



W3C TPAC • Lisbon • 19-23 October 2016



W3C Permission and Obligations Expression (POE) WG



Overview



- History of ODRL
- W3C POE WG
 - Scope
 - Deliverables
- Use Cases
- ODRL Information Model
- ODRL Vocabulary
- ODRL Expression
- Profiles
- ODRL Implementations

History of ODRL



- 2000-2011 ODRL Initiative
- ODRL Version 0.5 to 1.1
- W3C DRM Workshop (Jan 2001)
 - <https://www.w3.org/2000/12/drm-ws/>
- W3C NOTE ODRL V1.1 (Sept 2002)
 - <http://www.w3.org/TR/odrl/>
- ODRL Profiles
 - Creative Commons, Service-Oriented Computing
 - Dublin Core, Geospatial (Closed)
- Adopted by Open Mobile Alliance (OMA) - Part of DRM in Mobile handsets
- ODRL V2 Requirements and Early Drafts of Version 2.0
- Ten international ODRL workshops
- Website (odrl.net) archive
 - <https://www.w3.org/2012/09/odrl/archive/odrl.net/>



Context of RELs



- Rights Expression Languages (Circa 2000)
 - XrML (ContentGuard)
 - ODRL (Open group)
- Standardisation
 - MPEG-21 Part 5/6 & 20/21
 - IEEE/IMS Learning Content
 - OASIS
 - Open eBook Forum
 - OMA
 - Editeur ONIX Books
 - PRISM
 - PLUS Photo
 - Creative Commons (ccREL)

History of ODRL



- 2012-
- W3C ODRL Community Group
 - <https://www.w3.org/community/odrl/>
 - 53 Participants
- Version 2.0 and 2.1
 - JSON and Ontology encodings
- Linked Data Profile (draft)
- RightML Profile (International Press Telecommunications Council)
 - <http://rightsml.org>
 - Legal review of all V2.1 terms
- Implementations (10+)
 - <https://www.w3.org/community/odrl/implementations/>
- Proposed to become a W3C WG...

W3C WG



- 2016-2017
- W3C Permissions & Obligations Expression WG
 - <https://www.w3.org/2016/poe/>
 - 22 Members + 3 Invited Experts
- Chairs
 - Renato Iannella, Monograph
 - Ben Whittam Smith, Thomson Reuters
- Team Contact
 - Phil Archer, supported by the BigDataEurope project

POE WG Scope



- ODRL Community Group Specifications are the **baseline** for the TRs
- We will source additional Use Cases of the wider communities and industry
 - EU Projects
 - PLUS Photo metadata
 - Idealliance/PRISM
 - IEEE 1599
 - W3C Linked Data For Language Technology CG
 - etc...
- NOT in scope
 - Access control mechanisms
 - Digital rights management
 - Complete Rule language for combining statements
 - Enforcement mechanisms
 - Legal jurisdiction issues

Deliverables



Milestones (Rec Track)

Deliverable	FPWD	LCCR	PR	Rec
Permissions & Obligations Expression - Information Model	May 2016	April 2017	October 2017	December 2017
Permissions & Obligations Expression - Vocabulary	May 2016	April 2017	October 2017	December 2017
Permissions & Obligations Expression - XML Mapping	May 2016	April 2017	October 2017	December 2017
Permissions & Obligations Expression - RDF/OWL Mapping	May 2016	April 2017	October 2017	December 2017
Permissions & Obligations Expression - JSON Mapping	May 2016	April 2017	October 2017	December 2017

Note: The group will document significant changes from this initial schedule on the group home page.

ODRL Information Model
<http://w3c.github.io/poe/model/>

ODRL Vocabulary & Expression
<http://w3c.github.io/poe/vocab/>

Milestones (Notes)

Deliverable	FPWD	WG Note
Permissions & Obligations Expression - Use Cases & Requirements	May 2016	November 2016
Permissions & Obligations Expression - Formal Semantics	May 2016	November 2017

Note: The group will document significant changes from this initial schedule on the group home page.

