



# OSLC Core Version 3.0. Part 7: Vocabulary

## OASIS Standard

26 August 2021

### This stage:

<https://docs.oasis-open-projects.org/oslc-op/core/v3.0/os/core-vocab.html> (Authoritative)  
<https://docs.oasis-open-projects.org/oslc-op/core/v3.0/os/core-vocab.pdf>

### Previous stage:

<https://docs.oasis-open-projects.org/oslc-op/core/v3.0/ps02/core-vocab.html> (Authoritative)  
<https://docs.oasis-open-projects.org/oslc-op/core/v3.0/ps02/core-vocab.pdf>  
(published as Project Specification)

### Latest stage:

<https://docs.oasis-open-projects.org/oslc-op/core/v3.0/core-vocab.html> (Authoritative)  
<https://docs.oasis-open-projects.org/oslc-op/core/v3.0/core-vocab.pdf>

### Latest version:

<https://open-services.net/spec/core/latest>

### Latest editor's draft:

<https://open-services.net/spec/core/latest-draft>

### Open Project:

[OASIS Open Services for Lifecycle Collaboration \(OSLC\) OP](#)

### Project Chairs:

Jim Amsden ([jamsden@us.ibm.com](mailto:jamsden@us.ibm.com)), [IBM](#)  
Andrii Berezovskyi ([andriib@kth.se](mailto:andriib@kth.se)), [KTH](#)

### Editors:

Jim Amsden ([jamsden@us.ibm.com](mailto:jamsden@us.ibm.com)), [IBM](#)  
Andrii Berezovskyi ([andriib@kth.se](mailto:andriib@kth.se)), [KTH](#)

### Additional components:

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

- OSLC Core Version 3.0. Part 1: Overview. <https://docs.oasis-open-projects.org/oslc-op/core/v3.0/os/oslc-core.html>
- OSLC Core Version 3.0. Part 2: Discovery. <https://docs.oasis-open-projects.org/oslc-op/core/v3.0/os/discovery.html>
- OSLC Core Version 3.0. Part 3: Resource Preview. <https://docs.oasis-open-projects.org/oslc-op/core/v3.0/os/resource-preview.html>

- OSLC Core Version 3.0. Part 4: Delegated Dialogs. <https://docs.oasis-open-projects.org/oslc-op/core/v3.0/os/dialogs.html>
- OSLC Core Version 3.0. Part 5: Attachments. <https://docs.oasis-open-projects.org/oslc-op/core/v3.0/os/attachments.html>
- OSLC Core Version 3.0. Part 6: Resource Shape. <https://docs.oasis-open-projects.org/oslc-op/core/v3.0/os/resource-shape.html>
- OSLC Core Version 3.0. Part 7: Vocabulary (this document). <https://docs.oasis-open-projects.org/oslc-op/core/v3.0/os/core-vocab.html>
- OSLC Core Version 3.0. Part 8: Constraints. <https://docs.oasis-open-projects.org/oslc-op/core/v3.0/os/core-shapes.html>
- OSLC Core Version 3.0. Machine Readable Vocabulary Terms. <https://docs.oasis-open-projects.org/oslc-op/core/v3.0/os/core-vocab.ttl>
- OSLC Core Version 3.0. Machine Readable Constraints. <https://docs.oasis-open-projects.org/oslc-op/core/v3.0/os/core-shapes.ttl>

#### Related work:

This specification is related to:

- OSLC Core Version 3.0: Link Guidance. <https://oslc-op.github.io/oslc-specs/notes/link-guidance.html>

#### RDF Namespaces:

<http://open-services.net/ns/core#>

#### Abstract:

Core Vocabulary defines the OSLC Core RDF vocabulary terms and resources, that have broad applicability across various domains.

#### 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://github.com/oslc-op/oslc-specs>.

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](mailto:oslc-op).

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-CoreVocab-3.0]**

OSLC Core Version 3.0. Part 7: Vocabulary. Edited by Jim Amsden and Andrii Berezovskyi. 26 August 2021. OASIS Standard. <https://docs.oasis-open-projects.org/oslc-op/core/v3.0/os/core-vocab.html>. Latest stage: <https://docs.oasis-open-projects.org/oslc-op/core/v3.0/core-vocab.html>.

## Notices

Copyright © OASIS Open 2021. 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 [Terminology](#)
  - 1.2 [References](#)
  - 1.3 [Typographical Conventions and Use of RFC Terms](#)
2. [Motivation](#)
3. [Consideration for select vocabulary terms](#)
  - 3.1 [Archived resources](#)
  - 3.2 [Comments](#)
  - 3.3 [Errors](#)
  - 3.4 [Impact of resource changes on links](#)
  - 3.5 [Inverse properties](#)
4. [Defining Enumerations](#)
5. [Terms for describing vocabularies](#)
  - 5.1 [Inverse Labels](#)
  - 5.2 [Traceability and Impact type](#)
6. [Discovery](#)
7. [Terms](#)
  - 7.1 [Vocabulary Details](#)
8. [Conformance](#)

# 1. Introduction

*This section is non-normative.*

Various resources and properties may be so commonly used or apply so broadly that it makes sense to define them in one place so they can be easily reused. Some common examples are short names or labels, error messages, discussion threads, traceability/impacts relationship behavior or annotating other vocabulary terms.

See [OSLC Core Version 3.0. Part 8: Constraints](#) for the standard OSLC constraints defined on this vocabulary.

