ebXML Registry profile for ebXML Core Components

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Abstract:

This document define the ebXML Registry profile for ebXML Core Components management. The document specify how to effectively customize and use an ebXML Registry Repository for specific domain. The document includes a standard mapping the Core Component Information Model to the ebXML Registry Information Model.

Status:

This document is an OASIS ebXML Registry Technical Committee Working Draft Technical Note.

Committee members should send comments on this specification to the regrep@lists.oasis-open.org list. Others should subscribe to and send comments to the regrep-comment@lists.oasis-open.org list. To subscribe, send an email message to regrep-comment-request@lists.oasis-open.org with the word "subscribe" as the body of the message.

For information on whether any patents have been disclosed that may be essential to implementing this specification, and any offers of patent licensing terms, please refer to the Intellectual Property Rights section of the OASIS ebXML Registry TC web page (http://www.oasis-open.org/committees/regrep/).

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1 Introduction

1.1 Scope of this document

The aim of this document is to define the ebRIM concepts with respect to ebXML Core Components technical Specification.

The core issue of this mapping is to preserve the CCTS Information Model, structure and content, in the obtained ebRIM mapped format.

At this level to be conform to the [CCTS] means that all information, metadata and relationships aren't lost into the passage to ebRIM. The defined ebRIM mapping has to be able to store and retrieve all CC information without lost.

The obtained mapping is a set of registry objects that will be the canonical objects for the UN/CEFACT registry implementation.

To implement this canonical objects guarantees the interoperability between registries and permits to share objects using the registry federation feature.

1.2 Audience

The target audience for this document includes all software developers who will follow this document to put in place a registry to manage reusable Core Components compliant with UN/CEFACT registry implementation.

The entire comprehensions of this document ask a background acquittance of the CCTS, ebRIM specifications and UN/CEFACT UMM methodology by the reader.

1.3 Overview

The ebXML Registry/Repository provides several generic services to manage every type of information, objects and files. Every stored "file" into the registry is a *RepositoryItem* and every *RepositoryItem* is accompanied by a registry object that contains all metadata or information.

The [ebRIM] provides several canonicals objects to accomplish that, but everyone can personalise the implementation by adding all needed classifications, object types and association types to the registry.

The whole UML class diagram, representing the CC Information Model, defined into the Core Component Technical Specification can be mapped to the ebXML registry storage format [ebRIM]. For that both, canonical and specifics objects are defined.

This task is done in two steps:

- In a first step the rules defined into the ebXML Registry Tutorial are followed. This step provides a simple way to map a generic information model to the target format.
- And in a second step, because the complexity of CC Information Model, an optimization of the resultant mapping is done.

The resultant mapping can constitute one or more XML files for direct submission, by the ebXML Registry Life Cycle Manager interface, to a ebXML registry.

1.3.1 UMM Overview

The UN/CEFACT Modeling Methodology (UMM) is an incremental business process and information model construction methodology that provides level of specification granularity that are suitable for communicating the model to business practitioners, business application integrators and network application solution providers.

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125 This methodology use a limited version of UML class diagrams artefacts to modelling components
126 structure.

127 1.3.2 ebRIM Overview

128

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2 CCTS UMM Mapping generals rules

In this chapter we define all applied rules to UMM profile for mapping CCTS schema to ebRIM model.

Where possible, the generals rules defined in the ebXML tutorial will be applied in this definition.

1.1 Classes

Where applicable the CCTS classes are mapped directly to an existing ebRIM registry object.

If not, a new ebRIM Object Type is defined. Its name is the same of the ccts class using UCC method.

If an UML class is an Abstract class it won't be mapped to an ebRIM object directly, it will represent only a concept. Its attributes will be created directly in inherited classes.

2.2 Inheritances

Inheritances are defined by the corresponding inheritance relationship among the *ClassificationNode* under ebRIM Extrinsic Object in the extended Object Type Scheme.

2.3 Associations

Associations can be mapped directly to RIM Associations. Where possible canonical RIM associations are adopted.

Role will be not considered the type of the ebRIM association.

Undirected one to many associations will take the direction from the « single » class as source an the multiple class as target.

2.3.1 Association Classes

The association classes will be mapped directly to the ebRIM Association object.

No new dedicated ebRIM objects will be created to represent this class, but the attributes will be inserted directly in the ebRIM Association object.

2.3.2 Aggregations

Mapped to associations.

2.3.3 Compositions

Rule of tutorial will be applied.

2.3.4 Roles

2.4 Attributes

Attributes are mapped to existing canonicals ebRIM attributes or to a new defined ebRIM *Slots*.

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3 Core Components and Data Types Information Model mapping

The *Unified Modeling Language* class diagram describes all aspects of *Core Components* storage details and fully describes the types of *Core Components* and their relationships as a requirement of storage.

In the transformation of this diagram each classes corresponds to a sub-node of the [ebRIM] object type scheme. At the end of this document an optimization will be done. This because for the registry purposes all we need is the managed artifacts and not every single object (For example the class *RegistryClass* is never used alone in a business instance).

