OSLC Change Management Version 3.0. Part 2: Vocabulary

OASIS Standard
26 May 2021

This stage:
https://docs.oasis-open-projects.org/oslc-op/cm/v3.0/os/change-mgt-vocab.html (Authoritative)
https://docs.oasis-open-projects.org/oslc-op/cm/v3.0/os/change-mgt-vocab.pdf

Previous stage:
https://docs.oasis-open-projects.org/oslc-op/cm/v3.0/ps01/change-mgt-vocab.html (Authoritative)
https://docs.oasis-open-projects.org/oslc-op/cm/v3.0/ps01/change-mgt-vocab.pdf
(published as Project Specification on 17 September 2020)

Latest stage:
https://docs.oasis-open-projects.org/oslc-op/cm/v3.0/change-mgt-vocab.html (Authoritative)
https://docs.oasis-open-projects.org/oslc-op/cm/v3.0/change-mgt-vocab.pdf

Latest version:
https://open-services.net/spec/cm/latest

Latest editor’s draft:
https://open-services.net/spec/cm/latest-draft

Open Project:
OASIS Open Services for Lifecycle Collaboration (OSLC) OP

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

Editors:
Jim Amsden (jamsden@us.ibm.com), IBM
Samuel Padgett (spadgett@us.ibm.com), IBM
Steve Speicher (sspeiche@us.ibm.com), IBM

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

Related work:
This specification is related to:

- Open Services for Lifecycle Collaboration Change Management Specification Version 2.0. [http://open-services.net/bin/view/Main/CmSpecificationV2](http://open-services.net/bin/view/Main/CmSpecificationV2)

RDF Namespaces:
[http://open-services.net/ns/cm#](http://open-services.net/ns/cm#)

Abstract:
This specification defines vocabulary terms for the Change Management domain.

Status:
This document was last revised or approved by the membership of OASIS on the above date. The level of approval is also listed above. Check the “Latest stage” location noted above for possible later revisions of this document. Any other numbered Versions and other technical work produced by the Open Project are listed at [https://github.com/oslc-op/oslc-specs](https://github.com/oslc-op/oslc-specs).

Comments on this work can be provided by opening issues in the project repository or by sending email to the project’s public comment list oslc-op@lists.oasis-open-projects.org.

Note that any machine-readable content ([Computer Language Definitions](https://docs.oasis-open-projects.org/oslc-op/cm/v3.0/os/change-mgt-vocab.html)) 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-CM-3.0-Part2]

The English version of this specification is the only normative version. Non-normative translations may also be available.
Notices

Copyright © OASIS Open 2021. All Rights Reserved.

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.

This specification is published under the Attribution 4.0 International (CC BY 4.0). Portions of this specification are also provided under the Apache License 2.0.

All contributions made to this project have been made under the OASIS Contributor License Agreement (CLA).

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 Open Projects IPR Statements page.

This document and translations of it may be copied and furnished to others, and derivative works that comment on or otherwise explain it or assist in its implementation may be prepared, copied, published, and distributed, in whole or in part, without restriction of any kind, provided that the above copyright notice and this section are included on all such copies and derivative works. However, this document itself may not be modified in any way, including by removing the copyright notice or references to OASIS, except as needed for the purpose of developing any document or deliverable produced by an OASIS Open Project or OASIS Technical Committee (in which case the rules applicable to copyrights, as set forth in the OASIS IPR Policy, must be followed) or as required to translate it into languages other than English.

The limited permissions granted above are perpetual and will not be revoked by OASIS or its successors or assigns.

This document and the information contained herein is provided on an "AS IS" basis and OASIS DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY THAT THE USE OF THE INFORMATION HEREIN WILL NOT INFRINGE ANY OWNERSHIP RIGHTS OR ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

OASIS requests that any OASIS Party or any other party that believes it has patent claims that would necessarily be infringed by implementations of this OASIS Project Specification or OASIS Standard, to notify the OASIS TC Administrator and provide an indication of its willingness to grant patent licenses to such patent claims in a manner consistent with the IPR Mode of the OASIS Technical Committee that produced this specification.

OASIS invites any party to contact the OASIS TC Administrator if it is aware of a claim of ownership of any patent claims that would necessarily be infringed by implementations of this specification by a patent holder that is not willing to provide a license to such patent claims in a manner consistent with the IPR Mode of the OASIS Open Project that produced this specification. OASIS may include such claims on its website, but disclaims any obligation to do so.