## 1.1 Terminology

Terminology uses and extends the terminology and capabilities of [OSLC Core Overview](#), W3C Linked Data Platform [[LDP](#)], W3C's Architecture of the World Wide Web [[WEBARCH](#)], Hyper-text Transfer Protocol [[HTTP11](#)].

### Archived Resource

A resource in which an explicit action has been performed to mark the resource as no longer active.

## 1.2 References

### 1.2.1 Normative references

[[HTTP11](#)]

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

[[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/>

[[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. [Ambiguity of Uppercase vs Lowercase in RFC 2119 Key Words](#). IETF, May 2017. Best Current Practice. URL: <https://www.rfc-editor.org/rfc/rfc8174>

### 1.2.2 Informative references

[[LinkGuidance](#)]

Steve Speicher; Jim Amsden. [OSLC Link Guidance 3.0](#). OASIS. URL: <https://tools.oasis-open.org/version-control/svn/oslc-core/trunk/supporting-docs/link-guidance.html>

[[WEBARCH](#)]

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

## 1.3 Typographical Conventions and Use of RFC Terms

## Standards Track Work Product

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.

## 2. Motivation

*This section is non-normative.*

Most OSLC vocabularies and resource shape constraints on usages of those vocabularies are given in the various OSLC domain specifications. The motivation for these domain specifications is to define agreed upon, formalized vocabulary terms for key elements in the domain. Domain vocabularies are not intended to restrict what vocabularies servers actually use for those domains, or what domains they support. Rather vocabularies establish a common core of domain terms that reduce accidental variability and foster greater interchange and interoperability between tools that support and users that make use of domains. Servers are free to extend the domains and integrate across domains as required to realize their provided capabilities.

OSLC Core takes a similar approach for common terms that are used across most domains. The intent is to provide a foundation for building domains that again reduces unnecessary variability, and eliminates the need for the various domain specifications to redundantly define similar terms. The follow paragraphs describe the kinds of common terms defined by OSLC core in order to achieve the stated intent.

## 3. Consideration for select vocabulary terms

### 3.1 Archived resources

Archived Resources are typically found in large systems in which an immutable copy of the state of a resource at a given time is captured. The purpose may vary in that it could be simply a way to facilitate access to a backup or snapshot of a resource at a particular point in time. Another use may be to indicate that a resource has been deleted, but is saved by the system for historical or legal reasons. Having a consistent way to indicate that a resource, or a set of them, has been archived helps when defining certain views of the resources or queries.

Archived Resources **MAY** be identified by having a property `oslc:archived`, with value `true`. [cc-1]

Archived Resources **MAY** be removed from typical user interactions. [cc-2]

Archived Resources **SHOULD** be considered immutable. [cc-3]

### 3.2 Comments

Many different kinds of applications have a way to provide comments or notes related to a given resource. These take the form of a discussion, with a sequence of comments. OSLC Core provide a common way for applications to easily add to a comment to a discussion thread or navigate a discussion thread.

### 3.3 Errors

Error responses from HTTP request often take the form of HTML pages intended for a human to read, even though these requests are often initiated from applications that don't have a human actively monitoring it. OSLC Core defines a consistent way to request error responses of a certain format, and a prescribed interaction model that helps clients better handle errors automatically.

### 3.4 Impact of resource changes on links

Some RDF properties express relations or links between subject and object artifacts. If a change in state of subject and/or object of a triple may result in the assertion becoming invalid, the link may be seen to represent a dependency. OSLC Core provides property `oslc:impactType` as a means of defining the dependency represented by an RDF property.

### 3.5 Inverse properties

Consider a user interface for a query builder that allows users to build queries about test cases. It is natural for the query builder to present the user with a list of the properties that apply to test cases that could be used in the query. Suppose the user wants to build a query that returns all the requirements that are validated by a test case. The query builder should describe the available properties from the point of view of the test case. This implies that the query builder should describe the inverse relation asserted by any triple that has the test case as an object. In this example, the query builder should describe assertions of the form {requirement `oslc_rm:validatedBy` test case} as {test case `validates` requirement}.



## 4. Defining Enumerations

*This section is non-normative.*

Some property values are characterized by a limited set of enumerated values. The type for these property values is called an enumeration in many modeling and programming languages, while the values are called enumeration literals. RDF does not define a specific way of defining enumerated types and enumeration literals. As a result, different vocabularies may take different, but equally valid approaches. In order to foster interoperability and integration, OSLC Core provides a recommended approach for defining enumerated types and enumeration literals. This approach is used in defining the OSLC Core vocabulary terms.

Enumerations in an OSLC vocabulary should be defined as an RDF class. Enumeration literals are the URIs of individuals of that class. For example, consider an enumeration called "Color" that has enumeration literals {red, yellow, green, blue} (using Java notation). Color would be defined as an RDF class and the enumeration literals would be individuals of that class. A `color` property is defined and then used to assert that the color of myCar is blue.

### EXAMPLE 1

```
# Color enumeration
Color
  a rdfs:Class ;
  rdfs:label "Color" ;
  rdfs:comment "The class of possible color values." .

# Color enumeration literals
red
  a Color ;
  rdfs:label "red" .

yellow
  a Color ;
  rdfs:label "yellow" .

green
  a Color ;
  rdfs:label "green" .

blue
  a Color ;
  rdfs:label "blue" .

# A Color property
color
  a rdf:Property ;
  rdfs:label "color" ;
  rdfs:comment "Used to specify the color of a resource".

# Asserting the color of a resource
myCar color blue.
```

Enumerations can be open or closed. Open enumerations allow additional enumeration literals to be added as needed. Closed enumerations have a fixed set of enumeration literals that is not intended to be extended. Resource shapes can be used to constrain enumerations to a specific set of values. Notice in the example above that the color property did not specify its `rdfs:range`. This keeps the enumeration completely open to any set of individuals. OSLC prefers to use resource shapes to constrain resources for particular usages, leaving them open for extension for other, possibly unanticipated usages.

