

Internet Engineering Task Force (IETF)  
Request for Comments: 8057  
Category: Informational  
ISSN: 2070-1721

B. Stark  
AT&T  
D. Sinicrope  
Ericsson  
W. Lupton  
Broadband Forum  
January 2017

## Uniform Resource Name (URN) Namespaces for Broadband Forum

### Abstract

This document describes the Namespace Identifiers (NIDs) "bbf", "broadband-forum-org", and "dslforum-org" for Uniform Resource Names (URNs) used to identify resources published by Broadband Forum (BBF). BBF specifies and manages resources that utilize these three URN identification models. Management activities for these and other resource types are handled by BBF.

### 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 (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). Not all documents approved by the IESG are a candidate for any level of Internet Standard; see Section 2 of RFC 7841.

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/rfc8057>.

Copyright Notice

Copyright (c) 2017 IETF Trust and the persons identified as the document authors. All rights reserved.

This document is subject to BCP 78 and the IETF Trust’s Legal Provisions Relating to IETF Documents (http://trustee.ietf.org/license-info) in effect on the date of publication of this document. Please review these documents carefully, as they describe your rights and restrictions with respect to this document. Code Components extracted from this document must include Simplified BSD License text as described in Section 4.e of the Trust Legal Provisions and are provided without warranty as described in the Simplified BSD License.

Table of Contents

- 1. Introduction . . . . . 2
  - 1.1. Terminology . . . . . 3
- 2. bbf Registration . . . . . 3
- 3. broadband-forum-org Registration . . . . . 5
- 4. dslforum-org Registration . . . . . 7
- 5. Examples . . . . . 8
- 6. Namespace Considerations . . . . . 9
- 7. Community Considerations . . . . . 9
- 8. IANA Considerations . . . . . 9
- 9. Security Considerations . . . . . 9
- 10. References . . . . . 10
  - 10.1. Normative References . . . . . 10
  - 10.2. Informative References . . . . . 10
- Acknowledgements . . . . . 11
- Authors’ Addresses . . . . . 11

1. Introduction

Broadband Forum (BBF) is a non-profit industry alliance driving broadband wireline solutions and empowering converged packet networks worldwide to better meet the needs of vendors, service providers, and their customers. BBF develops multi-service broadband packet networking specifications that address interoperability, architecture, and management. Its work enables home, business, and converged broadband services, encompassing customer, access, and backbone networks.

Occasionally, BBF 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 three specific

Uniform Resource Name (URN) [RFC2141] Namespace Identifiers (NIDs) for use by BBF are being specified in this document, in full conformance with the NID registration process specified in [RFC3406].

The "bbf" NID is for new work efforts related to data models for protocols other than the Customer Premises Equipment (CPE) WAN Management Protocol (CWMP) [TR-069]. The "broadband-forum-org" and "dslforum-org" NIDs are used for all data models related to CWMP [TR-069]. BBF has used the latter two NIDs for many years without formally registering them and has published widely implemented specifications that use these NIDs. Use of the "dslforum-org" NID started prior the organization's 2008 name change from DSL Forum to Broadband Forum.

### 1.1. Terminology

BBF	Broadband Forum
NID	Namespace Identifier
NSS	Namespace Specific String
RDS	Resolution Discovery System
URN	Uniform Resource Name

## 2. bbf Registration

Namespace ID:

bbf

Registration Information:

registration version number: 1  
registration date: 2016-12-05

Declared registrant of the namespace:

Registering organization

Name: Broadband Forum  
Address: 5177 Brandin Court, Fremont, CA 94538, USA

Designated contact

Role: Manager, Namespace  
Email: help@broadband-forum.org

**Declaration of syntactic structure:**

The syntax of namespace-specific strings for the "bbf" namespace is <NSS> in [RFC2141].

**Relevant ancillary documentation:**

BBF publishes information regarding the registered resources on the BBF Assigned Resources web page [BBF-RESOURCES].

**Identifier uniqueness considerations:**

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

BBF may, at the namespace resource manager's discretion, designate/allocate 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:**

BBF will update the BBF Assigned Resources web page [BBF-RESOURCES] to document the registered resources that use the "bbf" NID.

**Process of identifier assignment:**

BBF procedures for URN assignment are provided at [BBF-RESOURCES].

**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 BBF activities.

## Scope:

Global

## 3. broadband-forum-org Registration

## Namespace ID:

broadband-forum-org

## Registration Information:

registration version number: 1  
registration date: 2016-12-05

## Declared registrant of the namespace:

## Registering organization

Name: Broadband Forum  
Address: 5177 Brandin Court, Fremont, CA 94538, USA

## Designated contact

Role: Manager, Namespace  
Email: help@broadband-forum.org

## Declaration of syntactic structure:

The syntax of namespace-specific strings for the  
"broadband-forum-org" namespace is <NSS> in [RFC2141].

