OSLC Quality Management Version 2.1. Part 2: Vocabulary

OASIS Standard
19 January 2022

This stage:
https://docs.oasis-open-projects.org/oslc-op/qm/v2.1/os/quality-management-vocab.html
(Authoritative)

Previous stage:
https://docs.oasis-open-projects.org/oslc-op/qm/v2.1/ps01/quality-management-vocab.html
(Authoritative)
https://docs.oasis-open-projects.org/oslc-op/qm/v2.1/ps01/quality-management-vocab.pdf

Latest stage:
https://docs.oasis-open-projects.org/oslc-op/qm/v2.1/quality-management-vocab.html
(Authoritative)

Latest version:
https://open-services.net/spec/qm/latest

Latest editor’s draft:
https://open-services.net/spec/qm/latest-draft

Open Project:
OASIS Open Services for Lifecycle Collaboration (OSLC) OP

Project Chairs:
Jim Amsden (jamsden@us.ibm.com), IBM
Additional components:
This specification is one component of a Work Product that also includes:


Related work:
This specification is related to:


RDF Namespaces:
http://open-services.net/ns/qm#

Abstract:
This specification defines a vocabulary for the OSLC Quality Management domain.

Status:
This document was last revised or approved by the membership of OASIS on the above date. The level of approval is also listed above. Check the “Latest stage” location noted above for possible later revisions of this document. Any other numbered Versions and other technical work produced by the Open Project are listed at https://open-services.net/about/.
Comments on this work can be provided by opening issues in the project repository or by sending email to the project’s public comment list oslc-op@lists.oasis-open-projects.org.

The English version of this specification is the only normative version. Non-normative translations may also be available. Note that any machine-readable content (Computer Language Definitions) declared Normative for this Work Product is provided in separate plain text files. In the event of a discrepancy between any such plain text file and display content in the Work Product's prose narrative document(s), the content in the separate plain text file prevails.

Citation format:
When referencing this specification the following citation format should be used:
[OSLC-qm-2.1-Part2]
Notices

Copyright © OASIS Open 2022. All Rights Reserved.

All capitalized terms in the following text have the meanings assigned to them in the OASIS Intellectual Property Rights Policy (the "OASIS IPR Policy"). The full Policy may be found at the OASIS website.

This specification is published under the Attribution 4.0 International (CC BY 4.0). Portions of this specification are also provided under the Apache License 2.0.

All contributions made to this project have been made under the OASIS Contributor License Agreement (CLA).

For information on whether any patents have been disclosed that may be essential to implementing this specification, and any offers of patent licensing terms, please refer to the Open Projects IPR Statements page.

This document and translations of it may be copied and furnished to others, and derivative works that comment on or otherwise explain it or assist in its implementation may be prepared, copied, published, and distributed, in whole or in part, without restriction of any kind, provided that the above copyright notice and this section are included on all such copies and derivative works. However, this document itself may not be modified in any way, including by removing the copyright notice or references to OASIS, except as needed for the purpose of developing any document or deliverable produced by an OASIS Open Project or OASIS Technical Committee (in which case the rules applicable to copyrights, as set forth in the OASIS IPR Policy, must be followed) or as required to translate it into languages other than English.

The limited permissions granted above are perpetual and will not be revoked by OASIS or its successors or assigns.

This document and the information contained herein is provided on an "AS IS" basis and OASIS DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY THAT THE USE OF THE INFORMATION HEREIN WILL NOT INFRINGE ANY OWNERSHIP RIGHTS OR ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

OASIS requests that any OASIS Party or any other party that believes it has patent claims that would necessarily be infringed by implementations of this OASIS Project Specification or OASIS Standard, to notify the OASIS TC Administrator and provide an indication of its willingness to grant patent licenses to such patent claims in a manner consistent with the IPR Mode of the OASIS Technical Committee that produced this specification.

OASIS invites any party to contact the OASIS TC Administrator if it is aware of a claim of ownership of any patent claims that would necessarily be infringed by implementations of this specification by a patent holder that is not willing to provide a license to such patent claims in a manner consistent
with the IPR Mode of the OASIS Open Project that produced this specification. OASIS may include such claims on its website, but disclaims any obligation to do so.

OASIS takes no position regarding the validity or scope of any intellectual property or other rights that might be claimed to pertain to the implementation or use of the technology described in this document or the extent to which any license under such rights might or might not be available; neither does it represent that it has made any effort to identify any such rights. Information on OASIS' procedures with respect to rights in any document or deliverable produced by an OASIS Technical Committee can be found on the OASIS website. Copies of claims of rights made available for publication and any assurances of licenses to be made available, or the result of an attempt made to obtain a general license or permission for the use of such proprietary rights by implementers or users of this OASIS Open Project Specification or OASIS Standard, can be obtained from the OASIS TC Administrator. OASIS makes no representation that any information or list of intellectual property rights will at any time be complete, or that any claims in such list are, in fact, Essential Claims.

