



# The OGC: Standards and Compliance Testing

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# Is there life on Mars?





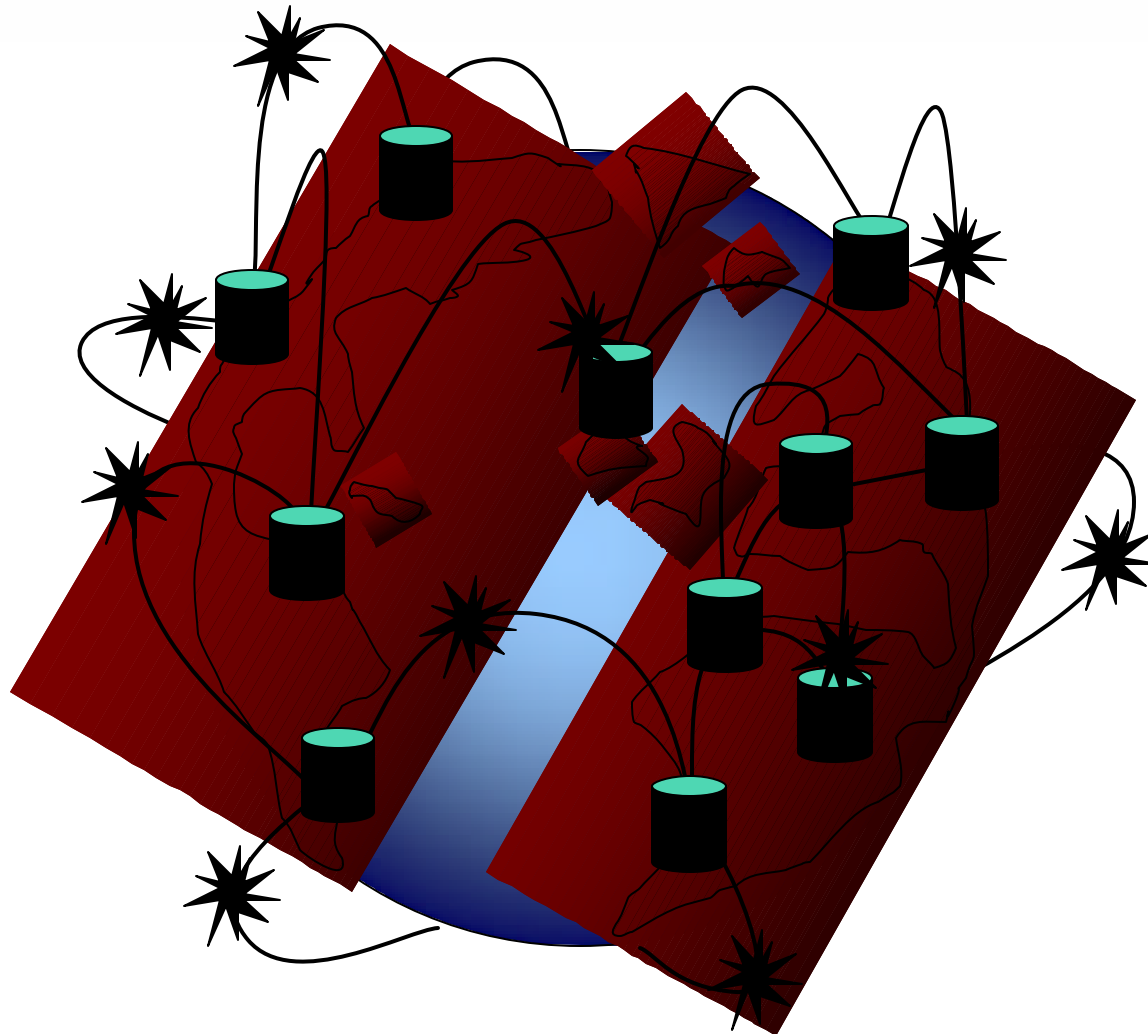
# What is the Core Mission of the OGC?



