

La collaboration OGC / W3C

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Un workshop « fondateur »



Linking Geospatial Data workshop – London March 2014

https://www.w3.org/2014/03/lgd/



Linking Geospatial Data workshop



- "Geographic information (GI) is a major element in defining context for knowledge that can then be exposed in many different ways to end users. The societal, economic and scientific benefits of integrating GI into commercial and institutional processes is potentially huge."
- "The workshop was really about two worlds: the geospatial information system world, effectively represented by OGC, and the Web world, represented by W3C. Both organizations operate in similar ways, have similar aims, and have more than 20 members in common. But we also both have 20 years of history and 'ways of doing things.' That has created a gap that we really want to fill in not a huge one but a gap nonetheless."

Phil Archer (W3C Data Activity Lead)

- Plus de 100 participants
- "The assembled participants expressed a desire for **one** working group to be established by the **two** standards bodies working together"



Une initiative conjointe



- Création d'un groupe de travail conjoint OGC-W3C (nov. 2014)
 - Spatial Data on the Web Working Group (SDWWG)
 - Lié aux structures propres des deux organisations et à leurs membres (charters)
 - http://www.w3.org/2015/spatial/charter
 - http://www.opengeospatial.org/projects/groups/sdwwg (sous groupe du « Geosemantics Domain Working Group » de l'OGC)
- The Scope of SDWWG is Web technologies as they may be applied to location. Where relevant, it will promote Linked Data using the 5 Stars of Linked Data paradigm, but this will not be to the exclusion of other technologies

Milestones

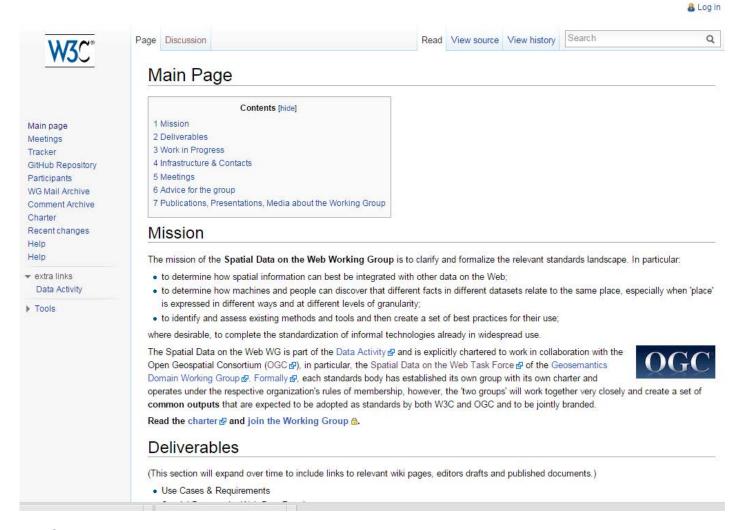
Deliverable	FPWD	LC	CR	PR	Rec
Use Cases and Requirements	March 2014	June 2015			
Best Practices	June 2015	December 2015	March 2016	July 2016	September 2016
Time Ontology in OWL	June 2015	December 2015	March 2016	July 2016	October 2016
Semantic Sensor Network	July 2015	March 2016	June 2016	October 2016	December 2016
Coverage in Linked Data	September 2015	March 2016	July 2016	September 2016	December 2016



Note: The group will document significant changes from this initial schedule on the group home page.

