



GeoDCAT-AP

La nuova versione e le esperienze in Europa

Dati territoriali aperti: l'interoperabilità tra cataloghi, RNDT e dati.gov.it

Webinar – 30 giugno 2021

→ GeoDCAT-AP

- Permette di rappresentare **metadati geografici** usando tecnologie del **Semantic Web**
- Estende la specifica europea **DCAT-AP** - lo standard *de facto* per l'interscambio di metadati a livello europeo
- Sviluppato nel contesto del programma **ISA / ISA²** dell'Unione Europea - ora parte del **Digital Europe Programme**
- Conforme, a livello concettuale, con il regolamento e le linee guida **INSPIRE** sui metadati

ISA² Programme solutions

You click, we link!



DCAT-AP

Describe datasets on data portals



Core Vocabularies

Commonly agreed models for public sector data



ADMS

Model to describe open source and reusable solutions



VocBench3

Multilingual platform for collaborative thesaurus management



CPSV-AP

Data model for describing public services and the associated life and business events



E-Docs

ArchiMate diagrams visualising e-Document lifecycle



TESTA

Data communication network service



Open e-TrustEx

Secure document exchange platform



OCS for ECIS

Online Collection Software to support European Citizens' Initiatives



Crypto Tool

Tools to improve the mechanism preventing double voting in European Parliament elections



EIRA & CarTool

European Interoperability Reference Architecture and Cartography tool



Joinup

Collaborative platform facilitating the sharing and reuse of IT solutions developed for public administrations



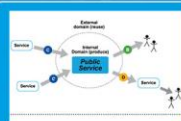
NIFO

National Interoperability Framework Observatory



EUPL

Open source licence



IMAPS

Interoperability Maturity Assessment of a Public Service



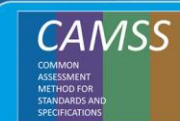
EUSurvey

Create, manage and analyse online surveys and public consultations



IOP Test Bed

Interoperability and conformance testing platform



CAMSS

Common assessment method for standards and specifications



Open PM²

Open Project Management Methodology



CIRCABC

Communication and Information Resource Centre for Administrations, Businesses and Citizens



IQAT

A toolkit to assess the potential interoperability of software solutions supporting public services



LEOS

Facilitate the editing of legislative texts



Ref2Link

A text mining tool to detect EU legal references for hyperlink creation or knowledge extraction



ELI

Tool for building notices describing legal resources using the European Legislation Identifier



ESPD

Facilitate participation in public procurement across the EU



Open e-Prior

e-Procurement system for Public Administrations



e-Certis

Map certificates necessary in public procurement



Re3gistry

Manage and share reference codes

- Key and generic interoperability enablers
- Semantic interoperability
- Decision making and legislation
- EU policies -Supporting instruments
- e-Procurement/ e-Invoicing
- Geospatial solutions
- Supporting instruments for public administrations

Learn more



→ Obiettivi e funzione

GeoDCAT-AP non sostituisce il regolamento e le specifiche INSPIRE sui metadati, basate sugli standard ISO 19115 e ISO 19119

- L'obiettivo è fornire una **rappresentazione alternativa e armonizzata** dei metadati INSPIRE
- La sua funzione primaria è di facilitare la ricerca e l'accesso ai dati INSPIRE **indipendentemente dalla piattaforma tecnologica utilizzata e dai confini geografici**

→ Sviluppo e adozione

- **Prima versione** pubblicata nel dicembre **2015**
- Corredata da una **implementazione di riferimento** delle regole di trasformazione, che permette di **convertire automaticamente metadati geografici**
- Condivisa con **W3C** e **OGC** per validazione e standardizzazione
- Adottata da **pubbliche amministrazioni** (regionali e nazionali), **progetti europei**, e **piattaforme software**
- Utilizzata per la pubblicazione di metadati geografici nell'**European Data Portal**

WEBINAR

GeoDCAT-AP

**Adoption and implementation experiences
of the geospatial extension to DCAT-AP**

Tuesday 16-07-2019

10:00-12:00 CEST (GMT+2)

