

# OGC API

Kurzüberblick, Einsatzmöglichkeiten und Tools

# OGC API Standards

- Common (OWS Common Nachfolger)
- **Features (WFS Nachfolger)**
- Maps (WMS Nachfolger)
- Records (CSW Nachfolger)
- Processes (WPS Nachfolger)
- Coverages (WCS Nachfolger)
- Tiles (WMTS Nachfolger)
- Environmental Data Retrieval API
- zukünftig: Styles, Routing



Open  
Geospatial  
Consortium

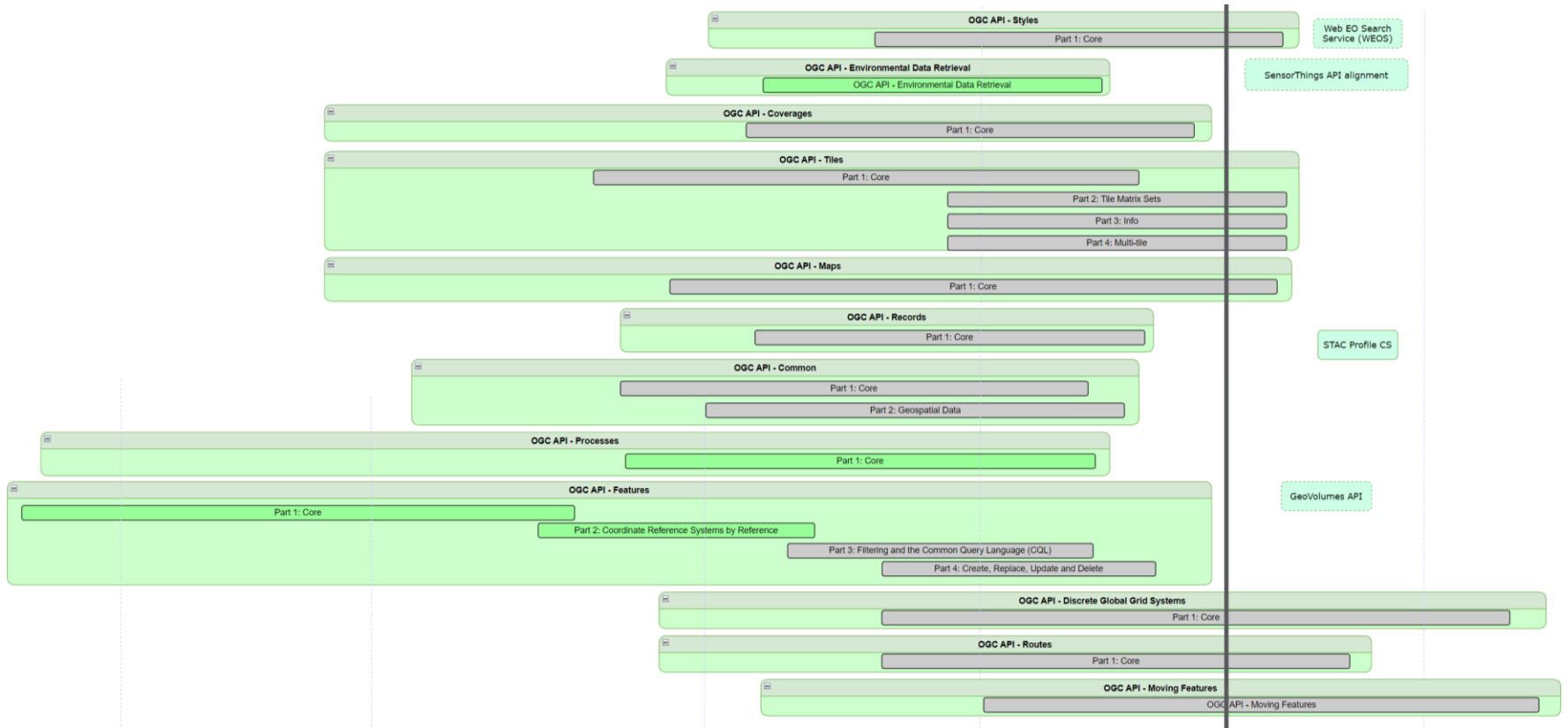
# OGC API Features

- OGC-API Features ist ein mehrteiliger Standard, der die Möglichkeit bietet, räumliche Daten im Web zu erstellen, zu ändern und abzufragen.
- Teile:
  - OGC API - Features - Part 1: Core (Standard seit 2019/10)
  - OGC API - Features - Part 2: Coordinate Reference Systems by Reference (Standard seit 2020/11)
  - OGC API - Features - Part 3: Filtering and the Common Query Language (CQL)
  - OGC API - Features - Part 4: Simple Transactions
  - OGC API - Features - Part 5: OpenAPI 3.1

