



Open
Geospatial
Consortium

Progreso de los OGC APIs

(Interfaces de Programación de Aplicaciones)

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Open Geospatial Consortium (OGC)

- Consorcio internacional sin ánimo de lucro.
- Agrupa a más de 560 compañías privadas, agencias gubernamentales y universidades.
- Los miembros colaboran en el desarrollo y mantenimiento de estándares para datos y servicios geospaciales.



1ª - Generación de Servicios Web OGC (OWS)

- La OGC ha sido creada en 1994
- 1990s/00s
- Uso de SOAP/XML



Servicios W*s

	WMS	WFS	WCS	WPS	SOS	SPS	CSW	WMTS
Use HTTP methods explicitly.	Y	N	Y*	N	N	N	N	Y
Be stateless.	Y	Y	Y	Y	Y	Y	Y	Y
Expose directory structure-like URIs.	N	N	N	N	N	N	N	Y
Use HTTP Error codes	N	N	N	N	N	N	N	N
Transfer XML, JavaScript Object Notation (JSON), or image.	Image	XML	Any	Any	XML	XML	XML	Image

Source: OGC 15-052r1r1

OGC APIs

 <https://ogcapi.ogc.org/>

- Aseguran que los datos geoespaciales sean “web native”.
- Mejoran la experiencia del usuario.
- Están más adaptados para datos actualizados frecuentemente
- En última instancia, reemplazarán y mejorarán los estándares de servicio web de OGC (W*s).



{ REST }



Todo definido en OpenAPI

```
1 openapi: 3.0.2
2 info:
3   title: "Building Blocks specified in OGC API - Features - Part 1: Core"
4   description: |-
5     Common components used in the
6     [OGC standard "OGC API - Features - Part 1: Core"](http://docs
7       .opengeospatial.org/is/17-069r3/17-069r3.html).
8     OGC API - Features - Part 1: Core 1.0 is an OGC Standard.
9     Copyright (c) 2019 Open Geospatial Consortium.
10    To obtain additional rights of use, visit http://www.opengeospatial
11      .org/legal/ .
12    This document is also available on
13    [OGC](http://schemas.opengis.net/ogcapi/features/part1/1.0/openapi
14      /ogcapi-features-1.yaml).
15  version: '1.0.0'
16  contact:
17    name: Clemens Portele
18    email: portele@interactive-instruments.de
19  license:
20    name: OGC License
21    url: 'http://www.opengeospatial.org/legal/'
22  components:
23  parameters:
24    bbox:
25      name: bbox
26      in: query
27      description: |-
28        Only features that have a geometry that intersects the bounding
29        box are selected.
30        The bounding box is provided as four or six numbers, depending on
31        whether the
32        coordinate reference system includes a vertical axis (height or
33        depth).
```

**Building Blocks
- Features - Part 1: Core**

Common components used in the [OGC standard "OGC API - Features - Part 1: Core"](#) (<http://docs.opengeospatial.org/is/17-069r3/17-069r3.html>).

OGC API - Features - Part 1: Core 1.0 is an OGC Standard. Copyright (c) 2019 Open Geospatial Consortium. To obtain additional rights of use, visit <http://www.opengeospatial.org/legal/>.

This document is also available on [\[OGC\]](http://schemas.opengis.net/ogcapi/features/part1/1.0/openapi-ogcapi-features-1.yaml) (<http://schemas.opengis.net/ogcapi/features/part1/1.0/openapi-ogcapi-features-1.yaml>).

[Contact Clemens Portele](#)
[OGC License](#)

No operations defined in spec!