Organised by the SEMIC action of the ISA² programme



→ Criteri di progettazione

- **Individuare il sottoinsieme rilevante di metadati INSPIRE e ISO 19115**
- **Riutilizzare il più possibile RDF vocabolari esistenti e impiegati diffusamente**
- **Limitare il più possibile l'impatto su sistemi esistenti**
- **Implementazione di riferimento integrabile nell'interfaccia standard dei cataloghi di dati geografici (CSW)**
- **Utilizzo di un linguaggio di trasformazione (XSLT) non vincolato a una specifica tecnologia**

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GeoDCAT-AP - Version 2.0.0

A geospatial extension for the DCAT application profile for data portals in Europe



SEMIC Recommendation 23 December 2020

This version:

<https://semiceu.github.io/GeoDCAT-AP/releases/2.0.0/>

Latest published version:

<https://semiceu.github.io/GeoDCAT-AP/releases/>

Latest editor's draft:

<https://semiceu.github.io/GeoDCAT-AP/drafts/latest/>

Previous version:

<https://semiceu.github.io/GeoDCAT-AP/drafts/2.0.0-draft-0.1/>

Previous Recommendation:

<https://semiceu.github.io/GeoDCAT-AP/releases/1.0.1/>

→ La nuova versione di GeoDCAT-AP

- Pubblicata nel dicembre **2020**, e **compatibile con la versione precedente**
- Allineata con la **versione 2017 delle linee guida INSPIRE sui metadati**
- Allineata con la **versione 2 di DCAT-AP e del W3C Data Catalog Vocabulary (DCAT)**, che includono metadati rilevanti per dati geografici (servizi, risoluzione spaziale e temporale)
- **Estende la prima versione di GeoDCAT-AP** per fornire una più fedele rappresentazione di alcuni metadati geografici (risoluzione spaziale e ruoli)
- Corredata dalla sua **definizione formale in RDF e SHACL**, oltre che dalla implementazione di riferimento delle regole di trasformazione

§ C. Change Log

A full change-log is available on [GitHub](#)

§ C.1 Changes since first public working draft of 12 October 2020

- Defined terms in the GeoDCAT-AP namespace (§ 4.20.1 [Instances of Metric](#)) for the specification of the different types of spatial resolution (see issue [#15](#)).
- Defined properties in the GeoDCAT-AP namespace (§ 7. [Agent Roles](#)) for the specification of [INSPIRE](#) / ISO 19115:2003 responsible party roles not supported in [\[VOCAB-DCAT-2\]](#) and [\[DCTERMS\]](#) (see issue [#32](#)).
- Adopted datatype `gsp:geoJSONLiteral`, defined in the current draft of GeoSPARQL [\[GeoSPARQL11\]](#), for GeoJSON literals, and deprecated the solution used in the previous versions of GeoDCAT-AP (see issue [#4](#)).
- Added to § 5.2 [Controlled vocabularies to be used](#) the [INSPIRE](#) Registry code lists for spatial representation type [\[INSPIRE-SRT\]](#) and maintenance frequency [\[INSPIRE-MF\]](#) (see issues [#55](#) and [#56](#)). The relevant examples have been revised accordingly ([Example 10](#), [Example 11](#), [Example 51](#)).
- Editorial revision of the specification.

§ C.2 Changes since GeoDCAT-AP 1.0.1 (2 August 2016)


- Document completely re-written starting from the [\[DCAT-AP-20200608\]](#) specification, with the purpose of using a consistent document structure across DCAT-AP specifications.
- Use of classes and properties aligned with [\[DCAT-AP-20200608\]](#) (see issues [#1](#), [#2](#), [#5](#), [#7](#), [#8](#), [#10](#), [#16](#)). Classes and properties no longer used or replaced by new ones have been deprecated (see [§ A.2 Deprecated classes and properties](#)).

