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- Que es la OGC API?
- OGC API Feature en ICGC
- Implementación
- Desarrollo
- Explotación
- Caso de uso en QGIS
- Conclusiones

Que es la API OGC?



OGC API – Discrete Global Grid Systems



OGC API – Records



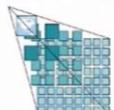
OGC API - Maps



OGC API - Styles



OGC API - Tiles



Tile Matrix Set

OGC API - Common



OGC API - Routes

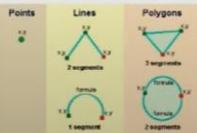


OGC API – Environmental Data Retrieval



Trajectory

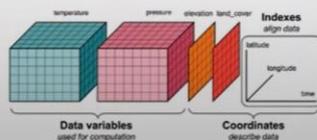
OGC API - Features



OGC API - Processes



OGC API – Coverages

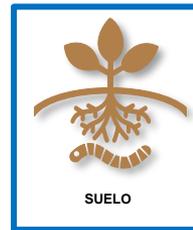
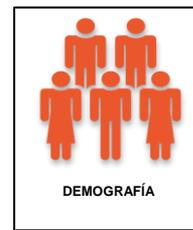


- ISO 19168-1:2020 Geographic information — Geospatial API for features — Part 1: Core
- ISO 19168-2:2022 Geographic information – Geospatial API for features — Part 2: Coordinate Reference Systems by Reference

OGC API en ICGC



- [Reglamento de Ejecución \(UE\) 2023/138. Conjuntos de datos de alto valor](#)
- [OGC API - Features as an INSPIRE download service](#)



- Geoespacial
- Observación de la Tierra y medio ambiente

Implementación



OGC API Extension

SERVIDOR

swagger <https://geoserveis.ide.cat/servei/catalunya/inspire/ogc/features/api?application%2Fvnd.oai.openapi%2Bjson%3Bversion%3D3.0> Explore

Features 1.0 server 2.21.0 0410

<https://geoserveis.ide.cat/servei/catalunya/inspire/ogc/features/api?application%2Fvnd.oai.openapi%2Bjson%3Bversion%3D3.0>

[WFS specification](#)

Server

Capabilities essential characteristics of this API

- GET / landing page
- GET /conformance information about specifications that this API conforms to
- GET /functions information about functions supported in the CQL filter extension
- GET /collections the feature collections in the dataset
- GET /collections/{collectionId} describe the feature collection with id 'collectionId'
- GET /collections/{collectionId}/queryables lists the queryable attributes for the feature collection with id 'collectionId'

Data access to data (features)

- GET /collections/{collectionId}/items fetch features
- GET /collections/{collectionId}/items/{featureId} fetch a single feature

TileMatrixSet

- GET /tileMatrixSets fetch all available tile matrix sets (tiling schemes)
- GET /tileMatrixSets/{tileMatrixSetId} fetch a tile matrix sets (tiling scheme) by id

Tiled data from one collection

- GET /collections/{collectionId}/tiles/{tileMatrixSetId}/{tileMatrix}/{tileRow}/{tileCol} fetch a tile from a collection

Desarrollo

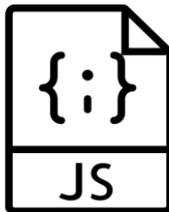


CLIENTE

2.21.0



OGC API Extension



The screenshot shows the 'Feature Collections ICGC' page in the GeoServer web interface. It lists several collections with their titles, descriptions, geographic extents, and query capabilities. Each collection has a 'Data as' dropdown menu set to 'HTML'.

Collection Name	Title	Description	Geographic Extent	Queryable as
inspire-AM-Address	Address		0.046, 40.524, 3.352, 42.896	WFS
inspire-AM-FishingArea	Fishing area		0.112, 40.677, 3.213, 42.789	WFS
inspire-AM-ForestManagementArea	Forest management area		0.046, 40.502, 3.352, 42.896	WFS
inspire-AM-HuntingManagementArea	Hunting management area		0.046, 40.503, 3.352, 42.896	WFS
inspire-AM-NatureSensitiveZone	Nature sensitive zone		0.046, 40.506, 3.211, 42.365	WFS
inspire-AJ-AdministrativeBoundary	Administrative boundary		0.046, 40.503, 3.352, 42.896	WFS
inspire-AJ-AdministrativeUnit	Administrative unit			WFS
inspire-BJ-Building	Building			WFS
inspire-ET-EnvironmentMonitoringFacilities	Environmental monitoring facilities			WFS

Collections

Explotación



Fetch this resource as: ▼

Inspire:AU.AdministrativeBoundary

Title: Administrative boundary
Description: AdministrativeBoundary represents the boundaries between neighbouring administrative units and including their boundary-specific attributes.
Geographic extents:
 0.646, 40.503, 3.352, 42.896.
 Queriables as [HTML](#).
 The layer can also be explored in this [HTML preview](#).