The name "OASIS" is a trademark of OASIS, the owner and developer of this specification, and should be used only to refer to the organization and its official outputs. OASIS welcomes reference to, and implementation and use of, specifications, while reserving the right to enforce its marks against misleading uses. Please see https://www.oasis-open.org/policies-guidelines/trademark/ for above guidance.
Table of Contents

1. Introduction
   1.1 Overview
   1.2 Terminology
   1.3 References
   1.4 Typographical Conventions and Use of RFC Terms

2. Quality Management Vocabulary Terms
   2.1 Vocabulary Details

3. Conformance
1. Introduction

1.1 Overview

This section is non-normative.

This specification defines a vocabulary for OSLC Quality Management resources. The intent is to define resources needed to support common integration scenarios and not to provide a comprehensive definition of quality management artefacts. The resource formats may not match exactly the native models supported by quality management service providers, but are intended to be compatible with them. The approach to supporting these scenarios is to delegate operations, as driven by service provider contributed user interfaces, as much as possible and not require a service provider to expose its complete data model and application logic.

Fig. 1 OSLC Quality Management Version 2.1 resource relationship overview

1.2 Terminology
Terminology is based on OSLC Core Overview [OSLCCore3], W3C Linked Data Platform [LDP], W3C's Architecture of the World Wide Web [WEBARCH], Hyper-text Transfer Protocol [HTTP11].

1.3 References

1.3.1 Normative references

[HTTP11]


[LDP]

Steve Speicher; John Arwe; Ashok Malhotra. *Linked Data Platform 1.0*. W3C, 26 February 2015. W3C Recommendation. URL: https://www.w3.org/TR/ldp/

[OSLCCore3]


[RFC2119]


[RFC8174]


1.3.2 Informative references

[OSLCCM]


[OSLCRM]

1.4 Typographical Conventions and Use of RFC Terms

As well as sections marked as non-normative, all authoring guidelines, diagrams, examples, and notes in this specification are non-normative. Everything else in this specification is normative.

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "NOT RECOMMENDED", "MAY", and "OPTIONAL" in this specification are to be interpreted as described in BCP 14 [RFC2119] [RFC8174] when, and only when, they appear in all capitals, as shown here.

In addition to the namespace URIs and namespace prefixes oslc, rdf, dcterms and foaf defined in the OSLC Core specification, OSLC qm defines the namespace URI of http://open-services.net/ns/qm# with a namespace prefix of oslc_qm

This specification also uses these namespace prefix definitions:

- oslc_cm: http://open-services.net/ns/cm# [OSLCCM]
- oslc_rm: http://open-services.net/ns/rm# [OSLCRM]
2. Quality Management Vocabulary Terms

This specification defines the **root** superclass, and a number of specific, commonly occurring subclasses, properties and values. Servers may define additional **root** subclasses and provide additional properties as needed.

2.1 Vocabulary Details

The namespace URI for this vocabulary is: http://open-services.net/ns/qm#

All vocabulary URIs defined in the OSLC Quality Management (QM) namespace.

See Also:


2.1.1 Classes in this namespace (5)

**TestCase, TestExecutionRecord, TestPlan, TestResult, TestScript**

**TestCase**

http://open-services.net/ns/qm#TestCase

**TestCase** is an RDFS class.

The QM Test Case resource.

**TestExecutionRecord**

http://open-services.net/ns/qm#TestExecutionRecord

**TestExecutionRecord** is an RDFS class.

The QM Test Execution Record resource.

**TestPlan**

http://open-services.net/ns/qm#TestPlan

**TestPlan** is an RDFS class.

The QM Test Plan resource.
**TestResult**

http://open-services.net/ns/qm#TestResult

*TestResult* is an RDFS class.

The QM Test Result resource.

**TestScript**

http://open-services.net/ns/qm#TestScript

*TestScript* is an RDFS class.

The QM Test Script resource.

### 2.1.2 Properties in this namespace (16)

- [affectedByChangeRequest](http://open-services.net/ns/qm#affectedByChangeRequest)
- [blockedByChangeRequest](http://open-services.net/ns/qm#blockedByChangeRequest)
- [executesTestScript](http://open-services.net/ns/qm#executesTestScript)
- [executionInstructions](http://open-services.net/ns/qm#executionInstructions)
- [producedByTestExecutionRecord](http://open-services.net/ns/qm#producedByTestExecutionRecord)
- [relatedChangeRequest](http://open-services.net/ns/qm#relatedChangeRequest)
- [reportsOnTestCase](http://open-services.net/ns/qm#reportsOnTestCase)
- [reportsOnTestPlan](http://open-services.net/ns/qm#reportsOnTestPlan)
- [runsOnTestEnvironment](http://open-services.net/ns/qm#runsOnTestEnvironment)
- [runsTestCase](http://open-services.net/ns/qm#runsTestCase)
- [status](http://open-services.net/ns/qm#status)
- [testsChangeRequest](http://open-services.net/ns/qm#testsChangeRequest)
- [usesTestCase](http://open-services.net/ns/qm#usesTestCase)
- [usesTestScript](http://open-services.net/ns/qm#usesTestScript)
- [validatesRequirement](http://open-services.net/ns/qm#validatesRequirement)
- [validatesRequirementCollection](http://open-services.net/ns/qm#validatesRequirementCollection)