**The OGC leads the development, promotion and harmonization of open and freely available geospatial standards and supports their effective implementation and use worldwide.**



# Accomplishment of the OGC Mission will enable a global geospatial and IT community

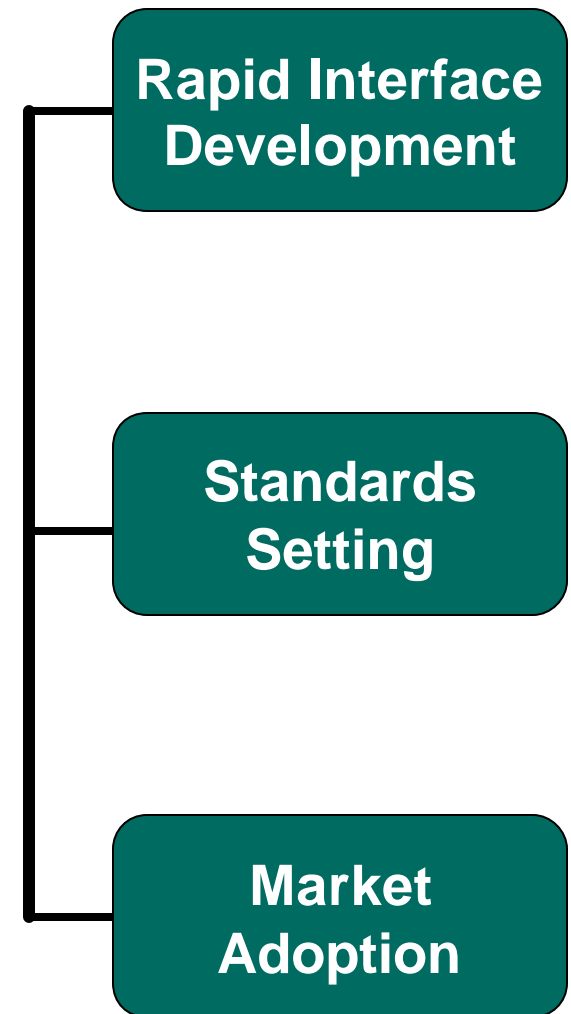


**Composed of many collaborating organizations... authoring and publishing open standards for geospatial interoperability**

# OGC's Approach for Advancing Interoperability



- **Interoperability Program (IP)** - a global, innovative, hands-on engineering and testing program designed to accelerate interface development and bring interoperability to the market.
- **Specification Development Program**  
–Consensus processes similar to other Industry consortia (World Wide Web Consortium, OMG, etc.).
- **Outreach and Community Adoption Program** – education and training, encourage take up of OGC specifications, business development, communications programs



# Compliance Testing



- OGC has had compliance testing available for some years.
- In 2002, the OGC members determined that a new approach was required for the emerging suite of OpenGIS Web Services (OWS) specifications.
- Initiated an OGC Interoperability Initiative called “Compliance & Interoperability Testing & Evaluation – CITE”
  - A collaboration between numerous OGC members and funded by a number of sponsoring organizations
  - Completed in September 2003 with the availability of the CITE on-line compliance testing framework
  - The project was done in close collaboration with the Open Group. They conducted the original feasibility and planning study.



# The Operational Objectives for CITE

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- Provide adequate coverage of the underlying specification
- Clearly indicate cases where the implementation is deficient
- Be available and affordable to the implementers
- Be impartial in the manner in which it implements tests
- Be easy to use and produce a clear result
- Provide a strategy for release control and appeal management



# Using The Tests



- Freely available and accessible via the CITE Portal
- Self administered.
- All tests within a test suite for a given OGC specification are written around assertions conformant to the IEEE (IEEE Std 1000.3.3-1991) standard.
  - Assertions are basically statements of fact that the device under test must adhere to. There are 4 types of assertions.

Classification	Description
A	Mandatory testable assertion.
B	Mandatory but untestable assertion.
C	Optional testable assertion.
D	Optional but untestable assertion.

# The “Rule”

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- Only those organizations that submit completed paperwork that is vetted by staff and pay appropriate fees will receive a compliance brand and can then claim compliance in their sales and marketing literature.

# What does compliance testing and branding mean for users and buyers of geospatial technology?



- An OGC Compliance Brand certifies that a given product or application properly implements a particular version of an OpenGIS Specification.
- Such brands serve to assure users that are purchasing or using said software that the OpenGIS specifications are properly implemented and that interoperability is better assured.



# Caveat

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- Compliance does not insure interoperability!! A different level of testing is required to insure full interoperability.
  - OGC has now implemented a new process we call “Interoperability Experiments.”

# Also, Coordination and Harmonization with the work other standards bodies is imperative



- ISO/TC 211 – ISO Standards for the Geospatial Community
  - Abstract models for a variety of topics
- OASIS E-Government and Emergency Management Technical Committees
  - OASIS UDDI
  - BEPL
  - Registries
- W3C
  - SOAP
  - XML
  - Web Architecture
  - Ontology and semantics
- IETF
  - Geopriv (geography and privacy)

# Thank you for your attention

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- Carl Reed – [creed@opengis.org](mailto:creed@opengis.org)
- <http://www.opengis.org/resources/?page=testing>