A shape can be used to constrain the Color enumeration for a specific purpose. For example, the color of lights in a traffic light should be constrained to exactly red, yellow and green.

## EXAMPLE 2

```
# Create a constraint on Color for traffic lights
TrafficLightConstraint
  a oslc:ResourceShape ;
  oslc:describes fhwa:TrafficLight ;
  determs:title "Establish constraints for traffic light colors" ;
  oslc:property colorConstraint .

colorConstraint
  a oslc:Property ;
  oslc:name "color" ;
  dcterms:description "The colors for a traffic light as specified by FHWA."
  oslc:propertyDefinition color ;
  oslc:occurs oslc:Exactly-one ;
  oslc:range Color ;
  oslc:allowValue red, yellow, green ;
  oslc:readOnly false ;
  oslc:representation oslc:Reference ;
  oslc:valueType oslc:Resource .
```

TrafficLightConstraint defines a constraint associated with the vocabulary term `fhwa:TrafficLight`. The constraint has one property, `colorConstraint` whose `oslc:propertyDefinition` is the color RDF property. The `oslc:range` for the `colorConstraint` is set to `Color`, meaning the value of the applicable property is constrained to be of `rdf:type` `Color`. The `oslc:allowedValue` property further constrains the values to be red, yellow, or green. If the `oslc:allowedValue` were not specified, then the `TrafficLightConstraint` would allow the enumeration to be open.

A completely different shape constraint could be used for colors that represent the status of a risk mitigation in a software development project.

## 5. Terms for describing vocabularies

### 5.1 Inverse Labels

The [W3C RDF Schema vocabulary](#) defines the vocabulary annotation property `rdfs:label`. This property is intended to provide a human-readable description for a resource's name. It is often used to provide a label for RDF properties. [LinkGuidance] discourages the creation of inverse predicates. However, there is still a need for a property, like `rdfs:label`, to specify an inverse label for a predicate.

For example, consider the OSLC Requirements Management (RM) property `oslc_rm:validatedBy`. When used as the predicate of a triple, this property is used to assert that the subject resource, e.g. a Requirement, is validated by the object resource, e.g. a TestCase. The `rdfs:label` for this property is "validatedBy".

Now consider the user interface of a query builder that allows users to build queries about TestCases. It is natural for the query builder to present the user with a list of the properties that apply to TestCases. Suppose the user wants to build a query that returns all the Requirements that are validated by a TestCase. The query builder should describe the available properties from the point of view of the TestCase. This implies that the query builder should describe the inverse relation asserted by any triple that has the TestCase as an object. In our example, the query builder should describe `oslc_rm:validatedBy` as "validates".

The `oslc:inverseLabel` property provides a human-readable label for the inverse of the subject property.

For example, the following triple (in Turtle notation) would be added to the OSLC RM vocabulary:

#### EXAMPLE 3

```
oslc_rm:validatedBy oslc:inverseLabel "validates".
```

It should be noted that the use of inverse labels is independent of the existence of explicit RDF inverse properties. However, if an inverse property is defined by some vocabulary, then a consistent label should be used in order to avoid confusion. In general, it is good practice to avoid the creation of inverse properties since it creates redundant information and complicates SPARQL queries. Instead, a single property should be wherever possible and it should be given an inverse label in order to describe the property from the perspective of the object.

For example, the [OSLC Quality Management \(QM\) vocabulary](#) defines two properties that are approximately inverse to `oslc_rm:validatedBy`. These are `oslc_qm:validatesRequirement` and `oslc_qm:validatesRequirementCollection`. In this case the choice of inverse label "validates" for `oslc_rm:validatedBy` is consistent with the actual labels of the inverse properties, namely "validatesRequirement" and "validatesRequirementCollection".

### 5.2 Traceability and Impact type

Some RDF properties express dependency relations between artifacts, and it is often very valuable to trace the impact of a change in an artifact to those artifacts that depend on it directly or indirectly. The concept of dependency is very general. For example, the concept of trace relations is described in SysML: "A generic trace requirement relationship provides a general-purpose relationship between a requirement and any other model element. The semantics of trace include no real constraints and therefore are quite weak."

As a general guideline, if any assertion involving a given predicate may become invalid if the state of either its subject or object resources change, then we may legitimately regard that predicate as expressing a dependency relation, in which case it may be useful to explicitly describe the nature of the dependency.

An assertion describes a link between subject and object resources whose name is the property or predicate of the assertion. A dependency relationship may be in the same direction as the link, the opposite direction, both directions, or the link may not represent any dependency whose impact might need to be assessed.

For example, in assertions such as {requirement validatedBy testcase}, it may be important to assess the impact of a change

in the requirement or a change in the testcase. Typically test cases are updated to reflect changes in requirements in order to perform the correct validation. So in this case, property `validatedBy` would introduce impact that follows the link, from the subject requirement to the object testcase. However, if a team is doing test-driven development, they may treat test cases as formal, executable specifications of requirements and the requirement is simply an informal description of the test case. In this case, the team might consider the impact to be opposite of the link, from the testcase to the requirement.

