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OGC API-Coverages Users Guide

Warning

This document defines an the OGC Best Practices on the implementation and use of the OGC API-Coverages standards. This document is not an OGC Standard and may not be referred to as an OGC Standard. It is subject to change without notice.

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i. Abstract

<Insert Abstract Text here>

ii. Keywords

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

ogcdoc, OGC document, <tags separated by commas>

iii. Preface

NOTE

Insert Preface Text here. Give OGC specific commentary: describe the technical content, reason for document, history of the document and precursors, and plans for future work. > Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. The Open Geospatial Consortium shall not be held responsible for identifying any or all such patent rights.

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iv. Submitting organizations

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Organization name(s)

v. Submitters

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

Name Affiliation

Chapter 1. Scope

NOTE Insert Scope text here. Give the subject of the document and the aspects of that scope covered by the document.

Chapter 2. References

The following normative documents contain provisions that, through reference in this text, constitute provisions of this document. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. For undated references, the latest edition of the normative document referred to applies.

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- OGC 09-146: **OGC Coverage Implementation Schema (CIS)**, version 1.1, CIS
- OGC 19-008: **OGC GeoTIFF Standard**, Version 1.1, http://docs.opengeospatial.org/is/19-008r4/19-008r4.html
- OGC Schema: **OGC JSON Schema for Coverage Implementation Schema**, version 1.1, 2017, CIS Schema
- OGC 10-090: **OGC Network Common Data Form (NetCDF) Core Encoding Standard**, Version 1.0, http://portal.opengeospatial.org/files/?artifact_id=43732
- OGC 17-089: **OGC Web Coverage Service (WCS) Interface Standard - Core**, Version 2.1, (WCS 2.1)
- Open API Initiative: **OpenAPI Specification 3.0.2**, OpenAPI
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- W3C: W3C RDF 1.1 **Concepts and Abstract Syntax.** https://www.w3.org/TR/2014/REC-rdf11-concepts-20140225/, 2014

Chapter 3. Terms and Definitions

This document uses the terms defined in Sub-clause 5 of OGC API - Common - Part 1: Core (OGC 19-072), 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.

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

3.1. Coverage

feature that acts as a function to return values from its range for any direct position within its spatiotemporal domain, as defined in OGC Abstract Topic 6

3.2. Regular grid

grid whose grid lines have a constant distance along each grid axis

3.3. Irregular grid

Grid whose grid lines have individual distances along each grid axis

3.4. Displaced grid

grid whose direct positions are topologically aligned to a grid, but whose geometric positions can vary arbitrarily

3.5. Mesh

coverage consisting of a collection of curves, surfaces, or solids, respectively

3.6. Partition [of a coverage]

separately stored coverage acting, by being referenced in the coverage on hand, as one of its components

3.7. Sensor model

mathematical model for estimating geolocations from recorded sensor data such as digital imagery

3.8. Transformation grid

grid whose direct positions are given by some transformation algorithm not further specified in this standard

Chapter 4. Conventions

This sections provides details and examples for any conventions used in the document. Examples of conventions are symbols, abbreviations, use of XML schema, or special notes regarding how to read the document.

4.1. Identifiers

The normative provisions in this document are denoted by the URI

http://www.opengis.net/spec/{standard}/{m.n}

All requirements and conformance tests that appear in this document are denoted by partial URIs which are relative to this base.

Chapter 5. Users Guide

Everything up the now has been information about this document and how to use it. Topics related to the implementation of Coverages APIs are included in this section.

Annex A: Revision History

Date	Release	Editor	Primary clauses modified	Description
2016-04-28	0.1	G. Editor	all	initial version

Annex B: Glossary

- **Conformance Test Module**
  set of related tests, all within a single conformance test class (OGC 08-131r3)

NOTE:	When no ambiguity is possible, the word `test` may be omitted. i.e. conformance test module is the same as conformance module. Conformance modules may be nested in a hierarchical way. This term and those associated to it are included here for consistency with ISO 19105.

- **Conformance Test Class; Conformance Test Level**
  set of conformance test modules that must be applied to receive a single **certificate of conformance**. (OGC 08-131r3)

NOTE:	When no ambiguity is possible, the word `test` may be left out, so conformance test class may be called a conformance class.

- **Executable Test Suite (ETS)**
  A set of code (e.g. Java and CTL) that provides runtime tests for the assertions defined by the ATS. Test data required to do the tests are part of the ETS (OGC 08-134)

- **Recommendation**
  expression in the content of a document conveying that among several possibilities one is recommended as particularly suitable, without mentioning or excluding others, or that a certain course of action is preferred but not necessarily required, or that (in the negative form) a certain possibility or course of action is deprecated but not prohibited (OGC 08-131r3)

NOTE:	"Although using normative language, a recommendation is not a requirement. The usual form replaces the `shall` (imperative or command) of a requirement with a `should` (suggestive or conditional)." (ISO Directives Part 2)

- **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 (OGC 08-131r3)

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

- **Requirements Module**
  aggregate of requirements and recommendations of a specification against a single standardization target type (OGC 08-131r3)

- **Standardization Target**
  entity to which some requirements of a standard apply (OGC 08-131r3)

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

Annex C: Bibliography

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