           A Uniform Resource Name (URN) Namespace for Examples

Abstract

   This document defines a Uniform Resource Name (URN) namespace
   identifier enabling the generation of URNs that are appropriate for
   use in documentation and in URN-related testing and experimentation.

Status of This Memo

   This memo documents an Internet Best Current Practice.

   This document is a product of the Internet Engineering Task Force
   (IETF). It represents the consensus of the IETF community. It has
   received public review and has been approved for publication by the
   Internet Engineering Steering Group (IESG). Further information on
   BCPs is available in Section 2 of RFC 5741.

   Information about the current status of this document, any errata,
   and how to provide feedback on it may be obtained at
   http://www.rfc-editor.org/info/rfc6963.

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1. Introduction

   The Uniform Resource Name (URN) technology [RFC2141] provides a way
   to generate persistent, location-independent resource identifiers.
   The primary "scope" of a URN is provided by its namespace identifier
   (NID). As specified in [RFC3406], there are three kinds of NIDs:
   formal, informal, and experimental. Most of the NIDs registered to
   date are formal. As far as is known, the few informal namespaces
   have not been widely used, and the experimental namespaces are by
   definition unregistered.

   The experimental namespaces take the form "X-NID" (where "NID" is the
   desired namespace identifier). Because the "X-" convention has been
   deprecated in general [RFC6648], it seems sensible to achieve the
   same objective in a different way. Therefore, this document
   registers a formal namespace identifier of "example", similar to
   "example.com" and other domain names [RFC2606]. Under the "example"
   NID, specification authors and code developers can mint URNs for use
   in documentation and in URN-related testing and experimentation by
   assigning their own unique Namespace Specific Strings without fear of
   conflicts with current or future actual URNs. Such URNs are intended
   for use as examples in documentation, testing of code for URN and URI
   processing, URN-related experimentation, invalid URNs, and other
   similar uses. They are not intended for testing non-URI code or for
   building higher-level applications for use over the Internet or
   private networks (e.g., as XML namespace names), since it is
   relatively easy to mint URIs whose authority component is a domain
   name controlled by the person or organization that wishes to engage
   in such testing and experimentation.

2. Terminology

   The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT",
   "SHOULD", "SHOULD NOT", "RECOMMENDED", "NOT RECOMMENDED", "MAY", and
   "OPTIONAL" in this document are to be interpreted as described in
   [RFC2119].

3. Completed Namespace Definition Template

3.1. Namespace ID

   The Namespace ID "example" has been assigned.

3.2. Registration Information

   Version 1

   Date: 2013-04-24

3.3. Declared Registrant of the Namespace

   Registering organization: IETF

   Designated contact: IESG, iesg@ietf.org

3.4. Declaration of Syntactic Structure

   URNs that use the "example" NID shall have the following structure:

   urn:example:{NSS}

   The Namespace Specific String (NSS) is a mandatory string of ASCII
   characters [RFC20] that conforms to the URN syntax requirements
   [RFC2141] and provides a name that is useful within the relevant
   documentation example, test suite, or other application.

3.5. Relevant Ancillary Documentation

   See [RFC6648] for information about deprecation of the "X-"
   convention in protocol parameters and identifiers.

3.6. Identifier Uniqueness Considerations

   Those who mint example URNs ought to strive for uniqueness in the
   Namespace Specific String portion of the URN. However, such
   uniqueness cannot be guaranteed through the assignment process.
   Therefore, it is NOT RECOMMENDED for implementers to use example URNs
   for any purposes other than documentation, private testing, and truly
   experimental contexts.

3.7. Identifier Persistence Considerations

   Once minted, an example URN is immutable. However, it is simply a
   string; and there is no guarantee that the documentation, test suite,
   or other application using the URN is immutable.

3.8. Process of Identifier Assignment

   Assignment is completely open, since anyone can mint example URNs for
   use in documentation, private testing, and other experimental
   contexts.

3.9. Process for Identifier Resolution

   Example URNs are not intended to be resolved, and the namespace will
   probably never be registered with a Resolution Discovery System
   (except to simply inform requesters that such URNs are merely
   examples).

3.10. Rules for Lexical Equivalence

   No special considerations; the rules for lexical equivalence
   specified in [RFC2141] apply.

3.11. Conformance with URN Syntax

   No special considerations

3.12. Validation Mechanism

   None

3.13. Scope

   The scope of an example URN is limited to the documentation in which
   it is found, the test in which it is used, the experiment in which it
   appears, etc. Example URNs have no meaning outside such strictly
   limited contexts.

4. Namespace Considerations

   No existing formal namespace enables entities to generate URNs that
   are appropriate for use as examples in documentation and in
   URN-related testing and experimentation. It could be argued that no
   such formal namespace is needed, given that experimental namespaces
   can be minted at will. However, experimental namespaces run afoul of
   the trend away from using the "X-" convention in the names of
   protocol parameters and identifiers [RFC6648]. Additionally, in
   practice, specification authors often mint examples using fake NIDs
   that go unregistered because they are never intended to be used. To
   minimize the possibility of confusion, use of this dedicated example
   namespace is recommended for generating example URNs.

5. Community Considerations

   The "example" NID is intended to provide a clean, easily recognizable
   space for minting examples to be used in documentation and in
   URN-related testing and experimentation. The NSS is best as a unique
   string, generated by the person, organization, or other entity that
   creates the documentation, test suite, or other application. There
   is no issuing authority for example URNs, and it is not intended that
   they can be resolved in any meaningful way.

   The "example" NID does not obviate the need to coordinate with
   issuing authorities for existing namespaces (e.g., minting
   "urn:example:xmpp:foo" instead of requesting issuance of
   "urn:xmpp:foo"), to register new namespace identifiers if existing
   namespaces do not match one's desired functionality (e.g., minting
   "urn:example:sha-1:29ead03e784b2f636a23ffff95ed12b56e2f2637" instead
   of registering the "sha-1" NID), or to respect the basic spirit of
   URN NID assignment (e.g., setting up shadow NIDs such as
   "urn:example:MyCompany:*" instead of using, say, HTTP URIs).

6. Security Considerations

   This document introduces no additional security considerations beyond
   those associated with the use and resolution of URNs in general.

7. IANA Considerations

   This document defines a URN NID registration of "example", which IANA
   has added to the "Formal URN Namespaces" registry. The completed
   registration template can be found in Section 3.

8. References

8.1. Normative References

   [RFC20]   Cerf, V., "ASCII format for network interchange", RFC 20,
               October 1969.

   [RFC2119]   Bradner, S., "Key words for use in RFCs to Indicate
               Requirement Levels", BCP 14, RFC 2119, March 1997.

   [RFC2141]   Moats, R., "URN Syntax", RFC 2141, May 1997.

   [RFC3406]   Daigle, L., van Gulik, D., Iannella, R., and P. Faltstrom,
               "Uniform Resource Names (URN) Namespace Definition
               Mechanisms", BCP 66, RFC 3406, October 2002.

8.2. Informative References

   [RFC2606]   Eastlake, D. and A. Panitz, "Reserved Top Level DNS
               Names", BCP 32, RFC 2606, June 1999.

   [RFC6648]   Saint-Andre, P., Crocker, D., and M. Nottingham,
               "Deprecating the "X-" Prefix and Similar Constructs in
               Application Protocols", BCP 178, RFC 6648, June 2012.

Appendix A. Acknowledgements

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