OASIS takes no position regarding the validity or scope of any intellectual property or other rights that might be claimed to pertain to the implementation or use of the technology described in this document or the extent to which any license under such rights might or might not be available; neither does it represent that it has made any effort to identify any such rights. Information on OASIS' procedures with respect to rights in any document or deliverable produced by an OASIS Technical Committee can be found on the OASIS website. Copies of claims of rights made available for publication and any assurances of licenses to be made available, or the result of an attempt made to obtain a general license or permission for the use of such proprietary rights by implementers or users of this OASIS Open Project Specification or OASIS Standard, can be obtained from the OASIS TC Administrator. OASIS makes no representation that any information or list of intellectual property rights will at any time be complete, or that any claims in such list are, in fact, Essential Claims.

The name "OASIS" is a trademark of OASIS, the owner and developer of this specification, and should be used only to refer to the organization and its official outputs. OASIS welcomes reference to, and implementation and use of, specifications, while reserving the right to enforce its marks against misleading uses. Please see https://www.oasis-open.org/policies-guidelines/trademark for above guidance.
# Table of Contents

1. Introduction  
   1.1 Terminology  
   1.2 References  
   1.3 Typographical Conventions and Use of RFC Terms  
2. Change Management Vocabulary Terms  
   2.1 Vocabulary Details  
3. Standard Enumeration Values  
   3.1 Resource: State  
   3.2 Resource: Priority  
   3.3 Resource: Severity  
4. Conformance
1. Introduction

This section is non-normative.

This specification defines vocabulary terms for common Change Management resources. The intent is to define resources needed to support common integration scenarios and not to provide a comprehensive definition of a Change Request. The resource formats may not match exactly the native models supported by change management service providers, but are intended to be compatible with them. 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.

See OSLC Change Management Version 3.0, Part 5: Machine Readable Constraints for the standard OSLC constraints defined on this vocabulary.

Fig. 1 OSLC Change Management 3.0 Overview

1.1 Terminology

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].

1.2 References

1.2.1 Normative references

[HTTP11]
Standards Track Work Product

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

[OSLCCore3]
Steve Speicher; Jim Amsden. OSLC Core Overview v3.0. OASIS. Project Specification. URL: https://docs.oasis-open.org/oslc-core/oslc-core/v3.0/oslc-core-v3.0-part1-overview.html

[RFC2119]

[RFC8174]

1.2.2 Informative references

[OSLCQM]

[OSLCRM]

[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 CM defines the namespace URI of http://open-services.net/ns/cm# with a namespace prefix of oslc_cm

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. Change Management Vocabulary Terms

This specification defines the ChangeRequest superclass, and a number of specific, commonly occurring subclasses, properties and values. Servers may define additional ChangeRequest subclasses and provide additional properties as needed.

2.1 Vocabulary Details

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

All vocabulary URIs defined in the OSLC Change Management (CM) namespace.

2.1.1 Classes in this namespace (9)

- ChangeNotice
- ChangeRequest
- Defect
- Enhancement
- Priority
- ReviewTask
- Severity
- State
- Task

ChangeNotice

http://open-services.net/ns/cm#ChangeNotice

ChangeNotice is an RDFS class.

Represents an assignment notification of a change request. May be used also to bestow authority onto the assigned user to effect the changes.

ChangeRequest

http://open-services.net/ns/cm#ChangeRequest

ChangeRequest is an RDFS class.

The CM Change Request resource.

Defect

http://open-services.net/ns/cm#Defect

Defect is an RDFS class.

A software or product defect.

Enhancement

http://open-services.net/ns/cm#Enhancement

Enhancement is an RDFS class.

A request for new functionality.

Priority

http://open-services.net/ns/cm#Priority

Priority is an RDFS class.
Defines the possible oslc_cm:priority property values.

**ReviewTask**

http://open-services.net/ns/cm#ReviewTask

*ReviewTask* is an RDFS class.

A request to make a change and review the change.

**Severity**

http://open-services.net/ns/cm#Severity

*Severity* is an RDFS class.

Defines the possible oslc_cm:severity property values.

