



OSLC Configuration Management Version 1.1. Part 4: RDF Vocabulary

Project Specification Draft 01

24 October 2024

This stage:

<https://docs.oasis-open-projects.org/oslc-op/config/v1.1/psd01/config-vocab.html> (Authoritative)

<https://docs.oasis-open-projects.org/oslc-op/config/v1.1/psd01/config-vocab.pdf>

Previous stage:

<https://docs.oasis-open-projects.org/oslc-op/config/v1.0/os/config-vocab.html> (Authoritative)

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Additional components:

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

- *OSLC Configuration Management Version 1.1. Part 1: Overview* <https://docs.oasis-open-projects.org/oslc-op/config/v1.1/psd01/oslc-config-mgt.html>
- *OSLC Configuration Management Version 1.1. Part 2: Versioned Resources* <https://docs.oasis-open-projects.org/oslc-op/config/v1.1/psd01/versioned-resources.html>

Standards Track Work Product

- *OSLC Configuration Management Version 1.1. Part 3: Configuration Specification* <https://docs.oasis-open-projects.org/oslc-op/config/v1.1/psd01/config-resources.html>
- *OSLC Configuration Management Version 1.1. Part 4: RDF Vocabulary (this document)* <https://docs.oasis-open-projects.org/oslc-op/config/v1.1/psd01/config-vocab.html>
- *OSLC Configuration Management Version 1.1. Part 5: Machine Readable Vocabulary Terms* <https://docs.oasis-open-projects.org/oslc-op/config/v1.1/psd01/config-vocab.ttl>
- *OSLC Configuration Management Version 1.1. Part 6: Machine Readable Vocabulary Constraints* <https://docs.oasis-open-projects.org/oslc-op/config/v1.1/psd01/config-shapes.ttl>

RDF Namespaces:

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

Abstract:

OSLC Configuration Management RDF Vocabulary

Status:

This document was last revised or approved by the [OASIS Open Services for Lifecycle Integration \(OSLC\) Open Project](#) 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://open-services.net/about/>.

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1. Introduction

This section is non-normative.

1.1 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", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "NOT RECOMMENDED", "MAY", and "OPTIONAL" in this specification are to be interpreted as described in [BCP 14 \[RFC2119\]](#) [RFC8174] when, and only when, they appear in all capitals, as shown here.

1.2 References

1.2.1 Normative references

[RFC2119]

S. Bradner. [Key words for use in RFCs to Indicate Requirement Levels](#) IETF, March 1997. Best Current Practice.
URL: <https://www.rfc-editor.org/rfc/rfc2119>

[RFC8174]

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

2. RDF Vocabulary

2.1 Vocabulary Details

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

The OSLC Configuration Management vocabulary defines terms for versioned resources and configurations of those versioned resources.

2.1.1 Classes in this namespace (16)

[Activity](#), [Baseline](#), [ChangeSet](#), [ChangeSetDelivery](#), [ChangeSetSelections](#), [Component](#), [Configuration](#), [ConfigurationSettings](#), [Contribution](#), [PersonalConfiguration](#), [RemovalAll](#), [Removals](#), [Selections](#), [Stream](#), [UnboundSelections](#), [VersionResource](#)

Activity

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

Activity is an RDFS class.

An activity is a read-only resource representing a long-running operation, such as recursive baseline or stream creation.

Baseline

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

Baseline is an RDFS class.

An immutable configuration with immutable selections of immutable resources, with immutable contributions that are themselves baselines.

ChangeSet

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

ChangeSet is an RDFS class.

A change set configuration represents a set of changes (including additions and removals) to some other configuration.

ChangeSetDelivery

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

ChangeSetDelivery is an RDFS class.

A resource representing the delivery of a single change set to a single target stream.

ChangeSetSelections

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

ChangeSetSelections is an RDFS class.

A resource listing the version resources selected by a change set configuration.

Component

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

Component is an RDFS class.

A unit of organization consisting of a set of versioned resources. Components are the units of configurability, and form reusable assets or building blocks.

Configuration

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

Configuration is an RDFS class.

A configuration identifies a set of versions of resources in a component. Configurations commonly identify exactly one version of each resource in a component. Configurations can also assemble other configurations into a shared context across multiple components.

ConfigurationSettings

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

ConfigurationSettings is an RDFS class.

Information about settings and preferences for a Configuration Management service.

Contribution

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

Contribution is an RDFS class.

A contribution represents the contribution of one configuration to another.