POE UCR NOTE
<http://w3c.github.io/poe/ucr/>

Potential new NOTES



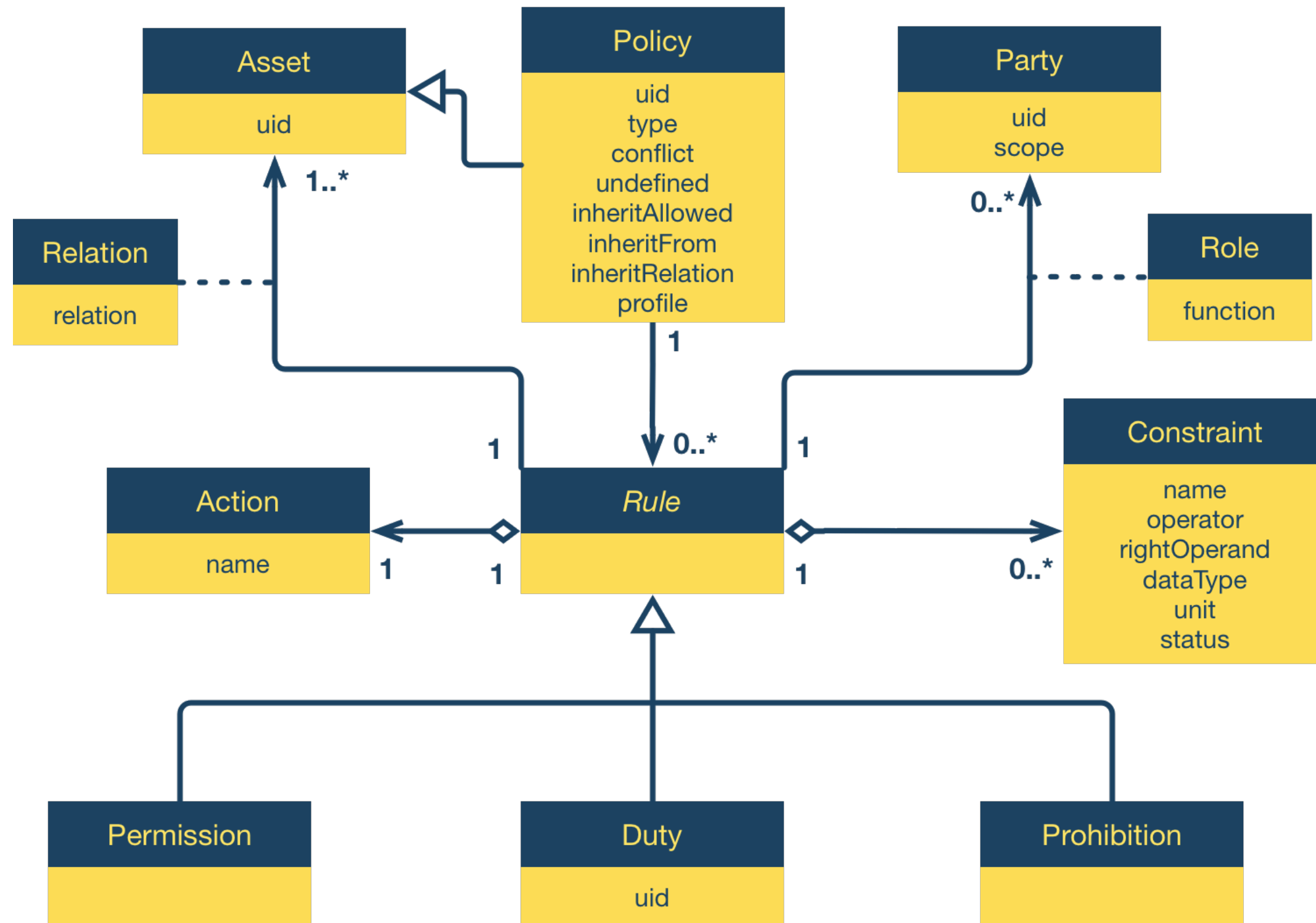
- Common Licenses/Mappings
 - How to map ODRL to common licenses
- ODRL "Best Practices" Guide
 - Examples and Implementor notes
- ODRL Linked Data Profile
 - Exemplar profile