Data as or choose another format: ▼

Feature schema

```

localId: String
geom: Geometry
country: String
nationalLevel: String
legalStatus: String
technicalStatus: String
administrativeUnit1: String
administrativeUnit2: String
legalResponsiveness: Date
namespace: String
versionId: String
  
```

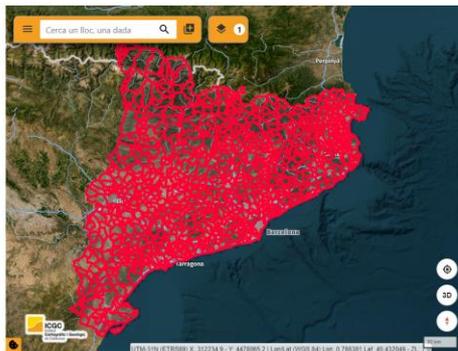


Fig. 0001 © Institut Cartogràfic i Geològic de Catalunya permet la reutilització dels continguts i de les dades sempre que se citi la font i la data d'actualització, que no es desautoritza l'informació i que no es contrapeja amb una font més específica.

Collection : /collections/{collectionId}

Items: collections/{collectionId}/items

AU.AdministrativeBoundary

fid	localId	country	nationalLevel	legalStatus	technicalStatus	administrativeUnit1	administrativeUnit2	legalResponsiveness	namespaces	versionId
AU.AdministrativeBoundary.ID.AU.Insta.1	ID.AU.Insta.1	ES	4thOrder	agreed	edgeMatched					08008
AU.AdministrativeBoundary.ID.AU.Insta.10	ID.AU.Insta.10	ES	4thOrder	agreed	edgeMatched					08003
AU.AdministrativeBoundary.ID.AU.Insta.100	ID.AU.Insta.100	ES	4thOrder	agreed	edgeMatched					080174
AU.AdministrativeBoundary.ID.AU.Insta.1000	ID.AU.Insta.1000	ES	4thOrder	agreed	edgeMatched					17006
AU.AdministrativeBoundary.ID.AU.Insta.1001	ID.AU.Insta.1001	ES	4thOrder	agreed	edgeMatched					170078
AU.AdministrativeBoundary.ID.AU.Insta.1002	ID.AU.Insta.1002	ES	4thOrder	agreed	edgeMatched					170079
AU.AdministrativeBoundary.ID.AU.Insta.1003	ID.AU.Insta.1003	ES	4thOrder	agreed	edgeMatched					170084
AU.AdministrativeBoundary.ID.AU.Insta.1004	ID.AU.Insta.1004	ES	4thOrder	notAgreed	edgeMatched					170084
AU.AdministrativeBoundary.ID.AU.Insta.1005	ID.AU.Insta.1005	ES	4thOrder	agreed	edgeMatched					170084
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AU.AdministrativeBoundary.ID.AU.Insta.101	ID.AU.Insta.101	ES	4thOrder	agreed	edgeMatched					080174
AU.AdministrativeBoundary.ID.AU.Insta.1010	ID.AU.Insta.1010	ES	4thOrder	agreed	edgeMatched					170097
AU.AdministrativeBoundary.ID.AU.Insta.1011	ID.AU.Insta.1011	ES	4thOrder	agreed	edgeMatched					170097
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AU.AdministrativeBoundary.ID.AU.Insta.1020	ID.AU.Insta.1020	ES	4thOrder	agreed	edgeMatched					170084

Feature: /collections/{collectionId}/items/{featureId}

AU.AdministrativeUnit

fid	localId	country	nationalCode	nationalLevel	nationalLevelName
AU.AdministrativeUnit.ID.AU.municipi.L10950	ID.AU.municipi.L10950	ES	170950	4thOrder	municipi

Filtros

Atributo

BBOX



US.Education.ID.US.educacio.11423990	ID.US.educacio.11423990	lowerSecondaryEducation
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Mostrant 4566 de 4566