Schemas

- collection >
- collections >

Modernización de la documentación
Hacia una herramienta interactiva

Diseñadas y Publicadas en “Bloques de Construcción”

User: just want features in WGS 84, but want to query



Features: CQL

Features: CRS

Features: Core

Data
OGC API - Common

Tiles

Maps

Coverages

Features: Transactions

EDR

User: tile it up and make it work on my phone



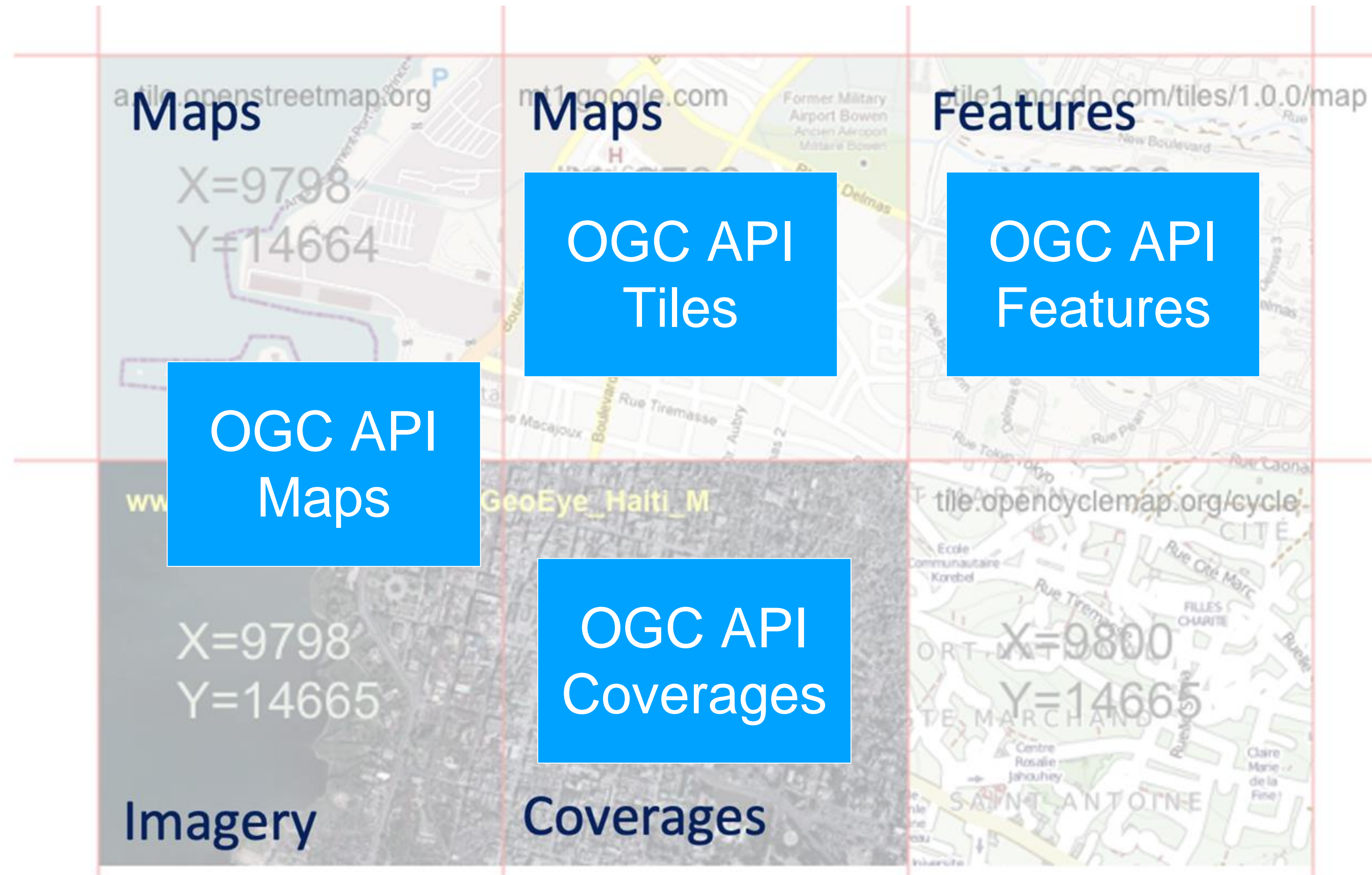
User: need features supporting GDA2020 and other CRSs