New Use Cases

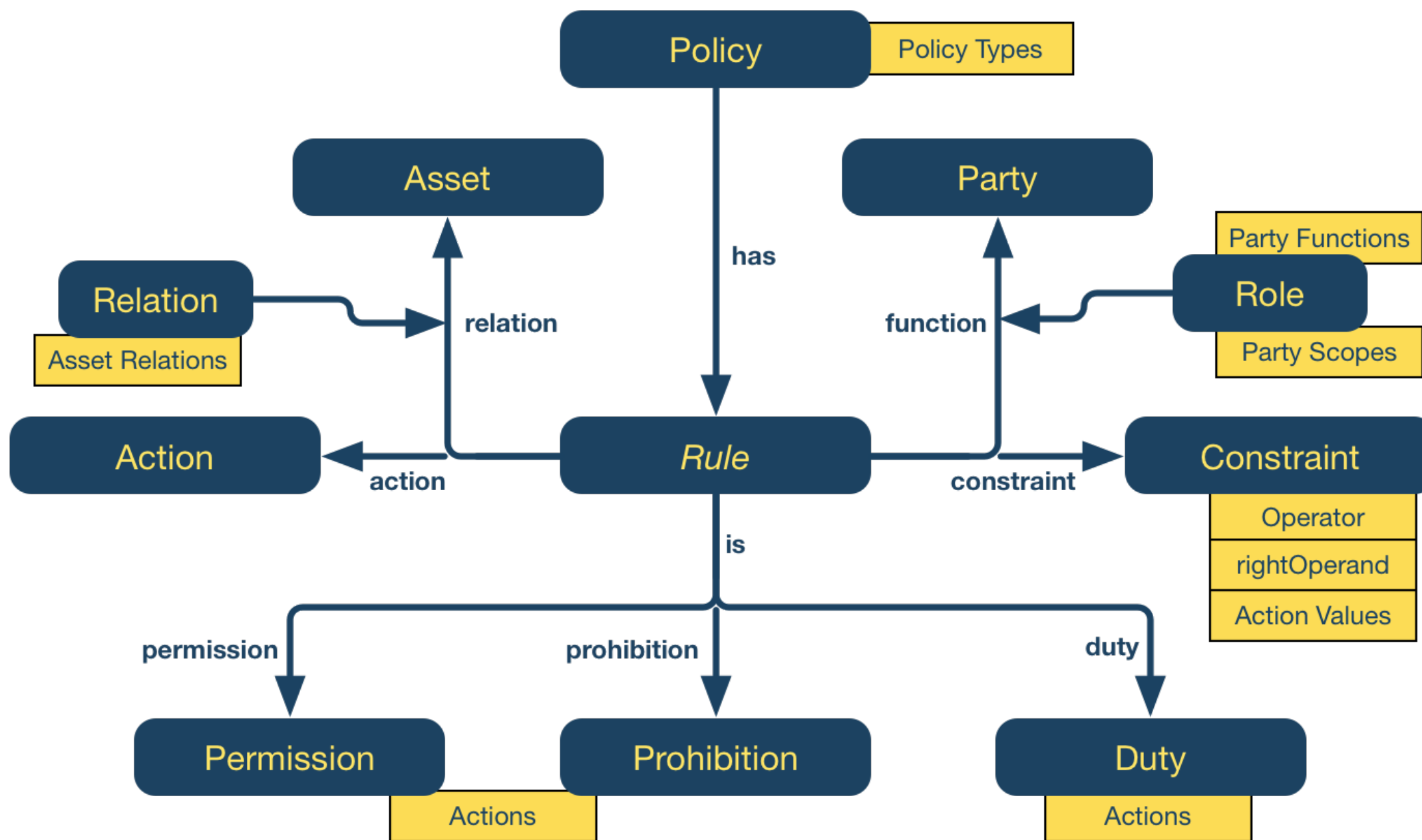


- <https://www.w3.org/TR/poe-ucr/>
- Support for:
 - Linked Datasets
 - Delegate Rights
 - Groups of Policies
 - Party roles
 - Policy Templates
 - Policy-level Duties
 - Policy Provenance properties
 - Complex Temporal Constraints (relative time)
 - Rules for extended relations (XOR, OR, AND)
 - Group/collections of Assets and Parties
 - New Policy Types (eg assertion)
 - Constraint on all parts of the model (eg parties)
 - etc...

