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Open Geospatial Consortium

GEOSPARQL 3D WHITE PAPER

TECHNICAL PAPER

CANDIDATE SWG DRAFT

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Note

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KEYWORDS

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

OGC, GeoSPARQL, 3D

PREFACE

To come...

SECURITY CONSIDERATIONS

The following security considerations apply...

IV SUBMITTING ORGANIZATIONS

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

- Organization one
- Organization two
- Organization three

V SUBMITTERS

NAME	AFFILIATION	OGC MEMBER
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1 SCOPE

1 SCOPE

2

CONFORMANCE

2 CONFORMANCE

3

NORMATIVE REFERENCES

3 NORMATIVE REFERENCES

There are no normative references in this document.

4 TERMS AND DEFINITIONS

4 TERMS AND DEFINITIONS

No terms and definitions are listed in this document.

5

ABSTRACT

5 ABSTRACT

To come...

6 KEYWORDS

6 KEYWORDS

To come...

7 CONVENTIONS

7 CONVENTIONS

8

INTRODUCTION

8 INTRODUCTION

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BENEFICIARIES AND BENEFITS

9 BENEFICIARIES AND BENEFITS

This section describes the beneficiaries and benefits of representing data, including geospatial data, using semantic and graph technologies. Furthermore, a collection of use cases demonstrate how semantic and graph technologies are used together with spatial data to tackle real world problems.

9.1. Beneficiaries

9.1.1. Beneficiary 1: Someone who benefits

9.2. Benefits

The benefits of semantic and graph technologies are outlined below.

9.2.1. Benefit B1: My benefit

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CURRENT CAPABILITIES

10 CURRENT CAPABILITIES

10.1. GeoSPARQL

GeoSPARQL is the most common geospatial extension of SPARQL. It was accepted as an OGC standard in 2012 and revised as GeoSPARQL 1.1 in 2024.

According to the standard document, “The OGC GeoSPARQL standard supports representing and querying geospatial data on the Semantic Web. GeoSPARQL defines a vocabulary for representing geospatial data in RDF, and it defines an extension to the SPARQL query language for processing geospatial data”.

10.1.1. Requirements addressed

GeoSPARQL addresses the following requirements with regards to 3D.

10.1.2. Adoption of GeoSPARQL 1.1

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REQUIREMENTS FOR GEOSPARQL 3D

11 REQUIREMENTS FOR GEOSPARQL 3D

This section provides an overview of feedback received on the current version of the GeoSPARQL standard (version 1.1) regarding 3D usage. This feedback helps to identify some of the barriers to use, and to outline requirements that have not been addressed that may encourage greater uptake.

11.1. Proposed extensions for GeoSPARQL 3D

11.1.1. Extension 1:

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ANNEX N: N

12 ANNEX N: N

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ANNEX O: HISTORY

13 ANNEX O: HISTORY

BIBLIOGRAPHY

BIBLIOGRAPHY

RDF	World Wide Web Consortium, *RDF 1.1 Concepts and Abstract Syntax*, W3C Recommendation (25 February 2014). https://www.w3.org/TR/rdf11-concepts/
TTL	World Wide Web Consortium, *RDF 1.1 Turtle Terse RDF Triple Language*, W3C Recommendation (25 February 2014). https://www.w3.org/TR/turtle