User: I am a fire incident commander: give me everything



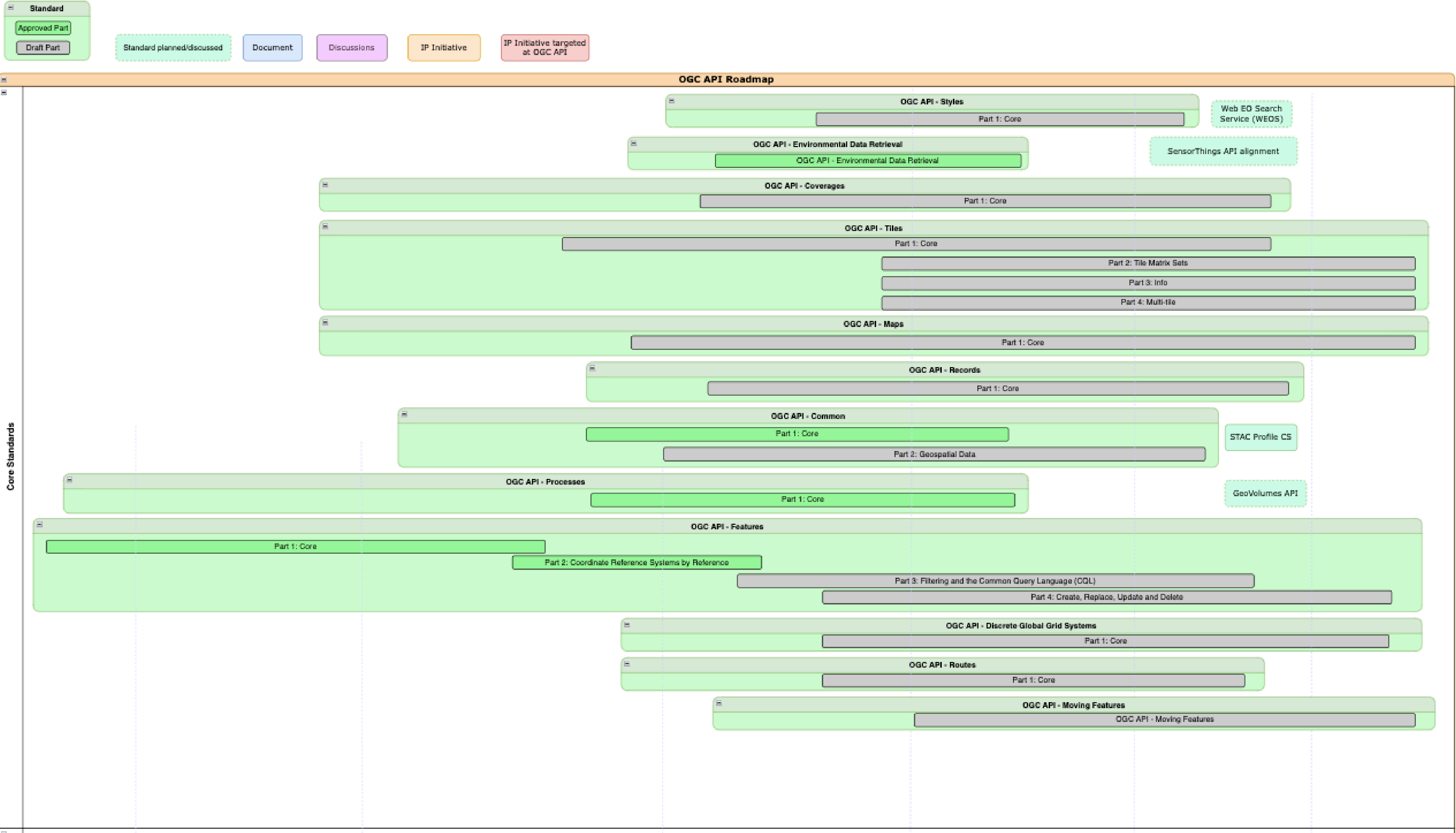
Correspondencia OWS -> OGC APIs



Discover via
OGC API
Records

Multiple Maps with common semantics - Interoperability (Source: Joan Maso)