ODRL Information Model



ODRL Vocabulary



ODRL Vocabulary



ODRL Expression



JSON

Turtle

XML

RDF/XML

N-Triples

EXAMPLE 3

```
{  
  "policytype": "http://www.w3.org/ns/odrl/2/Set",  
  "policyid": "http://example.com/policy:0099",  
  "permissions": [{  
    "target": "http://example.com/asset:9898",  
    "action": "http://www.w3.org/ns/odrl/2/reproduce"  
  }],  
  "prohibitions": [{  
    "target": "http://example.com/asset:9898",  
    "action": "http://www.w3.org/ns/odrl/2/modify"  
  }]  
}
```

ODRL Expression



JSON

Turtle

XML

RDF/XML

N-Triples

JSON

Turtle

XML

RDF/XML

N-Triples

EXAMPLE 4

```
@prefix odrl: <http://www.w3.org/ns/odrl/2/> .
```

```
<http://example.com/policy:0099>
```

```
  a odrl:Set;
```

```
  odrl:permission [
```

```
    a odrl:Permission ;
```

```
    odrl:target <http://example.com/asset:9898> ;
```

```
    odrl:action odrl:reproduce
```

```
  ] ;
```

```
  odrl:prohibition [
```

```
    a odrl:Prohibition ;
```

```
    odrl:target <http://example.com/asset:9898> ;
```

```
    odrl:action odrl:modify
```

```
  ] .
```

ODRL Expression



JSON

Turtle

XML

RDF/XML

N-Triples

JSON

Turtle

XML

RDF/XML

N-Triples

JSON

Turtle

XML

RDF/XML

N-Triples

EXAMPLE 5

```
<o:Policy xmlns:o="http://www.w3.org/ns/odrl/2/" type="http://www.w3.org/ns/odrl/2/Set" uid="http://example.com/policy:0099">
  <o:permission>
    <o:asset uid="http://example.com/asset:9898"
      relation="http://www.w3.org/ns/odrl/2/target"/>
    <o:action name="http://www.w3.org/ns/odrl/2/reproduce"/>
  </o:permission>
  <o:prohibition>
    <o:asset uid="http://example.com/asset:9898"
      relation="http://www.w3.org/ns/odrl/2/target"/>
    <o:action name="http://www.w3.org/ns/odrl/2/modify"/>
  </o:prohibition>
</o:Policy>
```