PersonalConfiguration

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

PersonalConfiguration is an RDFS class.

A configuration intended for use by a single agent, rather than shared.

RemovalAll

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

RemovalAll is an RDFS class.

For a change set, an indicator that all selections in the overridden configuration are to be ignored; all selections are defined by the change set.

Removals

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

Removals is an RDFS class.

For a change set, the selections to be removed from an overridden configuration.

Selections

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

Selections is an RDFS class.

A resource listing the version resources selected by a configuration.

Stream

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

Stream is an RDFS class.

A mutable configuration. Contributions to this configuration can be streams or baselines.

UnboundSelections

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

UnboundSelections is an RDFS class.

An indicator that a set of selections are as-yet unbound concept resources as opposed to bound version resources.

VersionResource

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

VersionResource is an RDFS class.

This type is used as a marker for any version resource.

2.1.2 Properties in this namespace (27)

[acceptedBy](#), [accepts](#), [baselineOfStream](#), [baselines](#), [branch](#), [committed](#), [committer](#), [component](#), [configuration](#), [configurations](#), [configurationSettings](#), [contribution](#), [contributionOrder](#), [derivedFrom](#), [mutable](#), [overrides](#), [previousBaseline](#), [progressMessage](#), [release](#), [selections](#), [selects](#), [sourceConfiguration](#), [sourceVersionResource](#), [streams](#), [targetStream](#), [targetVersionResource](#), [versionId](#)

acceptedBy

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

acceptedBy is an RDF property.

A type of configuration accepted as a contribution by the subject configuration.

accepts

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

accepts is an RDF property.

A type of configuration acceptable as a contribution to the subject configuration.

baselineOfStream

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

baselineOfStream is an RDF property.

The stream from which a baseline was made.

baselines

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

baselines is an RDF property.

A Linked Data Platform Container for baselines of a stream.

branch

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

branch is an RDF property.

Identifies a resource as one for a specific branch or variant of the component.

committed

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

committed is an RDF property.

Date and time a resource was committed, or checked in.

committer

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

committer is an RDF property.

The entity that committed or checked in this resource.

component

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

component is an RDF property.

A reference to a Component resource.

configuration

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

configuration is an RDF property.

A reference to a Configuration resource.

configurations

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

configurations is an RDF property.

A Linked Data Platform Container for configurations of a component.

configurationSettings

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

configurationSettings is an RDF property.

A reference to information about settings and preferences for a Configuration Management service.

contribution

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

contribution is an RDF property.

A reference to a Contribution resource.

contributionOrder

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

contributionOrder is an RDF property.

The ordering value for a contribution.

derivedFrom (*Archaic term*)

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

derivedFrom is an RDF property.

A resource from which this resource was derived; the use of `prov:wasDerivedFrom` is preferred.

mutable (*Archaic term*)

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

mutable is an RDF property.

A boolean property indicating whether or not a resource is modifiable; replaced by use of Baseline and Stream types.

overrides

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

overrides is an RDF property.

A reference to a configuration modified by a change set configuration.

previousBaseline

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

previousBaseline is an RDF property.

For a stream or a baseline, a link to the most recent baseline of the same stream.

progressMessage

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

progressMessage is an RDF property.

Text describing the progress of an operation.

release

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

release is an RDF property.

A reference to a resource representing a release.

selections

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

selections is an RDF property.

A reference to a Selections resource.

selects

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

selects is an RDF property.

A reference to a selected version resource.

sourceConfiguration

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

sourceConfiguration is an RDF property.

The change set that was delivered. This cannot be modified after creation.

sourceVersionResource

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

sourceVersionResource is an RDF property.

The version resource in the source configuration that is in conflict.

streams

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

streams is an RDF property.

A Linked Data Platform Container for streams created from a baseline.

targetStream

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

targetStream is an RDF property.

The stream to which the change set was delivered. This cannot be modified after creation.

targetVersionResource

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

targetVersionResource is an RDF property.

The version resource in the target stream that is in conflict.

versionId

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

versionId is an RDF property.

A human-readable version identifier.

2.1.3 Resources (Individuals) in this namespace (1)

[globalConfigurationService](#)

globalConfigurationService

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

globalConfigurationService is an RDF individual.

An `oslc:usage` value marking a global configuration service.

3. Conformance

OSLC Configuration Management Servers **MUST** use the vocabulary terms defined here where required, and with the meanings defined here. Servers **MAY** augment this vocabulary with additional terms. [CONFIG-VOCAB-1]