OSLC Core Version 3.0. Part 7: Vocabulary

Committee Specification 01

04 April 2017

Specification URIs

This version:

http://docs.oasis-open.org/oslc-core/oslc-core/v3.0/cs01/part7-core-vocabulary/oslc-core-v3.0-cs01-part7-core-vocabulary.html
http://docs.oasis-open.org/oslc-core/oslc-core/v3.0/cs01/part7-core-vocabulary/oslc-core-v3.0-cs01-part7-core-vocabulary.pdf

Previous version:

http://docs.oasis-open.org/oslc-core/oslc-core/v3.0/csprd01/part7-core-vocabulary/oslc-core-v3.0-csprd01-part7-core-vocabulary.html
http://docs.oasis-open.org/oslc-core/oslc-core/v3.0/csprd01/part7-core-vocabulary/oslc-core-v3.0-csprd01-part7-core-vocabulary.pdf

Latest version:

http://docs.oasis-open.org/oslc-core/oslc-core/v3.0/oslc-core-v3.0-part7-core-vocabulary.html
http://docs.oasis-open.org/oslc-core/oslc-core/v3.0/oslc-core-v3.0-part7-core-vocabulary.pdf

Technical Committee:

OASIS OSLC Lifecycle Integration Core (OSLC Core) TC

Chairs:

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

Martin Sarabura (msarabura@ptc.com), PTC

Editor:

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

Additional artifacts:

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

- *OSLC Core Version 3.0. Part 1: Overview,* http://docs.oasis-open.org/oslc-core/oslc-core/v3.0/cs01/part1-overview/oslc-core-v3.0-cs01-part1-overview.html
- *OSLC Core Version 3.0. Part 2: Discovery,* http://docs.oasis-open.org/oslc-core/oslc-core/v3.0/cs01/part2-discovery/oslc-core-v3.0-cs01-part2-discovery.html
- *OSLC Core Version 3.0. Part 3: Resource Preview,* http://docs.oasis-open.org/oslc-core/oslc-core/v3.0/cs01/part3-resource-preview/oslc-core-v3.0-cs01-part3-resource-preview.html
- *OSLC Core Version 3.0. Part 4: Delegated Dialogs,* http://docs.oasis-open.org/oslc-core/oslc-core/v3.0/cs01/part4-delegated-dialogs/oslc-core-v3.0-cs01-part4-delegated-dialogs.html
- *OSLC Core Version 3.0. Part 5: Attachments,* http://docs.oasis-open.org/oslc-core/oslc-core/v3.0/cs01/part5-attachments/oslc-core-v3.0-cs01-part5-attachments.html
- *OSLC Core Version 3.0. Part 6: Resource Shape,* http://docs.oasis-open.org/oslc-core/oslc-core/v3.0/cs01/part6-resource-shape/oslc-core-v3.0-cs01-part6-resource-shape.html
- *OSLC Core Version 3.0. Part 7: Vocabulary (this document),* http://docs.oasis-open.org/oslc-core/oslc-core/v3.0/cs01/part7-core-vocabulary/oslc-core-v3.0-cs01-part7-core-vocabulary.html

Related work:

This specification is related to:

- OSLC Core Version 3.0: Link Guidance. Work in progress. Current draft: https://tools.oasis-open.org/version-control/svn/oslc-

core/trunk/supporting-docs/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 OSLC Lifecycle Integration Core (OSLC Core) TC on the above date. The level of approval is also listed above. Check the “Latest version” location noted above for possible later revisions of this document. Any other numbered Versions and other technical work produced by the Technical Committee (TC) are listed at https://www.oasis-open.org/committees/tc_home.php?wg_abbrev=oslc-core#technical.

TC members should send comments on this specification to the TC’s email list. Others should send comments to the TC’s public comment list oslc-core-comments@lists.oasis-open.org, after subscribing to it by following the instructions at the “Send A Comment” button on the TC’s web page at https://www.oasis-open.org/committees/oslc-core/.

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 Intellectual Property Rights section of the TC’s web page (https://www.oasis-open.org/committees/oslc-core/ipr.php).