The property `oslc:impactType` asserts that the subject property is a dependency relation and gives the direction of impact. The resources `oslc:FollowsLink` and `oslc:OppositeLink` identify whether the impact follows the direction of the assertion (subject to object), or the opposite direction (object to subject). `oslc:SymmetricImpact` describes a symmetric dependency relation in which the property represents a dependency from both subject to object and object to subject. `oslc:NoImpact` indicates the predicate does not represent any dependency between the subject and object resources.

For example, the following triple (in Turtle notation) would be added to a vocabulary to indicate test cases are dependent on requirements:

### EXAMPLE 4

```
ex:validatedBy oslc:impactType oslc:FollowsLink .
```

The same dependency could also be described from the perspective of the test case. In this case, the dependency is opposite of the `validatesRequirement` predicate:

### EXAMPLE 5

```
ex:validatesRequirement oslc:impactType oslc:OppositeImpact .  
ex:validatesRequirementCollection oslc:impactType oslc:OppositeImpact .
```

## 6. Discovery

Vocabulary terms are discovered via published vocabulary documents at the OSLC Core namespace and shapes at advertised URLs.

## 7. Terms

### 7.1 Vocabulary Details

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

All vocabulary URIs defined in the OSLC Core namespace.

#### 7.1.1 Classes in this namespace (27)

[AllowedValues](#), [Any](#), [AttachmentContainer](#), [AttachmentDescriptor](#), [Cardinality](#), [Comment](#), [Compact](#), [CreationFactory](#), [Dialog](#), [Discussion](#), [Error](#), [ExtendedError](#), [ImpactType](#), [OAuthConfiguration](#), [PrefixDefinition](#), [Preview](#), [Property](#), [Publisher](#), [QueryCapability](#), [Representation](#), [ResourceShape](#), [ResourceShapeConstraints](#), [ResourceValueType](#), [ResponseInfo](#), [Service](#), [ServiceProvider](#), [ServiceProviderCatalog](#)

##### **AllowedValues**

<http://open-services.net/ns/core#AllowedValues>

*AllowedValues* is an RDFS class.

Provides a way to specify allowed values for one or more properties.

##### **Any**

<http://open-services.net/ns/core#Any>

*Any* is an RDFS class.

Any value type is allowed.

##### **AttachmentContainer**

<http://open-services.net/ns/core#AttachmentContainer>

*AttachmentContainer* is an RDFS class.

An LDP-C that contains attachments for a resource.

##### **AttachmentDescriptor**

<http://open-services.net/ns/core#AttachmentDescriptor>

*AttachmentDescriptor* is an RDFS class.

An LDP-RS that contains additional data about an attachment.

##### **Cardinality**

<http://open-services.net/ns/core#Cardinality>

*Cardinality* is an RDFS class.

The number of allowed values for a property.

#### **Comment**

<http://open-services.net/ns/core#Comment>

*Comment* is an RDFS class.

A Comment resource represents a single note, or comment, in a discussion thread.

#### **Compact**

<http://open-services.net/ns/core#Compact>

*Compact* is an RDFS class.

A resource describing how to display a link and Preview for another, associated resource.

#### **CreationFactory**

<http://open-services.net/ns/core#CreationFactory>

*CreationFactory* is an RDFS class.

The CreationFactory definition included in a ServiceProvider.

#### **Dialog**

<http://open-services.net/ns/core#Dialog>

*Dialog* is an RDFS class.

Describes information about a dialog such as its title and dimensions.

#### **Discussion**

<http://open-services.net/ns/core#Discussion>

*Discussion* is an RDFS class.

A Discussion resource is intended to represent a sequence of comments or notes regarding the associated resource.

#### **Error**

<http://open-services.net/ns/core#Error>

*Error* is an RDFS class.

Basis for forming an error response.

#### **ExtendedError**

<http://open-services.net/ns/core#ExtendedError>

*ExtendedError* is an RDFS class.

Extended error information.

#### **ImpactType**

<http://open-services.net/ns/core#ImpactType>

*ImpactType* is an RDFS class.

An enumeration of specifying different impact types or a property.

#### **OAuthConfiguration**

<http://open-services.net/ns/core#OAuthConfiguration>

*OAuthConfiguration* is an RDFS class.

The OAuthConfiguration definition included in ServiceProvider.

#### **PrefixDefinition**

<http://open-services.net/ns/core#PrefixDefinition>

*PrefixDefinition* is an RDFS class.

The PrefixDefinition definition included in ServiceProvider.

#### **Preview**

<http://open-services.net/ns/core#Preview>

*Preview* is an RDFS class.

An HTML representation of a resource that can be embedded in another user interface.

#### **Property**

<http://open-services.net/ns/core#Property>

*Property* is an RDFS class.

A Property resource describes one allowed or required property of a resource.

#### **Publisher**

<http://open-services.net/ns/core#Publisher>

*Publisher* is an RDFS class.

The Publisher definition included in ServiceProvider.

#### **QueryCapability**

<http://open-services.net/ns/core#QueryCapability>

*QueryCapability* is an RDFS class.

The QueryCapability definition included in a ServiceProvider.

#### **Representation**

<http://open-services.net/ns/core#Representation>

*Representation* is an RDFS class.

Specifies how a resource is represented in a document.



### **ResourceShape**

<http://open-services.net/ns/core#ResourceShape>

*ResourceShape* is an RDFS class.

The Resource Shape used for creation, query and modify. Formally, a shape *S* applies to a resource *R* if there is a triple *R* *rdf:type* *T* and there is a triple *S* *oslc:describes* *T*, or if there is a triple *R* *oslc:instanceShape* *S*.

