The OASIS/ebXML Registry Technical Committee
Candidate Work Items (CWI)
July11, 2001

The following list of candidate work items were submitted by members of the OASIS/ebXML Registry Technical Committee. Each of these items will be discussed and voted on by the TC. If approved, the item becomes a Work Item of the TC. This list is ordered based on submission date to the TC chair.

CWI1 – INeedAGardner (publish/subscribe)
I do have someone who takes care of my garden, but I'd like to be notified when a new Gardener (Gardening Service) comes to my town, because I hope I might get a better service for the same money.

CWI2 – WeAreNotJustIslands (Federated notions of registries)
I maintain my own Business Info, but I'd like to share some of it with some of my Business Partners. At the same time I'd like to be able (if my Business Partners allow me) to access their Business Info. This should be done using a uniform and consolidated access mechanism to all of our Business Information.

There is no protocol discussed within the specifications to support the communication of queries and commensurate responses from an ebXML Registry to 1:many ebXML Registries. That is, there does not appear to be true support for the concept of the "federated registry".

CWI3 – TheyGoTogether (Transactional processing)
I have many, many things save. Some of them are dependent on each other and some are independent of the others. It is important that those that I mark as dependent get saved or rejected as a whole group. If there are errors during submission, I'd like to know what was saved and what wasn't saved.

CWI4 – Content-based Queries (Indexing Content)
Note: See http://lists.oasis-open.org/archives/regrep/200107/msg00005.html specifying the file ebxmlRRContentQueryProposal.pdf for the complete proposal. This description was written by the TC chair.
End users should be able to query an ebXML Registy based on the information contained within ebXML objects such as BPs, CCs, CPPs, and CPAs. Currently the Registry cannot answer queries such as 'show me all companies with the Role of 'seller' in the industry of Fertilizer'. (The Role attribute is currently hidden in the content of the Collaboration Party Profile (CPP), a repository item.) (A broader question is whether end users should be able to query the information contained in non-ebXML objects.)

CWI5- Authorization Policy Administration
Note: See http://lists.oasis-open.org/archives/regrep/200107/msg00005.html specifying the file ebxmlRRPolicyAdminProposal.pdf for the complete proposal. This description was excerpted from the complete proposal by the TC chair.
Authorization policies enable sharing of private information with selected partners in a public registry. [ebRIM] defined structure for authorization policies; however [ebRS] does not define interfaces to act on the structures. Use cases for authorization policies include (1) limiting read access to a specific set of users or named user and (2) granting write (or delete or modify) access to a specific set of users or named user.

CWI6 – ebXML Registry as a Web Service
Note: See http://lists.oasis-open.org/archives/regrep/200107/msg00005.html specifying the file ebxmlRRWebServiceProposal.pdf for the complete proposal. This description was excerpted from the complete proposal by the TC chair.
Making ebXML Registry available as an abstract web service with additional technology bindings (e.g. SOAP) gives clients more options to interact with an ebXML Registry. Use cases include:
(1) An IT shop wants to write a client program to use the ebXML Registry. They do not have the knowledge or infrastructure for using an ebXML Messaging service to access the registry. However, they have the knowledge to use raw SOAP to access ebXML Registry over SOAP. They use the SOAP binding to ebXML Registry to write a custom SOAP client for the ebXML Registry.
(2) The same IT shop now has access to a WSDL compiler that can automatically generated stubs for accessing the SOAP based ebXML Registry services. The stubs provide simplified access to the ebXML Registry in C++ or Java. The client programmer does not even need to know SOAP. All SOAP specific details are hidden in the bindings generated by the WSDL compiler.
(3) The ebXML Registry team may define additional technology bindings for the abstract services defined by this proposal beyond ebXML Registry and SOAP. For example, an IIOP binding may be defined. These bindings could be layered easily on top of the abstract service definitions in WSDL.

CWI7 – Intrinsic Support for Business Service Interface and Service Bindings
Note: See http://lists.oasis-open.org/archives/regrep/200107/msg00007.html specifying the file RIMEnhancements.doc for the complete proposal. This description was excerpted from the complete proposal by the TC chair.
A registry should support the publishing and discovering of web services. A use case: A client program wants to find out businesses that have compatible server side interfaces so that it can automatically conduct business. Businesses that are prospective caterers to the current client's needs can a priori have published the information about the Services they offer as well as technical specification about how these Services can be invoked in a Registry.

CWI8 – Uniform Handling of Full-featured and Lightweight Taxonomies

Note: See http://lists.oasis-open.org/archives/regrep/200107/msg00007.html specifying the file RIMEnhancements.doc for the complete proposal. This description was excerpted from the complete proposal by the TC chair.
This description was written by the TC chair.
1. It is not clear to end-users when it appropriate to classify an object by creating a Classification object or when it is appropriate to use a slot.
2. End-users want to provide additional information regarding the taxomony that the end-user is utilizing for his slot value.
3. End-users may wish to perform group operations on RegistryEntries that contain the same slot value. This is difficult because slots are contained objects.

CWI9 – Support for Extensibility of non-RegistryEntry Objects
Note: See http://lists.oasis-open.org/archives/regrep/200107/msg00007.html specifying the file RIMEnhancements.doc for the complete proposal. This description was excerpted from the complete proposal by the TC chair.
Common entity objects that are not derived from RegistryEntry may also require support for extensible attributes. An example use case is: OASIS ebXML RIM defines PostalAddress with basic attributes. However, Postal Address in some countries requires custom attributes. Such an extension to PostalAddress can be handled by making slots available to PostalAddress.