http://www.w3.org/2015/spatial/wiki/Main Page

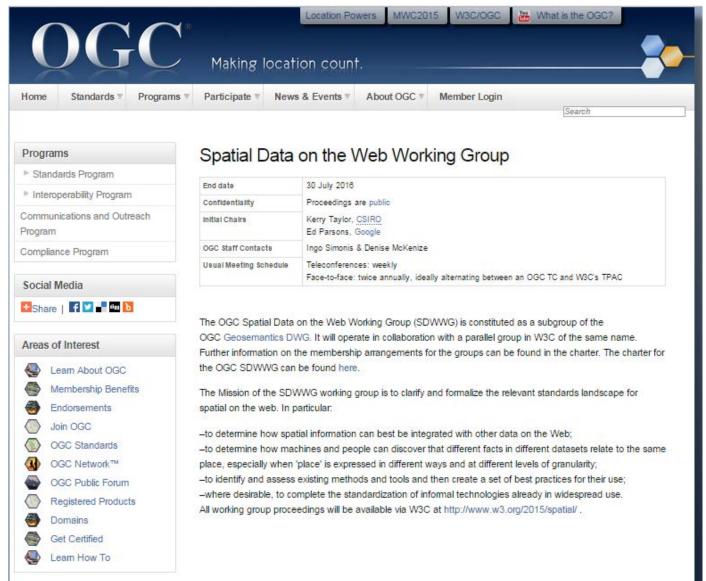






http://www.opengeospatial.org/projects/groups/sdwwg







La mission du SDWWG



The Mission of the SDWWG working group is to clarify and formalize the relevant standards landscape for spatial on the web. In particular:

- -to determine how spatial information can best be **integrated** with other data on the Web;
- -to determine **how machines and people can discover** that different facts in different datasets relate to the same place, especially when 'place' is expressed in different ways and at different levels of granularity;
- -to identify and assess existing methods and tools and then create a set of best practices for their use;
- —where desirable, to **complete the standardization** of informal technologies already in widespread use.

All working group proceedings will be available via W3C at http://www.w3.org/2015/spatial/.





Un premier « sommet » en Juin 2015 lors du meeting OGC de Boulder

Geosemantics Summit Introduction

95th OGC Technical Committee
Boulder, Colorado USA
Josh Lieberman
3 June 2015





Summit Topics



- Should OGC address spatial ontology needs with a central geospatial ontology standard, an assortment of geospatial ontology patterns, or general rules for formation of geospatial ontologies from other semantic / syntactic representations?
- Should OGC register existing or proposed domain specific ontologies/ vocabularies such as Semantic Sensor Networks (SSN), USGS National Map (TNM) ontologies, OWS-10 geospatial ontologies, etc.
- What is the state of the art for mapping between UML from ISO and OGC, as well as from INSPIRE and various national bodies, and RDF/ OWL ontologies. Is ruled-based mapping á là ISO 19150-2 the best approach?
- Do graph models add value to spatial data representation in and of themselves? Are there problems yet to solve with graph models in relation to spatial data? What about RDF models vs Property graph models
- How best to use ontologies in conjunction with OGC web services?
 What are the practices and issues here?



Geosemantics Summit



 Goal: Bring Semantic and Linked Data paradigms closer together in an OGC context

- Three Themes
 - Ontologies as standards and specification
 - Geospatial issues of linked data
 - Semantic enablement of OGC services



Geospatial Summit Agenda



- [10:15] Introduction by Josh Lieberman
- [10:30] Theme: Ontologies <-> standards
 - Jean Brodeur The ISO TC211 Harmonized Ontology
 - Stephane Fellah Core Geospatial ontologies Bootstrap for Geospatial Semantic Web
 - Simon Cox Ontology alignment is PROV-O good enough?
 - Rob Atkinson Challenges in publishing HY_Features as a geosemantics resource
 - Theme discussion
- [13:15] Theme: Linked data identifiers and actions
 - Tim Clark Use cases and requirements from end users of military data
 - Peter Baumann Bringing coverages to the Semantic Web
 - Gobe Hobona Testbed 11; Use of semantic linked data with RDF for National Map NHD and Gazetteer data
 - Rob Atkinson Geosemantics in practice: a case study with HY_Features and the Australian Hydrologic Geofabric
 - Theme discussion



Geospatial Summit Agenda, cont'd



- [3:30] Theme: Semantic enablement of OGC services model and behavior
 - Matthew Mayernik EarthCollab: enabling scientific collaboration and discovery through semantic connections
 - David McMeekin Semantics and ontologies challenges in Australia and New Zealand
 - Stephane Fellah Semantic service enablement
 - John Graybeal Semantic enablement of services with existing semantic tools
 - Wenwen Li Testbed 11 results
 - Theme discussion
- [5:40] Summary and Actions