Note that any machine-readable content (aka 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. 04 April 2017. OASIS Committee Specification 01. http://docs.oasis-open.org/oslc-core/oslc-core/v3.0/cs01/part7-core-vocabulary/oslc-core-v3.0-cs01-part7-core-vocabulary.html. Latest version: http://docs.oasis-open.org/oslc-core/oslc-core/v3.0/oslc-core-v3.0-part7-core-vocabulary.html.

Notices

Table of Contents

---

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.

1.1 Terminology

Terminology uses and extends the terminology and capabilities of OSLC Core Overview [OSLCCore3], 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

[DC-TERMS]

Dublin Core Metadata Initiative Terms, version 1.1. 11 October 2010. DCMI Recommendation. URL: http://dublincore.org/documents/2010/10/11/dcmi-terms/

[FOAF]

Dan Brickley; Libby Miller. *FOAF Vocabulary Specification 0.99 (Paddington Edition)*. 14 January 2014. URL: http://xmlns.com/foaf/spec

[HTTP11]

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

[LDP]

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

[OSLCCore3]

Steve Speicher. http://docs.oasis-open.org/oslc-core/oslc-core/v3.0/cs01/part1-overview/oslc-core-v3.0-cs01-part1-overview.html

[RFC2119]

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

http://docs.oasis-open.org/oslc-core/oslc-core/v3.0/cs01/part6-resource-shape/oslc-core-v3.0-cs01-part6-resource-shape.html
[rdf-schema]

Dan Brickley; Ramanathan Guha. *RDF Schema 1.1*. 25 February 2014. W3C Recommendation. URL: https://www.w3.org/TR/rdf-schema/

[rdf11-concepts]

Richard Cyganiak; David Wood; Markus Lanthaler. *RDF 1.1 Concepts and Abstract Syntax*. 25 February 2014. W3C Recommendation. URL: https://www.w3.org/TR/rdf11-concepts/

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

[SHACL]

Holger Knublauch; Arthur Ryman. *Shapes Constraint Language (SHACL)*. Draft. URL: https://w3c.github.io/data-shapes/shacl/

[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/

[skos-reference]

Alistair Miles; Sean Bechhofer. *SKOS Simple Knowledge Organization System Reference*. 18 August 2009. W3C Recommendation. URL: https://www.w3.org/TR/skos-reference

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. Resource Shape

The shape of an RDF resource is a description of the set of triples it is expected to contain and the integrity constraints those triples are required to satisfy. Applications of shapes include validating RDF data, documenting RDF APIs, and providing meta-data to tools, such as form and query builders, that handle RDF data. OSLC Core uses shapes to:

- Define specific vocabulary constraints including allowed values, max size, cardinality, representation in RDF specifications and if the property is read only.
  Specify the properties required for resource creation.
- Specify what servers all allow for prefilling delegated dialogs.
- Describe the results of query operations.

Constraints on OSLC Core and Domain resources **SHOULD** be described using [ResourceShapes] which is included as part of the OSLC Core multi-part specifications. Servers **MAY** use other constraint languages such as [SHACL] to define resource constraints.

4. 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.

5. Common Properties

Unlike the rest of the Core specification, these properties change and grow as new common properties are added by the Core TC. The properties that we list here are available for use in OSLC domain specifications when defining OSLC resources, but this does not mean that they are required to be in OSLC resources. OSLC domain specifications decide which properties are allowed and required for resources needed to realize their use cases. The OSLC common properties include properties defined in other standard vocabularies including:

- Friend of a Friend (FOAF)
- Dublin Core (dcterms)
- RDF Schema (rdfs)

5.1 Properties on Any Resource

Defines common properties that may be applicable to any OSLC resource. OSLC domains SHOULD use these properties where applicable rather than defining their own properties. The cardinality, representations, ranges, and other columns of the following table indicate typical usage, but a domain is free to apply its own constraints for particular resource shapes.