§ A.2 Deprecated classes and properties


Class / Property	URI	Domain	Replaced by	Deprecated in
<u>Media Type or Extent</u>	<code>dct:MediaTypeOrExtent</code>		<code>dct:MediaType</code>	[DCAT-AP-20191120]
+ <u>Service</u>	<code>dctype:Service</code>		<code>dcat:DataService</code>	GeoDCAT-AP 2.0.0
<u>end date</u>	<code>schema:endDate</code>	<code>dct:PeriodOfTime</code>	<code>dcat:endDate</code>	[DCAT-AP-20191120]
<u>endpoint URL</u>	<code>foaf:homepage</code>	<code>dcat:DataService</code>	<code>dcat:endpointURL</code>	GeoDCAT-AP 2.0.0
+ <u>had role</u>	<code>dct:type</code>	+ <code>prov:Attribution</code>	<code>dcat:hadRole</code>	GeoDCAT-AP 2.0.0
+ <u>keyword / tag</u>	<code>dc:subject</code>	<code>dcat:Catalog</code>	<code>dcat:keyword</code>	GeoDCAT-AP 2.0.0
+ <u>keyword / tag</u>	<code>dc:subject</code>	<code>dcat:DataService</code>	<code>dcat:keyword</code>	GeoDCAT-AP 2.0.0
<u>serves dataset</u>	<code>dct:hasPart</code>	<code>dcat:DataService</code>	<code>dcat:servesDataset</code>	GeoDCAT-AP 2.0.0
<u>service</u>	<code>dct:hasPart</code>	<code>dcat:Catalog</code>	<code>dcat:service</code>	GeoDCAT-AP 2.0.0
+ <u>spatial resolution</u>	<code>rdfs:comment</code>	<code>dcat:DataService</code>	<code>dcat:spatialResolutionInMeters</code> <code>dqv:hasQualityMeasurement</code>	GeoDCAT-AP 2.0.0
<u>spatial resolution</u>	<code>rdfs:comment</code>	<code>dcat:Dataset</code>	<code>dcat:spatialResolutionInMeters</code> <code>dqv:hasQualityMeasurement</code>	GeoDCAT-AP 2.0.0
+ <u>spatial resolution</u>	<code>rdfs:comment</code>	<code>dcat:Distribution</code>	<code>dcat:spatialResolutionInMeters</code> <code>dqv:hasQualityMeasurement</code>	GeoDCAT-AP 2.0.0
<u>start date</u>	<code>schema:startDate</code>	<code>dct:PeriodOfTime</code>	<code>dcat:startDate</code>	[DCAT-AP-20191120]
+ <u>theme / category</u>	<code>dct:subject</code>	<code>dcat:Catalog</code>	<code>dcat:theme</code>	GeoDCAT-AP 2.0.0
+ <u>theme / category</u>	<code>dct:subject</code>	<code>dcat:DataService</code>	<code>dcat:theme</code>	GeoDCAT-AP 2.0.0

→ Future versions

- Allineamento con nuove versioni di DCAT-AP e del W3C DCAT Vocabulary
- Allineamento con nuove versioni del regolamento e delle linee guide INSPIRE sui metadati
- Integrazione di requisiti contribuiti da utenti e implementazioni esistenti
- Supporto alla più recente versione dello standard ISO 19115



Pulls Issues Marketplace Explore











SEMICeu / GeoDCAT-AP
Unwatch 16
Star 8
Fork 3

<> Code
Issues 7
Pull requests
Actions
Projects 1
Wiki
Security
Insights
...

Filters

Labels 18
Milestones 0
New issue

7 Open
24 Closed

<input type="checkbox"/>	Author	Label	Projects	Milestones	Assignee	Sort	
<input type="checkbox"/>		ISO 19115:2003 "HAS BEEN REVISED BY ISO 19115-1:2014"					 1
		#63 opened 6 days ago by akuckartz					
<input type="checkbox"/>		Relationships between GeoDCAT-AP and DCTERMS agent roles					 1
		#57 opened on Dec 15, 2020 by andrea-perego					
<input type="checkbox"/>		Maintenance frequency code list					 5
		#56 opened on Dec 7, 2020 by andrea-perego					
<input type="checkbox"/>		Review list of recommended controlled vocabularies					
		#49 opened on Dec 4, 2020 by andrea-perego					
<input type="checkbox"/>		Support 1-to-many mappings for responsible party roles					 1
		#39 opened on Nov 24, 2020 by andrea-perego					

→ Riferimenti

GeoDCAT-AP 2

→ <https://semiceu.github.io/GeoDCAT-AP/releases/2.0.0>

GeoDCAT-AP XSLT e API

→ <https://github.com/semiceu/iso-19139-to-dcat-ap>

DCAT-AP 2

→ <https://joinup.ec.europa.eu/collection/semantic-interoperability-community-semic/solution/dcat-application-profile-data-portals-europe>

W3C DCAT 2

→ <https://www.w3.org/TR/vocab-dcat-2>