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Corrigendum for OpenGIS Implementation Specification 07-006: Catalogue Services, Version 2.0.2

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i. Preface

This document is a corrigendum for OGC Document 04-021r3. All changes described herein are published in OGC Document 07-006.

ii. Document terms and definitions

This document uses the specification terms defined in Subclause 5.3 of [OGC 05-008]. In particular, the word "shall" (not "must") is the verb form used to indicate a requirement to be strictly followed to conform to this specification.

iii. Document contributor contact points

All questions regarding this document should be directed to the editor or the contributors:

Name	Organization
Douglas Nebert	U.S. Geological Survey

iv. Revision history

Date	Release	Editor	Primary clauses modified	Description
2007-01-25	0.9.0	Nebert	All	Summary of all changes by subclause
2007-02-16	1.0.0	Nebert	All	Updated content to reflect version 15 edits

v. Changes to OGC Specifications

The previously approved OGC™ Specifications do not need changes to accommodate the technical contents of this document.

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Foreword

This document provides the revision notes for the OpenGIS Implementation Specification for the Catalogue Services version 2.0.2 and does not modify that implementation specification. The current OpenGIS IS that this document provides revision notes for is 07-006. This document supersedes the former specification corrigendum document that included change notes in OGC Document 04-021r3, Annex E.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. The OGC shall not be held responsible for identifying any or all such patent rights.

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Introduction

This document contains the revision notes for Catalogue Services Implementation Specification Version 2.0.2. This document was approvedby the OGC membership on February 16, 2007. As a result of the RWG process, there were a number of edits and enhancements made to this specification. This document provides the details of those edits, deficiency corrections, and enhancements. It also documents those items that have been deprecated. Finally, this document provides implementations details related to issues of backwards compatibility.

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Catalogue Services Specification

1 Scope

The Catalogue Services specification identifies the interfaces, bindings, and a framework for defining application profiles required to publish and access digital catalogues of metadata for geospatial data, services, and related resource information. Metadata act as generalised properties that can be queried and returned through catalogue services for resource evaluation and, in many cases, invocation or retrieval of the referenced resource. Catalogue services support the use of one of several identified query languages to find and return results using well-known content models (metadata schemas) and encodings. This OpenGIS® document consists primarily of changes made to the general model (Clause 6) and the HTTP Protocol Binding section (Clause 10) with additional edits for consistency.

Version 2.0.2 of this document includes many additions and changes, most increasing clarity or fixing errors for the CSW protocol binding.

2 Corrigendum Description

This section paraphrases the changes applied to the specification. The published specification document (OGC Document 07-006) shows the exact change with tracking on to provide context (Word version) and the changes as applied (PDF version). Each change or correction below has a single numbered reference in this section with the appropriate subclause reference to help locate the corrected portion of the document.

Title Page

Edited to reflect a new document number, approval date, version number, and editorial participation

Tables of Contents

The Table of Contents, Figures, and Tables were recreated to reflect the current content of the document.

Company Affiliation

Cubewerx is now listed as “Cubewerx Inc. (Clause iii)

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Normative References

One additional reference was added to include the ISO/IEC 14977. (Clause 3)

Terms and Definitions

Style was adjusted to include a subclause numbering and format as required by OGC. (Clause 4)

Added Definition

Added the following definition to Clause 4 (Subclause 4.21):

resource
an object or artefact that is described by a record in the information model of a catalogue

Use of "shall" and "may"

Many instances of "must" or "should" were changed to "shall" for consistency with standardisation guidelines (multiple subclauses).

2.1 Corrected spelling and case

Scanned and corrected for proper spelling and consistent use of case, especially mixed-case terms (multiple subclauses).

2.2 Document terms and definitions

Changed document source from: OGC 04-016r2 to 05-008c1. Updated document reference (Subclause 5.3)

BNF Syntax corrections

Deleted ellipsis (...) and various incorrect whitespace, corrected names of geospatial operators, corrected bounding latitude and longitude as signed, and corrected duration notation as per ISO 8601 in BNF, Subclause 6.2.2

Footnote 1 deleted

Deleted footnote expansion of classification scheme example. (Subclause 6.2.3)

Updated "Classified as" example

Changed "keyname path" to "classification scheme" and "keyname value" to "classification node" and made BNF consistent with practices in OASIS/ebXML Registry Services Specification v2.5. (Subclause 6.2.3)

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Moved Filter Encoding example

Moved the Filter Encoding example from subclause 6.2.4 (general model) to Subclause 10.8.4.11 (HTTP Binding) where XML encoding discussion is more appropriate.

Core queryable and returnable properties

The concept and objectives of core queryable properties was clarified to declare the scope of anticipated interoperability.

The list of core elements in Tables 1 and 4 were amended to clarify their intended role in the general model, their reference to Dublin Core concepts, and intention for realization in the protocol binding clauses. (Subclauses 6.3.2 and 6.3.3).

GetRecords example updated

The GetRecords operation example was updated to reference proper schemas and namespaces consistent with the schemas included with 2.0.2 (Subclause 6.3.3)

SRU reference

URL link to the Z39.50 "Search - Retrieve by URL" was updated (Subclause 8.1.1)

Correspondence of Z39.50 Attributes to general model equivalents

Table 45 in Subclause 8.1.3 was updated to reflect alignment of names and definitions from Table 1 (common queryables).

outputFormat and HTTP message headers

Clarified the role and behaviour of the outputFormat request parameter and the default HTTP message header as received (Subclauses 10.2.2 and 10.3.7).