Un premier document 'Use Cases and Requirements'



- Draft produit la semaine dernière
- 48 use cases
 - Real time wildfire monitoring
 - Locating a thing
 - Enabling publication, discovery of spatiotemporal data in the humanities
 - Integration of governmental and utility data to enable smart grids
 - Publication of air quality data aggregations
 - Publishing cultural heritage data
 - Intelligent transportation system
 - Observations of geological samples
 - Crowdsourced earthquake observation information

– ...



Un (nouvel) acteur dans le monde des données de la recherche

- - RDA: Research Data Alliance
 - <u>https://rd-alliance.org/</u>



- Initié et soutenu par la Commission Européenne + US + Australie...
- RDA Vision: Researchers and innovators openly sharing data across technologies, disciplines, and countries to address the grand challenges of society
- RDA Mission: The Research Data Alliance (RDA) builds the social and technical bridges that enable open sharing of data
- Un acteur complémentaire au niveau international (avec OGC, W3C, GEOSS,...) (avec des acteurs "relais")



RDA Interest (IG) and Working Groups (WG) by Focus 1

Domain Science - focused

- Toxicogenomics Interoperability IG
- Structural Biology IG
- Biodiversity Data Integration IG
- Agricultural Data Interoperability IG
- Wheat Data Interoperability WG
- Digital Practices in History and Ethnography IG
- Geospatial IG

- Marine Data Harmonization IG
- Metabolomics IG
- RDA/CODATA Materials Data Infrastructure and Interoperability IG
- Research Data Needs of the Photon and Neutron Science Community IG
- Defining Urban Data Exchange for Science IG
- The BioSharing Registry: Connecting data policies, standards and databases in the life sciences WG
- Urban Quality of Life Indicators IG

Community Needs - focused

- Community Capability Model IG
- Engagement IG
- RDA/CODATA Summer Schools in Data Science and Cloud Computing in the Developing World IG
- Development of Cloud Computing Capacity and Education in Developing World Research IG
- Data for Development IG
- Education and Training on handling of research data IG



RDA Interest (IG) and Working Groups (WG) by Focus 2

Reference and Sharing - focused

- Data Citation WG
 - Standardization of Data Cat. and Codes WG
- RDA/CODATA Legal Interoperability IG

- Reproducibility IG
 - Data Description Registry Interoperability
 Working Group
- RDA / WDS Publishing Data Bibliometrics WG

Data Stewardship and Services - focused

- Research Data Provenance IG
- Preservation e-infrastructure IG
- RDA / WDS Publishing Data Services WG
- RDA / WDS Publishing Data Workflows WG
- · Long-tail of Research Data IG
- RDA/WDS Publishing Data IG
- RDA/WDS Repository Audit and Certification

DSA-WDS Partnership WG

- Domain Repositories Interest Group
- · Brokering Interest Group
- ELIXIR Bridging Force IG
- Libraries for Research Data IG*RDA / WDS Certification of Digital Repositories IG
- RDA / WDS Publishing Data Cost Recovery for Data Centres IG

Base Infrastructure - focused

- Data Foundation and Terminology WG
- Metadata Standards Directory WG
- Practical Policy WG
 - PID Information Types WG
- Data Type Registries WG
- Data in Context IG

Big Data Analytics IG

Brokering Governance WG

- Federated Identity Management IG
- Metadata IG
- PID Interest Group
- Service Management IG
- Data Fabric IG

A suivre...



- Publication du document sur les use cases
- OGC TC: Nottingham du 14 au 18 septembre 2015
 - http://www.opengeospatial.org/event/1509tc
- RDA Plenary: Paris du 23 au 25 septembre 2015
 - Focus sur la participation des entreprises, et sur les données pour le changement climatique
 - https://rd-alliance.org/plenary-meetings/rda-sixth-plenary-meeting.html





Merci de votre attention

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