This wiki is locked. Future workgroup activity and specification development must take place at our new wiki. For more information, see this blog post about the new governance model and this post about changes to the website.

Open Services for Lifecycle Collaboration Quality Management Specification Version 2.0

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This Version

- http://open-services.net/bin/view/Main/QmSpecificationV2

Latest Version

- http://open-services.net/bin/view/Main/QmSpecificationV2

PreviousVersion

- http://open-services.net/bin/view/Main/QmSpecificationV1

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Notation and Conventions

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in RFC2119. Domain name examples use RFC2606.

Introduction

(this section is informative)

This specification builds on the OSLC Core Specification to define the resources and operations supported by an Open Services for Lifecycle Collaboration (OSLC) Quality Management (QM) provider.

Quality Management resources define the test plans, test cases, and test results of the software delivery lifecycle. They represent individual resources along with their relationships to other shared resource types such change requests and requirements. The intent of this specification is to define the set of HTTP-based RESTful interfaces in terms of HTTP methods: GET, POST, PUT and DELETE, HTTP response codes, mime type handling and resource formats. The capabilities of the interface definitions are driven by key integration scenarios and therefore don't represent a complete setup of operations on resources or resource types. The resource formats and operations may not match exactly the native models supported by quality management service providers but are intended to be compatible with them.

A key 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.

Terminology

Service Provider - an implementation of the OSLC Quality Management specifications as a server. OSLC QM clients consume these services

QM Resource - A resource managed by the QM service provider. The types of resources defined by this specification are Test Plan, Test Case, Test Script, Test Execution Record, and Test Result.

Test Plan Resource - Defines the overall process and strategy for testing a system

Test Case Resource - Defines the criteria which determine whether a system exhibits the correct behavior under a specific set of

circumstances

Test Script Resource - Defines a program or list of steps used to conduct a test

Test Execution Record Resource - Planning for execution of a test

Test Result Resource - Describes the outcome of attempting to execute a test

Base Requirements

Compliance

This specification is based on [OSLC Core Specification](). OSLC QM consumers and service providers **MUST** be compliant with both the core specification and this QM specification, and **SHOULD** follow all the guidelines and recommendations in both these specifications.

The following table summarizes the requirements from OSLC Core Specification as well as some additional specific to QM. Note that this specification further restricts some of the requirements for OSLC Core Specification. See further sections in this specification or the OSLC Core Specification to get further details on each of these requirements.

Requirement	Level	Meaning
Unknown properties and content	MAY / MUST	OSLC services MAY ignore unknown content and OSLC clients MUST preserve unknown content
Resource Operations	MUST	OSLC service MUST support resource operations via standard HTTP operations
Resource Paging	MAY	OSLC services MAY provide paging for resources but only when specifically requested by client
Partial Resource Representations	MUST / MAY	OSLC services MUST support request for a subset of a resource's properties via the oslc.properties URL parameter retrieval via HTTP GET and MAY support via HTTP PUT
Service Provider Resources	MAY / MUST	OSLC service providers MAY provide a Service Provider Catalog and MUST provide a Service Provider resource
Creation Factories	MAY	OSLC service providers MAY provide creation factories to enable resource creation via HTTP POST
Query Capabilities	MUST	OSLC service providers MUST provide query capabilities to enable clients to query for resources
Query Syntax	MUST	OSLC query capabilities MUST support the OSLC Core Query Syntax and MAY use other query syntax
Delegated UI Dialogs	MUST	OSLC Services MUST offer delegated UI dialogs (creation and selections) specified via service provider resource
UI Preview	SHOULD	OSLC Services SHOULD offer UI previews for resources that may be referenced by other resources
HTTP Basic Authentication	MAY	OSLC Services MAY support Basic Auth and should do so only over HTTPS
OAuth Authentication	MAY	OSLC Services MAY support OAuth and can indicate the required OAuth URLs via the service provider resource
Error Responses	MAY	OSLC Services MAY provide error responses using Core defined error formats
RDF/XML Representations	MUST / MUST	OSLC services MUST provide an RDF/XML representation for HTTP GET requests and MUST support RDF/XML representations on POST and PUT requests.
XML Representations	MAY	OSLC services MAY provide a XML representation for HTTP GET, POST and PUT requests that conform to the Core Guidelines for XML.
JSON Representations	MAY	OSLC services MAY provide JSON representations for HTTP GET, POST and PUT requests that conform to the Core Guidelines for JSON
HTML Representations	SHOULD	OSLC services SHOULD provide HTML representations for HTTP GET requests

The following areas of the OSLC QM V1 specification are affected by the corresponding areas of the OSLC Core Specification.

