and Organisation aggregates are sub-types of the Party aggregate.

The contextual relationship between aggregates is not expressed by embedding aggregates within each other. For example, Address is not embedded within Party and Party is not embedded within Address. The relationship between the Party and Address aggregates is established in the information relationship model derived from the business process model.

190 **6.5 Format of Core Component Dictionary**

191 The Core Components Dictionary is divided into sections and each section begins with
 192 the following information:
 193

Information	Explanation
Category	The category of the core component – Aggregate, Core Component Type or Basic.
Core Component Type	The core component type (CCT) that the core component uses (if applicable).

194
 195 The following information is defined (if applicable) for each of the core components:
 196

Information	Explanation
Name	The official dictionary entry name of the core component.
Definition	A description of the nature and meaning of the core component.
UID	A unique identifier.
Synonyms	A word or phrase having the same meaning as the Name of the core component. Used to capture the common or business name(s) of the core component.
Component Re-used	The generic component which is re-used by the core component. For example, account owner party details (000082) re-uses party details (000001).
Datatype	The formal datatype of a core component. (The datatype is not applicable for aggregate components or for basic core components that use core component types.)
Remarks	Examples or references related to the core component.
Core Component Type	The core component type that the basic core component uses.
Naming Convention	
Object Class	The logical data grouping to which a data element belongs.
Property Term	The distinguishing characteristic of the business entity.
Representation Type	The form of the set of valid values for an information element.

197
 198 **6.6 Format of Core Component Structures**

199 The Core Component Structure document is a spreadsheet and contains the following
 200 information:
 201

Column Heading	Explanation
UID	A unique identifier.
Aggregate Information Entity Name	The official dictionary entry name of the aggregate.
Embedded Entity Name	The official dictionary entry name of the embedded entity.
Core Component Type	The core component type that the basic core component uses.
Datatype	The formal datatype of a core component. (The datatype is not

	applicable for aggregate components or for basic core components that use core component types.)
Component Re-used	The generic component which is re-used by the core component. For example, account owner party details (000082) re-uses party details (000001).
Category Type	The category of the core component – Aggregate, Core Component Type or Basic.
Required	Indicates if the embedded entity is required in the aggregate entity.
Definition	A description of the nature and meaning of the core component.
Remarks	Examples or references related to the core component.

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Note: XML name tags have not been included in either the dictionary or the structure because the rules for the assignment of name tags is dependent on the design concepts of when to use elements and attributes in DTDs and/or schemas.

206 7 Disclaimer

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208 not necessarily those of their employers. The authors and their employers specifically
209 disclaim responsibility for any problems arising from correct or incorrect implementation
210 or use of this design.

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