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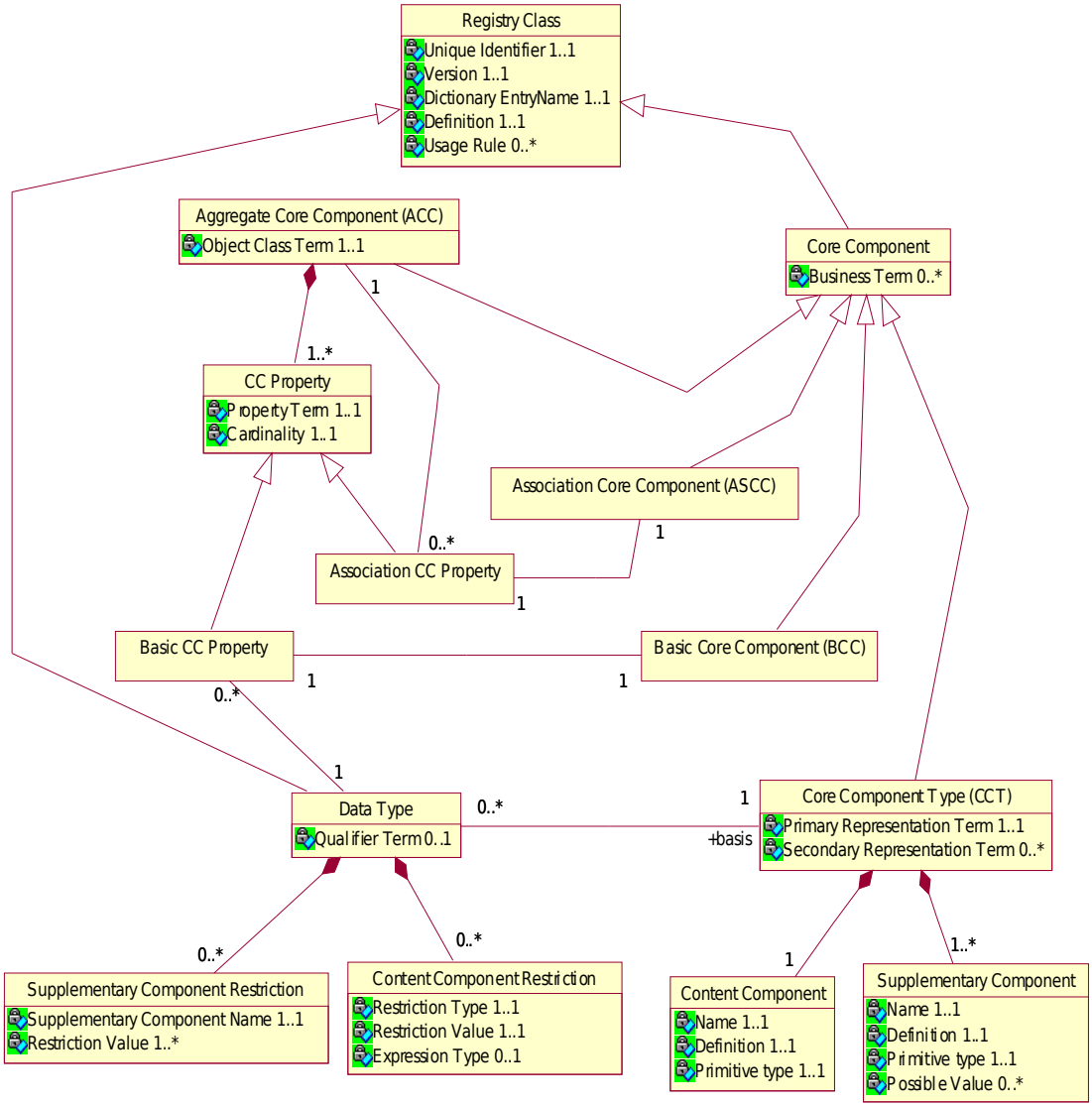

Figure 1: Core Components and Data Types - Full Definition

168

169 3.1 EbRIM ObjectType concepts

170 In the table below are defined all needed *ClassificationNode* ebRIM objects for the Core Component and
171 Data Type IM.

172 Here all classes are mapped to the *ExtrinsicObject* [ebRIM] object. The defined *ClassificationNode*
173 represents the *objectType* attribute of the *ExtrinsicObject* object that they must specify in every instance.

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174 This feature provides us a good mean to personalize our registry objects.

175 It will permits us to provides specifics research and discovery (ex: "get all ExtrinsicObject where
176 objectType is AggregateCoreComponent") and content management.

177

CCTS UML Class (with object type concept structure schema)			**EbRIM ObjectType**	**Comment**
Registry Class			RegistryClass	This class is contains all commons attributes that are inherited by the greater part of CC IM classes. This class is never instantiated directly for business usage. It is directly a sub-nod of the ebRIM canonical *ExtrinsicObject*
	Data Type		DataType	Inherit from RegistryClass
	Core Component		CoreComponent	Inherit from RegistryClass. This class generalize specifics CC classes as ACC, ASCC, BCC and CCT. No direct business usage is done for this class.
		Aggregate Core Component	AggregateCoreComponent	Inherit from CoreComponent
		Association Core Component	AssociationCoreComponent	Inherit from CoreComponent
		Basic Core Component	BasicCoreComponent	Inherit from CoreComponent
		Core Component Type	CoreComponentType	Inherit from CoreComponent
Core Component Property			CoreComponentProperty	This class doesn't inherit from any other CC IM class. It is directly a sub-nod of the ebRIM canonical *ExtrinsicObject*
	Association Core Component Property		AssociationCoreComponentProperty	Inherit from CCProperty
	Basic Core Component Property		BasicCoreComponentProperty	Inherit from CCProperty
Content Component Restriction			ConentComponentRestriction	This class doesn't inherit from any other CC IM class. It is directly a sub-nod of the ebRIM canonical *ExtrinsicObject*
Supplementary Component Restriction			SupplementaryComponentRestriction	This class doesn't inherit from any other CC IM class. It is directly a sub-nod of the ebRIM canonical *ExtrinsicObject*

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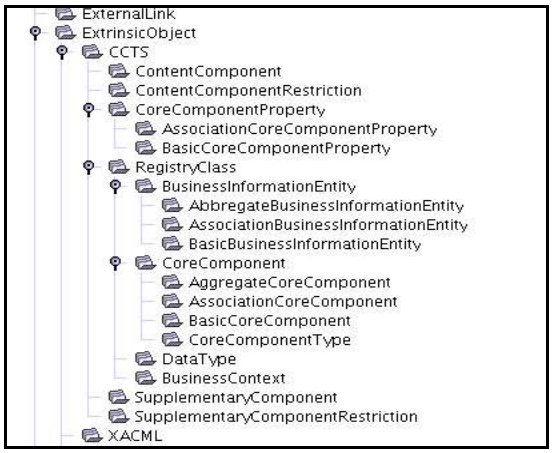
Content Component			ConentComponent	This class doesn't inherit from any other CC IM class. It is directly a sub-nod of the ebRIM canonical *ExtrinsicObject*
Supplementary Component			SupplementaryComponent	This class doesn't inherit from any other CC IM class. It is directly a sub-nod of the ebRIM canonical *ExtrinsicObject*

Table 1: ebRIM ObectType for Core Component and Data Type UML class diagram full definition

3.2 Inheritances

The inheritances of the classes are defined by the corresponding inheritance relationship among the *ClassificationNodes* in the extended Object Type Scheme.