**State**

http://open-services.net/ns/cm#State

*State* is an RDFS class.

Defines the possible oslc_cm:state property values.

**Task**

http://open-services.net/ns/cm#Task

*Task* is an RDFS class.

An executable and trackable activity.

2.1.2 Properties in this namespace (27)

- affectedByDefect
- affectsPlanItem
- affectsRequirement
- affectsTestResult
- approved
- authorizer
- blocksTestExecutionRecord
- closed
- closeDate
- fixed
- implementsRequirement
- inProgress
- parent
- priority
- relatedChangeRequest
- relatedTestCase
- relatedTestExecutionRecord
- relatedTestPlan
- relatedTestScript
- reviewed
- severity
- state
- status
- testedByTestCase
- tracksChangeSet
- tracksRequirement
- verified

- **affectedByDefect**

  http://open-services.net/ns/cm#affectedByDefect

  *affectedByDefect* is an RDF property.

  Change request is affected by a reported defect. It is likely that the target resource will be an oslc_cm:Defect.

- **affectsPlanItem**

  http://open-services.net/ns/cm#affectsPlanItem

  *affectsPlanItem* is an RDF property.

  Change request affects a plan item. It is likely that the target resource will be an oslc_cm:ChangeRequest.
http://open-services.net/ns/cm#affectsRequirement

*affectsRequirement* is an RDF property.

The ChangeRequest affects a Requirement. It is likely that the target resource will be an oslc_rm:Requirement.

---

http://open-services.net/ns/cm#affectsTestResult

*affectsTestResult* is an RDF property. (Archaic term)

Associated resource that is affected by this Change Request. It is likely that the target resource will be an oslc_qm:TestResult.

---

http://open-services.net/ns/cm#approved

*approved* is an RDF property.

Whether or not the Change Request has been approved.

---

http://open-services.net/ns/cm#authorizer

*authorizer* is an RDF property.

The URI of a resource describing an agent who is responsible authorizing for and/or has authorized effort to be expended to address a set of change requests.

---

http://open-services.net/ns/cm#blocksTestExecutionRecord

*blocksTestExecutionRecord* is an RDF property. (Archaic term)

Associated resource that is blocked by this Change Request. It is likely that the target resource will be an oslc_qm:TestExecutionRecord.

---

http://open-services.net/ns/cm#closed

*closed* is an RDF property.

Whether or not the Change Request is completely done, no further fixes or fix verification is needed.

---

http://open-services.net/ns/cm#closeDate

*closeDate* is an RDF property.

The date at which no further activity or work is intended to be conducted.

---

http://open-services.net/ns/cm#fixed
**fixed** is an RDF property.

Whether or not the Change Request has been fixed.

**implementsRequirement**

http://open-services.net/ns/cm#implementsRequirement

*implementsRequirement* is an RDF property.

The ChangeRequest implements the associated Requirement. It is likely that the target resource will be an *oslc_rm:Requirement*.

**inProgress**

http://open-services.net/ns/cm#inProgress

*inProgress* is an RDF property.

Whether or not the Change Request is in a state indicating that active work is occurring.

**parent**

http://open-services.net/ns/cm#parent

*parent* is an RDF property.

The related parent change requests of the subject change request.

**priority**

http://open-services.net/ns/cm#priority

*priority* is an RDF property.

Used to indicate the relative importance of ChangeRequests. It is likely that the target resource will be an *oslc_cm:Priority*.

**relatedChangeRequest**

http://open-services.net/ns/cm#relatedChangeRequest

*relatedChangeRequest* is an RDF property.

This relationship is loosely coupled, has no specific meaning, and can be used to link related change requests. It is likely that the target resource will be an *oslc_cm:ChangeRequest*.

**relatedTestCase** *(Archaic term)*

http://open-services.net/ns/cm#relatedTestCase

*relatedTestCase* is an RDF property.

Related test case resource. It is likely that the target resource will be an *oslc_qm:TestCase*.

**relatedTestExecutionRecord** *(Archaic term)*

http://open-services.net/ns/cm#relatedTestExecutionRecord

*relatedTestExecutionRecord* is an RDF property.
Related to a test execution resource. It is likely that the target resource will be an oslc_qm:TestExecutionRecord.

**relatedTestPlan** *(Archaic term)*

http://open-services.net/ns/cm#relatedTestPlan

relatedTestPlan is an RDF property.

