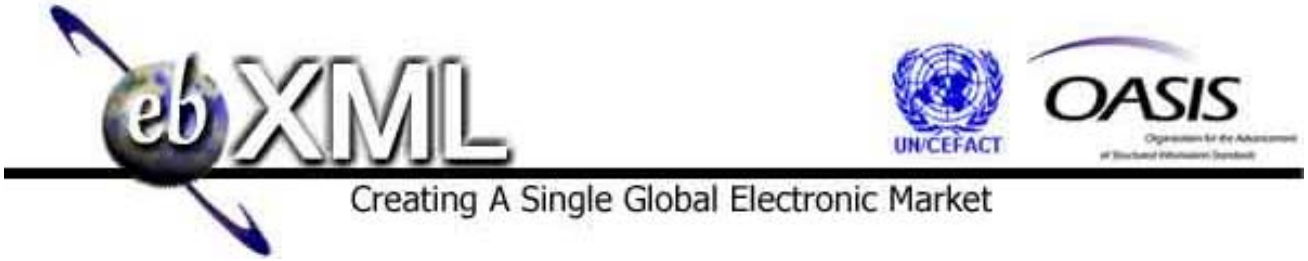


Guide to the Core Components Dictionary

v1.04

Core Components Team

10 May 2001

(This document is the non-normative version formatted for printing, July 2001)

Table of Contents

1 Status of this Document

This document specifies an ebXML Technical Report 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:

2 ebXML Participants

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

All participants of the Core Component Team, and the between-meeting Domain Discovery Groups.

Editing team:

Mike Adcock	APACS
Thomas Becker	SAP
Gait Boxman	TIE
Sue Probert	Commerce One
James Whittle	e-centre UK

Contributors:

Mike Adcock	APACS
Mary Kay Blantz	Netfish Technologies
Marianne Cockle	APACS
Eddy Dermience	UIC/EDIFER
Paula Heilig	Worldspan
Hartmut Hermes	Siemens
Stig Korsgaard	Danish Bankers Association
Olli-Pekka Pauna	EDIMASTER OY
Sue Probert	Commerce One
Henrik Reiche	Danish Insurance Association
Andreas Schultz	GDV

James Whittle e-centre UK

Nigel Wooden Acord

3 Introduction

3.1 Summary of contents of document

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

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

3.2 Audience

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

3.3 Related documents

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

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

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

4 Design Objectives

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

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

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

5 Dictionary Overview

5.1 Functionality

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

5.2 Scope

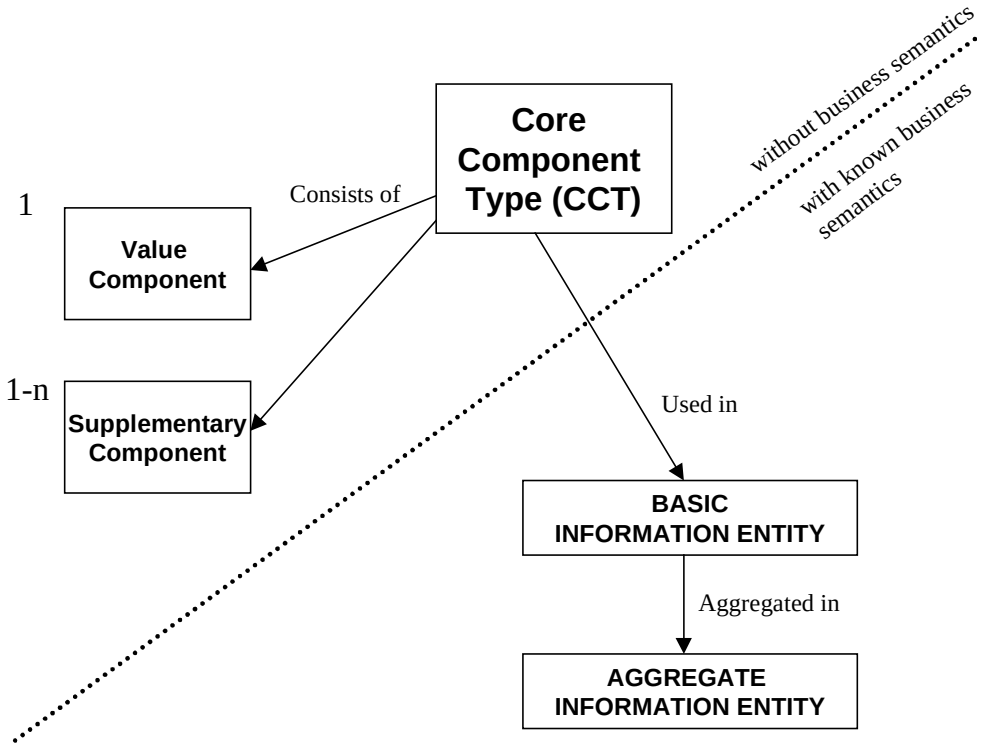
The scope of this document is to describe the three core component category types and to provide understanding for reviewing the ebXML TR - Core Components Dictionary Ver 1.04 and the ebXML TR - Core Component Structures Ver 1.04.

5.3 Definition and scope

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

5.4 Result of Analysis

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



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)

Representation Type	Datatype	Core Component Type	Example
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)

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.

5.5 Format of core component dictionary

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

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).

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

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.

5.6 Format of core component structures

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

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.

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.

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.

7 Contact Information

Team Leader

Name	Paula Heilig
Company	Worldspan
Street	300, Galleria Parkway, N.W. MD57A1-1
City, state, zip/other	Atlanta GA 30339-3196
Nation	USA
Phone:	770-563-2891
Email:	paula.heilig@worldspan.com

Vice Team Lead

Name	Marianne Cockle
Company	APACS
Street	Mercury House, Triton Court, 14 Finsbury Square
City, state, zip/other	London EC2A 1LQ
Nation	UK
Phone:	+44-20-7711-6209
Email:	marianne.cockle@apacs.org.uk

Editor

Name	James Whittle
Company	e centre^{UK}
Street	10, Maltravers Street
City, state, zip/other	London

Nation	UK
Phone:	+44-20-7655-9022
Email:	james.whittle@e-centre.org.uk