

Network Working Group	F. Dijkstra
Internet-Draft	SARA
Intended status: Informational	R. Hughes-Jones
Expires: January 26, 2012	DANTE
	July 25, 2011

A URN Namespace for the Open Grid Forum (OGF)
draft-dijkstra-urn-ogf-06

[Abstract](#)

This document describes a URN (Uniform Resource Name) namespace that is engineered by the Open Grid Forum (OGF) for naming persistent resources.

[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 <http://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 January 26, 2012.

[Copyright Notice](#)

Copyright (c) 2011 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.

[Table of Contents](#)

- *1. [Introduction](#)
- *1.1. [Requirements Language](#)
- *2. [URN Specification for "ogf" NID](#)
- *2.1. [Namespace ID](#)
- *2.2. [Registration Information](#)

- *2.3. [Declared registrant of the namespace](#)
- *2.4. [Declaration of syntactic structure](#)
- *2.5. [Relevant ancillary documentation](#)
- *2.6. [Identifier uniqueness considerations](#)
- *2.7. [Identifier persistence considerations](#)
- *2.8. [Process of identifier assignment](#)
- *2.9. [Process of identifier resolution](#)
- *2.10. [Rules for Lexical Equivalence](#)
- *2.11. [Conformance with URN Syntax](#)
- *2.12. [Validation mechanism](#)
- *2.13. [Scope](#)
- *3. [Examples \(Informative\)](#)
- *4. [Namespace Considerations](#)
- *5. [Community Considerations](#)
- *6. [Security Considerations](#)
- *7. [IANA Considerations](#)
- *8. [Acknowledgements](#)
- *9. [References](#)
- *9.1. [Normative References](#)
- *9.2. [Informative References](#)
- *[Authors' Addresses](#)

1. Introduction

The Open Grid Forum (OGF) is a standardisation development organisation in the field of distributed computing. The OGF produces documents such as working drafts, specifications, and schemata. For more information, see <http://www.ogf.org/>

Working groups in the OGF community have expressed the need for global, distributed, persistent identifiers in working drafts and standards. Motivated by this need, the OGF would like to assign URNs to some

resources in order to retain unique, permanent, location-independent names for them.

This namespace specification is for a formal namespace.

1.1. Requirements Language

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [\[RFC2119\]](#).

2. URN Specification for "ogf" NID

2.1. Namespace ID

"ogf" requested.

2.2. Registration Information

Registration Version Number: 1

Registration Date: yyyy-mm-dd

2.3. Declared registrant of the namespace

Technical Director
Open Grid Forum
P.O. Box 2326
Joliet, Illinois 60434
USA

<http://www.ogf.org/>

Email: urn@ogf.org

The position of technical director is currently fulfilled by Joel Replogle.

2.4. Declaration of syntactic structure

The formal syntax definitions below are given in [ABNF \[RFC5234\]](#).

The NSS in the urn:ogf names hierarchy begins with a subnamespace identifier (SNID), followed by a delimiter and a subnamespace-dependent string

OGF-URN = "urn:ogf:" SNID ":" SUBNAMESPACE-SPECIFIC-STRING

where <SNID> is a unique subnamespace identifier for the specification, and <SUBNAMESPACE-SPECIFIC-STRING> is a unique identifier within the subnamespace identifier scope.

<SNID> has the same syntax as a <NID> as defined in [\[RFC2141\]](#):

SNID = (ALPHA / DIGIT) *31(ALPHA / DIGIT / "-")

ALPHA and DIGIT are defined in [Appendix B](#) of [\[RFC5234\]](#).

The Technical Director at OGF (or their successors) assigns subnamespace identifiers (SNID).

The syntax of <SUBNAMESPACE-SPECIFIC-STRING> is dependent on the <SNID>, and MUST be defined by a [Grid Forum Document \[GFD-SERIES\]](#). This document does not pose any additional restrictions to the <SUBNAMESPACE-SPECIFIC-STRING> other than what is defined in the NSS syntax as defined by [\[RFC2141\]](#) or its successor:

SUBNAMESPACE-SPECIFIC-STRING = 1*<URN chars>

<URN chars> is defined in [Section 2.2](#) of [\[RFC2141\]](#).