Related test plan resource. It is likely that the target resource will be an oslc_qm:TestPlan.

**relatedTestScript** *(Archaic term)*

http://open-services.net/ns/cm#relatedTestScript

relatedTestScript is an RDF property.

Related test script resource. It is likely that the target resource will be an oslc_qm:TestScript.

**reviewed**

http://open-services.net/ns/cm#reviewed

reviewed is an RDF property.

Whether or not the Change Request has been reviewed.

**severity**

http://open-services.net/ns/cm#severity

severity is an RDF property.

Used to indicate the severity or potential impact of a defect. It is likely that the target resource will be an oslc_cm:Severity.

**state**

http://open-services.net/ns/cm#state

state is an RDF property.

Used to indicate the status of the change request.

**status** *(Archaic term)*

http://open-services.net/ns/cm#status

status is an RDF property.

Used to indicate the status of the change request based on values defined by the service provider. Most often a read-only property. It is likely that the target resource will be a string corresponding to an oslc_cm:State value.

**testedByTestCase** *(Archaic term)*

http://open-services.net/ns/cm#testedByTestCase

testedByTestCase is an RDF property.

Test case by which this change request is tested. It is likely that the target resource will be an oslc_qm:TestCase.
tracksChangeSet

http://open-services.net/ns/cm#tracksChangeSet

*tracksChangeSet* is an RDF property.

Tracks a change set resource. It is likely that the target resource will be an oslc_config:ChangeSet.

tracksRequirement

http://open-services.net/ns/cm#tracksRequirement

*tracksRequirement* is an RDF property.

Tracks the associated Requirement or Requirement ChangeSet resources. It is likely that the target resource will be an oslc_rm:Requirement.

verified

http://open-services.net/ns/cm#verified

*verified* is an RDF property.

Whether or not the resolution or fix of the Change Request has been verified.

2.1.3 Resources (Individuals) in this namespace (20)

approved, Blocker, closed, Critical, defect, fixed, High, inprogress, Low, Major, Medium, Minor, Normal, planItem, PriorityUnassigned, requirementsChangeRequest, reviewed, SeverityUnassigned, task, verified

approved

http://open-services.net/ns/cm#Approved

*approved* is an RDF individual.

Whether or not the Change Request has been approved.

Blocker

http://open-services.net/ns/cm#Blocker

*Blocker* is an RDF individual.

Severe problem. No workaround. Blocks development, test, or usage.

closed

http://open-services.net/ns/cm#Closed

*closed* is an RDF individual.

Whether or not the Change Request is completely done, no further fixes or fix verification is needed.

Critical

http://open-services.net/ns/cm#Critical
Critical is an RDF individual.
Severe problem. No workaround.

defect

http://open-services.net/ns/cm#defect
defect is an RDF individual.
Used to report defects in testing.

fixed

http://open-services.net/ns/cm#Fixed
fixed is an RDF individual.
Whether or not the Change Request has been fixed.

High

http://open-services.net/ns/cm#High
High is an RDF individual.
Highest priority, action on the change request highly recommended.

inprogress

http://open-services.net/ns/cm#Inprogress
inprogress is an RDF individual.
Whether or not the Change Request in a state indicating that active work is occurring.

Low

http://open-services.net/ns/cm#Low
Low is an RDF individual.
Action on the change request can be safely deferred.

Major

http://open-services.net/ns/cm#Major
Major is an RDF individual.
Prevents function from being used. There is a workaround.

Medium

http://open-services.net/ns/cm#Medium
Medium is an RDF individual.
Acting on the change request can wait, but not forever.
Minor

http://open-services.net/ns/cm#Minor

*Minor* is an RDF individual.

Minimal impact.

Normal

http://open-services.net/ns/cm#Normal

*Normal* is an RDF individual.

Affects non-critical functionality. There is a workaround.

planItem

http://open-services.net/ns/cm#planItem

*planItem* is an RDF individual.

Used for associating change requests into plans (project, release, sprint, etc).

PriorityUnassigned

http://open-services.net/ns/cm#PriorityUnassigned

*PriorityUnassigned* is an RDF individual.

The priority of the change request is intentionally not set.

requirementsChangeRequest

http://open-services.net/ns/cm#requirementsChangeRequest

*requirementsChangeRequest* is an RDF individual.

