



IPTC Standards

RightsML

Version 1.0 Experimental Phase 1

Specification of a Profile and Vocabulary for the communication of usage rights in ODRL 2.0

Document Revision 2



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In June 2011 the owners of the ACAP standard, ACAP Ltd., handed over the rights and the future maintenance of ACAP 2.0 to the International Press Telecommunications Council (IPTC). IPTC decided to rename the standard to RightsML to align its branding to the existing ...ML standards of this standardization organisation.

About the Standard

Specification versioning history

Version	Approval Date	Approved by	Remarks
1.0EP1	2012-03-21	IPTC Standards Committee	Specification is at Experimental Phase level.

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About this Document

This document specifies the IPTC rights markup language standard RightsML which is a profile and vocabulary for the machine-readable communication of usage rights in ODRL 2.0. More about ODRL 2.0 is defined in section 2 of the specifications.

Status of this Document

This document is under the governance of the Rights Expression Language Working Group of the IPTC.

This is a specification document which was endorsed by the IPTC members and may be updated, replaced or obsoleted by other documents at any time.

This Experimental Phase document is available in the directory <http://iptc.org/std-dev/RightsML/1.0EP1/specification/> which can be accessed on the Web and any updates to this document will be published there.

Versions of the final standard will be published in a subdirectory of <http://iptc.org/std/RightsML/> corresponding to the version number of the standard.



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1 Introduction

This document specifies a Profile of the Open Digital Rights Language (ODRL) Version 2.0 for application in the communication of usage policies, primarily in association with the licensed distribution and use of news content by news gathering agencies, news publishers, news licensing organisations, business intermediaries and business consumers in the online news market-place.

ODRL V2.0 defines a language for expression of rights and policies. This language has a number of key components:

- A Core Model, which defines the main structures and key concepts of the language.
- A Common Vocabulary, which defines a set of terms that may be used across all applications of ODRL V2.0.
- An XML encoding, which defines an XML schema for serialisation of ODRL 2.0 expressions in XML format. This is just one of a number of encodings that are under development; others include RDF.

The ODRL V2.0 Core Model describes a number of application scenarios, many of which are not applicable to the RightsML 1.0 use case. Not all the terms defined in the Common Vocabulary are applicable to this use case. This document therefore specifies a particular scenario for application of ODRL V2.0, and the vocabularies that may be used in that scenario.

References

In addition to the specifications of RightsML 1.0 the IPTC also maintains a developer site for RightsML implementers: see <http://dev.iptc.org/RightsML>. This site helps to implement the specifications by providing guidelines and best practices. Further it provides an open forum for discussing RightsML.

This RightsML specification builds on these ODRL 2.0 specification documents:

ODRL V2.0 – Core Model – Final Specification: 24 April 2012

(<http://www.w3.org/community/odrl/two/model/>)

ODRL V2.0 – Common Vocabulary – Final Specification: 24 April 2012

(<http://www.w3.org/community/odrl/two/vocab/>)

ODRL V2.0 – XML Encoding – Final Specification: 24 April 2012

(<http://www.w3.org/community/odrl/two/xml/>)

Any inclusions of ODRL V2.0 specifications are only made to specify how the RightsML 1.0 Profile and Vocabulary builds on this framework. They IPTC explicitly waives any claim on the copyright in the ODRL V 2.0 specifications.

RightsML use case

The RightsML use case is based upon the requirement, in the specific context of news syndication, to be able to associate a usage policy with an item of content for which usage rights are assigned by a licensing rights holder to a licensee. The assumption is that the licensee may not necessarily be the final consumer of the item in question, but is a licensed business entity that may wish to make any of a variety of permitted commercial uses of a content item, including using the item in the delivery of their own products or services to their own customers. The usage policy may therefore need to cover both the use that is made of the item by the immediate licensee to whom rights are being granted and the duty of the licensee to communicate specific usage policy terms to their own customers, associated with delivery of any content items or derivatives to their customers.

The requirement is to enable communication of the usage rights and constraints that are specific to a particular item. These might be delivered with the item – whether embedded in the item, or embedded in the communication payload that includes the item – or communicated separately.

The RightsML 1.0 Profile of ODRL 2.0 aims to satisfy this use case. Piloting activities have indicated that the Profile does, to a worthwhile extent, meet the requirements of this use case, insofar as the piloting activities have been able to test this. Further implementation would be expected to highlight any gaps in the Profile, especially in the vocabulary.



