



***Follow the OGC API Standards***

**MAXIMUM RESULT | MINIMUM EFFORT**

# OGC API standaarden

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### Features

Approved Standard

OGC API - Features - Part 1: Core and Part 2: Coordinate Reference Systems by Reference are both publicly available.



### Common

Approved Standard

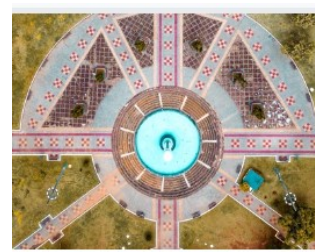
OGC API - Common specifies those building blocks that are shared by most or all OGC API Standards to ensure consistency across the family.



### EDR

Approved Standard

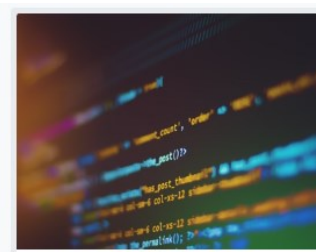
Environmental Data Retrieval (EDR) API provides a family of lightweight interfaces to access Environmental Data resources. Each resource addressed by an EDR API maps to a defined query pattern.



### Tiles

Approved Standard

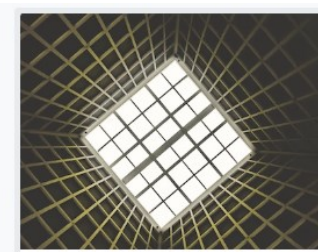
OGC API - Tiles provides extended functionality to other OGC API Standards to deliver vector tiles, map tiles, and other tiled data.



### Processes

Approved Standard

OGC API - Processes allows for processing tools to be called and combined from many sources and applied to data in other OGC API resources through a simple API.



### Coverages

OGC API - Coverages allows discovery, visualization and query of complex raster stacks and data cubes.



### Records

OGC API - Records updates OGC's Catalog Services for the Web by building on the simple access to content in OGC API - Features.



### Styles

The OGC API - Styles defines a Web API that enables map servers, clients as well as visual style editors, to manage and fetch styles.



### Maps

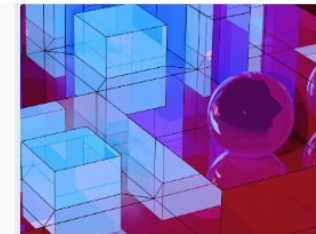
OGC API - Maps offers a modern approach to the OGC Web Map Service (WMS) standard for provision map and raster content.

WFS > Features  
WMST > Tiles  
CSV > Records  
WMS > Maps



### Moving Features

OGC API - Moving Features defines an API that provides access to data representing features that move as rigid bodies.



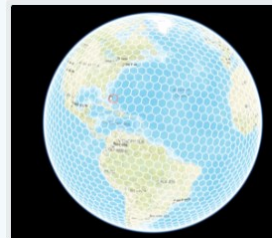
### 3D GeoVolumes

OGC API - 3D GeoVolumes facilitates efficient discovery of and access to 3D content in multiple formats based on a space-centric perspective.



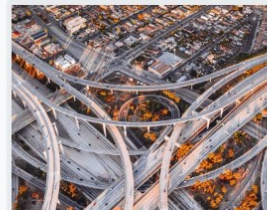
### Connected Systems

OGC API - Connected Systems act as a bridge between static and dynamic data collected by sensors.



### DGGS

Enables applications to organise and access data arranged according to a Discrete Global Grid System (DGGS).



### Routes

Enables applications to request routes in a manner independent of the underlying routing data set, routing engine or algorithm.



### Joins

OGC API - Joins supports the joining of data, from multiple sources, with feature collections or directly with other input files.

# Deployment model voorbeeld – API bouwstenen

Gebruiker: ik wil een lijst van verkeerslichten met bepaalde kenmerken



Features:  
CQL

Features:  
CRS

Features:  
Core

Data  
OGC API - Common

Tiles

Maps

Coverages

Features:  
Transactions

EDR

Gebruiker: ik zoek locaties van recente boringen in RD



Gebruiker: ik wil gegevens over dit object wijzigen



Gebruiker: ik wil kaarten bekijken op mijn smartphone



Gebruiker: er komt een orkaan aan, geef me alles



# OGC API status

## Gereed

- OGC API Features part 1 en 2 (ook als ISO standaard) (API in ontwikkeling PDOK)
- OGC API Environmental Data Retrieval (EDR) 1.1 (productie API KNMI, 2<sup>e</sup> plek Gouden API Award)
- OGC API Tiles (productie API PDOK)
- OGC API Processes

## In ontwikkeling

- OGC API Records – 2024 verwacht
- OGC API Features part 3 (filtering) in 2024 verwacht (incl CQL2)
- OGC API Features part 4 (CRUD) in 2024 verwacht
- OGC API Features part 5 Schemas 1st draft
- OGC API Processes part 2 + 3 eind 2023 verwacht
- OGC API Maps draft
- OGC API Coverages draft
- OGC API 3D Geovolumes draft (PDOK API)
- OGC API Styles 2.0
- OGC API Environmental Data Retrieval (EDR) 1.2 in ontwikkeling
- OGC API Moving Features naar public comment
- OGC API Connected Systems in ontwikkeling
- Publish Subscribe NIEUW cross-API specification voor Notificaties
- STAC API community standard