ODRL Profiles

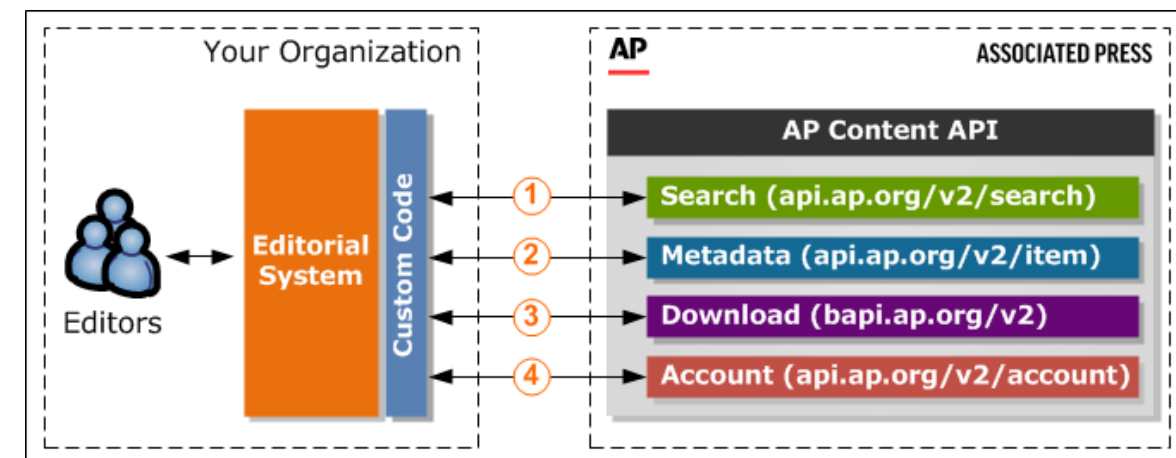


- Profiles enable a community to apply additional constraints and express additional terms that meet their specific requirements
- IPTC RightsML
 - Policy Type = Agreement
 - Smaller subset of Actions
 - Redefine some terms (narrower, more specific scope)
 - New Duties (eg `removeFromService`)
 - New Constraints (eg `requestedActionsPerformed`)
 - Vocab values (eg for `odrl:purpose`)

RightsML Implementations



- Associated Press - Image Archive API
- <https://developer.ap.org/ap-content-api>



```
"policytype": "https://www.w3.org/ns/odrl/2/Set",
"policyid": "https://api.ap.org/policies/6aef5ea3533922f726a1f12dd7dff406",
"permissions": [{
  "target": "https://api.ap.org/v2/item/fedf6ff0f6564fc29449f189d9242349",
  "action": "https://www.w3.org/ns/odrl/2/use",
  "assigner": "http://ap.org/",
  "constraints": [{
    "name": "https://www.w3.org/ns/odrl/2/purpose",
    "operator": "https://www.w3.org/ns/odrl/2/eq",
    "rightoperand": "http://cv.ap.org/odrl/purpose/editorial"
  }],
  "duties": [{
    "action": "https://www.w3.org/ns/odrl/2/compensate",
    "constraints": [{
      "name": "https://www.w3.org/ns/odrl/2/payAmount",
      "operator": "https://www.w3.org/ns/odrl/2/eq",
      "rightoperand": "20.00",
      "rightoperanddatatype": "https://www.w3.org/2001/XMLSchema#decimal",
      "rightoperandunit": "http://cvx.iptc.org/iso4217a/USD"
    }],
    "action": "https://www.w3.org/ns/odrl/2/reviewPolicy"
  }],
  "action": "https://www.w3.org/ns/odrl/2/reviewPolicy"
}]
```

Permit a particular asset

Restrict to editorial use

Indicate the required payment

Different currencies supported

Call out more complex restrictions

ODRL Implementations - Flatirons DAM



FLATIRONS®

<http://www.flatironssolutions.com/>

Results:



97805217687... .indd	97805217687... .indd	9780521768719.pdf						
1.0, CURRENT	1.0, CURRENT	1.0, CURRENT						
1.03 MB	2.55 MB	6.75 MB						
Indesign 2.x	Indesign 2.x	Acrobat PDF						
11/9/2009 12:34 PM	11/9/2009 12:34 PM	11/9/2009 12:34 PM						

Project Content

Select Languages For Publishing:

- ☒ Cantonese
- ☒ English
- ☐ French

Select Territories For Publishing:

- ☒ China
- ☐ France
- ☐ Japan

Select Publication Media:

- ☒ Print
- ☐ Display

Select Estimated Publication Date:

September 2010

September 2013

Results Filter

- ☒ Rights Cleared Assets
- ☐ Rights Denied Assets
- ☐ Has Comments - Print Restrictions
- ☐ Has Comments - General Restrictions
- ☐ Rights Restricted Assets
- ☐ No Rights Assigned Assets
- ☐ Has Comments - Electronic Restrictions