Specification	Corresponding Area of Core Specification
QM V1 REST API	Resource Operations
QM V1 Delegated Resource Selection and Creation	Delegated User Interface Dialogs
QM V1 Resource Definitions	Resource Representation
QM V1 Query Syntax	Query Capabilities
Service Provider Catalog (common spec)	Service Provider Resources

Backwards compatibility with OSLC QM V1 is discussed below.

Specification Versioning

See [OSLC Core Specification Versioning section](#).

Namespaces

In addition to the namespace URIs and namespace prefixes 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 namespace URI and prefix are used to designate the resources defined in this specification and their properties.

Resource Formats

In addition to the requirements for [OSLC Defined Resource Representations](#), this section outlines further refinements and restrictions.

For HTTP GET requests on all OSLC QM and OSLC Core defined resource types,

- QM Providers **MUST** provide RDF/XML and XML representations. The XML representation **SHOULD** follow the guidelines outlined in the [OSLC Core Representations Guidance](#).
- QM Consumers requesting RDF/XML **SHOULD** be prepared for any valid RDF/XML document. QM Consumers requesting XML **SHOULD** be prepared for representations that follow the guidelines outlined in the [OSLC Core Representations Guidance](#).
- QM Providers **SHOULD** support an [X]HTML representation and a user interface (UI) preview as defined by [UI Preview Guidance](#)

For HTTP PUT/POST request formats for QM resources,

- QM Providers **MUST** accept XML representations and **SHOULD** accept RDF/XML representations. QM Providers accepting RDF/XML **SHOULD** be prepared for any valid RDF/XML document. For XML, QM Providers **SHOULD** be prepared for representations that follow the guidelines outlined in the [OSLC Core Representations Guidance](#).

For HTTP GET response formats for Query requests,

QM Providers **MUST** provide RDF/XML, XML, and Atom Syndication Format XML.

When QM Consumers request:
- `application/rdf+xml` QM Providers **MUST** respond with RDF/XML representation without restrictions.
- `application/xml` QM Providers **MUST** respond with OSLC-defined abbreviated XML representation as defined in the [OSLC Core Representations Guidance](#)
- `application/atom+xml` QM Providers **MUST** respond with Atom Syndication Format XML representation as defined in the [OSLC Core Representations Guidance](#)
- The Atom Syndication Format XML representation **SHOULD** use RDF/XML representation without restrictions for the atom:content entries representing the resource representations.

Authentication

See [OSLC Core Authentication section](#). OSLC QM puts no additional constraints on authentication.

Error Responses

See [OSLC Core Error Responses section](#). OSLC QM puts no additional constraints on error responses.

Labels for Relationships

Quality Management relationships to other resources are represented as properties whose values are the URI of the object or target resource. When a Quality Management relationship property is to be presented in a user interface, it may be helpful to provide an

informative and useful textual label for that relationship instance. (This in addition to the relationship property URI and the object resource URI, which are also candidates for presentation to a user.) To this end, OSLC providers **MAY** support a `dcterms:title` link property in Quality Management resource representations, using the anchor approach outlined in the [OSLC Core Links Guidance](#).
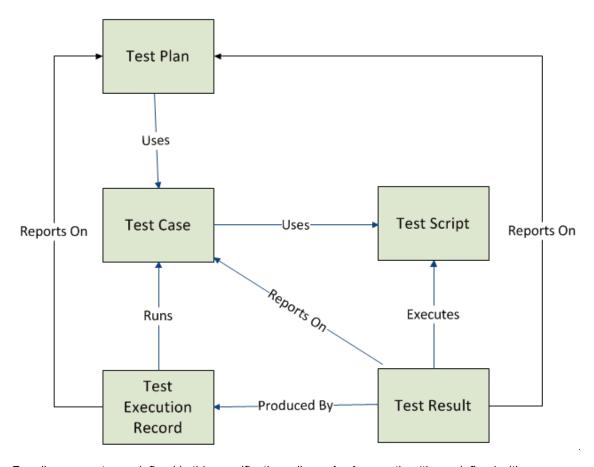
RDF/XML and XML example using reified statement:

```
<rdf:RDF
    xmlns:dcterms="http://purl.org/dc/terms/"
    xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
    xmlns:oslc_qm="http://open-services.net/ns/qm#">

    <oslc_qm:TestCase rdf:about="http://example.com/testcases/4321">
        <oslc_qm:validatesRequirement rdf:ID="link1"
            rdf:resource="http://anotherexample.com/requirements/123" />
    </oslc_qm:TestCase>

    <rdf:Description rdf:about="#link1">
        <dcterms:title>Requirement 123: Provide keyboard accessibility</dcterms:title>
    </rdf:Description>
</rdf:RDF>
```