(Here a figure of the Classification scheme tree …)



3.3 Associations

Source	Target	Association Type	Name	Comment
Aggregate Core Component	Association Core Component Property	Contains	ASCCProperty	
Association Core Component Property	Association Core Component	IsBasedOn	ASCCDetail	
Basic Core Component property	Basic Core Component	IsBasedOn	BCCDetail	
Basic CC Property	Data Type	HasType		
Data Type	Core Component Type	Refine		

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3.4 Compositions

Source	Target	ebRIM Association Type	Name	Comment
Aggregate Core Component	Core Component Property	Contains		
Data Type	Supplementary Component Restriction	Contains		
Data Type	Content Component Restriction	Contains		
Core Component Type	Content Component	Contains		
Core Component Type	Supplementary Component	Contains		

3.5 Attributes

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4 Business Information Entity mapping

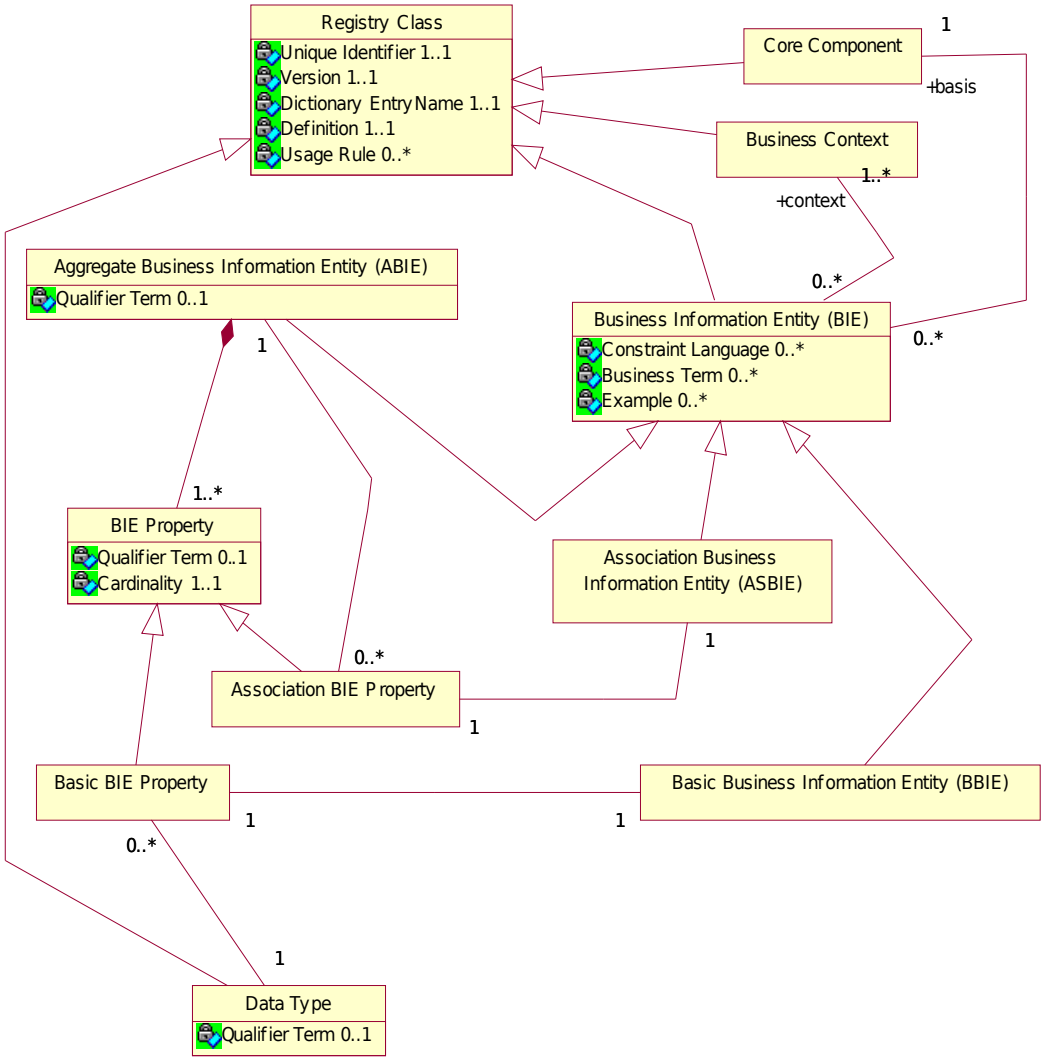

Figure 2 - Business Information Entities – Full Definition

4.1 Classes

CCTS UML Class (with object type concept structure schema)			EbXML RIM equivalent	Comment
Registry Class			RegistryClass	*(the same of cc mapping)*
	Data Type		DataType	*(the same of cc mapping)*

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	Business Information Entity		BusinessInformatIonEntity	Inherit from RegistryClass
		Aggregate Business Information Entity t	AggregateBusinessInformationEntity	Inherit from BusinessInformationEntity
		Association Business Information Entity	AssociationBusinessInformation Entity	Inherit from BusinessInformationEntity
		Basic Business Information Entity	BasicBusinessInformationEntity	Inherit from BusinessInformationEntity

206

207 4.2 Inheritances

208 The inheritances of the classes are defined by the corresponding inheritance relationship among the
209 ClassificationNodes in the extended Object Type Scheme.

210

211 *(Here a figure of the Classification scheme tree …)*

212 4.3 Associations

213

Source	Target	Association Type	Name	Comment
Aggregate Business Information Entity	Association Business Information Entity Property	Contains	ASBIEProperty	
Association Business Information Entity Property	Association Business Information Entity	IsBasedOn	ASBIEDetail	
Basic Business Information Entity property	Basic Business Information Entity	IsBasedOn	BBIEDetail	
Basic Business Information Entity Property	Data Type	HasType		

214

215

216 4.3.1 Compositions

217

218

Source	Target	ebRIM Object Type	Name	Comment
Aggregate Business Information Entity	Business Information Entity Property	Association type = Contains		

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219

220 ## 4.4 Attributes

221

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5 Core Components Context Definition Model mapping mapping

To review...

