Naming of OGC API Standards, Repositories & Specification Elements

#### **Open Geospatial Consortium**

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#### Naming of OGC API Standards, Repositories & Specification Elements

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## **Table of Contents**

1.	Scope	5	)
2.	Conformance	6	)
3.	References	7	,
4.	Terms and Definitions	8	)
	4.1. conformance test	8	)
	4.2. conformance test class	8	)
	4.3. requirement	8	)
	4.4. requirements class	8	)
	4.5. specification	8	)
	4.6. standard	9	)
	4.7. standardization target	9	)
	4.8. Web API	9	)
5.	Conventions	. 10	)
6.	Naming of OGC API Standards, Repositories & Specification Elements	. 11	
	6.1. Introduction	. 11	
	6.1.1. Resource Name Exception	. 11	
	6.2. Repositories	. 11	
	6.3. Standards	. 11	
	6.4. Requirements Classes	. 12	
	6.5. Requirements	. 12	
	6.6. Conformance Classes	12	
		. 12	
	6.7. Conformance Tests		
		. 12	
	6.7. Conformance Tests	. 12 . 12	)
	6.7. Conformance Tests 6.8. Definitions of the standards	. 12 . 12 . 13	

#### i. Abstract

This document is a policy of the OGC Naming Authority (OGC-NA), a sub-committee of the OGC Technical Committee. The document defines a series of policy requirements for OGC API standards, repositories, definitions, and specification elements. The policy document is intended to be a specialization of the OGC-NA policy on naming specification elements (OGC 10-103).

Upon approval of this policy, OGC staff shall proceed to change the names of the Git repositories to conform to the policy.

#### ii. Keywords

The following are keywords to be used by search engines and document catalogues.

ogcdoc, OGC document, policy, naming authority, OGC API

#### iii. Preface

This document defines a series of policy requirements for OGC API standards, repositories and specification elements. It is subject to change without notice.

#### iv. Submitting organizations

The following organizations submitted this Document to the Open Geospatial Consortium (OGC):

Organization name(s)

Open Geospatial Consortium

#### v. Submitters

All questions regarding this submission should be directed to the editor or the submitters:

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# Chapter 1. Scope

This policy document applies to OGC API standards, repositories, definitions, and specification elements. Within the context of this policy, the term 'specification elements' refers to:

- Requirements Classes
- Requirements
- Conformance Classes
- Conformance Tests

# **Chapter 2. Conformance**

This policy defines a series of policy requirements for OGC API standards.

Conformance with this policy shall be checked manually through review, or through automation where possible.

# **Chapter 3. References**

OGC: OGC 05-020r25, Technical Committee Policies and Procedures, http://docs.opengeospatial.org/pol/05-020r25/05-020r25.html (2017)

OGC: OGC 09-046r5, OGC Naming Authority – Procedures, http://www.opengeospatial.org/standards/na (2018)

## **Chapter 4. Terms and Definitions**

This document uses the terms defined in Sub-clause 5.3 of [OGC 06-121r8], 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 conform to this standard.

This document also uses terms defined in the OGC Standard for Modular specifications (OGC 08-131r3), also known as the 'ModSpec'.

For the purposes of this document, the following additional terms and definitions apply.

### 4.1. conformance test

test, abstract or real, of one or more requirements contained within a standard, or set of standards (source: OGC 08-131r3)

### 4.2. conformance test class

set of conformance test modules that must be applied to receive a single certificate of conformance (source: OGC 08-131r3)

NOTE

When no ambiguity is possible, the word "test" may be left out, so conformance test class maybe called a **conformance class**.

## 4.3. requirement

expression in the content of a document conveying criteria to be fulfilled if compliance with the document is to be claimed and from which no deviation is permitted (source: ISO/IEC Directives Part 2)

## 4.4. requirements class

aggregate of all requirement modules that must all be satisfied to satisfy a conformance test class (source: OGC 08-131r3)

NOTE

There is some confusion possible here, since the testing of indirect dependencies seems to violate this definition. But the existence of an indirect dependency implies that the test is actually a test of the existence of the relationship from the original target to something that has a property (satisfies a condition or requirement from another requirements class).

## 4.5. specification

document containing recommendations, requirements and conformance tests for those

requirements (source: OGC 08-131r3)

NOTE

This definition is included for completeness. See Clause 5.3 of The Specification Model — A Standard for Modular specifications (OGC 08-131r3). This does not restrict what else a standard may contain, as long as it does contain the three types of element cited.

#### 4.6. standard

specification that has been approved by a legitimate Standards Body (source: OGC 08-131r3)

NOTE

This definition is included for completeness. Standard and specification can apply to the same document. While specification is always valid, standard only applies after the adoption of the document by a legitimate standards organization. The legitimate Standards Bodies for OGC consist of OGC, ISO and any of the other standards bodies accepted and used as a source of normative references by OGC or ISO in their standards. In the normal meaning of the word "standard", there are other conditions that may be required, but this standard has chosen to ignore them in the process of abstraction.

## 4.7. standardization target

entity to which some requirements of a standard apply (source: OGC 08-131r3)

**NOTE** 

The **standardization target** is the entity which may receive a certificate of conformance for a **requirements class**.

