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A Uniform Resource Name (URN) Namespace for CableLabs

Abstract

This document describes the Namespace Identifier (NID) 'cablelabs' for Uniform Resource Names (URNs) used to identify resources published by Cable Television Laboratories, Inc. (CableLabs). CableLabs specifies and manages resources that utilize this URN identification model. Management activities for these and other resource types are handled by the manager of the CableLabs' Assigned Names and Numbers registry.

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1. Introduction

CableLabs is a non-profit research and development consortium that is dedicated to pursuing new cable telecommunications technologies and to helping its cable operator members integrate those technical advancements into their business objectives. Within CableLabs, specification activities are organized into projects such as DOCSIS(R), PacketCable(TM), and OpenCable(TM), and technical work is conducted within focus teams. Product vendors, manufacturers, and cable operator members are invited to join the focus teams that create technical specifications.

Occasionally, CableLabs specification efforts require identifiers in a managed namespace so that they are unique and persistent. To ensure that the uniqueness is absolute, the registration of a specific Uniform Resource Name (URN) [RFC2141] Namespace Identifier

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(NID) for use by CableLabs is being specified in this document, in full conformance with the NID registration process specified in [RFC3406].

2. URN Specification for CableLabs

Namespace ID: cablelabs

Registration information:

registration version number: 1 registration date: 2011-04-18

Declared registrant of the namespace:

Registering organization

Name: Cable Television Laboratories, Inc.

Address: 858 Coal Creek Circle, Louisville, CO 80027, USA

Designated contact

Role: Manager, Standards

Email: ietf_standards@cablelabs.com

Declaration of syntactic structure:

The Namespace Specific String (NSS) of all URNs that use the "cablelabs" NID will have the following structure:

{CLclass}:{CLClassSpecificString}

The "CLclass" is a US-ASCII string that conforms to the URN syntax requirements specified in [RFC2141] and defines a specific class of resource type. Each class will have a specific labeling scheme that is covered by "CLClassSpecificString", which also conforms to the naming requirements of [RFC2141].

CableLabs maintains the CableLabs' Assigned Names and Numbers [CANN] specification that will contain the assignment of CableLabs' resource classes and the specific registration values assigned for each resource class.

Relevant ancillary documentation:

CableLabs publishes information regarding the registered resources in the CableLabs' Assigned Names and Numbers specification ([CANN]).

Identifier uniqueness considerations:

CableLabs will manage resource classes using the "cablelabs" NID and will be the authority for managing resources and associated subsequent strings. CableLabs is expected to guarantee the uniqueness of the strings themselves, or it may permit secondary responsibility for certain defined resources.

CableLabs could allow the use of experimental type values for testing purposes only. Note that using experimental types may create collisions as multiple users may use the same values for resources and specific strings.

Identifier persistence considerations:

CableLabs will update the CableLabs' Assigned Names and Numbers specification ([CANN]) to document the registered resources that use the "cablelabs" NID.

Process of identifier assignment:

CableLabs will provide procedures for registration of each type of resource that it maintains. Each such resource may have three types of registration activities:

- Registered values associated with CableLabs documents or services
- 2. Registration of values or sub-trees to other entities
- 3. Name models for use in experimental purposes

Process for identifier resolution:

The namespace is not listed with a resolution discovery system; this is not applicable for this URN registration.

Rules for lexical equivalence:

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

Conformance with URN syntax:

No special considerations.

Validation mechanism:

None specified. URN assignment will be handled by procedures implemented in support of CableLabs activities.

Scope:

Global

3. Example

The following example represents a hypothetical URN that could be assigned by CableLabs.

urn:cablelabs:packetcable-example:ue:rst-sample

This example defines the URN to be used for User Equipment (UE) conforming to the sample Residential SIP Telephony (RST) application specified within CableLabs' PacketCable RST specification suite.

4. Namespace Considerations

CableLabs develops specifications that may require the use of data models. URN Namespaces are key constructs to manage the definitions of those data models reliably with persistence and uniqueness.

The use of URNs should also help specification authors to maintain different versions of URNs and dependencies between URNs across different versions of CableLabs specifications if they so wish.

5. Community Considerations

Participants involved in the development and usage of CableLabs specifications and cable industry deployments will benefit from the publication of this namespace by providing consistent and reliable names for the XML namespaces, schema locations, and similar identifiers of physical data models published within CableLabs specifications.

The CableLabs specifications are publicly available and are licensed to manufacturers on a nondiscriminatory basis. CableLabs will maintain the allocation of resources for the "cablelabs" NID within the following specification: "CableLabs' Assigned Names and Numbers" [CANN], which will be publicly available for viewing. CableLabs will also maintain the corresponding specifications where the registered resources are referenced or used.

6. IANA Considerations

This document adds a new entry ("cablelabs") in the urn-namespaces registry. This is the defining document. The entry can be found in the "Uniform Resource Names (URN) Namespaces" registry available from the IANA site (http://www.iana.org) and any associated mirrors.

7. Security Considerations

There are no additional security considerations other than those normally associated with the use and resolution of URNs in general, which are described in [RFC1737], [RFC2141], and [RFC3406].

8. Acknowledgements

The authors wish to thank Alfred Hoenes, Ted Hardie, and Peter Saint-Andre for their useful comments and suggestions. The authors also acknowledge that the text from [RFC4358] formed the basis for the initial version of this document.

9. References

9.1. Normative References

- [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.

9.2. Informative References

- [CANN] Cable Television Laboratories Inc., "CableLabs' Assigned Names and Numbers", 2011, http://www.cablelabs.com/specifications/cpSpecs.html.
- [RFC1737] Sollins, K. and L. Masinter, "Functional Requirements for Uniform Resource Names", RFC 1737, December 1994.
- [RFC4358] Smith, D., "A Uniform Resource Name (URN) Namespace for the Open Mobile Alliance (OMA)", RFC 4358, January 2006.

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