To better share CCTS classifications from others Registry Classification Scheme, we create 2 Classifications schemes :

- CCTS Context (which is a logical representation of the 8 ccts context)
- CCTS Classification Scheme

The Business Context object (EO) are classified with at least one or more of each type of :

- Business Process Context Value
- Product Context Value
- Industry Context Value
- Geopolitical Context Value
- Official Constraints Context Value
- Business Process Role Context Value
- Supporting Role Context Value
- System Capabilities Context Value

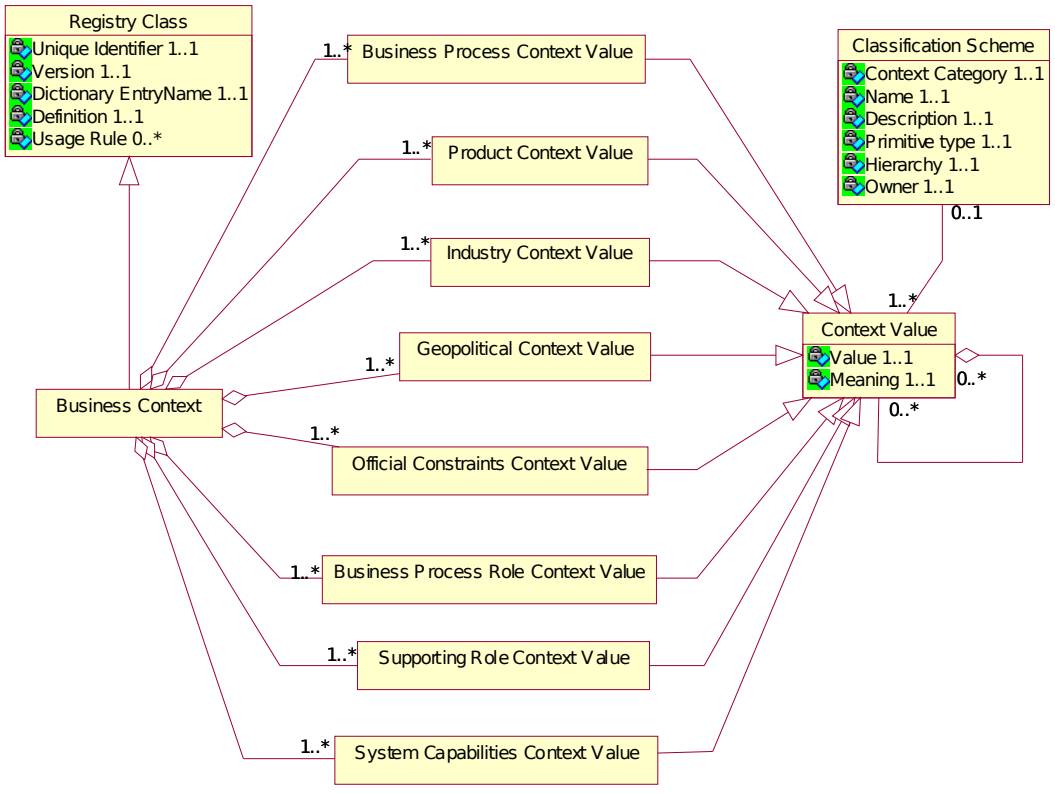

Figure 3 - Core Components Context Definition Model

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5.1 Classes

Registry Class			RegistryClass	
	Business Context		BC	
Context Value			CCTSContext	
	Business Process Context Value		BusinessProcessContext	
	Product Context Value		ProductContext	
	Industry Context Value		IndustryContext	
	Geopolitical Context Value		GeopoliticalContext	
	Official Constraints Context Value		OfficialConstraintsContext	
	Business Process Role Context Value		BusinessProcessRoleContext	
	Supporting Role Context Value		SupportingRoleContext	
	System Capabilities Context Value		SystemCapabilitiesContext	
Classification Scheme			CCTSClassificationScheme	

Here some example and figure….

5.2 Inheritances

ebXML registry has natively the classification system, so every inheritances are mapped to the classification scheme.

5.3 Associations

The association between the Context Value class and Classification Scheme class is already considered by classification context system.

5.3.1 Aggregations

The Context Value "self" aggregation is represented by a classification sub-node of context value classification node.

Aggregations between BC class and context values classes are represented by classifications of the Business Context registry object.

Here an example and a figure….

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265 5.4 Attributes

266

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6 Registry Metadata mapping

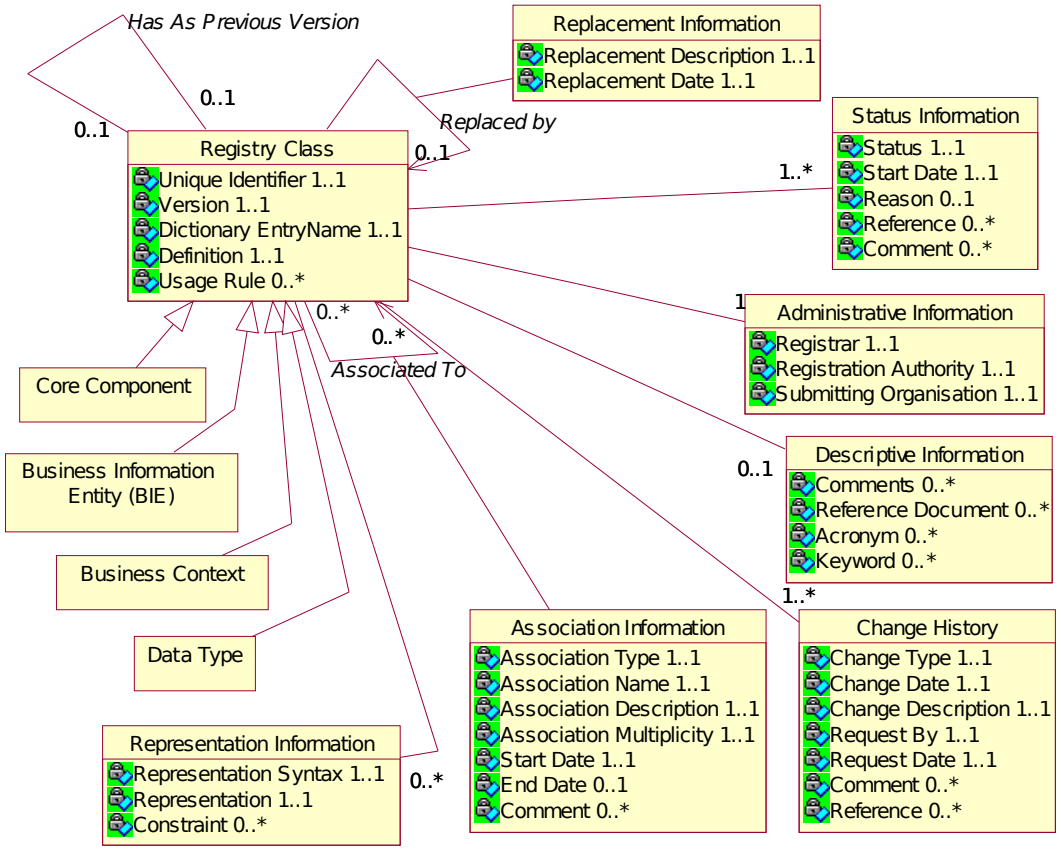

Figure 4 - Registry Metadata

6.1 Classes

Registry Class			EO	
Replacement Information			EO	
Status Information			EO	
Administrative Information			EO	An instance of this class will probably link three Registry Person Objects
Descriptive Information			EO	
Change History			EO	
Association Information			Registry Package	
Representation Information			EO	

