A Uniform Resource Name (URN) Namespace for the Hybrid Broadcast Broadband TV (HbbTV) Association

Abstract

   This document describes a Uniform Resource Name (URN) namespace for
   the Hybrid Broadcast Broadband TV (HbbTV) Association for naming
   persistent resources defined within HbbTV specifications. Example
   resources include technical documents and specifications, Extensible
   Markup Language (XML) Schemas, classification schemes, XML Document
   Type Definitions (DTDs), namespaces, style sheets, media assets, and
   other types of resources produced or managed by HbbTV.

Status of This Memo

   This document is not an Internet Standards Track specification; it is
   published for informational purposes.

   This document is a product of the Internet Engineering Task Force
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1. Introduction

   HbbTV (Hybrid Broadcast Broadband TV) is a new industry standard
   providing an open and business-neutral technology platform that
   seamlessly combines TV services delivered via broadcast with services
   delivered via broadband and also enables access to Internet-only
   services for consumers using connected TVs and set-top boxes. The
   founding members of the HbbTV consortium together with a large group
   of supporters jointly developed the HbbTV specification to create a
   global standard for hybrid entertainment services. Version 1.2.1 of
   this specification was published by ETSI as ETSI TS 102 796 [HbbTV12]
   in November 2012.

   The HbbTV specification is based on existing standards and web
   technologies including the Open IPTV Forum (OIPF), Consumer
   Electronics Association (CEA), Digital Video Broadcasting (DVB), and
   World Wide Web Consortium (W3C). The standard provides the features
   and functionality required to deliver feature-rich broadcast and
   Internet services. Utilizing standard Internet technology, it

enables rapid application development. It defines minimum
requirements simplifying the implementation in devices and leaving
room for differentiation; this limits the investment required by
consumer electronics manufacturers to build compliant devices. The
HbbTV Association is a pan-European initiative aimed at providing an
alternative to proprietary technologies and delivering an open
platform for broadcasters to deliver value-added on-demand services
to the end consumer.

HbbTV has a wide range of supporters from across the broadcaster and
consumer electronics industries.

HbbTV would like to assign unique, permanent, location-independent
names based on URNs for some resources it produces or manages. These
URNs will be constructed according to the URN syntax defined in
[RFC2141]. This namespace specification is for a formal namespace to
be registered according to the procedures set forth in [RFC3406].

2. URN Specification for the HbbTV Namespace Identifier (NID)

This section provides the information required to register a formal
namespace according to the registration procedure defined in
[RFC3406]. The URNs conform to the syntax defined in [RFC2141].

Namespace ID:

   "hbbtv"

Registration Information:

   Version: 1

   Date: 2014-08-07

Declared registrant of the namespace:

   Name: Mr. Peter Macavock

   Title: Administrator

   Affiliation: HbbTV Association

   Address: L'Ancienne-Route 17A, CH-1218 Grand-Saconnex,
                  Switzerland

   Phone: + 41 22 717 27 14

   Email: info@hbbtv.org

Declaration of structure:

   URNs assigned by HbbTV will have the following structure based on
   the organizational structure of the resources specified in the
   HbbTV specifications:

      urn:hbbtv:<NSS>

   where the syntax of "<NSS>" is specified in Section 2.2 of the URN
   Syntax requirements [RFC2141].

   The individual URNs will be assigned by HbbTV through the process
   of development of the HbbTV specifications.

Relevant ancillary documentation:

   None.

Identifier uniqueness considerations:

   HbbTV will establish unique identifiers as appropriate and will
   ensure that an assigned string is never reassigned.

Identifier persistence considerations:

   HbbTV is committed to maintaining the accessibility and
   persistence of all resources that are officially assigned URNs by
   the organization. The registration tables and information will be
   published and maintained by HbbTV on its web site.

Process of identifier assignment:

   The assignment of identifiers is fully controlled and managed by
   HbbTV.

Process of identifier resolution:

   Not applicable; the "hbbtv" namespace is not listed with a
   Resolution Discovery System.

Rules for Lexical Equivalence:

   The "<NSS>" is case-insensitive.

Conformance with URN Syntax:

   No special considerations.

   Validation mechanism:

      None specified. URN assignment will be managed completely and
      published by HbbTV.

   Scope:

      Global

3. Examples

   The following example of schemas and classification schemes is taken
   from the current HbbTV specification [HbbTV12].

      urn:hbbtv:dash:profile:isoff-live:2012

   The following examples of schemas and classification schemes are
   under consideration for inclusion in a future version of the HbbTV
   specification currently under development.

      urn:hbbtv:sync:timeline:ebu-tt-d

      urn:hbbtv:config:oitf:oitfCapabilities:2014-1

4. Namespace Considerations

   A unique formal namespace is required by HbbTV in order to specify
   how the various existing standards can be linked in order to create a
   true end-to-end ecosystem for standards-based IPTV deployments and to
   provide the necessary system-wide resources.

   URN assignment procedures:

      The individual URNs shall be assigned through the process of
      development of HbbTV specifications by the Hybrid Broadcast
      Broadband TV Association. The latest information about HbbTV-
      defined specifications can always be found at the owner's website
      at

         <https://hbbtv.org/pages/about_hbbtv/specification.php>

   URN resolution/delegation:

      The resolution and delegation shall be determined through the
      process of development of specifications by the HbbTV Association.

Since the implementations envisaged cover a wide range of devices with quite different access methods and capabilities, no single resolution or delegation mechanism can be referenced in this document.

Type of resources to be identified:

Types of resources to be identified include XML schema definition files, classification schemes, and identification systems defined and published by HbbTV. These resources being identified constitute a metadata system to describe digital multimedia broadcast services or content conveyed as part of such services.

The latest HbbTV-defined specifications can always be found at

<https://hbbtv.org/pages/about_hbbtv/specification.php>

5. Community Considerations

URNs defined by HbbTV will be used by implementers of hybrid broadcast/broadband systems, services, products, and applications based on the HbbTV specification. They are an essential component of the open ecosystem that is being facilitated by HbbTV.

HbbTV specifications are developed through a consensus-based process by member organizations representing most aspects of the digital television ecosystem. A full list of HbbTV members can be found at

<http://hbbtv.org/pages/hbbtv_association/members.php>

6. 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].

This document registers a namespace for URNs. HbbTV may assign special meaning to certain of the characters of the Namespace Specific String (NSS) in its specifications. Any security consideration resulting from such assignment is outside the scope of this document.

7. IANA Considerations

This document defines a URN NID registration of "hbbtv". IANA has included it in the "Uniform Resource Names (URN) Namespaces" registry.

8. References

8.1. Normative References

[RFC1737]   Sollins, K. and L. Masinter, "Functional Requirements for
            Uniform Resource Names", RFC 1737, December 1994,
            <http://www.rfc-editor.org/info/rfc1737>.

[RFC2141]   Moats, R., "URN Syntax", RFC 2141, May 1997,
            <http://www.rfc-editor.org/info/rfc2141>.

[RFC3406]   Daigle, L., van Gulik, D., Iannella, R., and P. Faltstrom,
            "Uniform Resource Names (URN) Namespace Definition
            Mechanisms", BCP 66, RFC 3406, October 2002,
            <http://www.rfc-editor.org/info/rfc3406>.

8.2. Informative References

[HbbTV12]   ETSI, "Hybrid Broadcast Broadband TV", ETSI TS 102 796
            v1.2.1, November 2012.

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