**affectedByChangeRequest**

http://open-services.net/ns/qm#affectedByChangeRequest

*affectedByChangeRequest* is an RDF property.

Change request that affects the Test Result. It is likely that the target resource will be an oslc_cm:ChangeRequest but that is not necessarily the case.

**blockedByChangeRequest**

http://open-services.net/ns/qm#blockedByChangeRequest

*blockedByChangeRequest* is an RDF property.

Change Request that prevents execution of the Test Execution Record. It is likely that the target resource will be an oslc_cm:ChangeRequest but that is not necessarily the case.

**executesTestScript**

http://open-services.net/ns/qm#executesTestScript

*executesTestScript* is an RDF property.
Test Script executed to produce the Test Result. It is likely that the target resource will be an oslc_qm:TestScript but that is not necessarily the case.

**executionInstructions**

http://open-services.net/ns/qm#executionInstructions

`executionInstructions` is an RDF property.

Instructions for executing the test script. Note that the value of Occurs is undefined. The resource shape document provided by the QM service provider may be consulted for its value.

**producedByTestExecutionRecord**

http://open-services.net/ns/qm#producedByTestExecutionRecord

`producedByTestExecutionRecord` is an RDF property.

Test Execution Record that the Test Result was produced by. It is likely that the target resource will be an oslc_qm:TestExecutionRecord but that is not necessarily the case.

**relatedChangeRequest**

http://open-services.net/ns/qm#relatedChangeRequest

`relatedChangeRequest` is an RDF property.

A related change request. It is likely that the target resource will be an oslc_cm:ChangeRequest but that is not necessarily the case.

**reportsOnTestCase**

http://open-services.net/ns/qm#reportsOnTestCase

`reportsOnTestCase` is an RDF property.

Test Case that the Test Result reports on. It is likely that the target resource will be an oslc_qm:TestCase but that is not necessarily the case.

**reportsOnTestPlan**

http://open-services.net/ns/qm#reportsOnTestPlan

`reportsOnTestPlan` is an RDF property.

Test Plan that a test or execution record reports on. It is likely that the target resource will be an oslc_qm:TestPlan but that is not necessarily the case.
runsOnTestEnvironment

http://open-services.net/ns/qm#runsOnTestEnvironment

runsOnTestEnvironment is an RDF property.
Indicates the environment details of the test case for this execution record.

runsTestCase

http://open-services.net/ns/qm#runsTestCase

runsTestCase is an RDF property.
Test Case run by the Test Execution Record. It is likely that the target resource will be an oslc_qm:TestCase but that is not necessarily the case.

status

http://open-services.net/ns/qm#status

status is an RDF property.
Used to indicate the state of the Test Result based on values defined by the service provider.

testsChangeRequest

http://open-services.net/ns/qm#testsChangeRequest
testsChangeRequest is an RDF property.
Change Request tested by the Test Case. It is likely that the target resource will be an oslc_cm:ChangeRequest but that is not necessarily the case.

usesTestCase

http://open-services.net/ns/qm#usesTestCase

usesTestCase is an RDF property.
Test Case used by the Test Plan. It is likely that the target resource will be an oslc_qm:TestCase but that is not necessarily the case.

usesTestScript

http://open-services.net/ns/qm#usesTestScript
usesTestScript is an RDF property.

Test Script used by the Test Case. It is likely that the target resource will be an oslc_qm:TestScript but that is not necessarily the case.

validatesRequirement

http://open-services.net/ns/qm#validatesRequirement

validatesRequirement is an RDF property.

Requirement that is validated by the Test Case. It is likely that the target resource will be an oslc_rm:Requirement but that is not necessarily the case.

validatesRequirementCollection

http://open-services.net/ns/qm#validatesRequirementCollection

validatesRequirementCollection is an RDF property.

Requirement Collection that is validated by the Test Plan. It is likely that the target resource will be an oslc_rm:RequirementCollection but that is not necessarily the case.
3. Conformance

Quality Management servers **MUST** use the vocabulary terms defined here where required, and with the meanings defined here.

Quality Management servers **MAY** augment this vocabulary with additional classes, properties, and individuals.