### **ResourceShapeConstraints**

<http://open-services.net/ns/core#ResourceShapeConstraints>

*ResourceShapeConstraints* is an RDFS class.

Resource Shape Constraints metadata

### **ResourceValueType**

<http://open-services.net/ns/core#ResourceValueType>

*ResourceValueType* is an RDFS class.

Specifies how an object reference is represented in a document.

### **ResponseInfo**

<http://open-services.net/ns/core#ResponseInfo>

*ResponseInfo* is an RDFS class.

The ResponseInfo included in query results.

### **Service**

<http://open-services.net/ns/core#Service>

*Service* is an RDFS class.

The Service definition included in a ServiceProvider.

### **ServiceProvider**

<http://open-services.net/ns/core#ServiceProvider>

*ServiceProvider* is an RDFS class.

The Service Provider resource.

### **ServiceProviderCatalog**

<http://open-services.net/ns/core#ServiceProviderCatalog>

*ServiceProviderCatalog* is an RDFS class.

The Service Provider Catalog resource.

## **7.1.2 Properties in this namespace (81)**

[allowedValue](#), [allowedValues](#), [archived](#), [attachment](#), [attachmentSize](#), [authorizationURI](#), [cause](#), [comment](#), [creation](#), [creationDialog](#), [creationFactory](#), [default](#), [defaultValue](#), [describes](#), [details](#), [dialog](#), [discussedBy](#), [discussionAbout](#), [document](#), [domain](#), [error](#), [executes](#), [extendedError](#), [futureAction](#), [hidden](#), [hintHeight](#), [hintWidth](#), [icon](#), [iconAltLabel](#), [iconSrcSet](#), [iconTitle](#), [impactType](#), [initialHeight](#), [inReplyTo](#), [instanceShape](#), [inverseLabel](#), [isMemberProperty](#), [label](#), [largePreview](#), [maxSize](#), [message](#), [modifiedBy](#), [moreInfo](#), [name](#), [nextPage](#), [oauthAccessTokenURI](#), [oauthConfiguration](#), [oauthRequestTokenURI](#), [occurs](#), [order](#), [partOfDiscussion](#), [postBody](#), [prefix](#), [prefixBase](#), [prefixDefinition](#), [property](#), [propertyDefinition](#), [publisher](#), [queryable](#), [queryBase](#), [queryCapability](#), [range](#), [readOnly](#), [rel](#), [representation](#), [resourceShape](#), [resourceType](#), [results](#), [score](#), [selectionDialog](#), [service](#), [serviceProvider](#), [serviceProviderCatalog](#), [shortId](#), [shortTitle](#), [smallPreview](#), [statusCode](#), [totalCount](#), [usage](#), [valueShape](#), [valueType](#)

#### **allowedValue**

<http://open-services.net/ns/core#allowedValue>

*allowedValue* is an RDF property.

Specifies the allowed values for a property (may be more than one).

#### **allowedValues**

<http://open-services.net/ns/core#allowedValues>

*allowedValues* is an RDF property.

Reference to an AllowedValues resource that specifies the allowed values for the property.

#### **archived**

<http://open-services.net/ns/core#archived>

*archived* is an RDF property.

Indicates whether the subject has been marked as archived, no longer an actively updating resource.

#### **attachment**

<http://open-services.net/ns/core#attachment>

*attachment* is an RDF property.

An attachment associated with a resource. May be used as a membership predicate for an attachment container.

#### **attachmentSize**

<http://open-services.net/ns/core#attachmentSize>

*attachmentSize* is an RDF property.

Size in bytes of the attachment content.

#### **authorizationURI**

<http://open-services.net/ns/core#authorizationURI>

*authorizationURI* is an RDF property.

URI for obtaining OAuth authorization.

**cause**

<http://open-services.net/ns/core#cause>

*cause* is an RDF property.

An error that is a cause of this error.

**comment**

<http://open-services.net/ns/core#comment>

*comment* is an RDF property.

Comment about the resource.

**creation**

<http://open-services.net/ns/core#creation>

*creation* is an RDF property.

To create a new resource via the factory, post it to this URI.

**creationDialog**

<http://open-services.net/ns/core#creationDialog>

*creationDialog* is an RDF property.

Enables clients to create a resource via UI.

**creationFactory**

<http://open-services.net/ns/core#creationFactory>

*creationFactory* is an RDF property.

Enables clients to create new resources.

**default**

<http://open-services.net/ns/core#default>

*default* is an RDF property.

Used in conjunction with `oslc:usage` property used to identify which service is the default usage.

**defaultValue**

<http://open-services.net/ns/core#defaultValue>

*defaultValue* is an RDF property.

A default value for property, inlined into property definition.

**describes**

<http://open-services.net/ns/core#describes>

*describes* is an RDF property.

This shape describes resources that are of the RDF type given by the object of the `oslc:describes` predicate. Formally, a shape *S* applies to a resource *R* if there is a triple *R* `rdf:type` *T* and there is a triple *S* `oslc:describes` *T*.

#### **details**

`http://open-services.net/ns/core#details`

*details* is an RDF property.

A URL that may be used to retrieve a resource to determine additional details about the service provider.

#### **dialog**

`http://open-services.net/ns/core#dialog`

*dialog* is an RDF property.

The URI of the HTML dialog.

#### **discussedBy**

`http://open-services.net/ns/core#discussedBy`

*discussedBy* is an RDF property.

A series of notes and comments about this resource.

#### **discussionAbout**

`http://open-services.net/ns/core#discussionAbout`

*discussionAbout* is an RDF property.

Reference to associated resource.