QM Resource Definitions

The QM resource properties are not limited to the ones defined in this specification; service providers may provide additional properties. It is recommended that any additional properties exist in their own unique namespace and not use the namespaces defined in this specification.

A list of properties is defined for each type of resource. Most of these properties are identified in [OSLC Core Appendix A: Common Properties](#). Any exceptions are noted. Relationship properties refer to other resources. These resources may be in any OSLC domain (including QM).

The diagram below shows the relationships between QM Resources.

For all resource types defined in this specification, all **required** properties (those defined with an occurrence of **exactly-one** or **one-or-many**) **MUST** exist for each resource and must be provided when requested. All other properties are optional, and might not exist on some or any resources; those that do not exist will not be present in the returned representation even if requested, while those that do exist **MUST** be provided if requested. Providers **MAY** define additional provider-specific properties; providers **SHOULD** use their own namespaces for such properties, or use standard Dublin Core or RDF namespaces and properties where appropriate.

If no specific set of properties is requested, **all** properties are returned - both those defined in this specification as well as any provider-specific ones. See Selective Property Values in OSLC Core Specification.

Consumers of OSLC QM services should note that some resources may have a very large number of related resources, and that some resources may be very large and/or expensive to compute. For this reason, consumers are **strongly** encouraged to use the `oslc.properties` parameter to limit the properties returned from a request to the subset required. See Selective Property Values in OSLC Core Specification.

Resource: TestPlan

- **Name:** `TestPlan`
- **Type URI** `http://open-services.net/ns/qm#TestPlan`

TestPlan Properties

Prefixed Name	Occurs	Read-only	Value-type	Representation	Range	Description
OSLC Core: Common Properties						
dcterms:contributor	zero-	unspecified	Either	Either	any	Contributor or contributors to

	or-many		Resource or Local Resource	Reference or Inline		resource (reference: Dublin Core). It is likely that the target resource will be an foaf:Person but that is not necessarily the case.
dcterms:created	zero-or-one	True	DateTime	n/a	n/a	Timestamp of resource creation (reference: Dublin Core)
dcterms:creator	zero-or-many	unspecified	Either Resource or Local Resource	Either Reference or Inline	any	Creator or creators of resource (reference: Dublin Core). It is likely that the target resource will be an foaf:Person but that is not necessarily the case.
dcterms:description	zero-or-one	unspecified	XMLLiteral	n/a	n/a	Descriptive text (reference: Dublin Core) about resource represented as rich text in XHTML content. SHOULD include only content that is valid and suitable inside an XHTML <div> element. SHOULD include only content that is valid inside an XHTML <span> element.
dcterms:identifier	exactly-one	True	String	n/a	n/a	A unique identifier for a resource. Assigned by the service provider when a resource is created. Not intended for end-user display.
dcterms:modified	zero-or-one	True	DateTime	n/a	n/a	Timestamp of latest resource modification (reference: Dublin Core)
rdf:type	zero-or-many	unspecified	Resource	Reference	n/a	The resource type URIs.
dcterms:subject	zero-or-many	unspecified	String	n/a	n/a	Tag or keyword for a resource. Each occurrence of a dc:subject property denotes an additional tag for the resource.
dcterms:title	exactly-one	unspecified	XMLLiteral	n/a	n/a	Title (reference: Dublin Core) of the resource represented as rich text in XHTML content. SHOULD include only content that is valid inside an XHTML <span> element.
oslc:instanceShape	zero-or-one	True	Resource	Reference	oslc:ResourceShape	Resource Shape that provides hints as to resource property value-types and allowed

						values.
`oslc:serviceProvider`	zero-or-many	True	Resource	Reference	`oslc:ServiceProvider`	The scope of a resource is a link to the resource's OSLC Service Provider.

