OASIS OPEN PROJECTS

OSLC Core Version 3.0. Part 7: Vocabulary

Project Specification 01
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Project Chairs:

Jim Amsden (jamsden@us.ibm.com), IBM
Andrii Berezovskyi (andriib@kth.se), KTH

Editor:

Jim Amsden (jamsden@us.ibm.com), IBM

Additional components:

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

- *OSLC Core Version 3.0. Part 1: Overview.* oslc-core.html
- *OSLC Core Version 3.0. Part 2: Discovery*. discovery.html
- *OSLC Core Version 3.0. Part 3: Resource Preview.* resource-preview.html
- *OSLC Core Version 3.0. Part 4: Delegated Dialogs*. dialogs.html
- *OSLC Core Version 3.0. Part 5: Attachments*. attachments.html

- *OSLC Core Version 3.0. Part 6: Resource Shape*. resource-shape.html
- *OSLC Core Version 3.0. Part 7: Vocabulary (this document)*. core-vocab.html
- *OSLC Core Version 3.0. Part 8: Constraints*. core-shapes.html
- *OSLC Core Version 3.0. Part 9: Machine Readable Vocabulary Terms*. core-vocab.ttl
- *OSLC Core Version 3.0. Part 10: Machine Readable Constraints*. 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 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 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.

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.

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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 and may be removed from typical user interactions. As a consequence, an archived resource should be considered immutable.

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*. 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/

[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

1.2.2 Informative references

[LinkGuidance]

Steve Speicher; Jim Amsden. *OSLC Link Guidance 3.0*. 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*. 15 December 2004. W3C Recommendation. URL: https://www.w3.org/TR/webarch/

1.3 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].

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.

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`.

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.

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.

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}.

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. Defining Enumerations

This section is non-normative.

Some property values are 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, yelow, 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.

4. Terms for describing vocabularies

4.1 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”.

4.2 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 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 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.
```

5. Discovery

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

6. Terms

6.1 Vocabulary Details

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

All vocabulary URIs defined in the OSLC Core namespace.

6.1.1 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

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.

6.1.2 Properties in this namespace (80)

allowedValue, allowedValues, archived, attachment, attachmentSize, authorizationURI, 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.

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 **MUST** be 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 **SHOULD** be of 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.

MUST be either 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 olsc.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.

6.1.3 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 **MUST** 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.

7. 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.