It is anticipated that it will be necessary to extend the RightsML 1.0 Profile from time to time, especially the vocabulary. On the assumption that the market for digital services in news delivery will continue to evolve rapidly, new types of usage will arise for which usage policies cannot be adequately expressed without extending the Profile. It is anticipated that such extensions to the RightsML 1.0 Profile will, in the first instance, be private extensions, worked out between the business partners most immediately concerned. In the longer term it will clearly benefit the market as a whole for such extensions to be considered for incorporation into the RightsML 1.0 Profile. This document specifies how implementers may define and use their own terms, in addition to or in place of the vocabulary terms defined in this document.

Using "namespaces" to identify different vocabularies

ODRL 2.0 anticipates that applications will need to extend the Common Vocabulary in a variety of different ways. The RightsML 1.0 Profile recognises that terms from a variety of different vocabularies are needed to provide the rich forms of expression that many applications will require. At least three vocabularies are needed for any realistic application:

- The ODRL Core Model
- The ODRL Common Vocabulary
- The RightsML Vocabulary.

Other vocabularies will be needed in specific cases, including both proprietary and standard vocabularies.

The provenance of all vocabularies must be indicated by explicitly specifying the vocabulary from which each term is taken. Each vocabulary should be represented by a Uniform Resource Identifier (URI) that has been issued by the owner or provider of the vocabulary. This URI, known as the "namespace URI" for the vocabulary in question, need not necessarily resolve to a web resource, although it may do so and if so, the web resource should relate directly to the vocabulary in question.

The precise way in which a vocabulary term is expressed will depend upon the chosen encoding. In some encodings, such as XML, it may be appropriate or necessary to declare a "namespace prefix", a short prefix that can be attached to the term in order to specify the vocabulary to which it belongs. If a term is expressed using a namespace prefix, the prefix must be declared and must be associated with the correct namespace URI for the vocabulary in question, following the rules of the chosen encoding for declaring namespaces and prefixes.

The namespace URIs for the ODRL 2.0 Core Model, the ODRL 2.0 Common Vocabulary and the RightsML 1.0 Vocabulary are given below.

Vocabulary	Namespace URI
ODRL 2.0 Core Model	http://w3.org/ns/odrl/2/
ODRL 2.0 Common Vocabulary	http://w3.org/ns/odrl/vocab#
RightsML Vocabulary	http://iptc.org/std/RightsML/2011-10-07/

The RightsML 1.0 Profile of ODRL 2.0

The RightsML 1.0 Profile is specified in accordance with the guidance on specifying Profiles that is given in Section 4 of the ODRL 2.0 Core Model.

Additions to the Core Model

The RightsML 1.0 Profile does not add any features to the Core Model. The range of values of certain attributes is extended, as described below.

Implementation of Core Model features

Policy entity

In implementations of the RightsML 1.0 Profile it is recommended that the value of the **type** attribute of a Policy should generally be "set", because the Set Scenario does not require any Parties to be identified in the expression of a Permission or Prohibition.



Asset entity

The value of the **uid** attribute of an Asset may identify either a specific resource (content item) or a resource category. The range of values of the **uid** attribute is extended to allow a resource category to be represented by a term from a specified vocabulary. It is recommended that URIs only be used to identify a specific resource as an Asset. Vocabulary terms must only be used to identify an Asset to be a resource category.

In addition to specifying how an Asset is used in connection with an Action, the **relation** attribute may be used specify that an Asset is created or derived as a result of an Action on a target Asset.

Party entity

The value of the **uid** attribute of a Party may identify either a specific party or a category of parties. The range of values of the **uid** attribute is extended to allow a party category to be represented by a term from a specified vocabulary. It is recommended that URIs only be used to identify a specific party as the Party entity. Vocabulary terms must only be used to identify a Party entity to be a category.

Role entity

No change.

Permission entity

No change.

Duty entity

No change.

Prohibition entity

No change.

Action entity

No change.

Constraint entity

No change.

Experimental features in the ODRL 2.0 Core Model

The RightsML 1.0 Profile does not include any of the experimental features described in Section 5 of the ODRL 2.0 Core Model.

ODRL 2.0 Common Vocabulary

Some terms defined in the ODRL 2.0 Common Vocabulary are excluded from the RightsML 1.0 Profile, because they are considered to be either irrelevant or inappropriate in the RightsML 1.0 use case. In some cases alternative terms have been specified in the RightsML 1.0 Vocabulary, in which case this is indicated against the corresponding term in the ODRL 2.0 Common Vocabulary.