Prefixed Name	Occurs	Read-only	Value-type	Representation	Range	Description
Relationship properties: This grouping of properties is used to identify relationships between resources managed by OSLC Service Providers						
`oslc_qm:relatedChangeRequest`	zero-or-many	False	Resource	Reference	`any`	A related change request. It is likely that the target resource will be an `oslc_cm:ChangeRequest` but that is not necessarily the case.
`oslc_qm:usesTestCase`	zero-or-many	False	Resource	Either	`any`	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.
`oslc_qm:validatesRequirementCollection`	zero-or-many	False	Resource	Reference	`any`	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.

Resource: TestCase

- **Name:** `TestCase`
- **Type URI** `http://open-services.net/ns/qm#TestCase`

TestCase Properties

Prefixed Name	Occurs	Read-only	Value-type	Representation	Range	Description
OSLC Core: Common Properties						
`dcterms:contributor`	zero-or-many	unspecified	Either Resource or Local Resource	Either Reference or Inline	`any`	Contributor or contributors to resource (reference: Dublin Core). It is likely that the target resource will be an `foaf:Person` but that is not necessarily the case.
`dcterms:created`	zero-or-one	True	DateTime	n/a	n/a	Timestamp of resource creation (reference: Dublin Core)
`dcterms:creator`	zero-or-many	unspecified	Either Resource or Local	Either Reference or Inline	`any`	Creator or creators of resource (reference: Dublin Core). It is likely that the target resource

			Resource			will be an `foaf:Person` but that is not necessarily the case.
`dcterms:description`	zero-or-one	unspecified	XMLLiteral	n/a	n/a	Descriptive text (reference: Dublin Core) about resource represented as rich text in XHTML content. SHOULD include only content that is valid and suitable inside an XHTML <div> element. SHOULD include only content that is valid inside an XHTML <span> element.
`dcterms:identifier`	exactly-one	True	String	n/a	n/a	A unique identifier for a resource. Assigned by the service provider when a resource is created. Not intended for end-user display.
`dcterms:modified`	zero-or-one	True	DateTime	n/a	n/a	Timestamp of latest resource modification (reference: Dublin Core)
`rdf:type`	zero-or-many	unspecified	Resource	Reference	n/a	The resource type URIs.
`dcterms:subject`	zero-or-many	unspecified	String	n/a	n/a	Tag or keyword for a resource. Each occurrence of a dc:subject property denotes an additional tag for the resource.
`dcterms:title`	exactly-one	unspecified	XMLLiteral	n/a	n/a	Title (reference: Dublin Core) of the resource represented as rich text in XHTML content. SHOULD include only content that is valid inside an XHTML <span> element.
`oslc:instanceShape`	zero-or-one	True	Resource	Reference	`oslc:ResourceShape`	Resource Shape that provides hints as to resource property value-types and allowed values.
`oslc:serviceProvider`	zero-or-many	True	Resource	Reference	`oslc:ServiceProvider`	The scope of a resource is a link to the resource's OSLC Service Provider.

Prefixed Name	Occurs	Read-only	Value-type	Representation	Range	Description
Relationship properties: This grouping of properties is used to identify relationships between resources managed by OSLC Service Providers						
`oslc_qm:relatedChangeRequest`	zero-or-many	False	Resource	Reference	`any`	A related change request. It is likely that the target resource will be an `oslc_cm:ChangeRequest` but that is not necessarily the case.
`oslc_qm:testsChangeRequest`	zero-or-many	False	Resource	Reference	`any`	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.
`oslc_qm:usesTestScript`	zero-or-many	False	Resource	Either	`any`	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.
`oslc_qm:validatesRequirement`	zero-or-many	False	Resource	Reference	`any`	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.