Prefixed Name	Occurs	Read-only	Value-type	Representation	Range	Description
`dcterms:contributor`	Zero-or-many	unspecified	AnyResource	Either	`foaf:Person`	Contributor or contributors to the resource. It is likely that the target resource will be a foaf:Person but that is not necessarily the case.
`dcterms:created`	Zero-or-one	unspecified	dateTime	N/A	Unspecified	Timestamp of resource creation
						Creator or creators of the

dcterms:creator	Zero-or-many	unspecified	AnyResource	Either	foaf:Person	resource. It is likely that the target resource will be a foaf:Person but that is not necessarily the case.
dcterms:description	Zero-or-many	unspecified	XMLLiteral	N/A	Unspecified	Descriptive text about resource represented as rich text in XHTML content.
dcterms:identifier	Zero-or-many	unspecified	string	N/A	Unspecified	A unique identifier for a resource. Typically read-only and assigned by the service provider when a resource is created. Not typically intended for end-user display.
dcterms:modified	Zero-or-many	unspecified	dateTime	N/A	Unspecified	Timestamp of latest resource modification.
dcterms:references	Zero-or-many	unspecified	AnyResource	Either	Unspecified	A related resource that is referenced, cited, or otherwise pointed to by the described resource.
dcterms:relation	Zero-or-many	unspecified	AnyResource	Either	Unspecified	Relation which identifies a related resource.
dcterms:subject	Zero-or-many	unspecified	string	N/A	Unspecified	Tag or keyword for a resource. Each occurrence of a dcterms:subject property denotes an additional tag for the resource.
dcterms:title	Zero-or-many	unspecified	XMLLiteral	N/A	Unspecified	Title of the resource represented as rich text in XHTML content.
oslc:discussedBy	Zero-or-many	unspecified	Resource	Either	oslc:Comment	A series of notes and comments about this resource.
oslc:error	Zero-or-many	unspecified	AnyResource	Either	Unspecified	A series of errors associated with this resource.
						The URI of a Resource Shape that

`oslc:instanceShape`	Zero-or-many	unspecified	Resource	Reference	`oslc:ResourceShape`	describes the possible properties, occurrence, value types, allowed values and labels. This shape information is useful in displaying the subject resource as well as guiding clients in performing modifications. Instance shapes may be specific to the authenticated user associated with the request that retrieved the resource, the current state of the resource and other factors and thus should not be cached.
`oslc:modifiedBy`	Zero-or-many	unspecified	Resource	Either	`foaf:Person`	The URI of a resource describing the entity that most recently modified the subject 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.
`oslc:serviceProvider`	Zero-or-many	unspecified	Resource	Reference	`oslc:ServiceProvider`	A link to the resource's OSLC Service Provider. There may be cases when the subject resource is available from a service provider that implements multiple domain specifications, which could result in multiple values for this property.
						A short, human-readable, plain text value. This

`oslc:shortId`	Zero-or-many	unspecified	string	N/A	Unspecified	value should be unique in some context that is apparent to human users of a service.
`oslc:shortTitle`	Zero-or-many	unspecified	XMLLiteral	N/A	Unspecified	Shorter form of dcterms:title for the resource represented as rich text in XHTML content.
`rdf:type`	Zero-or-many	unspecified	Resource	Reference	`rdfs:Class`	The resource type URIs.
`rdfs:member`	Zero-or-many	unspecified	Resource	Either	Unspecified	OSLC domains might define a number of member or contains relationships between resources. The rdfs:member property is suitable for use when only one such relationship needs to be defined, or when no additional semantics need to be implied by the property name

5.2 Person Properties

- **Name:** `Person`
- **Type URI:** `http://xmlns.com/foaf/0.1/Person`
- **Summary:** Person is a resource defined by FOAF that is used as the value for a dcterms:creator or dcterms:contributor property. This shape specifies the recommended minimal FOAF Person properties that should be provided for OSLC.

Person Properties

Prefixed Name	*Occurs*	*Read-only*	*Value-type*	*Representation*	*Range*	*Description*
`foaf:familyName`	Zero-or-many	unspecified	string	N/A	Unspecified	Family name of person expressed as simple text string.
`foaf:givenName`	Zero-or-many	unspecified	string	N/A	Unspecified	Given name of person expressed as simple text string.
`foaf:mbox`	Zero-or-many	unspecified	string	N/A	Unspecified	A personal mailbox for this person, typically identified using the mailto: URI scheme (see RFC 2368).
`foaf:name`	Zero-or-many	unspecified	string	N/A	Unspecified	The full name of a person expressed as simple text string.
`foaf:nick`	Zero-or-many	unspecified	string	N/A	Unspecified	A short informal nickname or login identifer expressed as simple text string.