## Relevant ancillary documentation:

BBF publishes information regarding the registered resources on  
the BBF Assigned Resources web page [BBF-RESOURCES].

## Identifier uniqueness considerations:

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

BBF may, at the namespace resource manager's discretion, designate/allocate 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:

BBF will update the BBF Assigned Resources web page [BBF-RESOURCES] to document the registered resources that use the "broadband-forum-org" NID.

## Process of identifier assignment:

BBF procedures for URN assignment are provided at [BBF-RESOURCES].

## 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 BBF activities.

## Scope:

Global

#### 4. dslforum-org Registration

Namespace ID:

dslforum-org

Registration Information:

registration version number: 1  
registration date: 2016-12-05

Declared registrant of the namespace:

Registering organization

Name: Broadband Forum  
Address: 5177 Brandin Court, Fremont, CA 94538, USA

Designated contact

Role: Manager, Namespace  
Email: help@broadband-forum.org

Declaration of syntactic structure:

The syntax of namespace-specific strings for the "dslforum-org" namespace is <NSS> in [RFC2141].

Relevant ancillary documentation:

BBF publishes information regarding the registered resources on the BBF Assigned Resources web page [BBF-RESOURCES].

Identifier uniqueness considerations:

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

BBF may, at the namespace resource manager's discretion, designate/allocate 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:**

BBF will update the BBF Assigned Resources web page [BBF-RESOURCES] to document the registered resources that use the "dslforum-org" NID.

**Process of identifier assignment:**

BBF procedures for URN assignment are provided at [BBF-RESOURCES].

**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 BBF activities.

**Scope:**

Global

**5. Examples**

The following examples represent hypothetical URNs that could be assigned by BBF.

urn:broadband-forum-org:cwmp:datamodel-1-5

urn:bbf:yang:fast

The first of these defines an URN to be used for CPE WAN Management Protocol (CWMP) data models conforming to rules for BBF's CWMP suite of specifications.



## 6. Namespace Considerations

BBF develops various specifications that 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 BBF specifications, if they so wish.

Three NIDs are defined. The "broadband-forum-org" and "dslforum-org" NIDs have been used for many years by BBF without formal registration. (Broadband Forum changed its name from DSL Forum in 2008.) As they are referenced by multiple BBF specifications currently in common use, BBF is formalizing them. The new "bbf" NID will be used for new work efforts that are not enhancements, updates, or extensions to work that currently makes use of the "broadband-forum-org" and "dslforum-org" NIDs.

## 7. Community Considerations

Participants involved in the development and usage of Broadband Forum specifications 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 BBF specifications.

The BBF specifications are publicly available and are licensed to manufacturers on a reasonable and nondiscriminatory basis. BBF will maintain the allocation of resources for the "bbf", "broadband-forum-org", and "dslforum-org" NIDs at the following publicly viewable location: [BBF-RESOURCES]. BBF will also maintain the corresponding specifications where the registered resources are referenced or used.

## 8. IANA Considerations

This document adds three new entries in the formal urn-namespaces registry. The namespaces are "bbf", "broadband-forum-org", and "dslforum-org". This is the defining document. The entries can be found at <<http://www.iana.org/assignments/urn-namespaces>> and any associated mirrors.

## 9. Security Considerations

There are no additional security considerations other than those normally associated with the use and resolution of URNs in general.

## 10. References

### 10.1. Normative References

- [RFC2141] Moats, R., "URN Syntax", RFC 2141, DOI 10.17487/RFC2141, 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, DOI 10.17487/RFC3406, October 2002, <<http://www.rfc-editor.org/info/rfc3406>>.

### 10.2. Informative References

- [BBF-RESOURCES] Broadband Forum, "Broadband Forum Assigned Names", 2016, <<http://www.broadband-forum.org/assignments>>.
- [RFC6289] Cardona, E., Channabasappa, S., and J-F. Mule, "A Uniform Resource Name (URN) Namespace for CableLabs", RFC 6289, DOI 10.17487/RFC6289, June 2011, <<http://www.rfc-editor.org/info/rfc6289>>.
- [TR-069] Broadband Forum, "CPE WAN Management Protocol", <<http://www.broadband-forum.org/technical/trlist.php>>.

## Acknowledgements

The authors acknowledge that the text from [RFC6289] formed the basis for the initial version of this document. Review and guidance from Mahesh Jethanandani, Al Morton, Joel Halpern, and Yaron Sheffer were much appreciated.

## Authors' Addresses

Barbara Stark  
AT&T  
Atlanta, GA  
United States of America

Email: [barbara.stark@att.com](mailto:barbara.stark@att.com)

David Sinicrope  
Ericsson  
Cary, NC  
United States of America

Email: [david.sinicrope@ericsson.com](mailto:david.sinicrope@ericsson.com)

William Lupton  
Broadband Forum  
United Kingdom

Email: [wlupton@broadband-forum.org](mailto:wlupton@broadband-forum.org)