Resource: TestScript

- **Name:** `TestScript`
- **Type URI** `http://open-services.net/ns/qm#TestScript`

TestScript Properties

Prefixed Name	Occurs	Read-only	Value-type	Representation	Range	Description
OSLC Core: Common Properties						
`dcterms:contributor`	zero-or-many	unspecified	Either Resource or Local Resource	Either Reference or Inline	`any`	Contributor or contributors to resource (reference: Dublin Core). It is likely that the target resource will be an `foaf:Person` but that is not necessarily the case.
`dcterms:created`	zero-or-one	True	DateTime	n/a	n/a	Timestamp of resource creation (reference: Dublin Core)
`dcterms:creator`	zero-or-many	unspecified	Either Resource or Local Resource	Either Reference or Inline	`any`	Creator or creators of resource (reference: Dublin Core). It is likely that the target resource will be an `foaf:Person` but that is not necessarily the case.
`dcterms:description`	zero-or-one	unspecified	XMLLiteral	n/a	n/a	Descriptive text (reference: Dublin Core) about resource

						represented as rich text in XHTML content. SHOULD include only content that is valid and suitable inside an XHTML <div> element. SHOULD include only content that is valid inside an XHTML <span> element.
`dcterms:identifier`	exactly-one	True	String	n/a	n/a	A unique identifier for a resource. Assigned by the service provider when a resource is created. Not intended for end-user display.
`dcterms:modified`	zero-or-one	True	DateTime	n/a	n/a	Timestamp of latest resource modification (reference: Dublin Core)
`rdf:type`	zero-or-many	unspecified	Resource	Reference	n/a	The resource type URIs.
`dcterms:title`	exactly-one	unspecified	XMLLiteral	n/a	n/a	Title (reference: Dublin Core) of the resource represented as rich text in XHTML content. SHOULD include only content that is valid inside an XHTML <span> element.
`oslc:instanceShape`	zero-or-one	True	Resource	Reference	`oslc:ResourceShape`	Resource Shape that provides hints as to resource property value-types and allowed values.
`oslc:serviceProvider`	zero-or-many	True	Resource	Reference	`oslc:ServiceProvider`	The scope of a resource is a link to the resource's OSLC Service Provider.

Prefixed Name	Occurs	Read-only	Value-type	Representation	Range	Description
Relationship properties: This grouping of properties is used to identify relationships between resources managed by OSLC Service Providers						
`oslc_qm:executionInstructions`	unspecified	unspecified	Resource	Reference	`any`	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.
`oslc_qm:relatedChangeRequest`	zero-or-many	False	Resource	Reference	`any`	A related change request. It is likely that the target resource will be an `oslc_cm:ChangeRequest` but that is not necessarily the case.
`oslc_qm:validatesRequirement`	zero-or-many	False	Resource	Reference	`any`	Requirement that is validated by the Test Script. It is likely that the target resource will be an `oslc_rm:Requirement` but that is not necessarily the case.

Resource: TestExecutionRecord

- **Name:** `TestExecutionRecord`
- **Type URI** `http://open-services.net/ns/qm#TestExecutionRecord`

TestExecutionRecord Properties

Prefixed Name	Occurs	Read-only	Value-type	Representation	Range	Description
OSLC Core: Common Properties						
`dcterms:contributor`	zero-or-many	unspecified	Either Resource or Local Resource	Either Reference or Inline	`any`	Contributor or contributors to resource (reference: Dublin Core). It is likely that the target resource will be an `foaf:Person` but that is not necessarily the case.
`dcterms:created`	zero-or-one	True	DateTime	n/a	n/a	Timestamp of resource creation (reference: Dublin Core)
`dcterms:creator`	zero-or-many	unspecified	Either Resource or Local Resource	Either Reference or Inline	`any`	Creator or creators of resource (reference: Dublin Core). It is likely that the target resource will be an `foaf:Person` but that is not necessarily the case.
`dcterms:identifier`	exactly-one	True	String	n/a	n/a	A unique identifier for a resource. Assigned by the service provider when a resource is created. Not intended for end-user display.
`dcterms:modified`	zero-or-one	True	DateTime	n/a	n/a	Timestamp of latest resource modification (reference: Dublin Core)
`rdf:type`	zero-or-many	unspecified	Resource	Reference	n/a	The resource type URIs.
`dcterms:title`	exactly-one	unspecified	XMLLiteral	n/a	n/a	Title (reference: Dublin Core) of the resource represented as rich text in XHTML content. SHOULD include only content that is valid inside an XHTML <span> element.
`oslc:instanceShape`	zero-or-one	True	Resource	Reference	`oslc:ResourceShape`	Resource Shape that provides hints as to resource property value-types and allowed values.
`oslc:serviceProvider`	zero-or-many	True	Resource	Reference	`oslc:ServiceProvider`	The scope of a resource is a link to the resource's OSLC Service Provider.