OGC API Roadmap



OGC API - Estándares aprobados y candidatos a estándares

OGC API –
Discrete Global Grid Systems



OGC API –
Records



Peter

OGC API - Maps



Joan

OGC API - Styles



OGC API –
Moving Features

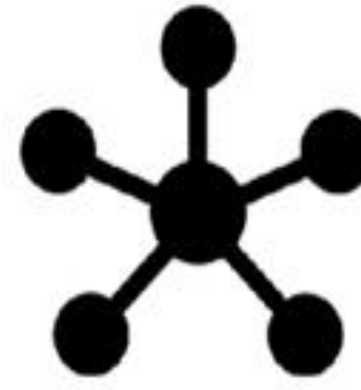


OGC API - Tiles




Joan

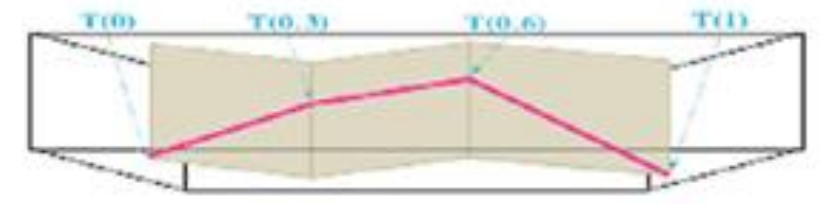
OGC API - Common



OGC API - Routes



OGC API –
Environmental Data Retrieval



OGC API - Features

Clemens

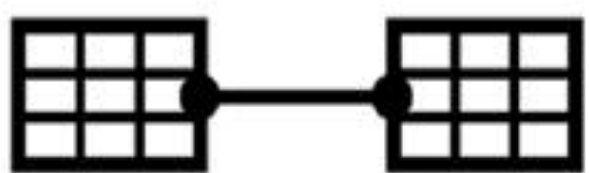
OGC API - Processes



OGC API – Coverages



OGC API –
Joins

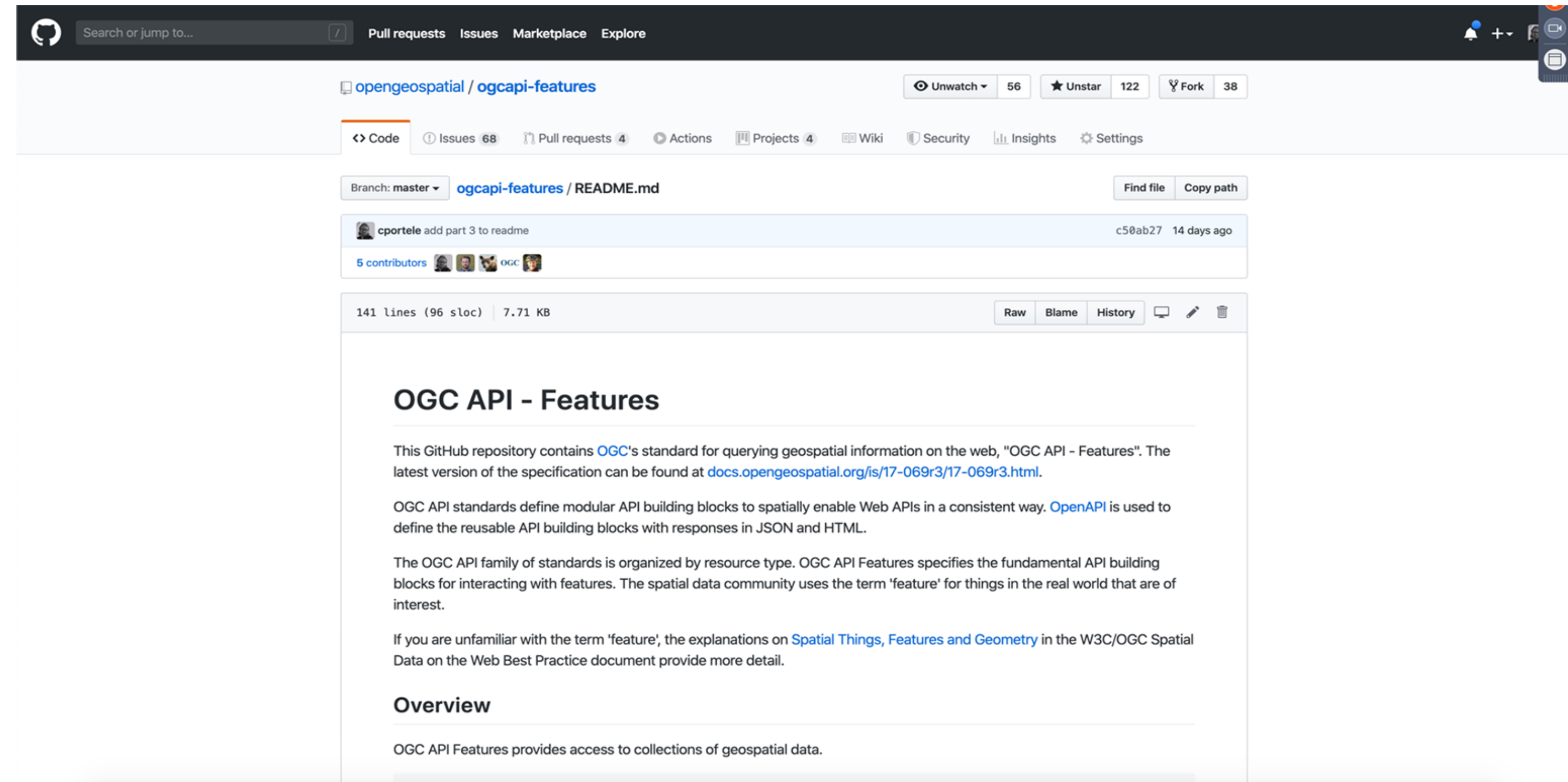
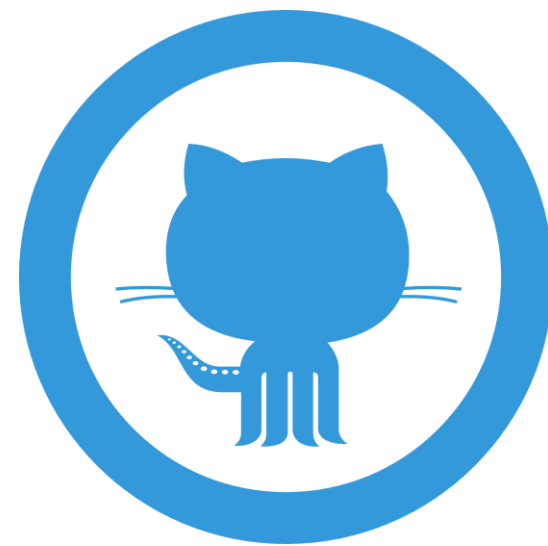


Green border means approved

¿Cómo involucrarse en OGC?

Contribuir a los repositorios de GitHub de las OGC APIs

- Juntarse a las discusiones.
- Crear issues.
- Submitir PR.



The screenshot shows the GitHub repository page for 'opengeospatial/ogcapi-features'. The repository has 56 watchers, 122 stars, and 38 forks. The current branch is 'master' and the file being viewed is 'ogcapi-features / README.md'. The commit history shows a commit by 'cportele' titled 'add part 3 to readme' from 14 days ago. The README content includes the title 'OGC API - Features', a description of the repository's purpose, and an 'Overview' section.