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6.2 Associations

Source	Target	Association Type	Name	Comment
Registry Class (new instance)	Registry Class (old instance)	HasAsPreviousVersion		
Registry Class	Registry Class	ReplacedBy	ReplacementInformation	*To confirm that we can create an association on the same registry object!!!*
Registry Class	Registry Class	ReplacedBy	ReplacementInformation	*To confirm that we can create an association on the same registry object!!!*
Registry Class	Registry Class	AssociatedTo	AssociationInformation	*To confirm that we can create an association on the same registry object!!!*
Registry Class	Status Information	Contains		This association is bi-directional, but it is enough to create a one direction association. Only for logical reason we choice as source the Registry Class.
Registry Class	Administrative Information	Contains		This association is bi-directional, but it is enough to create a one direction association. Only for logical reason we choice as source the Registry Class.
Registry Class	Descriptive Information	Contains		This association is bi-directional, but it is enough to create a one direction association. Only for logical reason we choice as source the Registry Class.
Registry Class	Change History	Contains		This association is bi-directional, but it is enough to create a one direction association. Only for logical reason we choice as source the Registry Class.
Registry Class	Representation Information	Contains		This association is bi-directional, but it is enough to create a one direction association. Only for logical reason we choice as source the Registry Class.

Attributes

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7 Defining Content Management Services

7.1 Defining Content Validation Services

Use of jCAM to validate XML instance docs?

7.2 Defining Content Cataloging Services

The ebXML Regitsry provides the ability for a user defined content cataloging service to be configure for each ObjectType defined by the mapping. The purpose of cataloging service is to selectively convert content into ebRIM compatible metadata when the content is submitted. The generated metadata enables the selected content to be used as parameter(s) in a domain specific parameterized query.

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8 Defining CC Specific Queries

The ebXML Registry provides the ability for domain specific queries to be defined as parameterized stored queries within the Registry as instances of the AdhocQuery class. When mapping a domain specific model one SHOULD define such domain specific queries.

8.1 Common Discovery Use Cases

The first step in defining these domain specific queries is to identify the common use cases for discovering domain specific objects in the registry using natural language.

For the CC Information model we identify the following sample domain specific discovery use cases as likely to be commonly needed:

Mandatory functions:

1. Add, update or update Package
2. Add, delete or update my components. (ex : update ABIE with id …)
3. Add, delete or update my RSM
4. Add, delete or update Documents associated with my component.
5. Add, delete or update Documents associated with my Package
6. Add, delete or update component with my package.
7. Submit a new version.

For the CC Information model we identify the following sample specific attributes for discovery use cases as likely to be commonly needed:

- Object Class Term
- Property Term
- Business Term
- Definition
- Business Context value
- Core Component Type
- Keyword
- Status
- Version
- Owner
- Responsible Organization

Access to 'Consultation' use cases may be restricted. (Ex: users with 'submitter' role can consult their own components but can't consult others components until they're published (approved)

Mandatory functions:

8. Get a component from its ID: a user can retrieve a component from its identifier whatever the component type may be. (ACC, ASCC, BCC, CCT, ABIE, ASBIE, BBIE, DataType, BusinessContext…)
9. Get documents attached to a Package or component
10. Get a Package from one of its components (ex: get business specification from an ABIE …)
11. Get an Assembly Message from one of its components.
12. Get all components with the same type (ex: get all ACC, get all CCT, get all Business Contexts…)
13. Get all sub-level components from a parent component. (ex : get all BCC from ACC, get all Supplementary Component from Data Type …)
14. Get latest, previous or all versions of a component.

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15. Get components or package by status (ex: get all 'approved' ACC…)
16. Get all components or package by owner (ex: give me my components …)

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9 Event Notification Feature

The ebXML Registry provides the ability for a user or an automated service to create a subscription to events that match a specified criterea. Whenever an event matching the specified criteria occurs, the registry notifies the subscriber that the event transpired.

A mapping of a domain specific model to ebRIM SHOULD define template Subscriptions for the typical use cases for event notification within that domain.

9.1 Use Cases for Event Notification

The following are some common use cases that may benefit from the event notification feature:

- A user may be using an object in the registry and may want to know when it changes. For example, they may be using an XML Schema as the schema for their XML documents. When a new version of that XML Schema is created they may wish to be notified so that they can plan the migration of their business processes to the new version of the XML Schema.
- A user may be interested in a certain type of object that does not yet exist in the registry. They may wish to be notified when such an object is published to the registry. For example, assume that a registry provides a dating service based upon PIM. Let us A person may create a subscription specifying interest in a CC that has a particular Business Context, is classified into Aerospace domain and it is linked, associated to a owned object. Whenever, a CC instance is submitted that matches this criteria, the registry will notify the user.
- An automated service such as a software agent may be interested in certain types of events in the registry. For example, an external workflow engine wishes to be notified of approbation of CC. To receive such notifications, "workflow system" may create a subscription for cc.ApprobationEvents where cc.ApprobationEvents.objectType is "ABIE.

9.2 Subscriptions for Events

A user may create a subscription to events of interest by submitting a Subscription object to the registry as defined by ebRIM. The Subscription object MUST specify a selector parameter that identifies a stored query that the registry should use to select events that are of interest to the user for that Subscription.

```
<SubmitObjectsRequest  >
  <rim:RegistryObjectList>
    ...
  </rim:RegistryObjectList>
</SubmitObjectsRequest>
```

Listing 1: Subscription for XXXEvent

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10 Defining Access Control

10.1 Subject Role Extension

10.2 Subject Group Extension

10.2.1 Defining Custom Access Control Policies

10.3

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11 Known Issues

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Appendix A - CCIM to ebRIM: The Complete Mapping