CWI10 – Support for User Defined Types for Telephone Number
Note: See http://lists.oasis-open.org/archives/regrep/200107/msg00007.html specifying the file RIMEnhancements.doc for the complete proposal. This description was excerpted from the complete proposal by the TC chair.
Based on the explicit meaning in the title, here are the example use cases:
(1) A user has a PDA that has a contact number - There might be more such devices with their own contact numbers. The RIM need not limit specifying contact numbers for a few well-identified types of contact numbers.
(2) An organization has more than one direct number - This is a very common case and does not need any further elaboration.

CWI11 – Improve handling of enumeration attributes in RIM
Note: See http://lists.oasis-open.org/archives/regrep/200107/msg00007.html specifying the file RIMEnhancements.doc for the complete proposal. This description was excerpted from the complete proposal by the TC chair.
The motivation paragraphs of the proposal provide the set of use cases.
(1) Current RIM allows the potential of having data inconsistency. For example, a RegistryEntry may have an objectType attribute value which is a name String that does not match a valid ClassificationNode representing the enumeration value. By making the RegistryEntry have an objectType attribute value which is an id string referencing a valid ClassificationNode enforces integrity of registry data.

(2) Treating the objectType as an identifier that can be used to access the real ClassificationNode, representing the particular objectType will provide automatic validation.
(3) Registry clients can access the ClassificationNode referenced by the id string under the proposed semantic change. Once the node has been accessed it can be used to navigate to the parent and sibling nodes to get complete access to the domain and range of the enumeration. This will be useful to tools and other client applications.

CWI12 – Reformat of the Specifications
The RIM and RS object calls could be considered Java-centric. This issue may be resolved by working on Farrukh's "abstraction to a web service" proposal. If you all agree that this is covered within FN's proposals, then please scratch this one.

CWI13 – Implicit Rules need to be Made Explicit
There are many implicit semantic rules in the RIM and RS. However, for interoperability sake, we need to make them explicit. Some examples:
Can a classification scheme be added to by someone other than the owner? If so, what does that say about the stability of a classification scheme from the perspective of the owner of the 'root' node?
In a broader sense, can any association be created between two RegistryEntries regardless of who owns them?

CWI14 – Registration of XML Tags
Note: See ***http://lists.oasis-open.org/archives/regrep/200107/msg00016.html*** *specifying the file* **Registration of XML Tags.doc** *for the complete proposal. This description was written by the TC chair.*
End-users want to be able to discover and validate XML tags. The following are example use cases:
(1) An organization wishes to ensure that all of the tags contained within its DTDs/ Schemas are consistent wherever possible. Therefore, the organization registers all of its valid tags in an XML registry. The organization will continue to register new tags over time as its needs require. Because a tag is a registered object, it can be classified and queried as needed.
(2) Upon submission of a DTD/Schema, the XML registry verifies that each of the tags contained within the DTD/Schema exist in the XML registry. If any are found to not exist, the registry can either reject the submission, or automatically register these tags with predetermined default values in the registry entry. The verification and action taken would be determined by global registry settings.
(3) A user needs to create a new DTD/Schema (or update an existing one), and wishes to use registered tags wherever possible. The user queries the XML registry based on name, description, classification, etc. (all the criteria for a registered object) to discover the tags they will use.
(4) A user has located a tag for use in a DTD/Schema/XML Document and would like to examine other DTDs/Schemas in which that tag is used. The user queries

the XML registry using a new association (name not yet determined) that associates a registered XML tag to each DTD/Schema/XML Document in which it occurs.

CWI15 – Classification Scheme Handling
*Note: See **http://lists.oasis-open.org/archives/regrep/200106/msg00018.html** specifying the file **ClassificationScheme.pdf** for the complete proposal. This description was excerpted from the complete proposal by the TC chair.*

An end-user wishes to register his classification scheme and submit it to the Registry's repository for safe-keeping. The end-user has to create a registry entry for each node in the classification scheme.

A user wants to retrieve a classification scheme from the root node as a structured XML document. The GetClassificationTreeRequest (*cf* Section 8.1.2 of [2]) returns only a set of ClassificationNode instances as its Response (*cf* Appendix A of [2] lines 2990-2995). The user would have to reconstruct the tree-structure of the original classification scheme from the parent attribute of each classification node in the set.

CWI16 – Using a Classification from a Classification Scheme External to the Registry
*Note: See **http://lists.oasis-open.org/archives/regrep/200106/msg00018.html** specifying the file **ClassificationScheme.pdf** for the complete proposal. This description was excerpted from the complete proposal by the TC chair.*
A user wishes to register a new object in this Registry X and then classify it by a classification scheme that exists in some other Registry Y. Right now this cannot be done as a Classification in X without first copying, or re-creating, the nodes one wishes to use from Y. There is no way to create a Classification instance in X unless the nodes of the classification scheme also reside in X.

CWI17 – The Attributes on a Classification Node and Classification
*Note: See **http://lists.oasis-open.org/archives/regrep/200106/msg00018.html** specifying the file **ClassificationScheme.pdf** for the complete proposal. This description was excerpted from the complete proposal by the TC chair.*
Users should not have to create and manage the metadata (inherited from RegistryEntry) for each classificationNode that is created and for each Classification that is created.