

Network Working Group
Internet-Draft
Intended status: Informational
Expires: April 25, 2019

M. Jethanandani
VMware
M. Angel Reina Ortega
ETSI
October 22, 2018

URN Namespace for ETSI Documents
draft-mahesh-etsi-urn-04

Abstract

This document describes the Namespace Identifier (NID) 'etsi' for Uniform Resource Names (URNs) used to identify resources published by European Telecommunications Standards Institute (<http://etsi.org>). ETSI specifies and manages resources that utilize this URN identification model. Management activities for these and other resources types are handled by the manager of the ETSI Protocol Naming and Numbering Service (PNNS).

Status of This Memo

This Internet-Draft is submitted in full conformance with the provisions of [BCP 78](#) and [BCP 79](#).

Internet-Drafts are working documents of the Internet Engineering Task Force (IETF). Note that other groups may also distribute working documents as Internet-Drafts. The list of current Internet-Drafts is at <https://datatracker.ietf.org/drafts/current/>.

Internet-Drafts are draft documents valid for a maximum of six months and may be updated, replaced, or obsoleted by other documents at any time. It is inappropriate to use Internet-Drafts as reference material or to cite them other than as "work in progress."

This Internet-Draft will expire on April 25, 2019.

Copyright Notice

Copyright (c) 2018 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 (<https://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	2
2.	URN Specification for ETSI	3
3.	Examples	5
4.	Security Considerations	5
5.	IANA Considerations	6
6.	References	6
6.1.	Normative References	6
6.2.	Informative References	6
	Authors' Addresses	7

[1.](#) Introduction

ETSI is a nonprofit international industry standards organization, that produces globally acceptable standards for Information & Communication Technologies including fixed, mobile, radio, broadcast, internet, aeronautical and other areas.

As part of these specifications efforts, there is a need to identify identifiers in a managed namespace that are unique and persistent. To ensure that this namespace's uniqueness is absolute, a registration of a specific Uniform Resource Names (URNs) [[RFC8141](#)] Namespace Identifier (NID) for use by ETSI is being specified in this document, in full conformance with the NID registration process specified in the document.

[1.1.](#) Terminology

Acronym	Meaning
ETSI	European Telecommunications Standards Institute
EUN	ETSI URN Namespace
NID	Namespace Identifier
NSS	Namespace Specific String
PNNS	ETSI Protocol Name and Numbering Service
RDS	Resolution Discovery System
URI	Uniform Resource Identifier
URN	Uniform Resource Name

2. URN Specification for ETSI

Namespace Identifier:

etsi

Version:

1

Date:

2018-10-22

Registrant:

ETSI Protocol Naming and Numbering Service (PNNS)

European Telecommunications Standards Institute (ETSI)

650, Route des Lucioles, Sophia Antipolis 06560, France

pnns@etsi.org

Purpose:

The Namespace Identifier (NID) 'etsi' for Uniform Resource Names (URNs) will be used to identify resources published by ETSI. These

might include published standards or protocols that it defines and which make use of URNs. These namespaces are globally unique. The URN namespace will be used in public networks by clients to configure and manage resources in the network. It is the servers that will enforce the uniqueness of the namespaces by using the namespace and the XPath associated with the managed node in the network, when accessing a resource.

Syntax:

The syntax of namespace specific strings for the 'etsi' namespace is <NSS> in Uniform Resource Names (URNs) [[RFC8141](#)].

The entire URN is case-insensitive.

Assignment:

ETSI will maintain the list of registered subtrees that use the "etsi" NID at <https://portal.etsi.org/PNNS/GenericAllocation/ETSIURNNamespace.aspx>, in the ETSI URN Namespace (EUN) registry. It will describe the <NSS>, how the namespaces will be allocated, and how experimental namespaces can be used within the allocated URN.

ETSI will manage resource classes using the "etsi" NID and will be the authority for managing resources and associated subsequent strings. ETSI will guarantee the uniqueness of the strings themselves, or it may permit secondary responsibility for certain defined resources. Once a subtree assignment is made, it cannot be reassigned.

ETSI may allow for use of experimental type values in specific subtrees, for testing purposes only. Note that using experimental types may create collision as multiple users may use the same values for different resources and specific strings. All experimentation must follow the guidance set forth in A Uniform Resource Name (URN) Namespace for Examples [[RFC6963](#)].

