OASIS OPEN PROJECTS

OSLC Architecture Management Version 3.0. Part 2: Vocabulary

Project Specification 01
30 September 2021

This stage:

https://docs.oasis-open-projects.org/oslc-op/am/v3.0/ps01/architecture-management-vocab.html (Authoritative)
https://docs.oasis-open-projects.org/oslc-op/am/v3.0/ps01/architecture-management-vocab.pdf

Previous stage:

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Additional components:

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

- *OSLC Architecture Management Version 3.0. Part 1: Specification*. architecture-management-spec.html
- *OSLC Architecture Management Version 3.0. Part 2: Vocabulary (this document)*. architecture-management-vocab.html

- *OSLC Architecture Management Version 3.0. Part 3: Constraints*. architecture-management-shapes.html
- *OSLC Architecture Management Version 3.0. Part 4: Machine Readable Vocabulary Terms*. architecture-management-vocab.ttl
- *OSLC Architecture Management Version 3.0. Part 5: Machine Readable Constraints*. architecture-management-shapes.ttl

Related work:

This specification is related to:

- *OSLC Architecture Management Specification Version 2.0*. http://open-services.net/wiki/architecture-management/OSLC-Architecture-Management-Specification-Version-2.0/

RDF Namespaces:

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

Abstract:

This specification defines vocabulary terms for the OSLC Architecture Management domain.

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://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.

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Notices

All capitalized terms in the following text have the meanings assigned to them in the OASIS Intellectual Property Rights Policy (the "OASIS IPR Policy"). The full Policy may be found at the OASIS website.

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1. Introduction

This section is non-normative.

This specification defines vocabulary terms for OSLC Architecture Management resources. The intent is to define resources needed to support common integration scenarios and not to provide a comprehensive definition of an architecture resource. The resource formats are intended to define a high-level resource that can be specialized by enterprise architecture, analysis or design artifacts. The approach to supporting these scenarios is to delegate operations, as driven by service provider contributed user interfaces, as much as possible and not require a service provider to expose its complete data model and application logic.

1.1 Terminology

This section is non-normative.

Terminology is based on OSLC Core Overview [OSLCCore3], W3C Linked Data Platform [LDP], W3C's Architecture of the World Wide Web [WEBARCH], Hyper-text Transfer Protocol [HTTP11]. Terminology for this specification is defined in part 1 of the multi-part specification.

1.2 References

1.2.1 Normative references

[HTTP11]

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

[LDP]

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

[OSLCCore3]

Jim Amsden; S. Speicher. *OSLC Core Version 3.0. Part 1: Overview*. OASIS. Project Specification Draft. URL: https://docs.oasis-open-projects.org/oslc-op/core/v3.0/oslc-core.html

[RFC2119]

S. Bradner. *Key words for use in RFCs to Indicate Requirement Levels*. IETF, March 1997. Best Current Practice. URL: https://www.rfc-editor.org/rfc/rfc2119

[RFC8174]

B. Leiba. *Ambiguity of Uppercase vs Lowercase in RFC 2119 Key Words*. IETF, May 2017. Best Current Practice. URL: https://www.rfc-editor.org/rfc/rfc8174

1.2.2 Informative references

[OSLCQM]

Paul McMahan; Jim Amsden; Gray Bachelor. *OSLC Quality Management 2.1. Part 1: Specification*. OASIS. Project Specification Draft. URL: https://open-services.net/spec/qm/latest

[OSLCRM]

Ian Green; Jad El-khoury. *OSLC Requirements Management Version 2.1. Part 1: Specification*. OASIS. Project Specification Draft. URL: https://open-services.net/spec/rm/latest

[WEBARCH]

Ian Jacobs; Norman Walsh. *Architecture of the World Wide Web, Volume One*. W3C, 15 December 2004. W3C Recommendation. URL: https://www.w3.org/TR/webarch/

1.3 Typographical Conventions and Use of RFC Terms

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.

