OASIS OPEN PROJECTS

OSLC Configuration Management Version 1.0. Part 4: RDF Vocabulary

Project Specification 01
30 May 2022

This stage:

https://docs.oasis-open-projects.org/oslc-op/config/v1.0/ps01/config-vocab.html (Authoritative)
https://docs.oasis-open-projects.org/oslc-op/config/v1.0/ps01/config-vocab.pdf

Previous stage:

https://docs.oasis-open-projects.org/oslc-op/config/v1.0/psd01/config-vocab.html (Authoritative)
https://docs.oasis-open-projects.org/oslc-op/config/v1.0/psd01/config-vocab.pdf

Latest stage:

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

Latest version:

https://open-services.net/spec/config/latest

Latest editor's draft:

https://open-services.net/spec/config/latest-draft

Open Project:

OASIS Open Services for Lifecycle Integration (OSLC) Open Project

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Additional components:

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

- *OSLC Configuration Management Version 1.0. Part 1: Overview.* https://docs.oasis-open-projects.org/oslc-op/config/v1.0/ps01/oslc-config-mgt.html
- *OSLC Configuration Management Version 1.0. Part 2: Versioned Resources.* https://docs.oasis-open-projects.org/oslc-op/config/v1.0/ps01/versioned-resources.html

- *OSLC Configuration Management Version 1.0. Part 3: Configuration Specification*. https://docs.oasis-open-projects.org/oslc-op/config/v1.0/ps01/config-resources.html
- *OSLC Configuration Management Version 1.0. Part 4: RDF Vocabulary (this document)*. https://docs.oasis-open-projects.org/oslc-op/config/v1.0/ps01/config-vocab.html
- *OSLC Configuration Management Version 1.0. Part 5: Machine Readable Vocabulary Terms*. https://docs.oasis-open-projects.org/oslc-op/config/v1.0/ps01/config-vocab.ttl
- *OSLC Configuration Management Version 1.0. Part 6: Machine Readable Vocabulary Constraints*. https://docs.oasis-open-projects.org/oslc-op/config/v1.0/ps01/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/.

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@lists.oasis-open-projects.org.

Note that any machine-readable content (Computer Language Definitions) declared Normative for this Work Product is provided in separate plain text files. In the event of a discrepancy between any such plain text file and display content in the Work Product's prose narrative document(s), the content in the separate plain text file prevails.

Citation format:

When referencing this specification the following citation format should be used:
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OSLC Configuration Management Version 1.0. Part 4: RDF Vocabulary. Edited by Nick Crossley. 30 May 2022. OASIS Project Specification 01. https://docs.oasis-open-projects.org/oslc-op/config/v1.0/ps01/config-vocab.html. Latest stage: https://docs.oasis-open-projects.org/oslc-op/config/v1.0/config-vocab.html.

Notices

Table of Contents

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 (15)

Activity, Baseline, ChangeSet, 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.

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 overriden 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 (23)

acceptedBy, accepts, baselineOfStream, baselines, branch, committed, committer, component, configuration, configurations, configurationSettings, contribution, contributionOrder, derivedFrom, mutable, overrides, previousBaseline, progressMessage, release, selections, selects, streams, 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.

streams

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

streams is an RDF property.

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

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]