Prefixed Name	Occurs	Read-only	Value-type	Representation	Range	Description
Relationship properties: This grouping of properties is used to identify relationships between resources managed by OSLC Service Providers						
oslc_qm:blockedByChangeRequest	zero-or-many	False	Resource	Reference	any	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.
oslc_qm:runsOnTestEnvironment	zero-or-one	unspecified	Resource	Reference	any	Indicates the environment details of the test case for this execution record.
oslc_qm:relatedChangeRequest	zero-or-many	False	Resource	Reference	any	A related change request. It is likely that the target resource will be an oslc_cm:ChangeRequest but that is not necessarily the case.
oslc_qm:reportsOnTestPlan	zero-or-one	unspecified	Resource	Either	any	Test Plan that the Test Execution Record reports on. It is likely that the target resource will be an oslc_qm:TestPlan but that is not necessarily the case.
oslc_qm:runsTestCase	exactly-one	False	Resource	Either	any	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.

Resource: TestResult

- **Name:** TestResult
- **Type URI** http://open-services.net/ns/qm#TestResult

TestResult Properties

Prefixed Name	Occurs	Read-only	Value-type	Representation	Range	Description
OSLC Core: Common Properties						
`dcterms:created`	zero-or-one	True	DateTime	n/a	n/a	Timestamp of resource creation (reference: Dublin Core)
`dcterms:identifier`	exactly-one	True	String	n/a	n/a	A unique identifier for a resource. Assigned by the service provider when a resource is created. Not intended for end-user display.
`dcterms:modified`	zero-or-one	True	DateTime	n/a	n/a	Timestamp of latest resource modification (reference: Dublin Core)
`rdf:type`	zero-or-many	unspecified	Resource	Reference	n/a	The resource type URIs.
`dcterms:title`	exactly-one	unspecified	XMLLiteral	n/a	n/a	Title (reference: Dublin Core) of the resource represented as rich text in XHTML content. SHOULD include only content that is valid inside an XHTML <span> element.
`oslc:instanceShape`	zero-or-one	True	Resource	Reference	`oslc:ResourceShape`	Resource Shape that provides hints as to resource property value-types and allowed values.
`oslc:serviceProvider`	zero-or-many	True	Resource	Reference	`oslc:ServiceProvider`	The scope of a resource is a link to the resource's OSLC Service Provider.

Prefixed Name	Occurs	Read-only	Value-type	Representation	Range	Description
OSLC QM: Start of additional properties						
`oslc_qm:status`	zero-or-one	unspecified	String	n/a	n/a	Used to indicate the state of the Test Result based on values defined by the service provider. Most often a read-only property.

Prefixed Name	Occurs	Read-only	Value-type	Representation	Range	Description
Relationship properties: This grouping of properties is used to identify relationships between resources managed by OSLC Service Providers						
`oslc_qm:affectedByChangeRequest`	zero-or-many	False	Resource	Reference	`any`	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.
`oslc_qm:executesTestScript`	zero-or-one	unspecified	Resource	Either	`any`	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.
`oslc_qm:producedByTestExecutionRecord`	zero-or-one	unspecified	Resource	Either	`any`	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.
`oslc_qm:reportsOnTestCase`	exactly-one	unspecified	Resource	Either	`any`	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.
`oslc_qm:reportsOnTestPlan`	zero-or-one	unspecified	Resource	Either	`any`	Test Plan that the Test Result reports on. It is likely that the target resource will be an `oslc_qm:TestPlan` but that is not necessarily the case.