NOT COMPLETE !!!

```
<?xml version="1.0" encoding="UTF-8"?>
<RegistryObjectList xmlns="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0
rim.xsd">
      <!-- ########################################################  -->
      <!-- ## ClassificationScheme objects definition             ## -->
      <!-- ########################################################  -->
      <!-- #Defining Business Process Context Classification Scheme# -->
      <ClassificationScheme
lid="urn:un:unece:uncefact:icg:registry:ContextClassification:BusinessProces
s"
id="urn:un:unece:uncefact:icg:registry:ContextClassification:BusinessProcess
" isInternal="true" nodeType="urn:oasis:names:tc:ebxml-
regrep:NodeType:UniqueCode">
            <Name>
                  <LocalizedString charset="UTF-8" value="Business Process"
xml:lang="en-US"/>
            </Name>
            <Description>
                  <LocalizedString charset="UTF-8" value="This is the
ClassificationScheme for Business Process context classification. Provided
by UN/CEFACT Catalogue of Common Business Processes" xml:lang="en-US"/>
            </Description>
      </ClassificationScheme>
      <!-- Defining Product Classification Context Classification Scheme -->
      <ClassificationScheme
lid="urn:un:unece:uncefact:icg:registry:ContextClassification:ProductClassif
ication"
id="urn:un:unece:uncefact:icg:registry:ContextClassification:ProductClassifi
cation" isInternal="true" nodeType="urn:oasis:names:tc:ebxml-
regrep:NodeType:UniqueCode">
            <Name>
                  <LocalizedString charset="UTF-8" value="Product
Classification" xml:lang="en-US"/>
            </Name>
            <Description>
                  <LocalizedString charset="UTF-8" value="This is the
ClassificationScheme for Product Classification context. It is based on :
Universal Standard Product and Service Specification (UNSPSC); Standard
International Trade Classification (SITC Rev .3); Harmonized Commodity
Description and Coding System (HS); Classification Of the purposes of non
Profit Institutions serving households (COPI)" xml:lang="en-US"/>
            </Description>
      </ClassificationScheme>
      <!-- Defining Industry Classification Scheme with -->
```


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```
      <ClassificationScheme
lid="urn:un:unece:uncefact:icg:registry:ContextClassification:Industry"
id="urn:un:unece:uncefact:icg:registry:ContextClassification:Industry"
isInternal="true" nodeType="urn:oasis:names:tc:ebxml-
regrep:NodeType:UniqueCode">
            <Name>
                  <LocalizedString charset="UTF-8" value="Industry"
xml:lang="en-US"/>
            </Name>
            <Description>
                  <LocalizedString charset="UTF-8" value="This is the
ClassificationScheme for Industry context classification" xml:lang="en-US"/>
            </Description>
      </ClassificationScheme>
      <!-- Defining Geopolitical Classification Scheme with a iso 3166
ClassificationNode -->
      <ClassificationScheme
lid="urn:un:unece:uncefact:icg:registry:ContextClassification:Geopolitical"
id="urn:un:unece:uncefact:icg:registry:ContextClassification:Geopolitical"
isInternal="true" nodeType="urn:oasis:names:tc:ebxml-
regrep:NodeType:UniqueCode">
            <Name>
                  <LocalizedString charset="UTF-8" value="Geopolitical"
xml:lang="en-US"/>
            </Name>
            <Description>
                  <LocalizedString charset="UTF-8" value="This is the
ClassificationScheme for Geopolitical context classification" xml:lang="en-
US"/>
            </Description>
            <ClassificationNode code="ISO 3166-2"
parent="urn:un:unece:uncefact:icg:registry:ContextClassification:Geopolitica
l"
lid="urn:un:unece:uncefact:icg:registry:ContextClassification:Geopolitical:i
so3166"
id="urn:un:unece:uncefact:icg:registry:ContextClassification:Geopolitical:is
o3166"
path="/urn:un:unece:uncefact:icg:registry:ContextClassification:Geopolitical
/iso3166"/>
      </ClassificationScheme>
      <!-- Defining Official Constraints Classification Scheme -->
      <ClassificationScheme
lid="urn:un:unece:uncefact:icg:registry:ContextClassification:OfficialConstr
aints"
id="urn:un:unece:uncefact:icg:registry:ContextClassification:OfficialConstra
ints" isInternal="true" nodeType="urn:oasis:names:tc:ebxml-
regrep:NodeType:UniqueCode">
            <Name>
                  <LocalizedString charset="UTF-8" value="Official
Constraints" xml:lang="en-US"/>
            </Name>
            <Description>
```


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```
                  <LocalizedString charset="UTF-8" value="This is the
ClassificationScheme for Constraints context classification" xml:lang="en-
US"/>
            </Description>
      </ClassificationScheme>
      <!-- Defining Business Process Role Classification Scheme -->
      <ClassificationScheme
lid="urn:un:unece:uncefact:icg:registry:ContextClassification:BusinessProces
sRole"
id="urn:un:unece:uncefact:icg:registry:ContextClassification:BusinessProcess
Role" isInternal="true" nodeType="urn:oasis:names:tc:ebxml-
regrep:NodeType:UniqueCode">
            <Name>
                  <LocalizedString charset="UTF-8" value="Business Process
Role" xml:lang="en-US"/>
            </Name>
            <Description>
                  <LocalizedString charset="UTF-8" value="This is the
ClassificationScheme for Business Process Role context classification"
xml:lang="en-US"/>
            </Description>
      </ClassificationScheme>
      <!-- Defining Supporting Role Classification Scheme -->
      <ClassificationScheme
lid="urn:un:unece:uncefact:icg:registry:ContextClassification:SupportingRole
"
id="urn:un:unece:uncefact:icg:registry:ContextClassification:SupportingRole"
isInternal="true" nodeType="urn:oasis:names:tc:ebxml-
regrep:NodeType:UniqueCode">
            <Name>
                  <LocalizedString charset="UTF-8" value="Supporting Role"
xml:lang="en-US"/>
            </Name>
            <Description>
                  <LocalizedString charset="UTF-8" value="This is the
ClassificationScheme for Supporting Role context classification"
xml:lang="en-US"/>
            </Description>
      </ClassificationScheme>
      <!-- Defining System Capabilities Classification Scheme with a iso
3166 ClassificationNode -->
      <ClassificationScheme
lid="urn:un:unece:uncefact:icg:registry:ContextClassification:SystemCapabili
ties"
id="urn:un:unece:uncefact:icg:registry:ContextClassification:SystemCapabilit
ies" isInternal="true" nodeType="urn:oasis:names:tc:ebxml-
regrep:NodeType:UniqueCode">
            <Name>
                  <LocalizedString charset="UTF-8" value="System
Capabilities" xml:lang="en-US"/>
            </Name>
            <Description>
```


