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GEOVATION



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# OGC API Hackathon 2019

London, United Kingdom  
20 June 2019



Geovation Hub and Ordnance Survey staff

# **Welcome Note**

# OGC staff on hand

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- Scott Simmons
- Denise McKenzie
- Gobe Hobona

# Why OGC APIs?

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- OGC web service standards should be more flexible with respect to current and emerging IT trends
- OGC standards should be **far** more easy to use by developers
- OGC has long provided guidance to make standards more modular
- OGC Web Services (OWS) Common was an attempt to retroactively build a common core for W\*S standards... now we have a chance to do this proactively!

# OGC Board of Directors guidance – why Hackathons are working

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- Get to 90% of a standard really fast...
- Then take time to finish the last 10%
- Make the 90% product available to stakeholders and implementers to test
- Develop a repository of example implementations
- Be more public for the 90%
- Control the 10% in the OGC process to ensure the final product is truly an “international consensus standard”



## Old news

- Used since 2012 in GeoPackage
- Mostly used to manage text for OGC

## New news

- More repos are public
- Let the users contribute
- Relax the rules during compilation

## Now in use

- Document from the developer's perspective
- Used in OGC API efforts
- Retrofit of older standards by numerous parties

# OGC API family of standards



- Modernization of web service standards (W\*S) started with Web Feature Service v. 3
- Additional standards in the hackathon investigating the same pattern:
  - Processing
  - Map Tiles
  - Coverages
- Standards will be named “OGC API - [resource]”
  - OGC API - Features, OGC API - Processes, etc.
- Establishing a common core
  - OGC API - Common
- Old W\*S standards don't go away, but will have less focus for future revision

# This is not completely new...



- CTO discussions with OpenAPI Initiative (2016)
- CTO Open APIs White Paper [[16-019r4](#)]
- OAB [discussions](#) on OpenAPI (2017)
- Call-out to members experimenting with OpenAPI (2017)
  - See earlier example from UKHO
- OGC staff OpenAPI definitions for [WMTS](#) (2017)
- Spatial Data on the Web Working Group (2017)
  - [Best Practices](#) document detailing more “webby” web services use cases and requirements
- **OGC WFS3 Hackathon (2018)**
- Testbed 14 – NextGen Thread (2018)
  - Two Engineering Reports [[18-045](#)] and [[18-021](#)]
- MetOcean Hackathon for WCS (2018)





# Goal and Objectives

# Goal & Objectives



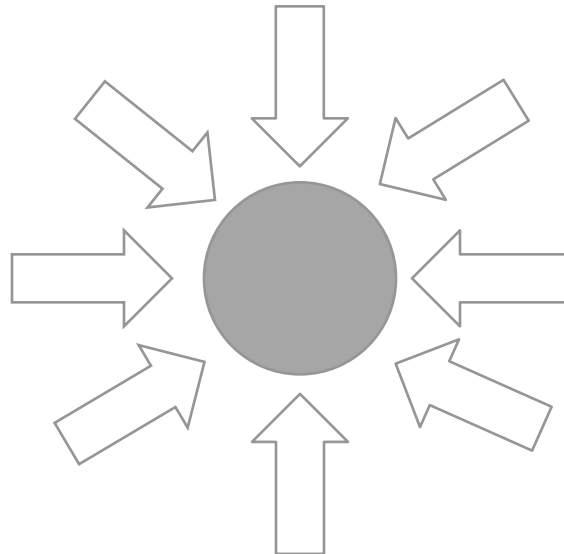
- Goal
  - To advance the development of OGC API specifications
- Objectives
  - Develop, deploy and test services/clients that support OGC APIs
  - Suggest improvements for a common core
  - Define rules/guidance that can be documented
  - Validate work that has been completed to date
  - Contribute to the GitHub repos



# Can we converge on a common core?



- All OGC Web API efforts are equal stakeholders
- Some borrowing or convergence is already happening
- Hack away and find those “building blocks” that are universal to all candidate standards
- Improve guidance on use of Web APIs



# Expected output from participants

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- Running services/clients
- Suggestions for a common core
- Rules/guidance that can be documented
- Validation of work completed to date
- Contribute to the GitHub repo



# Agenda

# Day 1 – Thursday 20 June 2019

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- 09:00hrs - Welcome note (Geovation Hub Staff)
- 09:15hrs - Goals and objectives (OGC DKM & SWG Chairs)
- 09:30hrs - Introduction to the Draft Specifications (Common, Features, Map Tiles, Processes, Coverages)
- 11:00hrs – Split into teams by specification
- 11:10hrs – Team-based work starts [define the problem/scope]
- 12:30hrs - Lunch
- 13:30hrs - Resume [come up with multiple options]
- 17:00hrs - Early Dinner
- 18:00hrs - Resume [select the preferred option]
- 20:00hrs - Back-briefs from each team
- 21:00hrs - Adjourn

# Day 2 – Friday 21 June 2019

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- 08:00hrs - Goals and objectives (OGC DKM & SWG Chairs)
- 08:30hrs - Resume team-based work [implement the preferred option]
- 12:00hrs - Third back-briefs from each team [ "alignment report" to brief on any deviation from Core as provided at start]
- 12:30hrs - Working Lunch [complete implementation of the preferred option]
- 13:30hrs – Joint work on Common or Resume team-based work [implement the preferred option]
- 15:30hrs - Final back-briefs
- 16:30hrs - Closing note (OGC COO)
- 17:00hrs - Close

# Room Allocation



## Day 1

Time	Event Space(Big Room)	Boardroom T	Boardroom H
09:00 - 11:00	All teams		
11:00 - 12:30	Common (All teams)		
13:30 - 17:00	Map Tiles	Coverages	Processes
18:00 - 21:00	Common (All teams)		

## Day 2

Time	Event Space(Big Room)	Boardroom T	Boardroom H
08:00 - 08:30	All teams		
08:30 - 12:00	Map Tiles	Coverages	Processes
12:00 - 12:30	All teams		
13:30 - 15:30	Map Tiles	Coverages	Processes
15:30 - 17:00	All teams		