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F. Dijkstra
SARA
R. Hughes-Jones
DANTE
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A URN Namespace for the Open Grid Forum (OGF)
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Abstract

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

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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 [[RFC-Editor: Please replace with the date of approval of this document for publication as an RFC]]

2.3. Declared registrant of the namespace

Technical Director
Open Grid Forum
P.O. Box 2326
Joliet, Illinois 60434
USA
<http://www.ogf.org/>

Current contact person:

Joel Replogle
Email: replogle@ogf.org [[Joel Replogle: Check if a generic mail address exists]]

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 topic identifier, followed by a delimiter and a topic-dependent string

```
OGF-URN = "urn:ogf:" TOPIC-ID ":" TOPIC-SPECIFIC-STRING
```

where TOPIC-ID is a unique topic identifier for the specification, and TOPIC-SPECIFIC-STRING is a unique identifier within the topic identifier scope.

TOPIC-ID has the same syntax as a <NID> as defined in [RFC2141]:

```
TOPIC-ID = ( ALPHA / DIGIT ) *31( ALPHA / DIGIT / "-" )
```

ALPHA and DIGIT are defined in Appendix B of [RFC5234].

The Technical Director at OGF (or its successor) assigns topic identifiers [URN-OGF].

The syntax of TOPIC-SPECIFIC-STRING is dependent on the TOPIC-ID, and SHOULD be defined by a Grid Forum Document [GFD-SERIES]. This document does not pose any additional restrictions to the TOPIC-SPECIFIC-STRING than the NSS syntax as defined by [RFC2141] or its successor:

```
TOPIC-SPECIFIC-STRING = 1*<URN chars>
```

URN-char is defined in Section 2.2 of [RFC2141].

2.5. Relevant ancillary documentation

The Technical Director at OGF (or its successor) will keep a list of assigned topic identifiers and associated documentation at <http://www.ogf.org/urn/>.

This website also contains information on the procedures how to register an topic identifier.

2.6. Identifier uniqueness considerations

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

2.7. Identifier persistence considerations

The Technical Director will only assign topic identifiers for persistent resources [URN-OGF].

2.8. Process of identifier assignment

Assignment of topic 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 topic identifiers) for assignment by third parties.

The details of this process will be specified at the OGF website [URN-OGF].

The syntax and semantics of each TOPIC-ID SHOULD be defined by a Grid Forum Document [GFD-SERIES] before it is assigned.

2.9. Process of identifier resolution

OGF will maintain an index of all topic identifiers on its Web site, <http://www.ogf.org/urn/>[[Joel2: URL must be created]]

Resolution mechanism of TOPIC-SPECIFIC-STRING within each TOPIC-ID SHOULD be defined before assignment of a topic identifier.

2.10. Rules for Lexical Equivalence

The TOPIC-ID part of URNs in the OGF hierarchy is case insensitive. Thus, the TOPIC-ID MUST be case normalised before comparison.

The rules for lexical equivalence of the TOPIC-SPECIFIC-STRING part of URNs in the OGF hierarchy is specific for each TOPIC-ID and MUST be defined when a TOPIC-ID 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 (interpret as octet, UTF-8, type of Unicode normalisation factor, etc.)

2.11. Conformance with URN Syntax

Implementors should be aware that a revision of RFC2141 is proposed, which may allow a different set of allowed characters (URN-char) in the NSS than the current URN chars (adding "&" and/or "~", whilst removing the reserved characters "%", "/", "?", and "#"). The intention of this document is to only restrict the syntax of the TOPIC-ID, and have Grid Forum Documents specify the syntax of the

TOPIC-SPECIFIC-STRING. If RFC 2141 is to be updated, this document may be revised as well.

In other words, the current definition:

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

is likely to change in the future to:

TOPIC-SPECIFIC-STRING = 1*<URN-char>

2.12. Validation mechanism

The validation mechanism of URNs in the OGF hierarchy is specific for each TOPIC-ID and MUST be defined when a TOPIC-ID is assigned by the OGF Technical Director.

URNs in the OGF hierarchy without an assigned TOPIC-ID 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)

The following examples are not guaranteed to be real or even syntactically correct. They are listed for pedagogical reasons only.

- o urn:ogf:gfd:l36
- o 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:

- o Grid Forum Documents
- o XML (Extensible Markup Language) Schemata

- o 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 make this documentation available to all interested parties.

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 regulate its 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.

Implementors 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 to 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 authors like to thank Joel Replogle for helping set up the urn:ogf registry. The template and useful examples from [RFC3406] formed the basis of this document.

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.
- [RFC5234] Crocker, D. and P. Overell, "Augmented BNF for Syntax Specifications: ABNF", STD 68, RFC 5234, January 2008.

9.2. Informative References

- [GFD-SERIES]
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- [RFC3406] Daigle, L., van Gulik, D., Iannella, R., and P. Faltstrom,
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IANA, "Official IANA Registry of URN Namespaces",
<<http://www.iana.org/assignments/urn-namespaces/>>.
- [URN-OGF] Open Grid Forum, "URN:OGF Hierarchy Registry and
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Authors' Addresses

Freek Dijkstra
SARA
Science Park 121
Amsterdam 1098 XG
NL

Email: Freek.Dijkstra@sara.nl

Richard Hughes-Jones
DANTE
City House
126-130 Hills Road
Cambridge CB2 1PQ
UK

Email: Richard.Hughes-Jones@dante.net