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```
                  <LocalizedString charset="UTF-8" value="This is the
ClassificationScheme for System Capabilities context classification"
xml:lang="en-US"/>
            </Description>
      </ClassificationScheme>
      <!-- ########################################################  -->
      <!-- ## Specifics ObjectType concepts extensions           ##  -->
      <!-- ## (Sub-nodes of [ebRIM] Extrinsic Object type)       ##  -->
      <!-- ########################################################  -->
      <ClassificationNode parent="urn:oasis:names:tc:ebxml-
regrep:ObjectType:RegistryObject:ExtrinsicObject" code="RegistryClass"
lid="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryClass"
id="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryClass">
            <!-- ObjectType concepts for Core Component -->
            <ClassificationNode
parent="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryClass"
code="CC"
lid="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryClass:CoreCompone
nt" id="urn:oasis:names:tc:ebxml-
regrep:ObjectType:RegistryClass:CoreComponent">
                  <!-- ObjectType for Aggregate Core Component -->
                  <ClassificationNode
parent="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryClass:CoreComp
onent" code="ACC"
lid="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryClass:CoreCompone
nt:AggregateCoreComponent" id="urn:oasis:names:tc:ebxml-
regrep:ObjectType:RegistryClass:CoreComponent:AggregateCoreComponent"/>
                  <!-- ObjectType for Association Core Component -->
                  <ClassificationNode
parent="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryClass:CoreComp
onent" code="ASCC"
lid="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryClass:CoreCompone
nt:AssociationCoreComponent" id="urn:oasis:names:tc:ebxml-
regrep:ObjectType:RegistryClass:AssociationCoreComponent"/>
                  <!-- ObjectType for Basic Core Component -->
                  <ClassificationNode
parent="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryClass:CoreComp
onent" code="BCC"
lid="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryClass:CoreCompone
nt:BasicCoreComponent" id="urn:oasis:names:tc:ebxml-
regrep:ObjectType:RegistryClass:CoreComponent:BasicCoreComponent"/>
                  <!-- ObjectType for Core Component Type -->
                  <ClassificationNode
parent="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryClass:CoreComp
onent" code="CCT"
lid="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryClass:CoreCompone
nt:CoreComponentType" id="urn:oasis:names:tc:ebxml-
regrep:ObjectType:RegistryClass:CoreComponent:CoreComponentType"/>
            </ClassificationNode>
            <!-- ObjectType concepts for Business Information Entity -->
```


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```
            <ClassificationNode
parent="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryClass"
code="BIE"
lid="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryClass:BusinessInf
ormationEntity"
id="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryClass:BusinessInfo
rmationEntity">
                  <!-- ObjectType for Aggregate Business Information Entity
-->
                  <ClassificationNode
parent="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryClass:Business
InformationEntity" code="ABIE"
lid="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryClass:BusinessInf
ormationEntity:AggregateBusinessInformationEntity"
id="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryClass:BusinessInfo
rmationEntity:AggregateBusinessInformationEntity"/>
                  <!-- ObjectType for Association Business Information
Entity -->
                  <ClassificationNode
parent="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryClass:Business
InformationEntity" code="ASBIE"
lid="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryClass:BusinessInf
ormationEntity:AssociationBusinessInformationEntity"
id="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryClass:BusinessInfo
rmationEntity:AssociationBusinessInformationEntity"/>
                  <!-- ObjectType for Basic Business Information Entity -->
                  <ClassificationNode
parent="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryClass:Business
InformationEntity" code="BBIE"
lid="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryClass:BusinessInf
ormationEntity:BasicBusinessInformationEntity"
id="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryClass:BusinessInfo
rmationEntity:BasicBusinessInformationEntity"/>
            </ClassificationNode>
            <!-- ObjectType for Data Type -->
            <ClassificationNode
parent="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryClass"
code="DT"
lid="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryClass:DataType"
id="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryClass:DataType"/>
            <!-- ObjectType for Business Context -->
            <ClassificationNode
parent="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryClass"
code="BC"
lid="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryClass:BusinessCon
text"
id="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryClass:BusinessCont
ext"/>
      </ClassificationNode>
      <!-- ObjectType for Core Component Property -->
```