# OGC API Roadmap

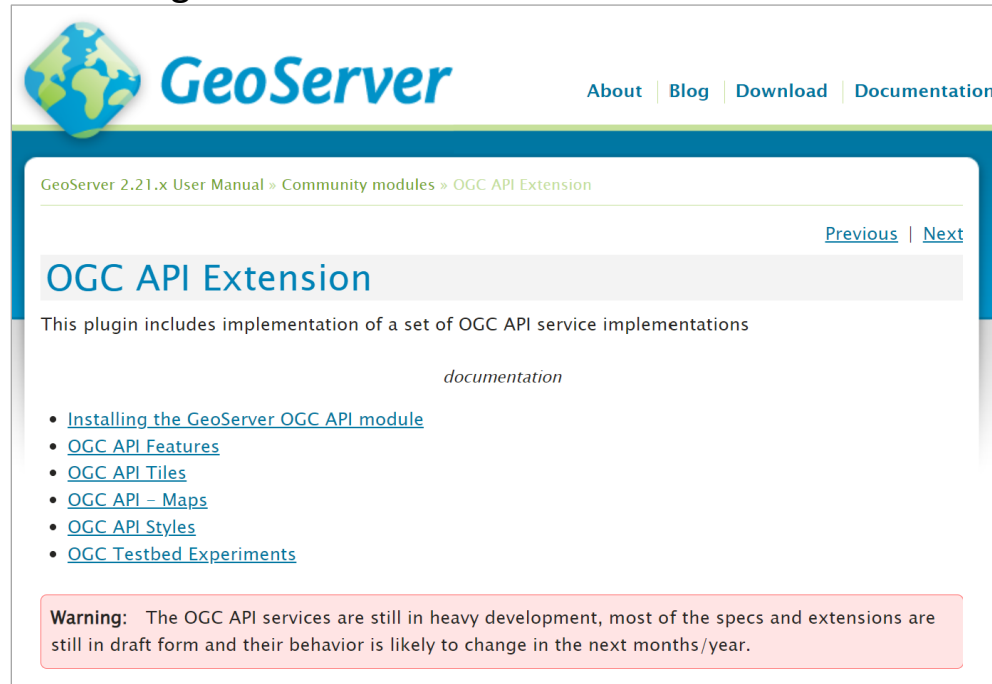
Proposed Standards	SWG Work / Work Item	OAB Review	OGC-NA Review	Public Review	Prepare for Approval	TC Approval to Vote	TC Vote	PC Vote	Public Release
<b>OGC</b> GeoAPI 09-083r4	🕒								
<b>OGC</b> OGC API - Common 19-072	✅	✅	✅	✅	✅	✅	✅	🕒	
<b>OGC</b> OGC API - Coverages	🕒								
<b>OGC</b> OGC API - Environmental Data Retrieval 19-086	✅	✅	✅	✅	✅	✅	✅	✅	✅
<b>OGC</b> OGC API - Features - Part 1: Core 17-069	✅	✅	✅	✅	✅	✅	✅	✅	✅
<b>OGC</b> OGC API - Features - Part 2: Coordinate Reference System by Reference 18-058	✅	✅	✅	✅	✅	✅	✅	✅	✅
<b>OGC</b> OGC API - Features - Part 3: Filtering and the Common Query Language (CQL) 19-079	✅	✅	🕒	✅	🕒				
<b>OGC</b> OGC API - Features - Part 4: Create, Replace, Update and Delete 20-002	🕒								
<b>OGC</b> OGC API - Features - Part 5: OpenAPI 3.1	🕒								
<b>OGC</b> OGC API - Maps	🕒								
<b>OGC</b> OGC API - Processes	✅	✅	✅	✅	✅	✅	✅	✅	🕒
<b>OGC</b> OGC API - Records	🕒								
<b>OGC</b> OGC API - Styles	🕒								
<b>OGC</b> OGC API - Tiles	🕒								
<b>OGC</b> SensorThings API 1.1 - Part 1 18-088	✅	✅	✅	✅	✅	✅	✅	✅	✅

# OGC API Roadmap



# GeoServer – OGC API

- Community Extension: <https://docs.geoserver.org/latest/en/user/community/ogc-api/index.html>
- Versionsnummer der Extension muss mit GS übereinstimmen
- OGC API in Geoserver noch in Entwicklung
- keine zusätzliche Konfiguration



The screenshot shows the GeoServer website header with the logo and navigation links: About, Blog, Download, and Documentation. The breadcrumb trail reads: GeoServer 2.21.x User Manual » Community modules » OGC API Extension. The main heading is "OGC API Extension". Below it, the text states: "This plugin includes implementation of a set of OGC API service implementations" followed by the word "documentation" in italics. A bulleted list of links includes: "Installing the GeoServer OGC API module", "OGC API Features", "OGC API Tiles", "OGC API - Maps", "OGC API Styles", and "OGC Testbed Experiments". A pink warning box at the bottom states: "Warning: The OGC API services are still in heavy development, most of the specs and extensions are still in draft form and their behavior is likely to change in the next months/year."

