Name type specification - specification elements

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This document defines an OGC Policy. It is subject to change without notice. This document is an official position of the OGC membership on this particular topic.

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i. Preface

This document specifies a rule for constructing OGC names that may be used for identifying specification elements defined in the OGC Specification Model – Modular Specification.

ii. Document terms and definitions

This document uses the normative terms (SHALL, SHOULD, etc) defined in Subclause 5.3 of [OGC 06-121r3], which is based on the ISO/IEC Directives, Part 2: Rules for the structure and drafting of International Standards. In particular, the word “shall” (not “must”) is the verb form used to indicate a requirement to be strictly followed to comply with this specification.

Name production rules in this document are expressed using ABNF (IETF RFC 5324).

iii. Revision History

<table>
<thead>
<tr>
<th>Date</th>
<th>Internal version</th>
<th>Editor</th>
<th>Sections modified</th>
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<tr>
<td>1 April 2009</td>
<td>0.1.0 Draft</td>
<td>Simon Cox</td>
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<td>Initial Draft Document.</td>
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<td>All</td>
<td>ABNF revised to match RFC 3986; http URI syntax made explicit</td>
</tr>
<tr>
<td></td>
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<td>spec-element names restructured to reflect context and modular-specifications dependencies</td>
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Name type specification - specification elements

1 Scope

An OGC name must be provided for each *normative element* within an OGC specification, as described in the OGC Specification Model – Modular Specifications (OGC 08-131r3). These include *requirement, requirements-module, requirements-class, conformance-test, conformance-module, conformance-class*, and the *specification as a whole*.

Note that a specification as a whole is the structure composed of constituent requirements- and conformance-classes. This is distinguished from a specification *document* or standard, which is identified by an OGC name from the 'doc' branch.
2 Normative references:


3 Naming rule

3.1 OGC name schemes

URI schemes [IETF RFC 3986] are defined by OGC to provide persistent names for resources of interest in geographic information infrastructures. The generic syntax for OGC names is described in [OGC Naming Authority – Procedures].

The generic syntax for OGC http URIs is

URI = "http://www.opengis.net/" OGCResource "/" ResourceSpecificPath

The following ABNF adapted from [IETF RFC 3986] provides some basic definitions required in the rest of this document.

segment = *pchar
segment-nc = *pchar-nc
segment-nz = 1*pchar
segment-nz-nc = 1*pchar-nc
pchar = unreserved / pct-encoded / sub-delims / ":" / ":@"
pchar-nc = unreserved / pct-encoded / sub-delims / ":@"
pct-encoded = "%" HEXDIG HEXDIG
unreserved = ALPHA / DIGIT / ":" / ":." / ":_" / "_" / "_-
reserved = gen-delims / sub-delims
gen-delims = ":" / ":/" / ":?" / ":#" / ":[" / ":]" / ":@"
sub-delims = ":!" / ":$" / ":&" / ":,;" / "(" / ":)"

/ "*" / ":+" / ":-" / "::;" / "="

3.2 Production rule for specification element names

An OGC name for a normative specification element shall be produced using the following rule:

OGCResource = "spec"

ResourceSpecificPath = standard "/" version [ "/" class "/" name *("/" name) ]

standard = segment-nz-nc ; value registered as a doc-name for an OGC standard according to [OGC-NA Name type specification – documents]
3.3 Explanation

This policy document provides a URI structure for specification components, as required by Req 2 in the OGC Policy document [OGC Specification Model – Modular Specifications]:

Req 2 Each component of the standard, including requirements, requirements modules, requirements classes, conformance test cases, conformance modules and conformance classes shall be assigned a URI as specified by the OGC naming authority or its equivalent.

The policy also includes the following requirement relevant to the naming scheme design:

Req 14 For the sake of consistency and readability, all requirements classes and all conformance test classes shall be explicitly named, with corresponding requirements classes and conformance test classes having similar names.

The consistency constraint described in Req 14 links the names of conformance classes to requirements classes. This is not formalized in the production rules, but will be checked during the registration process.

Names for Requirements Classes or Conformance Classes are constructed by appending fields to the name for the Specification. Names for Modules, Requirements and Tests are constructed by appending additional fields to the names for the Requirements Class or Conformance Class. In this way the names reflect the fact that each Module, Requirement and Test is owned by a single Requirements Class or Conformance Class, and each Requirements Class or Conformance Class is owned by a single Specification [OGC Specification Model – Modular Specifications http://www.opengis.net/doc/POLSPEC].
4 Name assignment policy

4.1 Names

The register of names http://www.opengis.net/register/ogc-na/name is controlled by OGC-NA. Changes to this register (addition, deletion, and supersession) shall be initiated by a submission to the OGC Naming Authority names@opengeospatial.org.

5 Examples

5.1 Specification

Example 1 A specification
http://www.opengis.net/spec/OMXML/2.0

NOTE: The specification as a whole has a single version designator. Elements within the specification cannot be versioned independently from the specification as a whole.

5.2 Requirements class

Example 2 A requirements class within the previous specification
http://www.opengis.net/spec/OMXML/2.0/req/measurement

NOTE: The first step after the /req/ field provides the name of a requirements-class.

5.3 Specification requirement

Example 3 A specification requirement, within the previous requirements class:
http://www.opengis.net/spec/OMXML/2.0/req/measurement/result-measure

NOTE: The second step after the /req/ field provides the name of a requirements-module or requirement.

5.4 Conformance class

Example 4 A conformance class within the previous specification
http://www.opengis.net/spec/OMXML/2.0/conf/measurement

NOTE: The first step after the /conf/ field provides the name of a conformance-class.

5.5 Conformance test

Example 5 A conformance test within the previous conformance-class
http://www.opengis.net/spec/OMXML/2.0/conf/measurement/result-measure

NOTE: The second step after the /conf/ field provides the name of a conformance-module or conformance-test.