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OGC Compliance Overview - Guide for Software Acquisition

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Table of Contents

1. Why OGC Compliance?.....	4
2. OGC Compliance Process	4
3. How to verify that a product is compliant.....	5
4. How to ask for OGC compliance in your procurement language	5
5. References	7

i. Abstract

This white paper provides an overview of the OGC compliance process, benefits for users who acquire OGC compliant products, and guidance regarding language to specify requirements for OGC compliant and implementing products in software acquisition (procurement) documents.

ii. Keywords

OGC standards, ogc documents, ogcdoc, compliance, certification, implementation, procurement

iii. Preface

The Open Geospatial Consortium (OGC®) provides international standards that are implemented worldwide in thousands of applications that use location information. To reduce the risk of applications not implementing a standard correctly, the OGC provides a compliance process for testing and certifying implementations. OGC certification provides substantial evidence that an implementation that is claimed to have implemented an OGC standard will interoperate as specified and in the same manner as other compliant implementations, regardless of who developed them. This white paper provides guidance regarding language to specify requirements for OGC compliant and implementing products in software acquisition (procurement) documents.

iv. Submitting organizations

The following organizations submitted this Document to the OGC: Open Geospatial Consortium (OGC)

v. Submitters

All questions regarding this submission should be directed to the editors:

Name	Affiliation
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Lance McKee	OGC

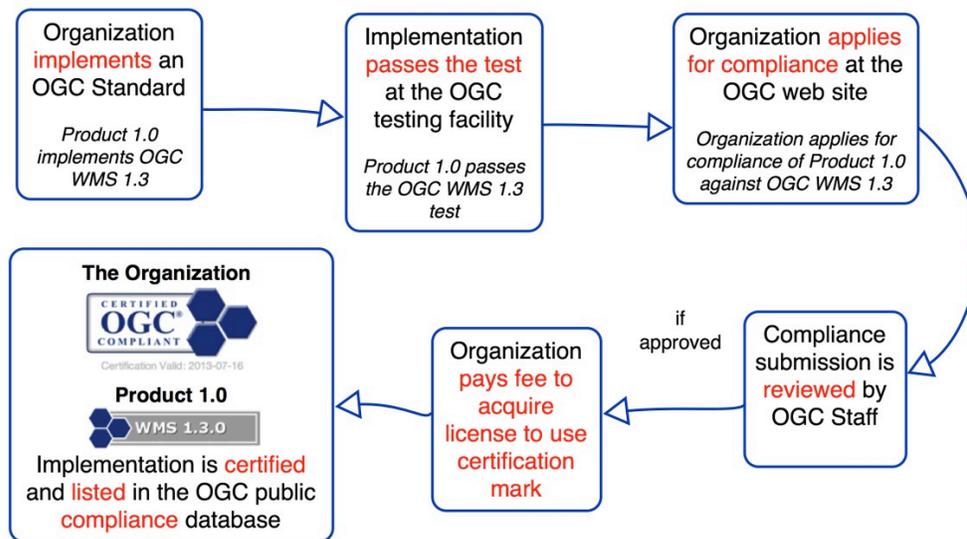
1. Why OGC Compliance?

OGC standards are implemented worldwide. However, not all of these implementations are certified as compliant by the OGC¹. The implementation of open standards that enable interoperability benefits the general public. This benefit can be greatly diminished if the standards are not consistently and correctly implemented.

Acquiring OGC compliant products helps minimize the delay, cost, and frustration of having to rework disparate implementations that *claim* to implement the same interoperability standard yet *fail* to interoperate. A buyer or user who acquires an OGC compliant product gains added confidence that the implementation will interoperate with other products that comply with the compatible OGC standard.

2. OGC Compliance Process

The diagram below provides an overview of the process that organizations (usually technology providers) go through to obtain OGC certification.



The first step is to implement an OGC standard in a product. Then the product is tested using the OGC online free testing facility. This process can help to improve the product. Once the product passes the compliance test, the organization can request OGC compliance certification. After the OGC has completed its review the OGC issues a Trademark License that entitles the organization to use the “Certified OGC

¹ Please see <http://www.opengeospatial.org/ogc/faq#14> for definitions of “comply”, “implementing”, and “conformance”.