[2.5. Relevant ancillary documentation](#)

The Technical Director at OGF (or their successors) will keep a list of assigned subnamespace identifiers and associated documentation at <http://www.ogf.org/urn/> [\[URN-OGF\]](#).

Information on the procedures how to register a subnamespace identifier can also be found at this website.

[2.6. Identifier uniqueness considerations](#)

Identifier uniqueness will be enforced by the Technical Director of the Open Grid Forum.

The OGF Technical Director may sub-delegate part of the namespace to third parties. It will not be permissible, neither by the OGF Technical Director nor any third party, to re-assign previously assigned URNs. A practical consequence is that a previously assigned subnamespace can not be re-assigned, unless additional arrangements are made to prevent identifier re-assignments.

[2.7. Identifier persistence considerations](#)

The Technical Director will only assign subnamespace identifiers for persistent resources.

In order to enforce identifier persistence for individual resources, each document defining subnamespace identifiers MUST contain a section on the type of resource that is specified (e.g. whether a URN in the subnamespace identifies a specific version of a resource, the latest version of a resource, a specific manifestation, or a more general concept)

[2.8. Process of identifier assignment](#)

Assignment of subnamespace identifiers is limited to the OGF and those authorities that are specifically designated by the OGF Technical Director. OGF may assign portions of its namespace (specifically, those under designated subnamespace identifiers) for assignment by third parties.

The details of this process is specified in [\[GFD-C.XXX\]](#).

The syntax and semantics of each subnamespace MUST be defined by a [Grid Forum Document](#) [GFD-SERIES] before the corresponding subnamespace identifier (SNID) is assigned.

2.9. Process of identifier resolution

The OGF namespace is not currently listed with a Resolution Discovery System (RDS), but nothing about the namespace prohibits the future definition of appropriate resolution methods or listing with an RDS. The OGF will maintain an index of all subnamespace identifiers on its Web site, <http://www.ogf.org/urn/>. This list may refer to known Resolution Discovery System(s).

2.10. Rules for Lexical Equivalence

The <SNID> part of URNs in the OGF hierarchy is case insensitive. Thus, the <SNID> MUST be case normalised before comparison.

The rules for lexical equivalence of the <SUBNAMESPACE-SPECIFIC-STRING> part of URNs in the OGF hierarchy is specific for each SNID and MUST be defined when a SNID is assigned by the OGF Technical Director. These definitions MUST include information about case sensitivity, and in case %-escaped octets, MUST define the exact normalisation to use (e.g. interpret as octet, interpret as UTF-8, specify type of Unicode normalisation factor, etc.)

2.11. Conformance with URN Syntax

The intention of this document is to only restrict the syntax of the <SNID>. The syntax of the <SUBNAMESPACE-SPECIFIC-STRING> follows the general syntax of a URN:

SUBNAMESPACE-SPECIFIC-STRING = 1*<URN chars>

Documents defining a subnamespace identifier SHOULD specify further syntactic restrictions in <SUBNAMESPACE-SPECIFIC-STRING>. It is RECOMMENDED that these documents forbid the assignment of URNs containing characters in the <reserved> set ("% ", "/", "?", and "#") as defined in [\[RFC2141\]](#). This is in accordance with section 2.2 of [\[RFC3986\]](#).

For forward compatibility, it is RECOMMENDED that software implementations that don't validate subnamespace-specific strings, validate the syntax according to the generic rules for validating URIs, as defined in [\[RFC3986\]](#). URIs may contain all characters defined in <URN chars>, including the characters in <reserved> (albeit they have a special meaning), as well the characters as "&" and "~".

2.12. Validation mechanism

The validation mechanism of URNs in the OGF hierarchy is specific for each SNID and SHOULD be defined when a SNID is assigned by the OGF Technical Director.