5.3 Implementation Conformance

5.3.1 Changes to the OSLC Core Vocabulary `MUST` be approved by the OASIS OSLC Core TC. The OSLC Core Vocabulary is assigned the namespace URI of the `http://open-services.net/ns/core#`.

5.3.2 Domain TCs and other extensions MUST contribute their vocabulary terms in a namespace which is assigned to them as an authority.

5.3.3 OSLC Core, domain and other extensions SHOULD reuse existing vocabulary terms from stable vocabularies such as [DC-TERMS], RDF [rdf11-concepts], RDF Schema [rdf-schema], [FOAF], [skos-reference] and OSLC. New vocabulary terms should only be created when there is no clear existing choice available. See the [LDP] similar clause on reuse.

See section 10. Terms for details on common property terms.

6. Discussion

6.1 Shape: Discussion

It is common to collect a series of comments on a lifecycle resource, often referred to as a discussion. For example: tasks, bug reports, requirements, assets and so on, are often collected across various types of resources such as project. A project might reflect the planning of work to deliver a product that realizes the requirements as validated through test cases and bug reports. Discussions allow users to collaborate with each other for more efficient and effective delivery. This Discussion resource definition provides a minimal shape describing the needed properties.

- **Name:** `core#Discussion`
- **Type URI:** `http://open-services.net/ns/core#Discussion`
- **Summary:** OSLC Core Discussion Shape

core#Discussion Properties

Prefixed Name	Occurs	Read-only	Value-type	Representation	Range	Description
`oslc:comment`	Zero-or-many	false	AnyResource	Either	`oslc:Comment`	Comment about resource
`oslc:discussionAbout`	Exactly-one	false	Resource	Reference	Unspecified	Reference to associated resource

6.2 Shape: Comment

Used in conjunction with Shape: Discussion to provide a minimal resource definition for a collection of comments.

- **Name:** `core#Comment`
- **Type URI:** `http://open-services.net/ns/core#Comment`
- **Summary:** OSLC Core Comment Shape

core#Comment Properties

Prefixed Name	Occurs	Read-only	Value-type	Representation	Range	Description
`dcterms:created`	Exactly-one	unspecified	dateTime	N/A	Unspecified	When the comment resource was created.
`dcterms:creator`	Exactly-one	unspecified	AnyResource	Either	`foaf:Person`	The person who created the comment.
`dcterms:description`	Exactly-one	unspecified	XMLLiteral	N/A	Unspecified	Details or body of the comment. SHOULD include only content that is valid and suitable inside an XHTML `<div>` element.
`dcterms:identifier`	Exactly-one	unspecified	string	N/A	Unspecified	A service defined identifier
`dcterms:title`	Zero-or-one	unspecified	XMLLiteral	N/A	Unspecified	A brief title for the comment. SHOULD include only content that is valid and suitable inside an XHTML `<span>` element.
`oslc:inReplyTo`	Zero-or-one	unspecified	Resource	Reference	`oslc:Comment`	Reference to the comment to which this comment replies.

See section 10. Terms for details on discussion property terms.

7. Errors

7.1 Implementation Conformance

7.1.1 When an OSLC Server incurs an error, it is RECOMMENDED that useful information be provided to clients in the body of the HTTP response.

7.1.2 OSLC Servers SHOULD use the Error resource defined below as the basis for forming error responses.

7.1.3 OSLC Servers SHOULD return an Error resource using the same representation format requested by the client via the HTTP `Accept` request header. [HTTP11]

7.1.4 OSLC Clients SHOULD treat the `oslc:statusCode` as a String that starts with digits, but may contain non-digit text.

7.2 Shape: Error

Used when servers may need a consistent shape to communicate error messages.

- **Name:** `core#Error`
- **Type URI:** `http://open-services.net/ns/core#Error`
- **Summary:** OSLC Core Error Shape

core#Error Properties

Prefixed Name	*Occurs*	*Read-only*	*Value-type*	*Representation*	*Range*	*Description*
`dcterms:created`	Zero-or-one	unspecified	dateTime	N/A	Unspecified	Optional indication of when the error was detected
`dcterms:identifier`	Zero-or-many	unspecified	string	N/A	Unspecified	A unique human-readable string identifier for this resource, such as an error number or code.
`dcterms:references`	Zero-or-many	unspecified	AnyResource	Either	Unspecified	A reference to any resources that are the subject of this error.
`oslc:extendedError`	Zero-or-one	true	AnyResource	Either	`oslc:ExtendedError`	Extended error information
`oslc:message`	Exactly-one	true	string	N/A	Unspecified	An informative message describing the error that occurred.
`oslc:statusCode`	Exactly-one	true	string	N/A	Unspecified	The HTTP status code reported with the error.