In addition to the namespace URIs and namespace prefixes `oslc`, `rdf`, `dcterms` and `foaf` defined in the OSLC Core specification, OSLC AM defines the namespace URI of `http://open-services.net/ns/am#` with a namespace prefix of `oslc_am`

This specification also uses these namespace prefix definitions:

- oslc_rm : `http://open-services.net/ns/rm#` [OSLCRM]
- oslc_qm : `http://open-services.net/ns/qm#` [OSLCQM]

2. Architecture Management Vocabulary Terms

Property value types that are not defined in the following sections, are defined in [OSLCCore3].

There are two OSLC AM defined resources: Resource and LinkType. OSLC AM defines a least common set of properties for resources, however service implementations are free to extend this set of properties. Clients **MUST** preserve properties it does not recognize when updating resources. AM Servers **MAY** ignore properties that it does not recognize. Additional properties may come from existing vocabularies (ie. Dublin Core, OWL). When additional properties do not come from a known vocabulary, it is recommended that they exist in their own unique namespace, and providers **SHOULD NOT** reuse namespaces defined in these specifications. [cc-1]

All RDF/XML resources that include links with annotations **MUST** begin with an outer `<rdf:RDF>` element. This outer XML element is required to support the ability to include annotations on 'link' properties with additional `<rdf:Description>` elements reifying statements about the link. [cc-2]

Service implementations and clients **MUST** be prepared to accept any form of valid RDF/XML. For example the following two resource forms are equivalent. [cc-3]

EXAMPLE 1

```
<rdf:RDF
   xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
   xmlns:oslc="http://open-services.net/ns/core#"
   xmlns:oslc_am="http://open-services.net/ns/am#"
   xmlns:dcterms="http://purl.org/dc/terms/">

    <oslc_am:Resource rdf:about="https://example.com/resources/res1">
      <dcterms:title>Service Interface</dcterms:title>
      <dcterms:identifier>res1</dcterms:identifier>
      <oslc:serviceProvider rdf:resource="http://open-services.net/ns/am#"/>
    </oslc_am:Resource>
</rdf:RDF>

is equivalent to

<rdf:RDF
   xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
   xmlns:oslc="http://open-services.net/ns/core#"
   xmlns:dcterms="http://purl.org/dc/terms/">

    <rdf:Description rdf:about="https://example.com/resources/res1">
      <dcterms:title>Service Interface</dcterms:title>
      <dcterms:identifier>res1</dcterms:identifier>
      <rdf:type rdf:resource="http://open-services.net/ns/am#Resource" />
      <oslc:serviceProvider rdf:resource="http://open-services.net/ns/am#"/>
    </rdf:Description>
</rdf:RDF>
```

This specification defines a number of specific, commonly occurring vocabulary terms (OWL classes), properties and values. Servers may define additional classes and provide additional properties as needed.

2.1 Vocabulary Details

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

All vocabulary URIs defined in the OSLC Architecture Management (AM) namespace.

2.1.1 Classes in this namespace (2)

ArchitectureResource, LinkType

ArchitectureResource

http://open-services.net/ns/am#Resource

ArchitectureResource is an RDFS class.

A generic architecture resource. A resource of this type is likely to be a model or design artifact.

LinkType

http://open-services.net/ns/am#LinkType

LinkType is an RDFS class.

A locally managed resource that describes a link type predicate that might otherwise not be directly resolvable.

3. Conformance

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

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

Clause Number	Requirement
cc-1	There are two OSLC AM defined resources: Resource and LinkType. OSLC AM defines a least common set of properties for resources, however service implementations are free to extend this set of properties. Clients **MUST** preserve properties it does not recognize when updating resources. AM Servers **MAY** ignore properties that it does not recognize. Additional properties may come from existing vocabularies (ie. Dublin Core, OWL). When additional properties do not come from a known vocabulary, it is recommended that they exist in their own unique namespace, and providers **SHOULD NOT** reuse namespaces defined in these specifications.
cc-2	All RDF/XML resources that include links with annotations **MUST** begin with an outer `<rdf:RDF>` element. This outer XML element is required to support the ability to include annotations on 'link' properties with additional `<rdf:Description>` elements reifying statements about the link.
cc-3	Service implementations and clients **MUST** be prepared to accept any form of valid RDF/XML. For example the following two resource forms are equivalent.