OGC API - Features

This GitHub repository contains OGC's standard for querying geospatial information on the web, "OGC API - Features". The latest version of the specification can be found at docs.opengeospatial.org/is/17-069r3/17-069r3.html.

OGC API standards define modular API building blocks to spatially enable Web APIs in a consistent way. OpenAPI is used to define the reusable API building blocks with responses in JSON and HTML.

The OGC API family of standards is organized by resource type. OGC API Features specifies the fundamental API building blocks for interacting with features. The spatial data community uses the term 'feature' for things in the real world that are of interest.

If you are unfamiliar with the term 'feature', the explanations on [Spatial Things, Features and Geometry](#) in the W3C/OGC Spatial Data on the Web Best Practice document provide more detail.

Overview

OGC API Features provides access to collections of geospatial data.

<https://github.com/opengeospatial/ogcapi-features/>

<https://github.com/opengeospatial/ogcapi-tiles>

<https://github.com/opengeospatial/ogcapi-records>

Unirse a los grupos de trabajo de OGC

- Grupos de Trabajo de Estándares (SWG): grupos que trabajan en estándares (nuevos o revisados) a través del proceso OGC RFC.
- Grupos de Trabajo de Dominio (DWGs): grupos que trabajan en requisitos específicos de tecnología o dominio para la interoperabilidad.
- **Es necesario ser miembro OGC para unirse a los grupos de trabajo.**



