

Joint Core Components

Core Component Primer

Interim Basic Information Entity Discovery Method

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Table of Contents

1. STATUS OF THIS DOCUMENT	3
2. INTRODUCTION	3
3. AUDIENCE	3
4. PRE-REQUISITES	3
4.1 DOCUMENT CONVENTIONS.....	4
5. PURPOSE, SCOPE AND GOALS	4
5.1 PURPOSE.....	4
5.2 SCOPE.....	4
5.3 GOALS	4
6. TERMINOLOGY	4
7. CORE COMPONENT DISCOVERY STEPS	4
7.1 PREPARATION STEPS	5
7.2 DISCOVERY STEPS	5
8. CORE COMPONENT TYPES (CCT)	7
ANNEX I – CORE COMPONENT TYPES	8
ANNEX II – EXAMPLES OF PROPOSED CORE COMPONENTS	9
ANNEX III – EXAMPLES OF PROPOSED CORE COMPONENTS WITH THE SAME BUSINESS TERMS	11

1. Status of this Document

This document specifies a Joint Core Component (JCC) interim paper for the eBusiness community.

Distribution of this document is unlimited.

2. Introduction

This primer is designed to help you, within your domain, to understand the methodology for the discovery of potential Core Components. This is a practical guide to help you get value from the ebXML Technical Reports.

The **Core Components Overview** Ver 1.04 document already has all of the information you need about how the ebXML Core Components Technical Reports go together. It is suggested you start there and when you are ready, come here to this document. So, lets get started.

Upon completion of working through these exercises, it should be clear to you, how to define a potential Core Component and fill in the required information for presentment to the Cross Industry Harmonisation and Analysis Team.

3. Audience

The target audience for this document are the business experts working within the domain groups, developing their domain specific business processes and core components. The results of this discovery work should be input to the Cross Industry Harmonisation and Analysis Team.

4. Pre-requisites

Before starting with this work, you should have a clear understanding of the ebXML Core Components work. A good place to start would be to read the Core Components Overview Document.

- [ccOVER] **Core Components Overview** Ver 1.04
- To understand the level of detail needed for each new entry in the catalogue including the meta data – read the [ccCTLG] **Guide to the Core Component Dictionary** Ver 1.04.
- The other key document you will need to complete these exercises is the [ccNAM] **Naming Convention for Core Components** Ver 1.04 JCC.

Other documents listed below are recommended for reference.

- [ccD&A] **Core Component Discovery and Analysis** Ver 1.04 JCC
- [ebCNTXT] **Context and Re-Usability of Core Components** Ver 1.04
- [ebCCDOC] **Document Assembly and Context Rules** Ver 1.04
- [ccSTRUCT] **Core Component Structure** Ver 1.04
- [ccDICT] **Core Component Dictionary** Ver 1.04
- [ccDRIV] **Catalogue of Context Drivers** Ver 1.04

4.1 Document Conventions

The keywords MUST, MUST NOT, REQUIRED, SHALL, SHALL NOT, SHOULD, SHALL NOT, RECOMMENDED, MAY, and OPTIONAL, when they appear in this document, are to be interpreted as described in RFC 2119 [Bra97].

5. Purpose, Scope and Goals

5.1 Purpose

The purpose of this document is to provide business and technical domain experts with a clearly defined, step by step process to follow when engaged in the discovery of potential Core Components.

Note that while business process modeling is needed to fulfill ebXML requirements, Core Component discovery can continue using the steps below, pending the completion of UMM models. Thus this document is 'interim' in nature.

5.2 Scope

- These exercises are developed for discovery of potential Core Components.
- This is only a small part of the whole activity of defining a business process and creating business exchanges.
- The results of working within this document then moves to Cross Industry Harmonisation and Analysis. Any issues that are identified from a result of that analysis are discussed with the domain groups and resolved through this process.