Used for associating a change request for usage in tracking changes to a Requirements resource.

reviewed

http://open-services.net/ns/cm#Reviewed

*reviewed* is an RDF individual.

Whether or not the Change Request has been reviewed.

SeverityUnassigned

http://open-services.net/ns/cm#SeverityUnassigned

*SeverityUnassigned* is an RDF individual.

The severity of the change request is intentionally not set.

task

http://open-services.net/ns/cm#task
task is an RDF individual.
Used for associating change requests into executable and track-able items.

verified

http://open-services.net/ns/cm#Verified

verified is an RDF individual.

Whether or not the resolution or fix of the Change Request has been verified.
3. Standard Enumeration Values

The Change Management specification defines a number of standard enumeration values for ChangeRequest state, priority and severity. Servers are not limited to these values, they are only provided to establish a common set of values that facilitate interoperability.

Providers **MAY** have custom state, priority and severity values.

Providers **SHOULD use** `skos:narrower` when custom state, priority or severity values refine standard values to help clients understand the meaning of custom values.

Providers **SHOULD NOT use** `owl:sameAs` when custom state, priority or severity values refine standard values.

Priority and severity example:

```
Example 1

@prefix ex: <http://example.com/bugtracker> .
@prefix oslc: <http://open-services.net/ns/core#> .
@prefix oslc_cm: <http://open-services.net/ns/cm#> .
@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#> .
@prefix dcterms: <http://purl.org/dc/terms/> .
@prefix skos: <http://www.w3.org/2004/02/skos/core> .

<http://example.com/bugs/2314>
  a oslc_cm:Defect ;
  dcterms:identifier "00002314" ;
  oslc:shortTitle "Bug 2314" ;
  dcterms:title "Invalid installation instructions" ;
  oslc_cm:priority oslc_cm:High ;
  oslc_cm:severity <http://example.com/enums#S1> .

<http://example.com/enums#HOT>
  a oslc_cm:Severity ;
  rdfs:label "Severe - HOT" ;
  skos:narrower oslc_cm:Critical ;
  ex:icon <http://example.com/severity/S1.gif> .
```

3.1 Resource: State

Defines a set of standard values for property `oslc_cm:status`.

- **Name:** State
- **Type URI** `http://open-services.net/ns/cm#State`

<table>
<thead>
<tr>
<th>Range</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>oslc_cm:Closed</td>
<td>Completely done, no further fixes or fix verification is needed.</td>
</tr>
<tr>
<td>oslc_cm:InProgress</td>
<td>Active work is occurring.</td>
</tr>
<tr>
<td>oslc_cm:Fixed</td>
<td>The issue is resolved or fixed but the resolution or fix has not yet been verified.</td>
</tr>
<tr>
<td>oslc_cm:Approved</td>
<td>The resolution or fix is approved and can be delivered.</td>
</tr>
<tr>
<td>oslc_cm:Reviewed</td>
<td>The resolution or fix has been reviewed.</td>
</tr>
<tr>
<td>oslc_cm:Verified</td>
<td>The resolution or the fix is verified.</td>
</tr>
</tbody>
</table>

3.2 Resource: Priority

- **Name:** Priority
3.3 Resource: Severity

- **Name:** Severity
- **Type URI** [http://open-services.net/ns/cm#Severity](http://open-services.net/ns/cm#Severity)

**NEEDS UPDATE:** Improve descriptions.

<table>
<thead>
<tr>
<th>Range</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>oslc_cm:Blocker</td>
<td>Severe problem. No workaround. Blocks development, test, or usage.</td>
</tr>
<tr>
<td>oslc_cm:Critical</td>
<td>Severe problem. No workaround.</td>
</tr>
<tr>
<td>oslc_cm:Major</td>
<td>Prevents function from being used. There is a workaround.</td>
</tr>
<tr>
<td>oslc_cm:Normal</td>
<td>Affects non-critical functionality. There is a workaround.</td>
</tr>
<tr>
<td>oslc_cm:Minor</td>
<td>Minimal impact.</td>
</tr>
<tr>
<td>oslc_cm:SeverityUnassigned</td>
<td>The priority of the change request is intentionally not set.</td>
</tr>
</tbody>
</table>
4. Conformance

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

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