Limit: Tot

Filtres: Atribut

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US.Education.ID.US.educacio.10583224	ID.US.educacio.10583224	masterOrEquivalentEducation	Facultat de Comunicació i Educació Humanitats (UAO)	93 254 09 00	-
US.Education.ID.US.educacio.14180046	ID.US.educacio.14180046	masterOrEquivalentEducation	Facultat de Medicina (UW)	-	-
US.Education.ID.US.educacio.3044342	ID.US.educacio.3044342	masterOrEquivalentEducation	Escola Politècnica Superior d'Enginyeria de Vilanova i la Geltrú (UPC)	93 896 77 01	-
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US.Education.ID.US.educacio.3044345	ID.US.educacio.3044345	masterOrEquivalentEducation	Escola Superior d'Agricultura de Barcelona (UPC)	93 552 10 00	-
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US.Education.ID.US.educacio.3044348	ID.US.educacio.3044348	masterOrEquivalentEducation	Escola Politècnica d'Enginyeria (UAO)	93 254 09 00	-

Mostrant 248 de 248

Limit: Tot

Filtres: masterOrEquivalentEducation

BBOX: Copia coordenades del BBOX



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US.Education.ID.US.educacio.3044513	ID.US.educacio.3044513	masterOrEquivalentEducation	Facultat de Medicina (USG)	972 41 96 16	-
US.Education.ID.US.educacio.3044535	ID.US.educacio.3044535	masterOrEquivalentEducation	Institut de Llengua i Cultura Catalanes (USG)	972 41 82 31	-

Mostrant 22 de 22

Limit: Tot

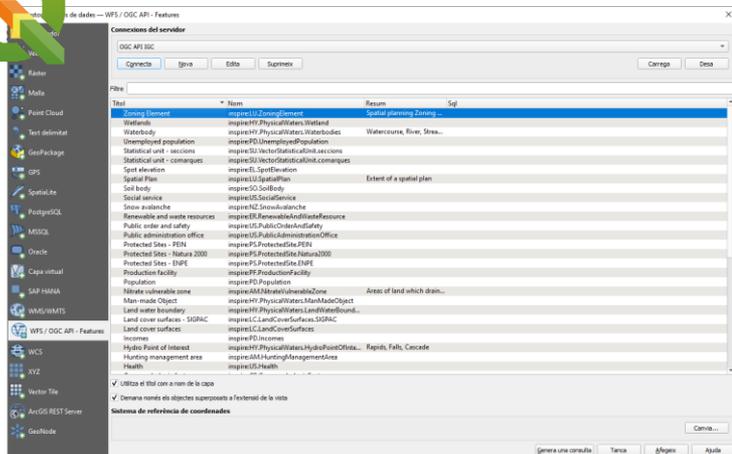
Filtres: Atribut

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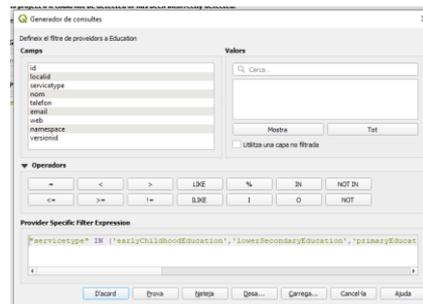
Caso de uso en QGIS



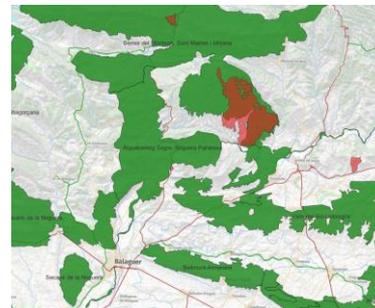
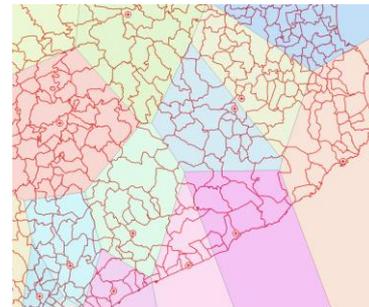
Importación



Filtros



Geoprocesos



- ACTUALIZACIÓN AUTOMÁTICA DE LOS DATOS
- EXPORTACIÓN A CUALQUIER FORMATO
- PETICIÓN POR EXTENSIÓN DE LA VISTA

#51663 | versión QGIS 3.30

Conclusiones

<https://geoserveis.ide.cat/servei/catalunya/inspire/ogc/features/collections?f=text%2Fhtml>



- Facilidad para el usuario
- Interoperabilidad entre orígenes de datos
- Datos según necesidad
- Sistema de coordenadas según necesidad
- Simplicidad e Integridad de los datos
- Personalización



- Validación INSPIRE
- Perdida de simbología
- Mayor coste inicial de implementación

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