#### **document**

`http://open-services.net/ns/core#document`

*document* is an RDF property.

The URI of an HTML document to be used for the preview.

#### **domain**

`http://open-services.net/ns/core#domain`

*domain* is an RDF property.

Namespace URI of the specification that is implemented by this service. In most cases this namespace URI will be for an OSLC domain, but other URIs **MAY** be used.

#### **error**

`http://open-services.net/ns/core#error`

*error* is an RDF property.

Error information that may be associated with a resource.

#### **executes**

<http://open-services.net/ns/core#executes>

*executes* is an RDF property.

Link from a currently available action to the future action it realizes.

#### **extendedError**

<http://open-services.net/ns/core#extendedError>

*extendedError* is an RDF property.

Extended (additional) error information.

#### **futureAction**

<http://open-services.net/ns/core#futureAction>

*futureAction* is an RDF property.

A predicate that links to an action that is not currently executable on the subject resource, but may be executable in the future and/or on other resources. For example, in OSLC Automation this is expected to link from an `oslc_auto:AutomationPlan` to an `oslc:Action` resource with zero bindings (as it is not executable), with the meaning that the executable form of the action may be available on `oslc_auto:AutomationResult` resources generated by executing that Automation Plan. Similarly, resource shapes can allow discovery of actions available on the output of a creation factory.

#### **hidden**

<http://open-services.net/ns/core#hidden>

*hidden* is an RDF property.

A hint that indicates that property **MAY** be hidden when presented in a user interface.

#### **hintHeight**

<http://open-services.net/ns/core#hintHeight>

*hintHeight* is an RDF property.

Preferred height of a delegated user interface. Values must be expressed using length units as specified in Cascading Style Sheets 2.1.

#### **hintWidth**

<http://open-services.net/ns/core#hintWidth>

*hintWidth* is an RDF property.

Preferred width of a delegated user interface. Values must be expressed using length units as specified in Cascading Style Sheets 2.1.

### **icon**

<http://open-services.net/ns/core#icon>

*icon* is an RDF property.

URI of an image applicable to the resource.

### **iconAltLabel**

<http://open-services.net/ns/core#iconAltLabel>

*iconAltLabel* is an RDF property.

Alternative label used in association with the *oslc:icon*, such as HTML *img* tag's *alt* attribute.

### **iconSrcSet**

<http://open-services.net/ns/core#iconSrcSet>

*iconSrcSet* is an RDF property.

Specification of a set of images of different sizes based on HTML *img* element *srcset* attribute.

### **iconTitle**

<http://open-services.net/ns/core#iconTitle>

*iconTitle* is an RDF property.

Title used in association with the *oslc:icon*, such as HTML *img* tag's *title* attribute.

### **impactType**

<http://open-services.net/ns/core#impactType>

*impactType* is an RDF property.

Asserts that the subject property is a dependency relation and gives the direction of impact.

### **initialHeight** *(Archaic term)*

<http://open-services.net/ns/core#initialHeight>

*initialHeight* is an RDF property.

Recommended initial height of the preview. The presence of this property indicates that the preview supports dynamically computing its size. Values are expressed in relative length units as defined in the W3C Cascading Style Sheets Specification (CSS 2.1). *Em* and *ex* units are interpreted relative to the default system font (at 100% size).

### **inReplyTo**

<http://open-services.net/ns/core#inReplyTo>

*inReplyTo* is an RDF property.

Reference to comment this comment is in reply to.

### **instanceShape**

<http://open-services.net/ns/core#instanceShape>

*instanceShape* is an RDF property.

The URI of a Resource Shape that describes the possible properties.

#### **inverseLabel**

<http://open-services.net/ns/core#inverseLabel>

*inverseLabel* is an RDF property.

Provides a human-readable label for the inverse of the subject property.

#### **isMemberProperty**

<http://open-services.net/ns/core#isMemberProperty>

*isMemberProperty* is an RDF property.

Used to define when a property is a member of a container, useful for query.

#### **label**

<http://open-services.net/ns/core#label>

*label* is an RDF property.

Very short label for use in menu items.

#### **largePreview**

<http://open-services.net/ns/core#largePreview>

*largePreview* is an RDF property.

URI and sizing properties for an HTML document to be used for a large preview.

#### **maxSize**

<http://open-services.net/ns/core#maxSize>

*maxSize* is an RDF property.

For String properties only, specifies maximum characters allowed. If not set, then there is no maximum or maximum is specified elsewhere.

#### **message**

<http://open-services.net/ns/core#message>

*message* is an RDF property.

An informative message describing the error that occurred.

#### **modifiedBy**

<http://open-services.net/ns/core#modifiedBy>

*modifiedBy* is an RDF property.

The URI of a resource describing the entity that most recently modified this resource. The link target is usually a foaf:Person or foaf:Agent, but could be any type. This is modeled after dcterms:creator, but Dublin Core currently has no equivalent property.

#### **moreInfo**

<http://open-services.net/ns/core#moreInfo>

*moreInfo* is an RDF property.

{{A resource giving more information on the error, with an HTML content-type.

#### **name**

<http://open-services.net/ns/core#name>

*name* is an RDF property.

Name of property being defined, i.e. second part of property's Prefixed Name. For all other uses, consider dcterms:title, rdfs:label, oslc:shortTitle or oslc:label.

#### **nextPage**

<http://open-services.net/ns/core#nextPage>

*nextPage* is an RDF property.

Link to next page of response.

#### **oauthAccessTokenURI**

<http://open-services.net/ns/core#oauthAccessTokenURI>

*oauthAccessTokenURI* is an RDF property.