5.3 Goals

- For each potential Core Component:
 - a precise definition is established;
 - useful business remarks are captured;
 - type of Core Component (Basic or Aggregate) is identified;
 - the naming convention is applied to create a dictionary entry name;
 - business terms for the Core Components that are different to the dictionary entry name are captured;
 - a Core Component Type (CTT) is identified for Basic Core Components only; and
 - a temporary UID is assigned.
- The resulting Core Components after the Harmonisation and Analysis are then assigned an official UID and passed onto the Registry and Repository.

6. Terminology

See the ebXML Glossary document when terminology becomes an issue.

7. Core Component Discovery Steps

In the creation of potential core components, there are several processes or steps you need to think out before you get started.

7.1 Preparation Steps

- Step 1. Select an essential Business Process for your domain (for example: Make a Payment, Place an Order, Issue an Invoice) and use this information to fill in the top of the Core Component Discovery Form.

Core Component Discovery Form	
Domain Group	D1-Materials Management
Business Process	Place an Order
Date	31/06/2000
Version	1.0
Contact Person Name	Joe Smith
Contact Person Email	joe.smith@yahoo.com

- Step 2. Focus on a business exchange within the Business Process that you feel contains the key business information (for example: Payment Order, Purchase Order, Invoice), this will help you identify your source material.
- Step 3. Collect together your reference materials. Use a cross section of Message Implementation Guides (MIGs) or Implementation Guidelines as a source of information about the business exchange. Extract the pieces of business information that are required for the business process rather than for legacy or syntax purposes.

7.2 Discovery Steps

- Step 1. Identify a piece of business information (i.e. potential Core Component).
- Step 2. Develop a thorough definition and include any useful business comments as remarks. (Ref: [ebXML JCC - Naming Convention for Core Components, Section 8](#))
- Step 3. Follow the naming convention for Core Components to:
- assign a Representation Type;
 - assign a Property Term; and
 - assign an Object Class.
- (Ref: [ebXML TR - Naming Convention for Core Components, Section 5.2](#))
- Step 4. Concatenate the terms to create a Naming Convention compliant name.

Note: The resultant name may seem artificial in that it might not be the same as any of the business terms used for that concept, however, rigor of the Naming Conventions enables future translation of the name into other languages.

Step 5. Once the ebXML compliant name has been created, return to the definition and place the name at the beginning of the definition followed by “is”. This will help to ensure that the definition is not simply a regurgitated version of the Dictionary Entry Name.

Step 6. Document any business term(s) that are used within your domain to identify the piece of business information in the Business Terms column (separate business terms by commas). E.g. (Account Number, Account Identifier)

Note: Some business terms are used for several different pieces of business information. It is perfectly acceptable to have the same business term listed as a synonym for two or more pieces of business information. For example, Account Number is a synonym for Financial Account Identifier and for Sales Account Identifier. See Annex III

Step 7. In the case of Basic Core Components, identify a Core Component Type (CCT)

Step 8. Add a temporary UID. Start the temporary UID with the a domain group identifier. (e.g. D60001, D12001, I00001, H00001, etc)

For examples of proposed Core Components, see Annex II

8. Core Component Types (CCT)

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

By specifying the CCT for a Basic Information Entity, we eliminate the need to individually specify the supplementary information needed.

For example Date Time Type contains:

- date time content – The particular point in the progression of time
- date time format – The format of the date/time (Reference ISO 8601)

So, it is only necessary to define Birth Date and associate it with Date Time Type. It is not necessary to define Birth Date content and Birth Date format separately.

The same applies for Code Type. Code Type contains:

- code content - A character string (letters, figures or symbols) that for brevity and/or language independence may be used to represent or replace a definitive value or text of an attribute.
- code list identifier - The name of a list of codes.
- code list agency identifier - An agency that maintains one or more code lists.
- code list version identifier - The version of the code list.
- code name - The textual equivalent of the code content.
- language code - The identifier of the language used in the corresponding text string. (Reference ISO 639:1998)

So, it is only necessary to define Country Code and link it to Code Type. It is not necessary to define Country Code content, Country Code list, Country Code list agency, Country Text, etc. separately.