# GeoServer – OGC API – Admin GUI

The screenshot displays the GeoServer Admin GUI interface. At the top left is the GeoServer logo. At the top right, it shows the user is logged in as 'admin' with an 'Abmelden' (Logout) button. The main content area is titled 'Willkommen' (Welcome) and contains the following information:

- Server:** Serverstatus, Protokollierung, Kontaktangaben, Über GeoServer.
- Daten:** Layer-Vorschau, Arbeitsbereiche, Datenspeicher, Layer, Gruppenlayer, Stile.
- Dienste:** WMTS, WCS, WFS, WMS.
- Einstellungen:** Global, JAI, Raster.
- Kartenkacheln-Cache:** Gecachte Layer, Caching Standards, GridSets, Festplattenkontingent, BlobStores.

The central 'Willkommen' section includes:

- A welcome message: 'Willkommen'.
- A note: 'Diese GeoServer-Instanz gehört Bundesministerium für Landwirtschaft, Regionen und Tourismus.'
- A summary of resources:
  - 4 Layer (with '+ Layer hinzufügen' button)
  - 8 Datenspeicher (with '+ Datenspeicher hinzufügen' button)
  - 1 Arbeitsbereiche (with '+ Arbeitsbereich hinzufügen' button)
- A status indicator: 'Starke Kryptographie verfügbar' (Strong cryptography available).
- A version notice: 'Diese GeoServer-Instanz verwendet die Version 2.19.2. Für weitere Informationen kontaktieren Sie bitte den Administrator.'

On the right side, there is a 'Service-Funktionen' (Service Functions) section listing various OGC API versions:

- DGGS 1.0
- FEATURES 1.0
- IMAGES 1.0
- MAPS 1.0
- STYLES 1.0
- TILES 1.0
- WCS 1.0.0, 1.1.0, 1.1.1, 1.1, 2.0.1
- WFS 1.0.0, 1.1.0, 2.0.0
- WMS 1.1.1, 1.3.0

# GeoServer – OGC API – Landing page

Home

## GeoServer Features 1.0 Service

This is the landing page of the Features 1.0 service, providing links to the service API and its contents. This document is also available as [application/x-yaml](#), [application/json](#), [application/cbor](#).

### API definition

The [API document](#) provides a machine processable description of this service API conformant to OpenAPI 3. This API document is also available as [application/vnd.oai.openapi+json;version=3.0](#), [application/x-yaml](#), [application/cbor](#), [text/html](#).

### Collections

This [collection page](#) provides a list of all the collections available in this service. This collection page is also available as [application/x-yaml](#), [application/json](#), [application/cbor](#).

### Conformance

The [conformance page](#) provides a list of the conformance classes implemented by this service. This conformance page is also available as [application/x-yaml](#), [application/json](#), [application/cbor](#).

### Contact information

- Server managed by Abteilung II/1
- Organization: Bundesministerium für Landwirtschaft, Regionen und Tourismus
- Mail: [wolfgang.fahrner@bmlrt.gv.at](mailto:wolfgang.fahrner@bmlrt.gv.at)



Home / Collections

## GeoServer Feature Collections

This document lists all the collections available in the Features service. This document is also available as [application/x-yaml](#), [application/json](#), [application/cbor](#).

### ogcapi000501:nationalparke

- **Title:** nationalparke (2019)
- **Geographic extents:**
  - 12.04, 46.822, 17.132, 48.904.
- Queryables as [HTML](#).

Data as [HTML](#) or choose another format:

-- Please choose a format --  
-- Please choose a format --  
**application/vnd.google-earth.kml+xml**  
application/geo+json  
application/stac+json  
application/gml+xml;version=3.2  
text/csv  
application/json  
application/cbor

Data as [HTML](#) or choose another format:

-- Please choose a format --

### ogcapi000501:natura-2000\_ffh

- **Title:** natura-2000\_ffh (2020)
- **Geographic extents:**
  - 9.406, 46.317, 17.137, 49.025.
- Queryables as [HTML](#).

Data as [HTML](#) or choose another format:

-- Please choose a format --

### ogcapi000501:naturdenkmaeler

- **Title:** naturdenkmaeler (2020)
- **Geographic extents:**
  - 9.449, 46.41, 17.071, 49.007.
- Queryables as [HTML](#).

Data as [HTML](#) or choose another format:

-- Please choose a format --





# Alternative Tools

- Server (Auswahl)
  - Idproxy
    - <https://demo.idproxy.net/>
  - pygeoapi
    - <https://demo.pygeoapi.io/>
  - deegree
    - <https://oaf.lat-lon.de/deegree-services-oaf/datasets>
- Clients/APIs
  - <https://github.com/opengeospatial/ogcapi-features/tree/master/implementations>