QM Service Provider Capabilities

Service Discovery and Description

Resource Shapes

OSLC QM services providers **SHOULD** support Resource Shapes as defined in OSLC Core Specification Appendix A

Service Provider Resource

OSLC QM service providers **MUST** provide a [Service Provider Resource](#) that can be retrieved at a implementation dependent URI.

OSLC QM service providers **MAY** provide a [Service Provider Catalog Resource](#) that can be retrieved at a implementation dependent URI.

OSLC QM service providers **MUST** provide a `oslc:serviceProvider` property for their defined resources that will be the URI to a [Service Provider Resource](#).

Creation Factories

If an OSLC QM service provider supports the creation of resources, there **MUST** be at least one [Creation Factories](#) entry in the Services definition.

Query Capabilities

There **MUST** be at least one [Query Capabilities](#) entry in the Services definition.

The Query Capability **MUST** at least support these parameters:
- oslc:where
- oslc:select

If shape information is NOT present with the Query Capability, service providers **SHOULD** use the default properties defined in [OSLC Core RDF/XML Examples](#) to contain the result.

Delegated UIs

OSLC QM service providers support the selection and creation of QM resources as defined by [Delegated UIs](#) in OSLC Core.

The service providers supports the delegated UIs as follows:

QM Resource	Selection	Creation
TestPlan	MUST	MUST
TestCase	MUST	MUST
TestScript	MUST	MAY
TestExecutionRecord	MUST	MAY
TestResult	MUST	MAY

Miscellaneous

Version Compatibility with 1.0 Specifications

Media Types

For a resource format identification of RDF/XML and XML, the media type used for this representation **SHOULD** be application/rdf+xml or application/xml. The usage of the OSLC QM 1.0 defined media types of application/x-oslc-qm-* is being deprecated.

Requesting formats

QM 1.0 consumers wanting to request 1.0 resource formats will not need to change if they used 1.0 defined media types (

`application/x-oslc-qm*`), see OSLC-QM 1.0. QM 2.0 consumers should use media types as defined in this specification for requests, excluding the OSLC QM 1.0 specific media types (`application/x-oslc-qm*`). QM consumers supporting both 1.0 and 2.0, may request request both 1.0 and 2.0 media types on HTTP GET requests as usually done with HTTP request parameter `Accept` giving appropriate quality (See HTTP Accept) weighting to help distinguish their preferred content.

For additional guidance, a QM 2.0 consumer or provider may reference the `OSLC-Core-Version` HTTP header with a value of `2.0`.

Appendix A: Samples

(this section is informative)

See QmSpecificationV2Samples

Appendix B: Resource Shapes

(this section is informative)

See QmSpecificationV2Shapes

Appendix C: Notices and References

Contributors

Reporting Issues on the Specification

The working group participants who author and maintain this working draft specification, monitor a distribution list where issues or questions can be raised, see Quality Management Mailing List

Also the issues found with this specification and their resolution can be found at QmSpecV2Issues.

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Intellectual Property Covenant

The members of the Working Group (or as appropriate, their employers) have documented a Patent Non-Assertion Covenant for

implementations of the QM 2.0 Specification, as described in the open-services.net Terms of Use. Details of the Covenant may be found here.

References

- OSLC-QM 1.0 - OSLC Quality Management Specification 1.0
- OSLC Core - OSLC Core Specification 2.0
- OSLC-CM 2.0 - OSLC Change Management Specification 2.0
- OSLC-RM 2.0 - OSLC Requirements Management Specification 2.0
- Dublin Core 1.1 - Dublin Core Metadata Element Set, Version 1.1
- FOAF - Friend of a Friend (FOAF) v0.98
- HTTP 1.1 - Hyper-text Transfer Protocol (HTTP/1.1)
- OAuth 1.0a - RFC5849 - The OAuth 1.0 Protocol
- RDF/XML Concepts - RDF/XML Concepts and Abstract Syntax
- RDF/XML Syntax - RDF / XML Syntax Specification (Revised)
- URI Syntax - URI Generic Syntax
- XML Namespaces - Namespaces in XML 1.0 (Third Edition)
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Main.QmSpecificationV2 moved from Main.QmSpecV2Draft on 24 Jul 2010 - 13:23 by PaulMcMahan - put it back