URI for obtaining OAuth access token.

#### **oauthConfiguration**

<http://open-services.net/ns/core#oauthConfiguration>

*oauthConfiguration* is an RDF property.

Defines the three OAuth URIs required for a client to act as an OAuth consumer.

#### **oauthRequestTokenURI**

<http://open-services.net/ns/core#oauthRequestTokenURI>

*oauthRequestTokenURI* is an RDF property.

URI for obtaining OAuth request token.

#### **occurs**

<http://open-services.net/ns/core#occurs>

*occurs* is an RDF property.



One of the values <http://open-services.net/ns/core#Exactly-one>, <http://open-services.net/ns/core#Zero-or-one>, <http://open-services.net/ns/core#Zero-or-many> or <http://open-services.net/ns/core#One-or-many>.

#### **order**

<http://open-services.net/ns/core#order>

*order* is an RDF property.

A computed property for each member resource of a query with an orderBy clause supporting sorting of the RDF results.

#### **partOfDiscussion**

<http://open-services.net/ns/core#partOfDiscussion>

*partOfDiscussion* is an RDF property.

Reference to owning Discussion resource .

#### **postBody**

<http://open-services.net/ns/core#postBody>

*postBody* is an RDF property.

The body of a POST request to return the next page if the response was to a POST request. Where a paged resource supports POST with an application/x-www-form-urlencoded body as an alternative to GET to avoid the request URI exceeding server limitations, the oslc:ResponseInfo in the response to the POST **SHOULD** contain this property so that a client knows what to POST to get the next page.

#### **prefix**

<http://open-services.net/ns/core#prefix>

*prefix* is an RDF property.

Namespace prefix to be used for this namespace.

#### **prefixBase**

<http://open-services.net/ns/core#prefixBase>

*prefixBase* is an RDF property.

The base URI of the namespace.

#### **prefixDefinition**

<http://open-services.net/ns/core#prefixDefinition>

*prefixDefinition* is an RDF property.

Defines a namespace prefix for use in JSON representations and in forming OSLC Query Syntax strings.

#### **property**

<http://open-services.net/ns/core#property>

*property* is an RDF property.

The properties that are allowed or required by this shape.

#### **propertyDefinition**

<http://open-services.net/ns/core#propertyDefinition>

*propertyDefinition* is an RDF property.

URI of the property whose usage is being described.

#### **publisher** *(Archaic term)*

<http://open-services.net/ns/core#publisher>

*publisher* is an RDF property.

An entity responsible for making the resource available. Servers should use `dcterms:publisher`.

#### **queryable**

<http://open-services.net/ns/core#queryable>

*queryable* is an RDF property.

Indicates whether a property is queryable (can appear in `oslc.where` and `oslc.select` clause) or not.

#### **queryBase**

<http://open-services.net/ns/core#queryBase>

*queryBase* is an RDF property.

The base URI to use for queries. Queries may be invoked either by HTTP GET or HTTP POST. For HTTP GET, a query URI is formed by appending a `key=value` pair to the base URI. For HTTP POST, the query parameters are encoded as content with media type `application/x-www-form-urlencoded` and sent in the request body. The base URI **MAY** accept other query languages and media types in the request body, e.g. `application/sparql-query` for SPARQL queries.

#### **queryCapability**

<http://open-services.net/ns/core#queryCapability>

*queryCapability* is an RDF property.

Enables clients query across a collection of resources.

#### **range**

<http://open-services.net/ns/core#range>

*range* is an RDF property.

For properties with a resource value-type, Providers **MAY** also specify the range of possible resource types allowed, each specified by URI. The default range is <http://open-services.net/ns/core#Any>.

#### **readOnly**

<http://open-services.net/ns/core#readOnly>

*readOnly* is an RDF property.

true if the property is read-only. If omitted, or set to false, then the property is writable. Providers **SHOULD** declare a property read-only when changes to the value of that property will not be accepted after the resource has been created, e.g. on PUT/PATCH requests. Consumers should note that the converse does not apply: Providers **MAY** reject a change to the value of a writable property.

#### **rel**

<http://open-services.net/ns/core#rel>

*rel* is an RDF property.

If present and set to 'alternate' then indicates that work-around is provided, behavior for other values is undefined.

#### **representation**

<http://open-services.net/ns/core#representation>

*representation* is an RDF property.

Should be <http://open-services.net/ns/core#Reference>, <http://open-services.net/ns/core#Inline> or <http://open-services.net/ns/core#Either>.

#### **resourceShape**

<http://open-services.net/ns/core#resourceShape>

*resourceShape* is an RDF property.

A Creation Factory **MAY** provide Resource Shapes that describe shapes of resources that may be created.

#### **resourceType**

<http://open-services.net/ns/core#resourceType>

*resourceType* is an RDF property.

The expected resource type URI of the resource that will be created using this creation factory. These would be the URIs found in the result resource's `rdf:type` property.

#### **results**

<http://open-services.net/ns/core#results>

*results* is an RDF property.

Used to hold the results of dialog action or JSON query results (default). The JSON query result attribute 'oslc:results' is used whenever a provider doesn't have a suitable property already in its model for such purposes.

#### **score**

<http://open-services.net/ns/core#score>

*score* is an RDF property.

A computed property for each member resource of a full text search query indicating the quality of the match, and sort them in

descending order of score.

**selectionDialog**

<http://open-services.net/ns/core#selectionDialog>

*selectionDialog* is an RDF property.

Enables clients to select a resource via a UI.

