

# 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)

https://docs.oasis-open-projects.org/oslc-op/qm/v2.1/os/quality-management-vocab.pdf

## **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/gm/v2.1/ps01/guality-management-vocab.pdf

## Latest stage:

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

https://docs.oasis-open-projects.org/oslc-op/qm/v2.1/quality-management-vocab.pdf

## Latest version:

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

## Latest editor's draft:

https://open-services.net/spec/qm/latest-draft

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## **Additional components:**

This specification is one component of a Work Product that also includes:

- OSLC Quality Management Version 2.1. Part 1: Specification. quality-managementspec.html
- OSLC Quality Management Version 2.1. Part 2: Vocabulary (this document). <a href="mailto:quality-management-vocab.html">quality-management-vocab.html</a>
- OSLC Quality Management Version 2.1. Part 3: Constraints. <u>quality-management-shapes.html</u>
- OSLC Quality Management Version 2.1. Part 4: Machine Readable Vocabulary Terms. quality-management-vocab.ttl
- OSLC Quality Management Version 2.1. Part 5: Machine Readable Constraints. qualitymanagement-shapes.ttl

## Related work:

This specification is related to:

 Open Services for Lifecycle Collaboration Quality Management Specification Version 2.0. https://archive.open-services.net/bin/view/Main/QmSpecificationV2

## **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 <a href="https://open-services.net/about/">https://open-services.net/about/</a>.

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## **Citation format:**

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

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## 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.

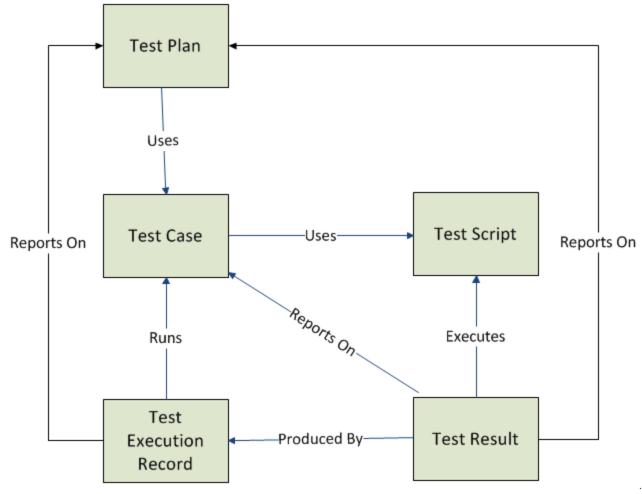


Fig. 1 OSLC Quality Management Version 2.1 resource relationship overview

## 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]

R. Fielding, Ed.; J. Reschke, Ed.. <u>Hypertext Transfer Protocol (HTTP/1.1): Message Syntax</u> <u>and Routing</u>. IETF, June 2014. Proposed Standard. URL: <a href="https://httpwg.org/specs/rfc7230.html">https://httpwg.org/specs/rfc7230.html</a>

## [LDP]

Steve Speicher; John Arwe; Ashok Malhotra. <u>Linked Data Platform 1.0</u>. W3C, 26 February 2015. W3C Recommendation. URL: <a href="https://www.w3.org/TR/ldp/">https://www.w3.org/TR/ldp/</a>

## [OSLCCore3]

Steve Speicher; Jim Amsden. <u>OSLC Core Overviewv3.0</u>. OASIS. Committee Specification Public Review Draft. URL: <a href="https://docs.oasis-open.org/oslc-core/oslc-core/v3.0/csprd03/part1-overview/oslc-core-v3.0-csprd03-part1-overview.html">https://docs.oasis-open.org/oslc-core/oslc-core/v3.0/csprd03/part1-overview/oslc-core-v3.0-csprd03-part1-overview.html</a>

## [RFC2119]

S. Bradner. *Key words for use in RFCs to Indicate Requirement Levels*. IETF, March 1997. Best Current Practice. URL: https://www.rfc-editor.org/rfc/rfc2119

## [RFC8174]

B. Leiba. <u>Ambiguity of Uppercase vs Lowercase in RFC 2119 Key Words</u>. IETF, May 2017. Best Current Practice. URL: <a href="https://www.rfc-editor.org/rfc/rfc8174">https://www.rfc-editor.org/rfc/rfc8174</a>

## 1.3.2 Informative references

## [OSLCCM]

Steve Speicher. <u>Open Services for Lifecycle Collaboration Change Management Specification Version 2.0</u>. https://open-services.net. Final. URL: <a href="https://archive.open-services.net/bin/view/Main/CmSpecificationV2">https://archive.open-services.net/bin/view/Main/CmSpecificationV2</a>

## [OSLCRM]

lan Green. <u>Open Services for Lifecycle Collaboration Requirements Management Specification Version 2.0</u>. https://open-services.net. Final. URL: <a href="https://archive.open-services.net/bin/view/Main/RmSpecificationV2">https://archive.open-services.net/bin/view/Main/RmSpecificationV2</a>

## [WEBARCH]

lan Jacobs; Norman Walsh. <u>Architecture of the World Wide Web, Volume One</u>. W3C, 15 December 2004. W3C Recommendation. URL: <a href="https://www.w3.org/TR/webarch/">https://www.w3.org/TR/webarch/</a>

## 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]
- OSIC 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:

• <a href="https://github.com/oslc-op/oslc-specs/blob/master/specs/qm/quality-management-vocab.ttl">https://github.com/oslc-op/oslc-specs/blob/master/specs/qm/quality-management-vocab.ttl</a>

## 2.1.1 Classes in this namespace (5)

TestCase, TestExecutionRecord, TestPlan, TestResult, TestScript

## **TestCase**

http://open-services.net/ns/gm#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/gm#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)

<u>affectedByChangeRequest</u>, <u>blockedByChangeRequest</u>, <u>executesTestScript</u>, <u>executionInstructions</u>, <u>producedByTestExecutionRecord</u>, <u>relatedChangeRequest</u>, <u>reportsOnTestCase</u>, <u>reportsOnTestPlan</u>, <u>runsOnTestEnvironment</u>, <u>runsTestCase</u>, <u>status</u>, <u>testsChangeRequest</u>, <u>usesTestCase</u>, <u>usesTestScript</u>, <u>validatesRequirement</u>, <u>validatesRequirementCollection</u>

## affectedByChangeRequest

http://open-services.net/ns/gm#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/gm#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/gm#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/gm#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/gm#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/gm#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/gm#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.