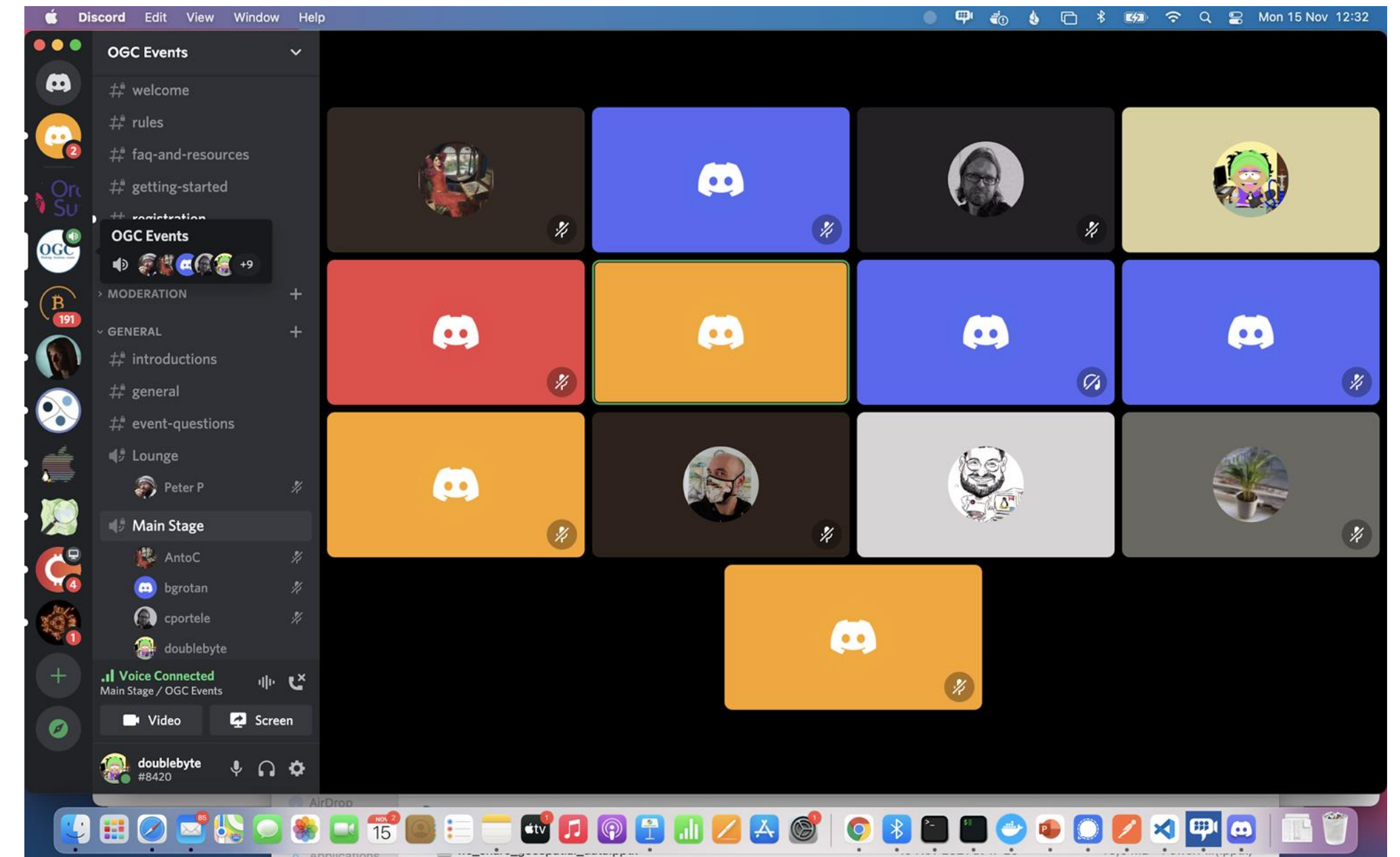
<https://www.ogc.org/join>

Unirse a los Code Sprints de OGC

- Eventos virtuales/híbridos de tres días.
- Enfoque en un grupo de estándares relacionados.
- La participación esta abierta a todas las personas.
- Habrá un mentor stream para nuevos participantes.



Servidor de Discord: OGC-events



<https://discord.gg/3uyaZZuXr3>



<https://github.com/opengeospatial/developer-events/wiki>

Code Sprint - Datos Vectoriales

- Julio 2022
- Evento virtual
- Estándares: OGC API - Moving Features, OGC API - Routes, OGC API - GeoVolumes, OGC API - Features, y OGC API - Joins



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Code Sprint de Septiembre ✓

- Code Sprint de OGC junto con ISO/TC211
- Enfoque en metadatos: OGC API - Records, ISO 19115, JSON-FG y STAC.
- Híbrido

Code Sprint de Diciembre ✓

- Enfoque en mapas web: OGC API - Tiles, OGC API Maps y OGC API - Styles.
- Híbrido

Seguir el Foro Ibérico y Latino-Americano de OGC

- Quiere abarcar la comunidad que habla castellano y portugues interesada en los desarrollos y objetivos de OGC o que necesitan los estandares geo-espaciales.
- Engloba tanto a los miembros OGC como a los que, sin serlo, compartan intereses
- Conectar lo Local con lo Global

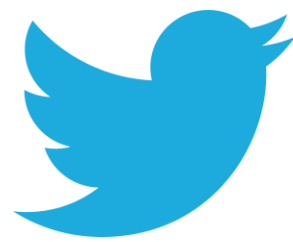


Suscribirse a la lista: ila.forum@lists.opengeospatial.org

https://external.ogc.org/twiki_public/ILAFpublic/WebHome



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¡Gracias por vuestra atención!

Community

- 500+ International Members
- 110+ Member Meetings
- 60+ Alliance and Liaison partners
- 50+ Standards Working Groups
- 45+ Domain Working Groups
- 25+ Years of Not for Profit Work
- 10+ Regional and Country Forums

Innovation

- 120+ Innovation Initiatives
- 380+ Technical reports
- Quarterly Tech Trends monitoring

Standards

- 65+ Adopted Standards
- 300+ products with 1000+ certified implementations
- 1,700,000+ Operational Data Sets
- Using OGC Standards