### 4.8. Web API

API using an architectural style that is founded on the technologies of the Web (source: DWBP)

NOTE

Best Practice 24: Use Web Standards as the foundation of APIs in the W3C Data on the Web Best Practices provides more detail.

# **Chapter 5. Conventions**

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.

# Chapter 6. Naming of OGC API Standards, Repositories & Specification Elements

### 6.1. Introduction

This section presents the normative clauses of this policy. Please note that the clauses relating to specification elements maintain consistency with the OGC-NA Name type specification - specification elements (10-103) policy.

#### **6.1.1. Resource Name Exception**

The following clauses make use of a parameter {resourceName}. Except in the case of OGC API - Common and the Environmental Data Retrieval API, the parameter {resourceName} shall be the plural of the name of the type of resource.

## 6.2. Repositories

This policy document acknowledges that SWGs will create one or more Git repositories on GitHub, Gitlab or other service. To ensure consistency in the naming of Git repositories, SWGs shall be required to name the repositories as follows:

https://github.com/opengeospatial/ogcapi-{resourceName}

For example, https://github.com/opengeospatial/ogcapi-features

A reference to the previous name or names of the repository shall be clearly recorded on the overview of the repository (typically a file named README.md).

### 6.3. Standards

Many of the emerging and existing OGC API standards are multi-part standards. This policy document acknowledges that the SWGs will have to plan to accommodate future extensions into their naming of standards. To ensure consistency in the naming of standards and their extensions, SWGs shall be required to name the standards as follows:

• OGC API - {resourceName} - Part n: {Topic}

'n' refers to the position of the document in the multi-part standard and shall always be greater than zero, whereas {Topic} refers to the topic or theme of the standard. For example, OGC API - Coverages - Part 1: Core

The first in the sequence of parts shall always be reserved for the 'Core' standard and therefore Part 1 is reserved for the 'Core' standard.

## 6.4. Requirements Classes

The base namespace of Requirements Classes shall indicate the Part number {n} and Version number {v} of the standard as follows. The requirements class shall be indicated by the {reqClass} segment(s) to the right of the '/req' segment.

• http://www.opengis.net/spec/ogcapi-{resourceName}-{n}/{v}/req/{reqClass}

For example, http://www.opengis.net/spec/ogcapi-processes-1/1.0/req/core

## 6.5. Requirements

The base namespace of Requirements shall indicate the Part number {n} and Version number {v} of the standard as follows. The requirement shall be indicated by the {req} segment(s) to the right of the '/req' segment.

• http://www.opengis.net/spec/ogcapi-{resourceName}-{n}/{v}/req/{reqClass}/{req}

For example, http://www.opengis.net/spec/ogcapi-tiles-1/1.0/req/core/root-success

### 6.6. Conformance Classes

The base namespace of Conformance Classes shall indicate the Part number {n} and Version number {v} of the standard as follows. The conformance class shall be indicated by the {confClass} segment(s) to the right of the '/conf' segment.

http://www.opengis.net/spec/ogcapi-{resourceName}-{n}/{v}/conf/{confClass}

For example, http://www.opengis.net/spec/ogcapi-coverages-1/1.0/conf/core

### 6.7. Conformance Tests

The base namespace of Conformance Tests shall indicate the Part number {n} and Version number {v} of the standard as follows. The conformance test shall be indicated by the {test} segment(s) to the right of the '/conf' segment.

• http://www.opengis.net/spec/ogcapi-{resourceName}-{n}/{v}/conf/{confClass}/{test}

## 6.8. Definitions of the standards

The OGC-NA maintains URIs for definitions of several standards, for example OGC API - Features, Sensor Observation Service (SOS) and so forth. To formalize the namespace used for the definitions, this policy states that the URIs of definitions of OGC API standards shall be of the form:

http://www.opengis.net/def/interface/ogcapi-{resourceName}

Note that this clause maintains consistency with the OGC Name Type Specification - definitions - part 1 – basic name (09-048r5) policy.

## 6.9. Link Relation Types

The OGC-NA maintains a register for link relation types at <a href="http://www.opengis.net/def/rel">http://www.opengis.net/def/rel</a>. The register shall be used as a look-up and also to track OGC's submissions to the Internet Assigned Numbers Authority (IANA).

Every link relation type used in an OGC standard shall be registered in the OGC link relation type register.

For link relation types registered outside of the authority "iana", the definition URI shall be used as the value of the rel property of the link. For example, http://www.opengis.net/def/rel/ogc/1.0/conformance.

## 6.10. Media Types

The OGC-NA maintains a register for media types at http://www.opengis.net/def/media-type.

Every media type used in an OGC standard

- shall be registered in the OGC media type register,
- shall include a notation property, and
- should be registered in the IANA register.

# **Annex A: Revision History**

Date	Release	Editor	Primary clauses modified	Description
2020-06-03	0.1	Gobe Hobona	all	Initial text
2020-06-19	0.2	Clemens Portele	multiple	Added sections on registers and fixed sections on URIs
2020-06-20	0.3	Gobe Hobona	6.8, 6.9	Update to registers section
2020-06-23	0.4	Gobe Hobona	6.10	Removed abbreviations section, as per TC decision on 2020-06-22
2020-07-15	0.5	Gobe Hobona	4,6.1,6.2	Addressing comments received from OGC-NA vote.