Network Working Group Internet-Draft Intended status: Best Current Practice Expires: September 11, 2013

A Uniform Resource Name (URN) Namespace for Examples draft-saintandre-urn-example-04

Abstract

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

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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 NID: 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 private testing by assigning their own unique namespace-specific strings.

2. Completed Namespace Definition Template

<u>2.1</u>. Namespace ID

The Namespace ID "example" is requested.

<u>2.2</u>. Registration Information

Version 1

Date: [to be assigned]

2.3. Declared Registrant of the Namespace

Registering organization: IETF

Saint-Andre

Designated contact: IESG, iesg@ietf.org

2.4. 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 that provides a name that is useful within the relevant documentation example, test suite, or other application.

<u>2.5</u>. Relevant Ancillary Documentation

See [<u>RFC6648</u>] for information about deprecation of the "x-" convention in protocol parameters and identifiers.

<u>2.6</u>. 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. As a result, implementers are counselled against using example URNs for any purposes other than documentation, private testing, and truly experimental contexts.

<u>2.7</u>. 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.

2.8. Process of Identifier Assignment

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

<u>2.9</u>. 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 (unless to simply inform requesters that such URNs are merely examples).

2.10. Rules for Lexical Equivalence

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

2.11. Conformance with URN Syntax

No special considerations

2.12. Validation Mechanism

None

2.13. 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 strictlylimited contexts.

3. Namespace Considerations

No existing formal namespace enables entities to generate URNs that are appropriate for use as examples in documentation, in private testing, and the like. 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.

<u>4</u>. Community Considerations

The "example" NID is intended to provide a clean, easily-recognizable space for minting examples to be used in documentation, in private testing, and the like. The Namespace Specific String (NSS) needs to be 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 they cannot 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).

<u>5</u>. Security Considerations

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

<u>6</u>. IANA Considerations

This document defines a URN NID registration of "example", to be added to the Uniform Resource Names (URN) Formal Namespaces registry. The completed registration template can be found in under <u>Section 2</u>.

References

<u>7.1</u>. Normative References

- [RFC20] Cerf, V., "ASCII format for network interchange", <u>RFC 20</u>, October 1969.
- [RFC2141] Moats, R., "URN Syntax", <u>RFC 2141</u>, May 1997.
- [RFC3406] Daigle, L., van Gulik, D., Iannella, R., and P. Faltstrom, "Uniform Resource Names (URN) Namespace Definition Mechanisms", <u>BCP 66</u>, <u>RFC 3406</u>, October 2002.

<u>7.2</u>. Informative References

- [RFC2606] Eastlake, D.E. and A. Panitz, "Reserved Top Level DNS Names", <u>BCP 32</u>, <u>RFC 2606</u>, June 1999.
- [RFC6648] Saint-Andre, P., Crocker, D., and M. Nottingham, "Deprecating the "X-" Prefix and Similar Constructs in Application Protocols", <u>BCP 178</u>, <u>RFC 6648</u>, June 2012.

Appendix A. Acknowledgements

Thanks to Martin Duerst, Barry Leiba, Julian Reschke, and Jim Schaad for their feedback.

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