Results Clearance Summary

.../Chanda



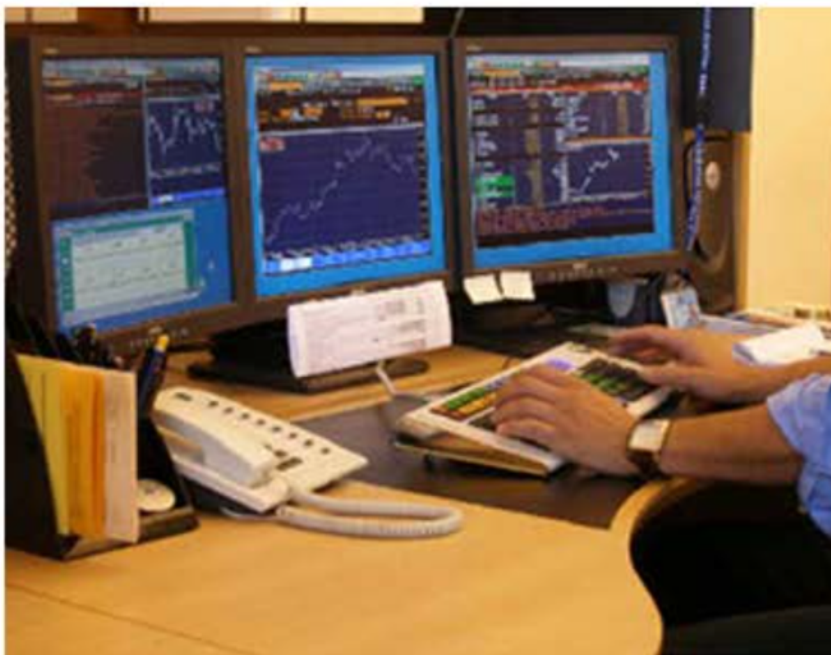
122 of 216

57 of 216

24 of 216

13 of 216

	Asset Name	Rights Status	Info	Format	Size	Modified
	97805217687345 .indd			.indd	1.03 MB	November 9, 2009
	9874562593736.indd			.indd	4.53 MB	December 14, 2008
	9895852741876.tiff			.tiff	3.07 MB	December 14, 2008
	9780521768719.pdf			.pdf	6.75 MB	November 9, 2009



RightsPro - Media store



<http://rightspro.com/>

The screenshot shows the RightsPro website interface. At the top, there's a navigation bar with the RightsPro logo, a search bar, and links for Home, My Account, and Sign out. Below the navigation bar, there's a progress bar with steps: Rights Holder, Add Content, Terms & Pricing, and Share With Buyers. The main content area displays the license details for 'Ray Gauss II - Annapolis Collection'. It includes a thumbnail of the collection, a table of usage statistics, and a grid of sample images. The usage statistics table shows 1 Use, 1 Project, and a payment of \$37.45. The sample images are arranged in a 2x4 grid, showing various scenes from the collection.

Uses	Projects	Payments
1	1	\$37.45

Use Pricing

How the Content is Used

PLUS - 2BOB*

Media Category: Advertising

Media Type: Periodicals

Media Detail: Magazine (Consumer Magazine)

Distribution Format: Printed

Version: Single Version

Size: Up To 1/4 Page Image (Up To 1/4 Page Ad)

Placement: Multiple Placements on Any Interior Pages

Region: Northern America (USA)

Quantity: Up To 1 Million

Duration: Life Of Publication

Industry: Chemicals
Communications Equipment and Services
Computer Hardware, Software and Peripherals
Construction and Contracting

Language: English
Afrikaans
Arabic

Exclusivity: Non-Exclusive
All Exclusive
Exclusivity For Industry

ODRL + PLUS

4SGF = Unit: Type = ONIX:PrintSizePe
Range
Maximum = 0.25

Send MMS Message



To:		Address Book
From:		
Subject:		
Text:		
Content File(s):	Choose File No file chosen Choose File No file chosen Choose File No file chosen Choose File No file chosen Choose File No file chosen Choose File No file chosen Choose File No file chosen Choose File No file chosen Choose File No file chosen Choose File No file chosen	
Note: To send a pre-compiled MMS message file (.mms file extension), specify the filename of the message file in the first Content File field. Otherwise, you can optionally specify up to 10 files to be included in the content of the MMS message.		
Send as BCC:	☐ Yes ☒ No	
Delivery Report:	☐ Yes ☒ No	
Read Report:	☐ Yes ☒ No	
Priority:	☐ High ☒ Normal ☐ Low	
Message Class:	☒ Personal ☐ Informational ☐ Advertisement	
Forward Lock:	☐ Yes ☒ No	
Restrict Content w/ DRM:	☐ Yes ☒ No	
DRM Rights Format:	☒ Binary WBXML ☐ Text XML	
DRM Permissions:	☐ Play (Audio or Video) ☐ Display (Image) ☐ Execute (Application) ☐ Print	
DRM Constraints:	# of Accesses (count): Start Date (yyyy-mm-dd): End Date (yyyy-mm-dd): # of Days (interval):	
Additional headers: (optional)		
	Submit	