Abstract Record

Added Abstract Record as root of known Element Sets (Subclause 10.2.5.2)

Returnable Element Sets

Clarified the use and syntax of Brief, Summary, and Full Element Sets (Subclause 10.2.5.3)

New table defining queryables

Added a new table that explains the exact mapping of the core queryables and their XML representation in the context of the HTTP Protocol Binding (CS-W) (Subclause 10.2.5.3).

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Harvest bindings

Added optional "GET" operation support to the Harvest Records method (Subclause 10.3.1, Table 53).

SOAP description and example

Updated the definition of SOAP and its usage in fault handling (Subclause 10.3.2).

2.3 CSW XML namespace reference

Examples referencing the HTTP Protocol Binding (CS-W) schemas in XML were updated to reflect a consistent URI pattern: http://www.opengis.net/cat/csw/2.0.2 (Subclause 10.3.3 and elsewhere).

Handling of case

Added "...parameter names in all KVP encodings shall be handled in a **case insensitive** manner while parameter values shall be handled in a **case sensitive** manner" Expanded the explanation in the nattarive (Subclause 10.3.6).

GetCapabilities request

Requires the invocation of a SERVICE parameter along with a VERSION parameter and corrected the XML schema fragment reflecting this (Subclause 10.3.6).

Exception handling

Clarified the behaviour of exception handling in the HTTP (CS-W) Protocol Binding and provided an example (Subclause 10.3.7).

Operations metadata

Clarified interaction of SOAP and POST requests as described in the capabilities response, Operations Metadata section (Subclause 10.5.4).

Updated examples

Reflect current version of the specification and proper GetCapabilities invocation syntax (Subclause 10.5.5).

Namespace in DescribeRecord

The Namespace parameter was changed from Mandatory to Optional in a DescribeRecord KVP-encoded operation (Subclause 10.6.2)

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TypeName Parameter

TypeName parameter definition was provided in the context of the DescribeRecord operation. In the XML Schema fragment, the TypeName element was changed to type "xsd:QName" from "csw:TypeNameType" (Subclauses 10.6.3 and 10.6.4.2)

DescribeRecord example

Added service request term, clarified schema references (Subclause 10.6.6).

Updated version number

In all examples of requests and responses where a version parameter is shown, the version is updated to 2.0.2. (Clause 10)

GetDomain references

Clarified consistent case handling of keywords and values (Subclause 10.7.2) Done in other subclauses as well.

Interface parameters correction

Corrected spelling of GetRecordById (Subclause 10.7.4).

GetRecords

Expanded the explanation of the operations and behaviour of the operation (Subclause 10.8.1)

KVP encoding of GetRecords

Updated table to include optional requestId, defined outputSchema to be “AnyURI” with a default value of http://www.opengis.net/cat/csw/2.0.2, startPosition to be “non-zero” Positive Integer, clarified mutually-exclusive use of ElementSet and ElementSetName (Subclause 10.8.2, Table 64).

XML encoding of GetRecords

Corrected XML schema for Distributed Search, QueryType, and BasicRetrieval structures, changed TypeNameList Type.itemType to be QName (Subclause 10.8.4).

requestID Parameter

Provided an explanation for the context and use of the requestId parameter in the GetRecords request (Subclause 10.8.4.2).

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outputSchema parameter

Changed the outputSchema value default from "OGCCORE" to the schema URL http://www.opengis.net/cat/csw/2.0.2 and now encourages alternate references to specify a URI of a schema reference with version number (Subclause 10.8.4.5).

TypeNames parameter

Provided discussion, a "NOTE" and examples for the use of the typeNames parameter in the GetRecords request (Subclause 10.8.4.8).

ElementName and ElementSetName

Clarified mutually-exclusive use/request of records based on either an ElementName or an ElementSetName (Subclause 10.8.4.9).

Filter Expression example

Added an example of using a filter expression as a constraint (Subclause 10.8.4.10).

OGC Filter syntax

Moved subclause from Clause 6 to explain detailed use and examples of filter expressions (Subclause 10.8.4.11).

DistributedSearch

Provided explanation of the use of a "FederatedCatalogues" constraint to designate target catalogues to be queried by GetRecords (Subclause 10.8.4.13).

ResponseHandler

Updated example schema and explanation of the ResponseHandler parameter usage (Subclause 10.8.4.14).

2.4 Matching outputSchema parameters in examples

Matched the usage of outputSchema parameter in both the KVP and XML requests to reflect the proper URI string reference (Subclauses 10.8.6 and 10.12.6).

Inserted missing typeName attribute

XML Schema fragment updated to include missing typeName attribute (Subclause 10.11.3.3).

Schema update for transactions

Corrected reference to csw:BriefRecord from csw:AbstractRecord. Added new paragraph to clarify TransactionSummary (Subclause 10.11.4).

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Harvest operation request

ResourceType changed to mandatory, removed minOccurs="0" (Subclause 10.12.3).

HarvestResponse

Corrected XML Schema fragment for Harvest Response (Subclause 10.12.5).

Defined URI patterns for metadata

Created a table and updated URI references to well-known metadata standards for reference by catalogue services (Subclause 10.12.42, Table 69).

sort.xsd

Removed reference to sort.xsd – this is defined in the filter specification (Subclause 10.13).

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