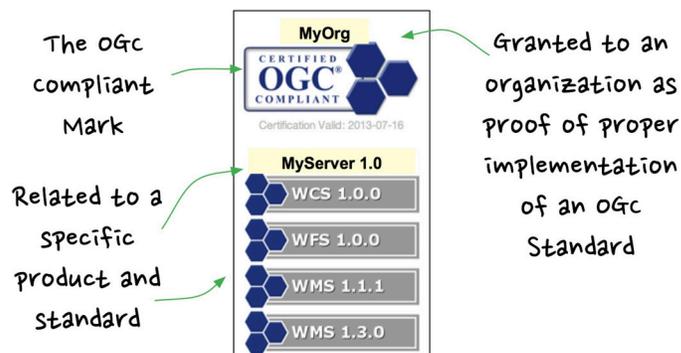
Compliant” mark on the product and in marketing materials. The organization can then claim that the product is **compliant**, **conformant** or **certified**, to a specific standard.

3. How to verify that a product is compliant

Anybody, particularly potential buyers, can determine if a product complies with a particular OGC standard by searching the OGC Compliance Database at: <http://www.opengeospatial.org/resource/products/compliant>. Compliant products are shown in a green font, as shown in the figure.



In the database, every compliant product links to an associated compliant badge, as shown in the figure. The badge contains the name of the organization, the name of the product, and the standards for which the product has passed compliance tests.



If an organization claims that a product *implements* an OGC standard, it might fulfill the requirements defined in the standard. The organization may register the product at OGC's implementation products public database. In contrast to compliant products, OGC makes no assertions about the correctness of these implementations.

4. How to ask for OGC compliance in your procurement language

The OGC position is that organizations seeking to acquire interoperable geospatial technology products can benefit from the inclusion of specific language in their procurement documents such as tenders, requests for quotes (RFQs) and requests for proposals (RFPs). This language should explain the purchaser's interoperability needs for OGC-compliant offerings, including any requirements for particular standard (e.g. encodings or interfaces).

Ideally a specific OGC standard will be available to meet every interoperability need. However, compliance tests are not available for every OGC standard.

Requiring or favoring an “Implementing Product” may be the most a buyer can hope for in cases where the OGC has not yet provided a compliance certification test.

Below is an illustration of text that could be included in procurement documents in situations where OGC-compliance is one of several evaluation criteria being considered. The table entries should be reduced to only include those standards required to satisfy the requirements of the desired system.

“Evaluation Criterion #n: OGC-compliance

Purchaser seeks geospatial products (systems, components or services) that provide maximum interoperability with purchaser’s and data sharing partner’s systems. To accomplish this, purchaser seeks to make maximum use of open standards provided by the Open Geospatial Consortium (OGC), ISO, and [list of other standards, profiles or recommendations].

Products that have earned OGC Certification for the standards listed in the table below will score more favorably on this evaluation criterion. To qualify for this criterion, certification licenses must be valid prior to [date] before the project commencement.

Technology Type	Encoding Standard	Interface Standard
Data Access	GML 2.0, 3.2.1	WFS 1.1, WFS 2.0
Data Visualization	KML 2.2	WMS 1.3
Sensor Data Sharing		SOS 2.0

Products that have implemented the standards listed in the table below will score more favorably on this evaluation criterion. To qualify for this criterion, product must be listed in the OGC Implementing Products database.

<http://www.opengeospatial.org/resource/products>

Technology Type	Encoding Standard	Interface Standard
Sensor Data Sharing	SensorML 2.0, O&M 2.0	

The OGC Testing Facility web page (<http://cite.opengeospatial.org/teamengine>) lists the OGC standards for which certification tests are available and explains the procedure for running those tests.

To learn more about the OGC Compliance Program, email the OGC Compliance Team [compliance\[at\]opengeospatial.org](mailto:compliance[at]opengeospatial.org).

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5. References

OGC implementation and compliance database:

<http://www.opengeospatial.org/resource/products/compliant>

OGC free online test facility: <http://cite.opengeospatial.org/teamengine/>

OGC implementation database registration:

<http://www.opengeospatial.org/resource/products/registration>