URNs in the OGF hierarchy without an assigned SNID are considered to be invalid.

2.13. Scope

Global URNs, relevant for the distributed computing community in general, and the Open Grid Forum in particular.

3. Examples (Informative)

Since no subnamespace identifiers have been defined yet, no actual examples can be given. Therefore, the following examples are not guaranteed to be real or even syntactically correct.

Grid forum documents defining the "gfd" and "network" subnamespace identifiers may give the following examples.

*urn:ogf:gfd:136

*urn:ogf:network:canarie.ca:kisti-uninett-glif-001

4. Namespace Considerations

The Open Grid Forum (OGF) is a standardisation development organisation in the field of distributed computing.

The use of the OGF hierarchy is expected to be broad, including but not limit to usage for:

*Grid Forum Documents

*XML (Extensible Markup Language) Schemata

*RDF (Resource Description Framework) Schemata

The Open Grid Forum is dedicated to openly publish all technical documentation related to URNs in the OGF hierarchy and allow unlimited distribution of these documents.

5. Community Considerations

Members of the distributed computing community will benefit from persistent and globally unique identifiers for use in protocols developed by the Open Grid Forum.

Practical use of the urn:ogf namespace has been detected, and a formal registration will allow the Open Grid Forum to document this usage and enforce technical review of current practices.

6. Security Considerations

There are no additional security considerations other than those normally associated with the use and resolution of URNs in general. Implementers are recommended to check the OGF registry and documentation [\[URN-OGF\]](#) before assuming that a given identifier is valid or has a certain meaning.

7. IANA Considerations

IANA is kindly requested to register the "ogf" namespace identifier (NID) at the [URN Namespaces registry \[URN-NAMESPACES\]](#) and refer to this document and/or the website <http://www.ogf.org/urn/>.

8. Acknowledgements

The template and useful examples from [\[RFC3406\]](#) formed the basis for this document. The authors would like to thank Joel Replegle and Andre Mersky for setting up the urn:ogf subnamespace registry. Jeroen van der Ham, Peter Saint-Andre and Mykyta Yevstifeyev proof-read this document and provided valuable feedback.

9. References

9.1. Normative References

[RFC2119]	Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels" , BCP 14, RFC 2119, March 1997.
[RFC2141]	Moats, R., "URN Syntax" , RFC 2141, May 1997.
[RFC3986]	Berners-Lee, T., Fielding, R. and L. Masinter, "Uniform Resource Identifier (URI): Generic Syntax" , STD 66, RFC 3986, January 2005.
[RFC5234]	Crocker, D. and P. Overell, "Augmented BNF for Syntax Specifications: ABNF" , STD 68, RFC 5234, January 2008.
[GFD-C.XXX]	Dijkstra, F., Hughes-Jones, R., Newby, G.B. and J. Replegle, "Procedure for Registration of Subnamespace Identifiers in the URN:OGF Hierarchy", GFD xxx, XXX 2011.

9.2. Informative References

[RFC3406]	Daigle, L., van Gulik, D., Iannella, R. and P. Faltstrom, "Uniform Resource Names (URN) Namespace Definition Mechanisms" , BCP 66, RFC 3406, October 2002.
[URN-NAMESPACES]	IANA, "Official IANA Registry of URN Namespaces", .
[GFD-SERIES]	Catlett, C., "GGF Document Series", GFD 1, April 2002.

[URN-OGF]	Open Grid Forum, "URN:OGF Hierarchy Registry and Documentation", .
-----------	--------------------------------------------------------------------

Authors' Addresses

Freek Dijkstra Dijkstra SARA Science Park 121 Amsterdam, 1098 XG NL
EMail: Freek.Dijkstra@sara.nl

Richard Hughes-Jones Hughes-Jones DANTE City House 126-130 Hills
Road Cambridge, CB2 1PQ UK EMail: Richard.Hughes-Jones@dante.net