**service**

<http://open-services.net/ns/core#service>

*service* is an RDF property.

Describes a service offered by the service provider.

**serviceProvider**

<http://open-services.net/ns/core#serviceProvider>

*serviceProvider* is an RDF property.

A link to the resource's OSLC Service Provider.

**serviceProviderCatalog**

<http://open-services.net/ns/core#serviceProviderCatalog>

*serviceProviderCatalog* is an RDF property.

Additional service provider catalog.

**shortId**

<http://open-services.net/ns/core#shortId>

*shortId* is an RDF property.

A short, human-readable, plain text value. This value should be unique in some context that is apparent to human users of a service.

**shortTitle**

<http://open-services.net/ns/core#shortTitle>

*shortTitle* is an RDF property.

Shorter form of dcterms:title for the resource.

**smallPreview**

<http://open-services.net/ns/core#smallPreview>

*smallPreview* is an RDF property.

URI and sizing properties for an HTML document to be used for a small preview.

#### **statusCode**

<http://open-services.net/ns/core#statusCode>

*statusCode* is an RDF property.

The HTTP status code reported with the error.

#### **totalCount**

<http://open-services.net/ns/core#totalCount>

*totalCount* is an RDF property.

This optional property indicates the total number of results across all pages, its value should be non-negative. In the context of a query resource, this value **SHOULD** be the total number of results, i.e. the number of resources that match the query. In the context of other resources, the value **SHOULD** be the total number of property values (i.e. RDF triples) of the resource. Unless Stable Paging is in effect, the total count **MAY** vary as a client retrieves subsequent pages.

#### **usage**

<http://open-services.net/ns/core#usage>

*usage* is an RDF property.

An identifier URI for the domain specified usage of this creation factory. If a service provides multiple creation factories, it may designate the primary or default one that should be used with a property value of <http://open-services.net/ns/core#default>.

#### **valueShape**

<http://open-services.net/ns/core#valueShape>

*valueShape* is an RDF property.

if the value-type is a resource type, then Property **MAY** provide a shape value to indicate the Resource Shape that applies to the resource.

#### **valueType**

<http://open-services.net/ns/core#valueType>

*valueType* is an RDF property.

A URI that indicates the value type, for example XML Schema or RDF URIs for literal value types, and OSLC-specified for others. If this property is omitted, then the value type is unconstrained.

### **7.1.3 Resources (Individuals) in this namespace (14)**

[AnyResource](#), [Either](#), [Exactly-one](#), [ImpactFollowsLink](#), [ImpactOppositeLink](#), [Inline](#), [LocalResource](#), [NoImpact](#), [One-or-many](#), [Reference](#), [Resource](#), [SymmetricImpact](#), [Zero-or-many](#), [Zero-or-one](#)

#### **AnyResource**

<http://open-services.net/ns/core#AnyResource>

*AnyResource* is an RDF individual.

The object resource can be identified with either a URI or a blank node.

### **Either**

<http://open-services.net/ns/core#Either>

*Either* is an RDF individual.

Representation is either a URI reference or blank node.

### **Exactly-one**

<http://open-services.net/ns/core#Exactly-one>

*Exactly-one* is an RDF individual.

Property with value is required.

### **ImpactFollowsLink**

<http://open-services.net/ns/core#ImpactFollowsLink>

*ImpactFollowsLink* is an RDF individual.

The property represents a dependency from subject to object.

### **ImpactOppositeLink**

<http://open-services.net/ns/core#ImpactOppositeLink>

*ImpactOppositeLink* is an RDF individual.

The property represents a dependency from object to subject.

### **Inline**

<http://open-services.net/ns/core#Inline>

*Inline* is an RDF individual.

The representation of the object resource must be present in the representation of the described resource.

### **LocalResource**

<http://open-services.net/ns/core#LocalResource>

*LocalResource* is an RDF individual.

The object resource must be identified with a blank node. The term 'local resource' is used because the scope of identifier is local to the representation. Clients and servers should use `oslc:representation` `oslc:Inline` instead to include resource representations in the same document.

### **NoImpact**

<http://open-services.net/ns/core#NoImpact>

*NoImpact* is an RDF individual.

The property does not represent a dependency.

### **One-or-many**

<http://open-services.net/ns/core#One-or-many>

*One-or-many* is an RDF individual.

Property is required and multi-valued.

#### **Reference**

<http://open-services.net/ns/core#Reference>

*Reference* is an RDF individual.

A URI Reference representation to a resource.

#### **Resource**

<http://open-services.net/ns/core#Resource>

*Resource* is an RDF individual.

The object resource must be identified with a URI.

#### **SymmetricImpact**

<http://open-services.net/ns/core#SymmetricImpact>

*SymmetricImpact* is an RDF individual.

The property represents a dependency from both subject to object and object to subject.

#### **Zero-or-many**

<http://open-services.net/ns/core#Zero-or-many>

*Zero-or-many* is an RDF individual.

Property is optional and multi-valued.

#### **Zero-or-one**

<http://open-services.net/ns/core#Zero-or-one>

*Zero-or-one* is an RDF individual.

Property is optional and single valued.

## 8. Conformance

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

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

Clause Number	Requirement
<a href="#">cc-1</a>	Archived Resources <b>MAY</b> be identified by having a property <code>oslc:archived</code> , with value <code>true</code> .
<a href="#">cc-2</a>	Archived Resources <b>MAY</b> be removed from typical user interactions.
<a href="#">cc-3</a>	Archived Resources <b>SHOULD</b> be considered immutable.