OGC API STANDARDS - OPPORTUNITIES TO INVEST AND ADVANCE

THE HOME OF LOCATION TECHNOLOGY INNOVATION AND COLLABORATION

The OGC API suite of Standards are forming the foundation for web-native use of geospatial information. These Standards have been formulated to not only provide access to content in much the same fashion as the existing OGC Web Service Standards, but to also structure data as resources, allowing linkage of geospatial content with other information on the web.

IMPROVING ACCESS THROUGH WEB APIS

OGC has been developing a suite of Standards to provide modular and consistent access to spatial content via simple web APIs. The OGC APIs are tailored to access, process, and distribute information residing in various formats and ensure that the content is fit for further use.

The OGC API family of Standards are being developed to make it easy for anyone to provide geospatial data to the web. These Standards build upon the legacy of the OGC Web Service standards (WMS, WFS, WCS, WPS, etc.), but define resource-centric APIs that take advantage of modern web development practices.

These Standards are being constructed as "building blocks" that can be used to assemble novel APIs for web access to geospatial content. The building blocks are defined not only by the requirements of the specific standards, but also through interoperability prototyping and testing in OGC's Innovation Program.

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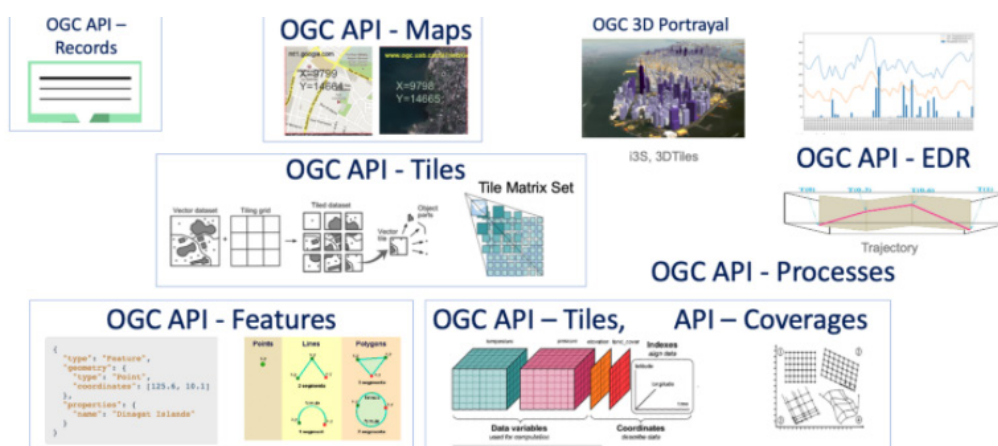
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Making Information Findable Accessible Interoperable and Reusable

THE OGC APIS VISION

APIs are an effective and popular method for rapid software development. Unfortunately variations in otherwise similar APIs degrade interoperability and increase developer workload for no added benefits. APIs as open consensus standards provide for increased developer efficiency and interoperability of independent implementations. The OGC is currently developing as set of open consensus APIs that will improve interoperability based on achievements and lessons learned from OGC Web Services (OWS)

The vision is that OGC APIs will spatially enable Web APIs in a consistent way. This will be achieved by using the joint OGC/W3C Spatial Data on the Web Best Practices; Leveraging the OpenAPI consortium standards; Focusing on developer experience and usability; Development of the APIs using Public GitHub repositories, Early implementations, and In-depth validation. The OGC APIs are designed to be Modular building blocks for access to location data as resource-oriented APIs.

OGC APIs provide access to Location Resources based on web best practices
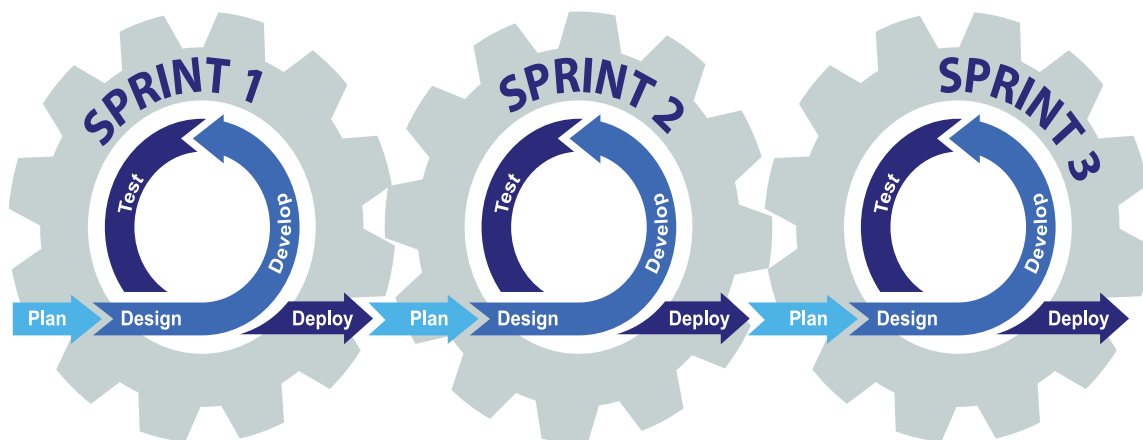
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Advancing OGC APIs

OGC Standards are advanced through a consensus process by dedicated OGC members. This process has evolved under the OGC APIs work to include concurrent development of running code advanced through Sprints and Hackathons with dynamic changes in documentation as the work continues. OGC members have the opportunity to target investment in advancing these standards through support of the various activities.

AGILE METHODOLOGY

OGC MEMBER OPPORTUNITIES

Each of the areas below is a great opportunity for Strategic and Principal members of the OGC to invest in the advancement of the OGC APIs and in supporting the community in a timely release of these APIs for the whole world to use:

- **Sponsorship of Sprints –** providing infrastructure or funding for participation.
- **Authoring of Standards and associated materials –** conversion of requirements to tangible Standards documents and API definitions takes significant resources. OGC offers an Innovation Program Pool of experts able to assist with projects.
- **Test environments –** OGC's Compliance Program provides test harnesses for ensuring software is compliant with OGC Standards. The OGC APIs are intended to be readily implementable across a broad spectrum of communities; such a goal is more attainable if tests are available upon publication of each Standard.

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OGC APIS IMPLEMENTATION TIMELINE

Standard	Initiated	Sprint 1	Sprint 2	Approval	CITE Tests
Features Part 1: Core				2019	
Features Part 2: CRS				2020	
Features Part 3: CQL				2021	
Features Part 4: Transactions				2021	
Records Part 1: Core				2021	
Processes Part 1: Core				2020	
Environmental Data Retrieval				2020	
Tiles Part 1: Core				2020	
Tiles other parts		Innovation Effort		2021	
Coverages Part 1: Core				2021	
Maps Part 1: Core				2021	
Common Part 1: Core				2020	
Common Part 2: Collections				2021	
Styles		Innovation Effort		2-21	
Routing		Innovation Effort		2022	

NOT A MEMBER? MAKE AN IMPACT IN LOCATION: JOIN OGC NOW

The location industry is constantly evolving. Powered by agencies, industry and academia alike, more problems are being solved by integrating location information than ever before. Become a part of the OGC community today.

A growing community of 500+ members, 120+ innovation initiatives, and 1.7M data sets using OGC standards today.

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