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Open Geospatial Consortium

USER GUIDE FOR OGC POINTS OF INTEREST

USER GUIDE

DRAFT

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I KEYWORDS

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

ogcdoc, OGC document, API, openapi, html

II SECURITY CONSIDERATIONS

No security considerations have been made for this document.

III SUBMITTING ORGANIZATIONS

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

- organization_1
- organization_2
- organization_3
- etc.

IV ABSTRACT

POI-CM is an open conceptual data model for representing information about points of interest (POI). It is defined through a Unified Modeling Language (UML) object model. This UML model extends the ISO Technical Committee 211 (TC211) conceptual model standards for spatial and temporal data. Building on the ISO foundation assures that the features described in the POI Models share the same spatial-temporal universe as described by related standards (e.g., CityGML).

The aim of developing the OGC POI conceptual model is to reach a common definition of the basic entities, attributes, and relations of "points of interest." In the broadest terms, a point of interest is a location about which information of general interest is available. A POI can be as simple as a set of coordinates and an identifier, or more complex such as a three-dimensional model of a building with names in various languages, information about open and closed hours, and a civic address.

This Users Guide provides extended explanations and examples for the individual concepts that are defined in the POI Conceptual Model Standard. Both the Conceptual Model Standard and this Users Guide are mutually linked to facilitate navigation between corresponding sections in these documents.

1 SCOPE

1 SCOPE

This document provides Engineering Guidance on the use of the POI Conceptual Model Standard.

The OGC Conceptual Model Standard specifies the representation of points of interest (POI) models. The POI Conceptual Model is expected to be the basis for a number of future implementation standards in which subsets of the Conceptual Model can be implemented. These future standards will be published separately to enable consistent and efficient storage and exchange of data.

The POI Conceptual Model Standard was designed to be concise and easy to use. As a result, most non-normative content has been removed. The purpose of this Users Guide is to capture that non-normative content and make it easy to access if and when needed.

2

NORMATIVE REFERENCES

2 NORMATIVE REFERENCES

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

Schema.org: http://schema.org/docs/schemas.html

G. Klyne, C. Newman: RFC 3339, *Date and Time on the Internet: Timestamps*. Internet Engineering Task Force (2002). https://raw.githubusercontent.com/relaton/relaton-data-ietf/master/data/reference.RFC.3339.xml

H. Butler, M. Daly, A. Doyle, S. Gillies, S. Hagen, T. Schaub: RFC 7946, *The GeoJSON Format*. Internet Engineering Task Force (2016). https://raw.githubusercontent.com/relaton/relaton-data-ietf/master/data/reference.RFC.7946.xml

3

INTRODUCTION

3 INTRODUCTION

There are many systems and applications that need to have information about locations in the world. For example, such “point of interest” (POI) data is needed in navigation systems, mapping, geocaching, location-based social networking games, and augmented reality browsers, among many others.

POI data has traditionally been exchanged in proprietary formats by various transport mechanisms. This specification defines a flexible, lightweight, extensible POI data model. This will enable content publishers to effectively describe and efficiently serve and exchange POI data.

POI-CM is a common semantic information model for the representation of POI objects that can be shared over different applications. The latter capability is especially important with respect to the cost-effective sustainable maintenance of POI set models, allowing the possibility of selling the same data to customers from different application fields.

POI-CM is an open conceptual data model for the storage and exchange of POI models. It is defined through a Unified Modeling Language (UML) object model. This UML model extends the ISO Technical Committee 211 (TC211) conceptual model standards for spatial and temporal data. Building on the ISO fundation assures that the features described in the POI Models share the same spatial-temporal universe as features described by related standards (e.g., CityGML).

A POI is not a dataset. Rather, it is a feature type that enhances an existing dataset of features. POI-CM builds on the ISO General Feature Model (ISO 10109) and the ISO Geometry Model (ISO 19107). To avoid reinventing things, POI-CM also borrows some classes from ISO Common Data Types (ISO 19103) and OGC CityGML 3.0.

The POI Conceptual Model standard defines the conceptual model in UML and is the focus of this Users Guide. The the future, separate implementation standards can be published for each encoding to be defined. This separation permits generality as well as specificity. The first POI implementation standard will describe the JSON encoding. Other implementation standards (e.g. for elational database schema) are expected to follow.

4

HOW TO USE THIS RESOURCE

4 HOW TO USE THIS RESOURCE

The Users Guide to the POI Conceptual Model Standard is not intended to be read from start to finish. Rather, it is a resource structured to provide quick answers to questions that an implementer may have about the POI-CM Standard.

The POI-CM Standard includes hyperlinks that can be used to navigate directly to relevant sections of the Users Guide.

Some content in the Users Guide has been copied from the POI Conceptual Model Standard to make the content more accessible to the user. In order to make clear which content in the Users Guide has been copied, the copied text is provided within grey boxes.

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CHOOSE RESTAURANT USE CASE

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CONSTRUCTION SITE USE CASE

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COUNTRY COVID REQUIREMENTS USE CASE

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COVID TESTING CENTER USE CASE

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