7.3 Shape: ExtendedError

Additional details about an error the server had when processing the request.

- **Name:** `core#ExtendedError`
- **Type URI:** `http://open-services.net/ns/core#ExtendedError`
- **Summary:** OSLC Core ExtendedError Shape

core#ExtendedError Properties

Prefixed Name	*Occurs*	*Read-only*	*Value-type*	*Representation*	*Range*	*Description*
`oslc:hintHeight`	Zero-or-one	true	string	N/A	Unspecified	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).
`oslc:hintWidth`	Zero-or-one	true	string	N/A	Unspecified	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)
`oslc:moreInfo`	Zero-or-one	true	Resource	Reference	Unspecified	A resource giving more information on the error SHOULD be of an HTML content-type.
`oslc:rel`	Zero-or-one	true	string	N/A	Unspecified	If present and set to 'alternate' then indicates that work-around is provided, behavior for other values is undefined.

See section 10. Terms for details on error property terms.

8. Terms for describing vocabularies

8.1 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".

8.2 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.
```

9. Discovery

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

10. Terms

10.1 Vocabulary Details

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

All vocabulary URIs defined in the OSLC Core namespace.

10.1.1 RDFS Classes in this namespace

AllowedValues, AttachmentContainer, AttachmentDescriptor, Comment, Compact, CreationFactory, Dialog, Discussion, Error, ExtendedError, OAuthConfiguration, PrefixDefinition, Preview, Property, Publisher, QueryCapability, ResourceShape, ResponseInfo, Service, ServiceProvider, ServiceProviderCatalog

10.1.2 RDF Properties in this namespace

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, partOfDiscussion, prefix, prefixBase, prefixDefinition, property, propertyDefinition, queryBase, queryCapability, range, readOnly, rel, representation, resourceShape, resourceType, results, selectionDialog, service, serviceProvider, serviceProviderCatalog, shortId, shortTitle, smallPreview, statusCode, totalCount, usage, valueShape, valueType

10.1.3 RDF Descriptions(Individuals) in this namespace

Any

10.1.4 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.

10.1.5 AttachmentContainer

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

AttachmentContainer is an RDFS class.

An LDP-C that contains attachments for a resource.

10.1.6 AttachmentDescriptor

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

AttachmentDescriptor is an RDFS class.

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

10.1.7 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.

10.1.8 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.

10.1.9 CreationFactory

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

CreationFactory is an RDFS class.

The CreationFactory definition included in a ServiceProvider.

10.1.10 Dialog

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

Dialog is an RDFS class.

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

10.1.11 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

10.1.12 Error

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

Error is an RDFS class.

Basis for forming an error response.

10.1.13 ExtendedError

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

ExtendedError is an RDFS class.

Extended error information.

10.1.14 OAuthConfiguration

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

OAuthConfiguration is an RDFS class.

The OAuthConfiguration definition included in ServiceProvider.

10.1.15 PrefixDefinition

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

PrefixDefinition is an RDFS class.

The PrefixDefinition definition included in ServiceProvider.

10.1.16 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.

10.1.17 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.

10.1.18 Publisher

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

Publisher is an RDFS class.

The Publisher definition included in ServiceProvider.

10.1.19 QueryCapability

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

QueryCapability is an RDFS class.

The QueryCapability definition included in a ServiceProvider.

10.1.20 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.

10.1.21 ResponseInfo

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

ResponseInfo is an RDFS class.

The ResponseInfo included in query results.

10.1.22 Service

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

Service is an RDFS class.

The Service definition included in a ServiceProvider.

10.1.23 ServiceProvider

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

ServiceProvider is an RDFS class.

The Service Provider resource

10.1.24 ServiceProviderCatalog

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

ServiceProviderCatalog is an RDFS class.

The Service Provider Catalog resource

10.1.25 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).

10.1.26 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.

10.1.27 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.

10.1.28 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.

10.1.29 attachmentSize

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

attachmentSize is an RDF property.

Size in bytes of the attachment content.

10.1.30 authorizationURI

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

authorizationURI is an RDF property.

URI for obtaining OAuth authorization.

10.1.31 comment

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

comment is an RDF property.

Comment about the resource.

10.1.32 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.

10.1.33 creationDialog

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

creationDialog is an RDF property.

Enables clients to create a resource via UI.

10.1.34 creationFactory

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

creationFactory is an RDF property.

Enables clients to create new resources.

10.1.35 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.

10.1.36 defaultValue

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

defaultValue is an RDF property.

A default value for property, inlined into property definition.

10.1.37 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.

10.1.38 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.

10.1.39 dialog