1 Billion+ Handsets



OMA ODRL Profile

Monegraph - ODRL on the BlockChain



m 7710775905

Hong Kong High-rise Life Renato Iannella

Share More by Renato Iannella

Details

CLASSIFICATION

Snapshot

DESCRIPTION

High-rise apartment building in Hong Kong

DIMENSIONS

2448 × 3264

UPLOADED

Jan 27, 2016

FORMAT

JPG



Unlimited License



Renato Iannella
is the current owner

2mb

2448px × 3264px

\$25

BUY

UNLIMITED

The current owner retains the ownership of the rights and grants you the ability to download the source files for use as outlined in the classification.

SNAPSHOT

With the exceptions of remix and resale specified below, media may be used for any purpose, commercial or otherwise.

CAN REMIX

You have the right to create a derivative work using this media as source material.

CAN NOT RESELL

You do not have the right to resell this work to another person.

This contract grants the following rights:

(right assigner's Bitcoin address → right recipient's Bitcoin address)

Title Amendment

The right to amend the title.

rightbase → 17dbMQtedPwNZxUBafnDbSQ9tgFYDqJUXJ

Transfer Sublicense

The right to transfer the "Sublicense" right to another entity.

rightbase → 1FA5xheJuFKtR7Yb2SCjCSSNscfjZLL2eT

Transfer Remix

The right to transfer the "Remix" right to another entity.

rightbase → 166tSzoFxAx42NVy9SwsZnK2Hq9ymQafmJ

Remix

You have the right to create a derivative work using this media as source material.

rightbase → 12gDXa6roYq5tY78smSo3jY4BxwQLEnUtp

Resell

You can sell this work to another person, transferring all relevant rights to them.

rightbase → 1G1R23EBYjszrwxtGpTFHeKwkZ4NNYTdLn

Use

The right to use a work based on the classification of the work.

rightbase → 1CQ54YwbYBd4B6bX8SimcBu8CC9dVSeNNQ

Ownership Title

The title of the work.

rightbase → 15R1GJsolBPfcLxvVoNtsSopA48h39eYHE

Sublicense

The right to sublicense the work.

rightbase → 1NbhNCoqVjTHHSKfb6Ai7KkpkmmTq3YXi

CANCEL

CUSTOMIZE LICENSE

Tap on labels to edit

I want to **sell** this **exclusive** **snapshot**
for **\$25** that the owner can resell &
can remix

Monegraph - ODRL on the BlockChain



CANCEL

sell

transfer

register

Set edition size

Exclusive

Limited Edition
13

Unlimited

You create a specified number of editions for this work that are sold individually. The buyer of an edition can resell the edition they purchase.

1 EXCLUSIVE

UNLIMITED

Set a price for your work

I want to

sell

this

exclusive

snapshot

TAP TO EDIT

\$

100

\$25

that the owner can res

can remix

Allow buyer to remix?

Allow Remix

No Remix

This work cannot be used as editable source materials for derivative works.

Classify your work



Artwork



News Photo



Product Image



Snapshot

A commercial agreement that gives virtually all rights over to the buyer

TPAC Agenda



- Thursday/Friday
 - <https://www.w3.org/2016/poe/wiki/Meetings:TPAC2016>
- Discuss new Use Cases
- Ratify Requirements
- Commence Design changes for
 - ODRL Information Model
 - ODRL Vocabulary
 - ODRL (3) Encodings
- Populate GitHub Issues
- Plan new NOTES
- Release next WDs by mid December 2016