The IETF XML Registry
draft-mealling-iana-xmlns-registry-03.txt

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Abstract

   This document describes an IANA maintained registry for IETF
   standards which use XML related items such as Namespaces, DTD,
   Schemas, and RDF Schemas.

1. **Introduction**

   Over the past few years XML [2] has become a widely used method for
   data markup. There have already been several IETF Working Groups
   that have produced standards that define XML DTDs, XML Namespaces [3]
   and XML Schemas [4]. Each one of these technologies uses URIs [1] to
   identify their respective objects. For example, a given XML document
   defines its DTD using the DOCTYPE element. This element, like SGML,

has a PUBLIC and a SYSTEM identifier. It is standard practice within
W3C standards to forego the use of the PUBLIC identifier in favor of
'well known' SYSTEM identifiers. There have been several IETF
standards that have simply created non-existent URIs in order to
simply identify but not resolve the SYSTEM identifier for some given
XML document.

This document seeks to standardize this practice by creating an IANA
maintained registry of XML elements so that document authors and
implementors have a well maintained and authoritative location for
their XML elements. As part of this standard, the IANA will both
house the public representation of the document and either include
the URI given by the registrant or assign it a Uniform Resource Name
that can be used as the URI in any URI based identification
components of XML.

2. Registerable Documents

2.1 The Assigned/Registered URI

All elements in this registry will require a URI in order to be
registered. If the registrant wishes to have a URI assigned then a
URN of the form:

    urn:ietf:params:xml:<class>:<id>

will be assigned where <class> is the type of the document being
registered (see below). <id> is a unique id generated by the IANA
based on any means the IANA deems necessary to maintain uniqueness
and persistence. NOTE: in order for a URN of this type to be
assigned, the item being registered MUST have been through the IETF
concensus process. Practically this means it must be documented in
an RFC. The RFC XXXX [6] URN registration template is found in
Section 4.

The IANA will also maintain a file server available via at least HTTP
and FTP that contains all of the registered elements in some publicly
accessible file space (in the same way that all of the IANA's
registered elements are available via
http://www.iana.org/assignments/). While the directory structure of
this server is up to the IANA, it is suggested that the files be
organized by the <class> and the individual files have the <id> as
their filename.

2.2 Document Types

The list of types of XML documents that can be registered with the

IANA are:

dtd -- An XML document that contains a DOCTYPE element can identify
   its DTD via both a PUBLIC identifier and a SYSTEM identifier. The
   URN assigned by the IANA can be used as the value of the SYSTEM
   identifier.

ns -- XML Namespaces [3]are named by a URI. They have no real,
   machine-parseable representation other than the specifications
   that define them. Thus the element registered will be the
   specification (or a pointer to it). The URN assigned by the IANA
   will be the XML Namespace's name.

schema -- XML Schemas [4] are also identified by a URI but their
   contents are machine parseable. The IANA registered document will
   be the XML Schema file. The URN the IANA assigns can be used as
   the URI for the schema.

rdfschema -- The Resource Description Format (RDF) [5] is an XML
   serialization of a connected graph based data model used for
   metadata expression. RDF makes use of schemas for RDF that
   express grammars about relationships between URIs. These grammars
   are identified by URIs. The URN assigned by the IANA can be used
   as the identifying URI.

[3]. Registration Procedures

   Until such time as the IANA requests or implements an automated
   process for the registration of these elements, any specifications
   wishing to do so must make that request part of the IANA
   considerations section of their respective documents. That request
   must be in the form of the following template:

   URI
      The URI that identifies the XML component. If the registrant is
      requesting that the IANA assign a URI then this field should be
      specified as "please assign"

   Registrant Contact
      The individual/organization that is the registration contact for
      the component being registered. Ideally this will be the name and
      pertinent physical and network contact information.

   XML
      The exact XML to be stored in the registry. Unless otherwise
      obvious what the beginning and end of the file are, the document
      should use the text "BEGIN" to mark the beginning of the file and

"END" to mark the end of the file. The IANA will insert any text
between those two strings (minus any page breaks and RFC
formatting inserted by the RFC Editor) into the file kept in the
repository.

[4](#). **IANA Considerations**

This documents seeks to create a rather large registry for which the
IANA (at the direction of the IESG) will be primarily responsible.
The amount of effort required to maintain this registry is not
insignificant and the policies and procedures surrounding any
approval process are non-trivial. The registry is on a First Come
First Served basis but at this time a Specification is Required.
Once the IETF has some experience with this registry these policies
may change.

RFC XXXX [6] specifies that any new registry that requires a name to
be assigned below the 'urn:ietf:params' namespace must specify the
structure of that space in template form. The IANA is directed to
create and maintain this new sub-namespace:

Registry-name: xml

Specification: This document contains the registry specification.
   The namespace is organized with one sub-namespace which is the
   <id>.

Repository: To be assigned according to the guidelines found above.

Index value: The class name

References

   [1]   Berners-Lee, T., Fielding, R. and L. Masinter, "Uniform Resource
         Identifiers (URI): Generic Syntax", RFC 2396, August 1998.

   [2]   WorldWideWeb Consortium, "Extensible Markup Language (XML) 1.0
         (Second Edition)", W3C Recommendation, October 2000,
         <http://www.w3.org/TR/2000/REC-xml-20001006>.

   [3]   WorldWideWeb Consortium, "Namespaces in XML", W3C
         Recommendation, January 1999, <http://www.w3.org/TR/1999/REC-
         xml-names-19990114/>.

   [4]   WorldWideWeb Consortium, "XML Schema Part 0: Primer", W3C
         Recommendation, May 2001, <http://www.w3.org/TR/xmlschema-0/>.

   [5]   WorldWideWeb Consortium, "Resource Description Framework (RDF)
         Model and Syntax Specification", W3C Recommendation, February
         1999, <http://www.w3.org/TR/REC-rdf-syntax/>.

   [6]   Mealling, M., Masinter, L., Hardie, T. and G. Klyne, "An IETF
         URN Sub-namespace for Registered Protocol Parameters", draft-
         mealling-iana-urn-02.txt (work in progress), August 2001.

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