All other ODRL 2.0 Common Vocabulary terms are included as defined.

If terms from the ODRL 2.0 Common Vocabulary that are not included in the RightsML 1.0 Profile are used in rights expressions, it is the responsibility of the implementer to ensure that the recipients of such expressions are aware that the vocabulary has been extended to include such terms and are able to interpret them correctly.

Policy types

The term **privacy** is not included in the RightsML 1.0 Profile. The term recommended for use in most implementations of the RightsML 1.0 Profile is **set**.

Actions

The following terms are **included** in the RightsML 1.0 Profile:

- **aggregate**
- **annotate**
- **attribute**
- **delete**



- **derive / modify**
- **display / present**
- **export / transform**
- **extract**
- **give**
- **include**
- **index**
- **inform**
- **nextPolicy**
- **obtainConsent**
- **pay**
- **play / present**
- **print**
- **share**
- **translate**

The following terms are **not included** in the RightsML 1.0 Profile:

- acceptTracking
- adhocShare
- anonymize
- append
- archive (replacement term defined in the RightsML 1.0 Vocabulary)
- attachPolicy
- attachSource
- concurrentUse
- commercialize
- copy / reproduce (replacement term defined in the RightsML 1.0 Vocabulary)
- digitize
- distribute (replacement term defined in the RightsML 1.0 Vocabulary)
- ensureExclusivity
- execute (use present or play)
- extractChar
- extractWord
- extractPage
- install
- lease
- lend
- move
- preview
- read
- reviewPolicy
- secondaryUse
- sell
- textToSpeech
- uninstall
- watermark
- write

Constraints

Attribute 'name'

The following terms are **not included** in the RightsML 1.0 Profile:

- deliveryChannel
- Industry
- media



- product
- version

In all the above cases, except the last, it is recommended that the generic constraint **purpose** be used instead, the right operand being a term from a suitable vocabulary.

Attribute 'operator'

No change.

Attribute 'rightOperand'

The RightsML 1.0 Profile does not change any of the value ranges specified in the ODRL 2.0 Common Vocabulary. However, the RightsML 1.0 Profile explicitly allows the 'rightOperand' attribute to contain an expression whose value is variable and may only be determinable at the instance when the Constraint as a whole must be evaluated to determine whether the Permission, Prohibition or Duty is applicable.

Party and Role

No change. However, given that the Action "acceptTracking" is not included in the RightsML 1.0 Profile, it is unlikely that the role function value "trackingParty" will be found to be usable.

Asset and Relation

No change.



The RightsML 1.0 Vocabulary

Note:

In the XML-encoded examples the following namespace prefixes are used

Prefix	Vocabulary namespace
o:	ODRL 2.0 Core Model, see Using "namespaces" to identify different vocabularies
ov:	ODRL 2.0 Common Vocabulary, see Using "namespaces" to identify different vocabularies
rml:	RightsML Vocabulary, see Using "namespaces" to identify different vocabularies
p:	Vocabulary created and maintained by the assigner with its proprietary namespace

Assets

No terms associated with Asset entities are currently defined.

Parties

No terms associated with Party entities are currently defined.

Actions

The following Action terms are defined.

<i>Identifier</i>	<i>Term</i>	<i>Definition</i>
addToService	Add to product or service	The act of adding the specified Asset to the Assignee's product or service.
archive	Archive	Preserve a persistent copy of a content item so that it can be retrieved over a significant period of time, which may be bounded (i.e. have an end-date or end-time) or unbounded.
copy	Copy	Make an exact copy of a content item. Usually preparatory to another action such as in copying to create a backup archive, or in copying to create a modified version. On its own does not necessarily imply that the copy has to be persistent – it may be transient.
distribute	Distribute	The act of distributing, displaying and/or performing an Asset to licensed recipients. Not "publicly" distribute, as in the ODRL 2.0 Common Vocabulary.
print	Print	Make a persistent physical rendering of a content item, usually on paper. A specialization of derive (see ODRL 2.0 Common Vocabulary).
removeFromService	Remove from product or service	The act of removing the specified Asset from the Assignee's product or service. Typically expressing a Duty to be performed on request, in association with permission to perform the action addToService .
use	Use	When associated with a permission, the act of making any reasonable use of the Asset, usually constrained to be for a specific purpose. When associated with a prohibition, the act of making any use whatsoever of the Asset.



Constraints

Attribute 'name'

The following terms are defined for use as names of Constraint entities.