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

dialog is an RDF property.

The URI of the HTML dialog.

10.1.40 discussedBy

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

discussedBy is an RDF property.

A series of notes and comments about this resource.

10.1.41 discussionAbout

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

discussionAbout is an RDF property.

Reference to associated resource.

10.1.42 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.

10.1.43 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.

10.1.44 error

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

error is an RDF property.

Error information that may be associated with a resource.

10.1.45 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.

10.1.46 extendedError

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

extendedError is an RDF property.

Extended (additional) error information.

10.1.47 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.

10.1.48 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.

10.1.49 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.

10.1.50 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.

10.1.51 icon

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

icon is an RDF property.

URI of an image applicable to the resource.

10.1.52 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.

10.1.53 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.

10.1.54 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.

10.1.55 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).

10.1.56 inReplyTo

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

inReplyTo is an RDF property.

Reference to comment this comment is in reply to.

10.1.57 instanceShape

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

instanceShape is an RDF property.

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

10.1.58 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.

10.1.59 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.

10.1.60 label

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

label is an RDF property.

Very short label for use in menu items.

10.1.61 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.

10.1.62 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.

10.1.63 message

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

message is an RDF property.

An informative message describing the error that occurred.

10.1.64 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.

10.1.65 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.

10.1.66 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

10.1.67 nextPage

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

nextPage is an RDF property.

Link to next page of response.

10.1.68 oauthAccessTokenURI

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

oauthAccessTokenURI is an RDF property.

URI for obtaining OAuth access token.

10.1.69 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.

10.1.70 oauthRequestTokenURI

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

oauthRequestTokenURI is an RDF property.

URI for obtaining OAuth request token.

10.1.71 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.

10.1.72 partOfDiscussion

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

partOfDiscussion is an RDF property.

Reference to owning Discussion resource .

10.1.73 prefix

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

prefix is an RDF property.

Namespace prefix to be used for this namespace.

10.1.74 prefixBase

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

prefixBase is an RDF property.

The base URI of the namespace.

10.1.75 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.

10.1.76 property

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

property is an RDF property.

The properties that are allowed or required by this shape.

10.1.77 propertyDefinition

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

propertyDefinition is an RDF property.

URI of the property whose usage is being described.

10.1.78 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.

10.1.79 queryCapability

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

queryCapability is an RDF property.

Enables clients query across a collection of resources.

10.1.80 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.

10.1.81 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.

10.1.82 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.

10.1.83 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

10.1.84 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.

10.1.85 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.

10.1.86 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.

10.1.87 selectionDialog

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

selectionDialog is an RDF property.

Enables clients to select a resource via a UI.

10.1.88 service

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

service is an RDF property.

Describes a service offered by the service provider.

10.1.89 serviceProvider

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

serviceProvider is an RDF property.

A link to the resource's OSLC Service Provider.

10.1.90 serviceProviderCatalog

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

serviceProviderCatalog is an RDF property.

Additional service provider catalog.

10.1.91 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.

10.1.92 shortTitle

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

shortTitle is an RDF property.

Shorter form of dcterms:title for the resource.

10.1.93 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.

10.1.94 statusCode

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

statusCode is an RDF property.

The HTTP status code reported with the error.

10.1.95 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.

10.1.96 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.

10.1.97 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.

10.1.98 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.

10.1.99 Any

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

Any is an RDF description.

Any value type is allowed.

Appendix A. Change History

This section is non-normative.

Revision	Date	Editor	Changes Made
01	04 April 2017	Jim Amsden	CS was approved and published.