# Een kijkje naar OGC API Features

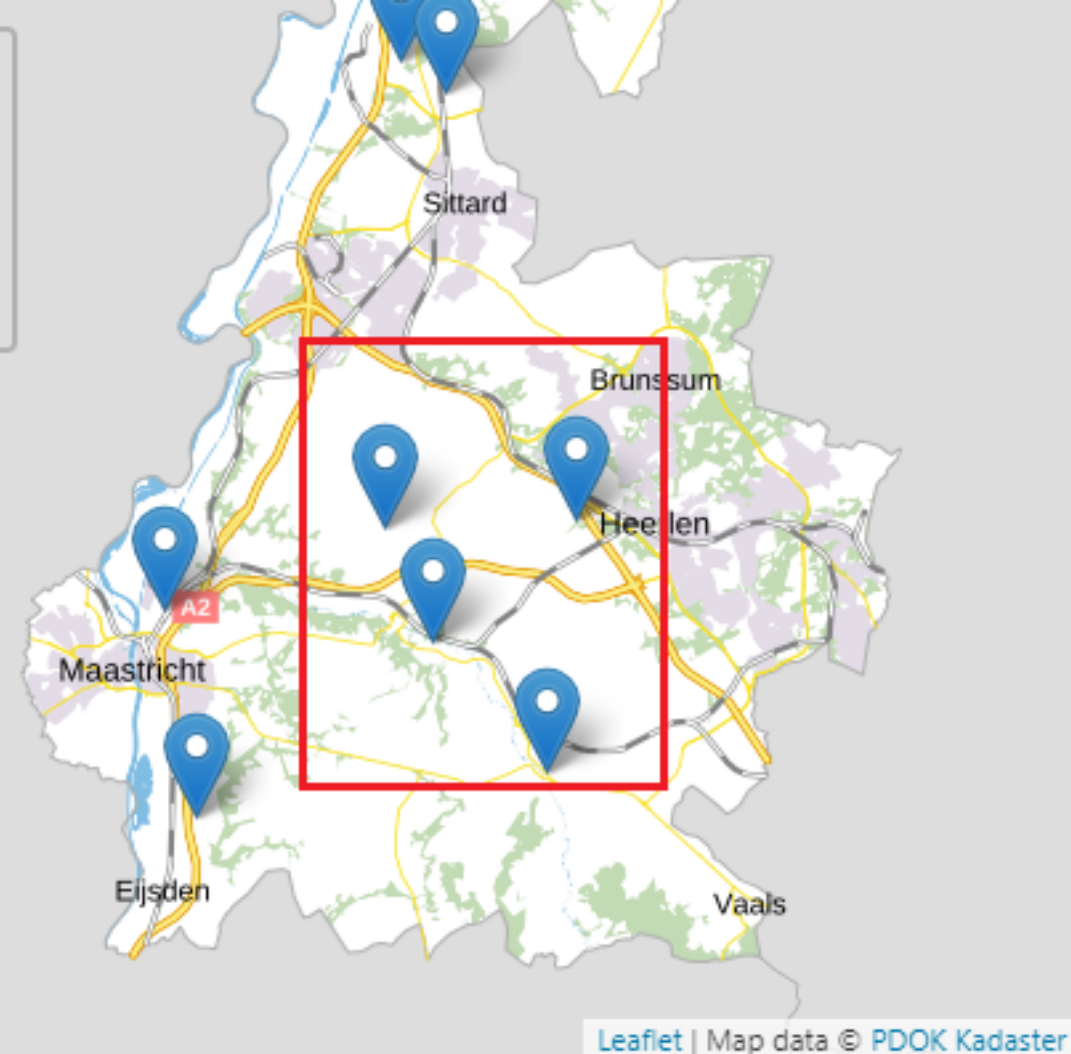
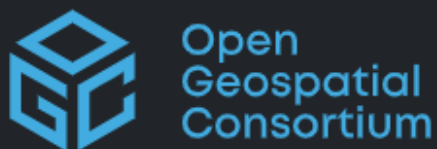
- **GET /collections**  
opsomming van de datasets & belangrijkste metadata
- **GET /collections/buildings/items?bbox=160.6,-55.95,-170,-25.89**
  - opvragen van items uit een collectie binnen een bounding box (of andere eenvoudige filter)
  - client kan via content negotiation gewenste format opvragen, bv GeoJSON
  - paginering
- **GET /collections/{collectionId}/items/{featureId}**
  - Opvragen individueel item
- **GET /collections/buildings/items?crs={crsuri}**
  - Opvragen in specifiek CRS
  - De default is CRS84



# De geo module

Regels voor geografische inhoud en functionaliteit in APIs

Toepassing van internationale geo-standaarden zoals GeoJSON, OGC API standaarden, INSPIRE richtlijn



De regels in de geo module hergebruiken veel inhoud uit de OGC API Features standaard, deel 1 en 2. [zie <https://ogcapi.org/features/>]

```
GET  
/api/v1/kastelen?bbox=5.4,52.1,5.5,53.2
```

# Bedankt!

## Geonovum

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