Security and Privacy:

If a namespace is URN-equivalent to another namespace used by a server, as per the rules specified in [Section 3.1](#) of URNs [[RFC8141](#)], [Section 6.1](#) of URI Generic Syntax [[RFC3986](#)], and the lexical rules specified in this document, the network management request is rejected. For example, this request could be in the form of a network management request using YANG [[RFC7950](#)].

The YANG modules that will initially use this URN namespace define a schema for data that is designed to be accessed via a network management protocol such as NETCONF [RFC6241] or RESTCONF [RFC8040]. The lowest NETCONF layer is the secure transport layer, and the mandatory-to-implement secure transport is Secure Shell (SSH) [RFC6242]. The lowest RESTCONF layer is HTTPS, and the mandatory-to-implement secure transport is TLS [RFC8446].

Interoperability:

There are no known interoperability issues at this time.

Resolution:

It is not foreseen that URNs within this namespace will undergo resolution.

Documentation:

Documentation can be found at
[https://portal.etsi.org/PNNS/GenericAllocation/
ETSIURNNamespace.aspx](https://portal.etsi.org/PNNS/GenericAllocation/ETSIURNNamespace.aspx).

3. Examples

The following are examples of URNs that ETSI is looking to assign:

urn:etsi:yang:etsi-nfv

urn:etsi:yang:etsi-nfv-vnf

urn:etsi:yang:etsi-nfv-pnf

Although all of these examples are related to network management with YANG [RFC7950], URNs related to other kinds of resources might be assigned in the future, in which case a "sub-identifier" other than "yang" might be created.

4. Security Considerations

There are no additional security considerations other than those described above, and are normally associated with the use and resolution of URNs in general, which are described in Function Requirements for URN [RFC1737], Uniform Resource Names (URNs) [RFC8141].

5. IANA Considerations

IANA is requested to register the formal URN namespace "etsi" using the template given above in [Section 2](#).

6. References

6.1. Normative References

- [RFC1737] Sollins, K. and L. Masinter, "Functional Requirements for Uniform Resource Names", [RFC 1737](#), DOI 10.17487/RFC1737, December 1994, <<https://www.rfc-editor.org/info/rfc1737>>.
- [RFC6963] Saint-Andre, P., "A Uniform Resource Name (URN) Namespace for Examples", [BCP 183](#), [RFC 6963](#), DOI 10.17487/RFC6963, May 2013, <<https://www.rfc-editor.org/info/rfc6963>>.
- [RFC8141] Saint-Andre, P. and J. Klensin, "Uniform Resource Names (URNs)", [RFC 8141](#), DOI 10.17487/RFC8141, April 2017, <<https://www.rfc-editor.org/info/rfc8141>>.

6.2. Informative References

- [RFC3986] Berners-Lee, T., Fielding, R., and L. Masinter, "Uniform Resource Identifier (URI): Generic Syntax", STD 66, [RFC 3986](#), DOI 10.17487/RFC3986, January 2005, <<https://www.rfc-editor.org/info/rfc3986>>.
- [RFC6241] Enns, R., Ed., Bjorklund, M., Ed., Schoenwaelder, J., Ed., and A. Bierman, Ed., "Network Configuration Protocol (NETCONF)", [RFC 6241](#), DOI 10.17487/RFC6241, June 2011, <<https://www.rfc-editor.org/info/rfc6241>>.
- [RFC6242] Wasserman, M., "Using the NETCONF Protocol over Secure Shell (SSH)", [RFC 6242](#), DOI 10.17487/RFC6242, June 2011, <<https://www.rfc-editor.org/info/rfc6242>>.
- [RFC7950] Bjorklund, M., Ed., "The YANG 1.1 Data Modeling Language", [RFC 7950](#), DOI 10.17487/RFC7950, August 2016, <<https://www.rfc-editor.org/info/rfc7950>>.
- [RFC8040] Bierman, A., Bjorklund, M., and K. Watsen, "RESTCONF Protocol", [RFC 8040](#), DOI 10.17487/RFC8040, January 2017, <<https://www.rfc-editor.org/info/rfc8040>>.
- [RFC8446] Rescorla, E., "The Transport Layer Security (TLS) Protocol Version 1.3", [RFC 8446](#), DOI 10.17487/RFC8446, August 2018, <<https://www.rfc-editor.org/info/rfc8446>>.

Authors' Addresses

Mahesh Jethanandani
VMware
USA

Email: mjethanandani@gmail.com

Miguel Angel Reina Ortega
ETSI
650, Route des Lucioles
Sophia Antipolis 06560
France

Email: MiguelAngel.ReinaOrtega@etsi.org