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```
      <ClassificationNode parent="urn:oasis:names:tc:ebxml-
regrep:ObjectType:RegistryObject:ExtrinsicObject" code="CCP"
lid="urn:un:unece:uncefact:icg:registry:ObjectType:CoreComponentProperty"
id="urn:un:unece:uncefact:icg:registry:ObjectType:CoreComponentProperty">
            <!-- ObjectType for Association Core Component Property -->
            <ClassificationNode
parent="urn:un:unece:uncefact:icg:registry:ObjectType:CoreComponentProperty"
code="ASCCP"
lid="urn:un:unece:uncefact:icg:registry:ObjectType:CoreComponentProperty:Ass
ociationCoreComponentProperty"
id="urn:un:unece:uncefact:icg:registry:ObjectType:CoreComponentProperty:Asso
ciationCoreComponentProperty"/>
            <!-- ObjectType for Basic Core Component Property -->
            <ClassificationNode
parent="urn:un:unece:uncefact:icg:registry:ObjectType:CoreComponentProperty"
code="BasicCoreComponentProperty"
lid="urn:un:unece:uncefact:icg:registry:ObjectType:CoreComponentProperty:BCC
P"
id="urn:un:unece:uncefact:icg:registry:ObjectType:CoreComponentProperty:BCCP
"/>
      </ClassificationNode>
      <!-- ObjectType for Business Information Entity Property -->
      <ClassificationNode parent="urn:oasis:names:tc:ebxml-
regrep:ObjectType:RegistryObject:ExtrinsicObject" code="BIEP"
lid="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryObject:ExtrinsicO
bject:BusinessInformationEntityProperty"
id="urn:un:unece:uncefact:icg:registry:ObjectType:BusinessInformationEntityP
roperty">
            <!-- ObjectType for Association Business Information Entity
Property -->
            <ClassificationNode
parent="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryObject:Extrins
icObject:BusinessInformationEntityProperty" code="ASBIEP"
lid="urn:un:unece:uncefact:icg:registry:ObjectType:BusinessInformationEntity
Property:AssociationBusinessInformationEntityProperty"
id="urn:un:unece:uncefact:icg:registry:ObjectType:BusinessInformationEntityP
roperty:AssociationBusinessInformationEntityProperty"/>
            <!-- ObjectType for Basic Business Information Entity Property
-->
            <ClassificationNode
parent="urn:un:unece:uncefact:icg:registry:ObjectType:RegistryObject:Extrins
icObject:BusinessInformationEntityProperty" code="BBIEP"
lid="urn:un:unece:uncefact:icg:registry:ObjectType:BusinessInformationEntity
Property:BasicBusinessInformationEntityProperty"
id="urn:un:unece:uncefact:icg:registry:ObjectType:BusinessInformationEntityP
roperty:BasicBusinessInformationEntityProperty"/>
      </ClassificationNode>
      <!-- ObjectType for Conent Component Restrict -->
```


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```
682       <ClassificationNode parent="urn:oasis:names:tc:ebxml-
683 regrep:ObjectType:RegistryObject:ExtrinsicObject"
684 code="ConentComponentRestrict"
685 lid="urn:un:unece:uncefact:icg:registry:ObjectType:ContentComponentRestricti
686 on"
687 id="urn:un:unece:uncefact:icg:registry:ObjectType:ContentComponentRestrictio
688 n"/>
689       <!-- ObjectType for Supplementary Component Restriction -->
690       <ClassificationNode parent="urn:oasis:names:tc:ebxml-
691 regrep:ObjectType:RegistryObject:ExtrinsicObject"
692 code="SupplementaryComponentRestriction"
693 lid="urn:un:unece:uncefact:icg:registry:ObjectType:SupplementaryComponentRes
694 triction"
695 id="urn:un:unece:uncefact:icg:registry:ObjectType:SupplementaryComponentRest
696 riction"/>
697       <!-- ObjectType for Conent Component -->
698       <ClassificationNode parent="urn:oasis:names:tc:ebxml-
699 regrep:ObjectType:RegistryObject:ExtrinsicObject" code="ContentComponent"
700 lid="urn:un:unece:uncefact:icg:registry:ObjectType:ContentComponent"
701 id="urn:un:unece:uncefact:icg:registry:ObjectType:ContentComponent"/>
702       <!-- ObjectType for Supplementary Component -->
703       <ClassificationNode parent="urn:oasis:names:tc:ebxml-
704 regrep:ObjectType:RegistryObject:ExtrinsicObject"
705 code="SupplementaryComponent"
706 lid="urn:un:unece:uncefact:icg:registry:ObjectType:SupplementaryComponent"
707 id="urn:un:unece:uncefact:icg:registry:ObjectType:SupplementaryComponent"/>
708       <!-- ObjectType for Status Information -->
709       <ClassificationNode parent="urn:oasis:names:tc:ebxml-
710 regrep:ObjectType:RegistryObject:ExtrinsicObject" code="StatusInformation"
711 lid="urn:un:unece:uncefact:icg:registry:ObjectType:StatusInformation"
712 id="urn:un:unece:uncefact:icg:registry:ObjectType:StatusInformation"/>
713       <!-- ObjectType for Descriptive Information -->
714       <ClassificationNode parent="urn:oasis:names:tc:ebxml-
715 regrep:ObjectType:RegistryObject:ExtrinsicObject"
716 code="DescriptiveInformation"
717 lid="urn:un:unece:uncefact:icg:registry:ObjectType:DescriptiveInformation"
718 id="urn:un:unece:uncefact:icg:registry:ObjectType:DescriptiveInformation"/>
719       <!-- ObjectType for Change History -->
720       <ClassificationNode parent="urn:oasis:names:tc:ebxml-
721 regrep:ObjectType:RegistryObject:ExtrinsicObject" code="ChangeHistory"
722 lid="urn:un:unece:uncefact:icg:registry:ObjectType:ChangeHistory"
723 id="urn:un:unece:uncefact:icg:registry:ObjectType:ChangeHistory"/>
724       <!-- ObjectType for Representation Information -->
725       <ClassificationNode parent="urn:oasis:names:tc:ebxml-
726 regrep:ObjectType:RegistryObject:ExtrinsicObject"
727 code="RepresentationInformation"
728 lid="urn:un:unece:uncefact:icg:registry:ObjectType:RepresentationInformation
729 "
730 id="urn:un:unece:uncefact:icg:registry:ObjectType:RepresentationInformation"
731 />
732       <!-- ########################################################  -->
733       <!-- ##Specifics AssociationType concepts extensions        ## -->
```


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```
734       <!-- ########################################################  -->
735       <!-- Defining Association "ClassifiedBy" object type (used to classify
736 CCs using existing BCs) -->
737       <ClassificationNode parent="urn:oasis:names:tc:ebxml-
738 regrep:AssociationType"
739 lid="urn:un:unece:uncefact:icg:registry:AssociationType:ClassifiedBy"
740 code="ClassifiedBy"
741 id="urn:un:unece:uncefact:icg:registry:AssociationType:ClassifiedBy">
742             <Name>
743                   <LocalizedString charset="UTF-8" value="ClassifiedBy"/>
744             </Name>
745       </ClassificationNode>
746 </RegistryObjectList>
```


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747 # Appendix B - Tips and Tricks

748 # Appendix C - Generating Unique UUIDs

749 # Appendix D - Assigning Logical Id

750 # Appendix E - Organizing Object in RegistryPackages

751

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752 # Appendix F - Revision History

Rev	Date	By Whom	What
0.1	Avril 28, 2005	Ivan Bedini	Created

753

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Appendix G - References

Appendix H - Normative

[ebRIM] ebXML Registry Information Model version 3.0
http://www.oasis-open.org/committees/regrep/documents/3.0/specs/ebRIM.pdf
[ebRS] ebXML Registry Services Specification version 3.0
http://www.oasisopen.org/committees/regrep/documents/3.0/specs/ebRS.pdf
[CCTS] ebXML Core Component Technical Specification v 2.01
http://www.untmg.org/artifacts/CCTS_v2.01_2003-11-15.pdf

[UML] Unified Modeling Language version 1.5
http://www.omg.org/cgi-bin/apps/doc?formal/03-03-01.pdf

Appendix IInformative

[TUTORIAL] ebXMLRegistry – A tutorial v 0.5
[CMRR] Web Content Management Using OASIS ebXML Registry
http://ebxmlrr.sourceforge.net/presentations/xmlEurope2004/04-02-02.pdf
http://ebxmlrr.sourceforge.net/presentations/xmlEurope2004/xmlEurope2004-webcm-ebxmlrr.sxi
http://ebxmlrr.sourceforge.net/presentations/xmlEurope2004/xmlEurope2004-webcm-ebxmlrr.ppt
[IMPL] ebXML Registry 3.0 Implementations
freebXML Registry: A royalty free, open source ebXML Registry Implementation
http://ebxmlrr.sourceforge.net

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