A list of Core Component Types and the supplementary information they contain is shown in Annex I.

The representation type of the business information entity determines which CCT can be re-used.

Representation Type	Core Component Type
Code	Code Type
Identifier	Identifier Type
Date	Date Time Type
Date and Time	Date Time Type
Time	Date Time Type
Amount	Amount Type
Quantity	Quantity Type
Name	Text Type

Representation Type	Core Component Type
Text	Text Type
Measure	Measure Type
Content	
Indicator	
Percent	
Rate	
Value	

Annex I – Core Component Types

Amount Type contains:

- amount - 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. (Reference ISO 4217)

Code Type contains:

- code content - A character string (letters, figures or symbols) that for brevity and/or language independence may be used to represent or replace a definitive value or text of an attribute.
- code list identifier - The name of a list of codes.
- code list agency identifier - An agency that maintains one or more code lists.
- code list version identifier - The version of the code list.
- code name - The textual equivalent of the code content.
- language code - The identifier of the language used in the text string above. (Reference ISO 639:1998)

Date Time Type contains:

- date time content – The particular point in the progression of time
- date time format – The format of the date/time (Reference ISO 8601)

Identifier Type contains:

- identifier content - A character string to identify and distinguish uniquely, one instance of an object in an identification scheme from all other objects within the same scheme.
- identification scheme name - The name of the identification scheme.
- identification scheme agency name - The agency that maintains the identification scheme.
- language code - The identifier of the language used in the text strings above. (Reference ISO 639:1998)

Measure Type contains:

- measure content - The size, volume, mass, amount or scope derived by performing a physical measure.
- measure unit code - The type of unit of measure. (Reference UN/ECE Recommendation #20 and X12 355.)

Quantity Type contains:

- quantity - A number of non-monetary units.
- quantity unit code - The unit of the quantity.
- quantity unit code list identifier - The quantity unit code list.
- quantity unit code list agency identifier - The agency which maintains the quantity unit code list.

Text Type contains:

- text content - A character string generally in the form of words.
- language code - The identifier of the language used in the corresponding text string. (Reference ISO 639:1998)

Annex II – Examples of Proposed Core Components

Temp UID	Definition	Remarks	Business Terms	Core Component Type	Dictionary Entry Name			
					Name	Object Class	Property Term *to be suppressed according to rule 5	Representation Type
T00001	The Charge Price.Amount is the amount of money expected, required, or given in payment for the charge for or price of something.		Charge, Price	Amount Type	Charge Price.Amount	Charge Price	Amount*	Amount
T00002	Transport.Method.Code is the method of transport used for the conveyance of goods or persons	For example, by air, by rail, by sea.	Transport Method Code	Code Type	Transport.Method.Code	Transport	Method	Code
T00003	Birth.Date is the date on which a person was born.	Applies only to parties being natural persons.		Date Type	Birth.Date	Birth	Date*	Date
T00004	Payment Card.Expiration.Date is the expiration date of a payment card that is associated with an account.		Expiration Date	Date Type	Payment Card.Expiration.Date	Payment Card	Expiration	Date
T00005	Street.Building.Identifier is a number and/or letter that identifies the position of a building on a street.		Building Number	Identifier Type	Street.Building.Identifier	Street	Building	Identifier
T00006	<i>(example needed)</i>			Measure Type				
T00007	Base Charge Price.Quantity is the base quantity of the charge/price unit amount.	For example, for a charge of \$5/day for 10 days the		Quantity Type	Base Charge Price.Quantity	Base Charge Price	Quantity*	Quantity

		Base Charge Price.Quantity is 1 day						
T00008	Person.Given.Name is the given name, first name, Christian name or moniker of a person.	This applies only to parties being natural persons.	First Name, Given Name, Christian Name	Text Type	Person.Given.N ame	Person	Given	Name
T00009	Party.Description.Text is text that provides information on the party.	This text may cover information that is in addition to the structured information but cannot be provided within the given structure.		Text Type	Party.Descriptio n.Text	Party	Description	Text