Identifier	Term	Definition
actionRequestReceived	Removal request received	The state that a request to perform an Action has been received. The right operand must contain either true or false . The constraint must be used in a Duty.

Example of use: see **requestedActionsPerformed**.

Example of use of recipient: It is permitted to distribute the Asset on condition that the recipient is not party X.

```
<o:permission>
  <o:asset uid="targetAssetURI" relation="ov:target"/>
  <o:action name="rml:distribute"/>
  <o:constraint name="rml:recipient" operator="ov:neq" rightOperand="p:X"/>
</o:permission>
```

requestedActionsPerformed	Requested actions performed	The state that a requested Action has been performed, e.g. removal. The right operand must contain either true or false. The constraint must be used in a Duty, and there must be at least one Duty to perform an Action on request within the same Permission.
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Example of use: It is permitted for the Assignee to add the Asset to their service, but this entails a Duty to remove the Asset from the service in the event that a removal request is received, and to inform the Assigner when the Asset has been removed.

```
<o:permission>
  <o:asset uid="targetAssetURI" relation="ov:target"/>
  <o:action name="rml:addToService" />
  <o:duty>
    <o:asset uid="targetAssetURI"/>
    <o:action name="rml:removeFromService"/>
    <o:constraint name="rml:actionRequestReceived" operator="ov:eq"
      rightOperand="p:true"/>
  </o:duty>
  <o:duty>
    <o:action name="ov:inform"/>
    <o:constraint name="rml:requestedActionsPerformed" operator="ov:eq"
      rightOperand="p:true"/>
    <o:party function="ov:informedParty" uid="licensorURI"/>
  </o:duty>
</o:permission>
```

Attribute 'rightOperand'

The following terms are to be used as category identifiers in the rightOperand attribute:

Identifier	Term	Definition
actionDateTime	Action date-time	The date and optionally the time at which the permitted Action is performed. To be used in Constraints on Duties, where the standard ODRL 2.0 term dateTime would be used to indicate the date-time at which the Duty is performed. The right operand must be date-time value or variable.



Identifier	Term	Definition
<p>Example of use: It is permitted for the Assignee to copy the Asset, but this entails a one-off Duty to obtain a license to do so before the Asset is copied.</p> <pre data-bbox="97 309 1165 622"> <o:permission> <o:asset uid="targetAssetURI" relation="ov:target"/> <o:action name="rml:copy"/> <o:duty> <o:asset uid="copyLicenseURI"/> <o:action name="ov:obtainConsent"/> <o:constraint name="ov:count" operator="ov:eq" rightOperand="1"/> <o:constraint name="ov:dateTime" operator="ov:lt" rightOperand="rml:actionDateTime"/> </o:duty> </o:permission> </pre>		
requestReceivedDateTime	Request received date-time	A date-time category: the date and optionally the time at which the request to perform an Action was received. To be used in a dateTime Constraint on a Duty to perform a requested Action, when specifying the date and optionally the time at which the requested Action must be performed relative to when the request was received.
<p>Example of use: It is permitted for the Assignee to add the Asset to their service, but this entails a Duty to remove the Asset from the service in the event that a removal request is received, and to inform the Assigner within 24 hours that the Asset has been removed.</p> <pre data-bbox="97 1070 1197 1590"> <o:permission> <o:asset uid="targetAssetURI" relation="ov:target"/> <o:action name="rml:addToService"/> <o:duty> <o:asset uid="targetAssetURI"/> <o:action name="rml:removeFromService"/> <o:constraint name="rml:actionRequestReceived" operator="ov:eq" rightOperand="p:true"/> </o:duty> <o:duty> <o:action name="ov:inform"/> <o:constraint name="rml:requestedActionsPerformed" operator="ov:eq" rightOperand="p:true"/> <o:constraint name="ov:dateTime" operator="ov:ltEq" rightOperand="rml:requestReceivedDateTime + PT24H"/> <o:party function="ov:informedParty" uid="licensorURI"/> </o:duty> </o:permission> </pre>		
serviceDevelopment serviceDemonstration serviceTesting	Service development Service demonstration Service testing	To be used in a purpose Constraint
<p>Example of use: The assignee is permitted to make a copy of the Asset for service testing purposes.</p> <pre data-bbox="97 1769 925 1937"> <o:permission> <o:asset uid="targetAssetURI" relation="ov:target"/> <o:action name="ov:copy"/> <o:constraint name="ov:purpose" operator="ov:eq" rightOperand="rml:serviceTesting"/> </o:permission> </pre>		

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