



# OSLC Quality Management Version 2.1. Part 2: Vocabulary

## Project Specification 01 27 August 2020

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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-management-spec.html](#)
- OSLC Quality Management Version 2.1. Part 2: Vocabulary (this document). [quality-management-vocab.html](#)
- OSLC Quality Management Version 2.1. Part 3: Constraints. [quality-management-shapes.html](#)
- 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. [quality-management-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 [OASIS Open Services for Lifecycle Collaboration \(OSLC\) OP](#) 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

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#### Citation format:

When referencing this specification the following citation format should be used:

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<https://docs.oasis-open-projects.org/oslc-op/qm/v2.1/ps01/quality-management-vocab.html>. Latest stage: <https://docs.oasis-open-projects.org/oslc-op/qm/v2.1/quality-management-vocab.html>.

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## 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.

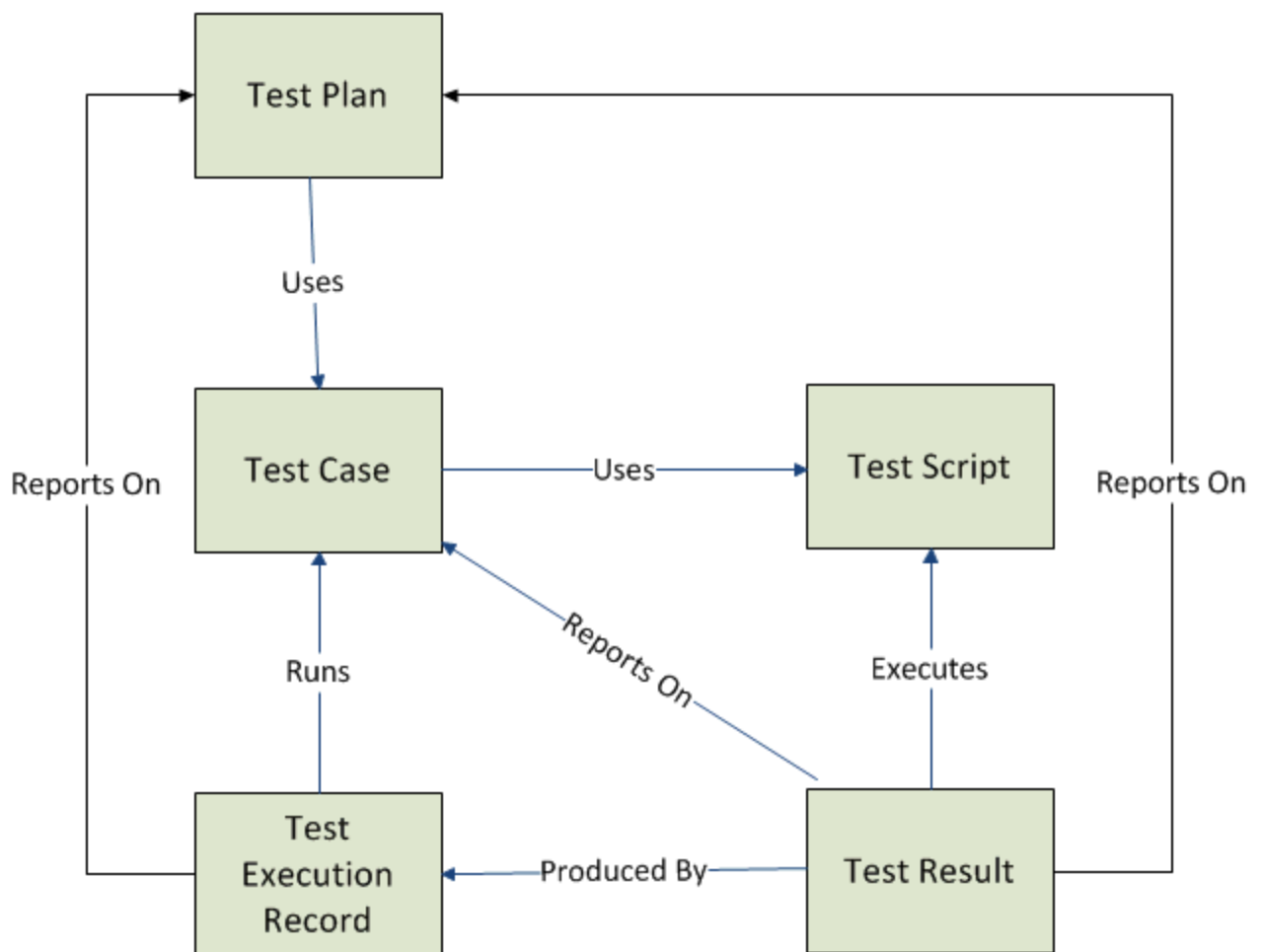


Fig. 1 OSLC Quality Management Version 2.1 resource relationship overview

## 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]

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

[LDP]

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

[OSLCCore3]

Steve Speicher; Jim Amsden. *OSLC Core Overview v3.0*. Committee Specification Public Review Draft. URL: <https://docs.oasis-open.org/oslc-core/oslc-core/v3.0/csprd03/part1-overview/oslc-core-v3.0-csprd03-part1-overview.html>

[RFC2119]

S. Bradner. *Key words for use in RFCs to Indicate Requirement Levels*. March 1997. Best Current Practice. URL: <https://tools.ietf.org/html/rfc2119>

### 1.3.2 Informative references

[OSLCCM]

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

[OSLCRM]

Ian Green. *Open Services for Lifecycle Collaboration Requirements Management Specification Version 2.0*. Final. URL: <https://archive.open-services.net/bin/view/Main/RmSpecificationV2>

[WEBARCH]

Ian Jacobs; Norman Walsh. *Architecture of the World Wide Web, Volume One*. 15 December 2004. W3C Recommendation. URL: <https://www.w3.org/TR/webarch/>



## 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**, **SHOULD**, **SHOULD NOT**, **RECOMMENDED**, **MAY**, and **OPTIONAL** in this specification are to be interpreted as described in [RFC2119].

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:

- <https://github.com/oslc-op/oslc-specs/blob/master/specs/qm/quality-management-vocab.ttl>

#### 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](#), [blockedByChangeRequest](#), [executesTestScript](#), [executionInstructions](#), [producedByTestExecutionRecord](#), [relatedChangeRequest](#), [reportsOnTestCase](#), [reportsOnTestPlan](#), [runsOnTestEnvironment](#), [runsTestCase](#), [status](#), [testsChangeRequest](#), [usesTestCase](#), [usesTestScript](#), [validatesRequirement](#), [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.