



A Future Path for ODRL



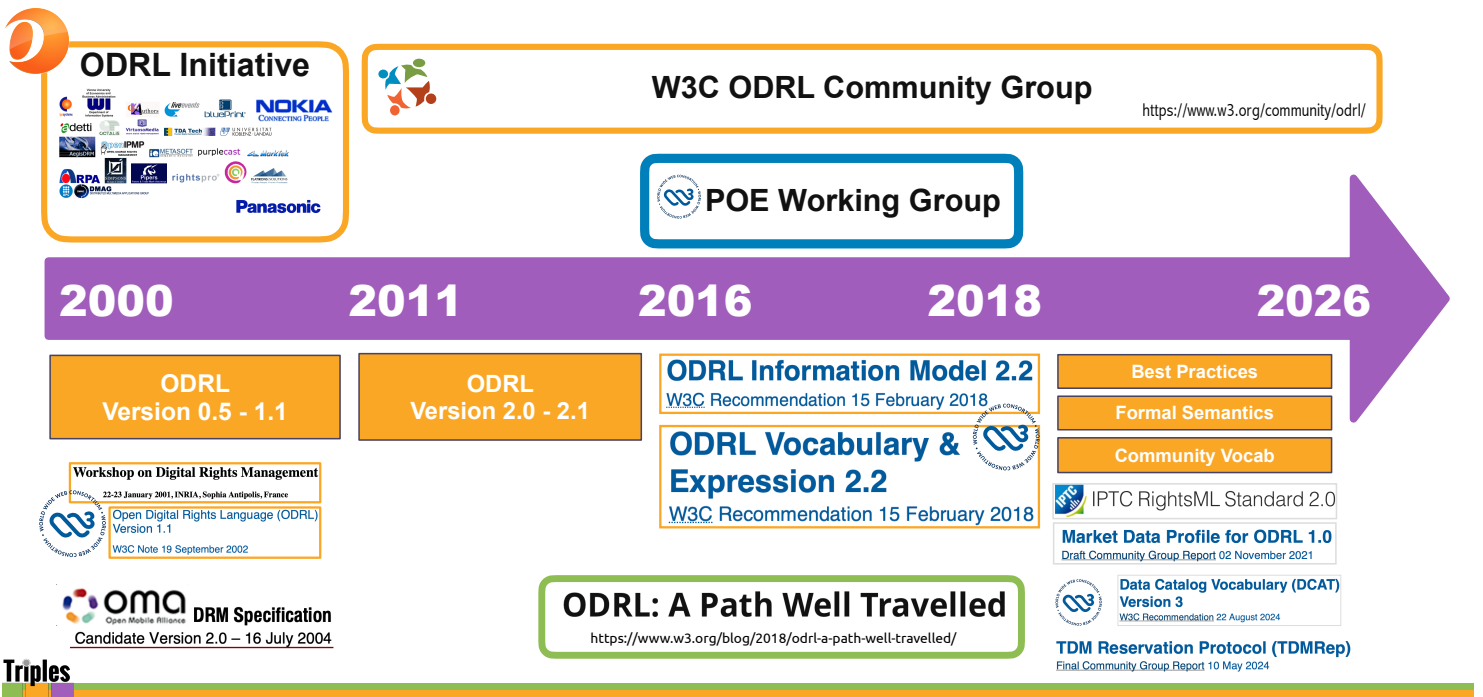
Dr Renato Iannella

Co-Chair, W3C ODRL Community Group
Principal Strategic Advisor, Triples
r@iannella

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ODRL - How We Got Here



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Back to the Future...



- **The W3C “Workshop on Digital Rights Management for the Web”**
 - 22/23 January 2001, Sophia-Antipolis, France
 - <https://www.w3.org/2000/12/drm-ws/>
- **Final Report “Next Steps”**
 - The creation of a W3C “Rights Management Framework”
 - Work split between a small number of specialised WG’s and a larger number of formal links to related efforts
 - Within W3C, MPEG, IETF, OpenEBook, <indec> and Industry
 - The Framework WG, as a Coordination Group would be responsible for mapping the relevance of related efforts into the Framework and recommending integration best practice

Open Digital Rights Management

A Position Paper for the W3C DRM Workshop

Renato Iannella
IPR Systems Pty Ltd
<http://www.iprsystems.com>
renato@iprsystems.com

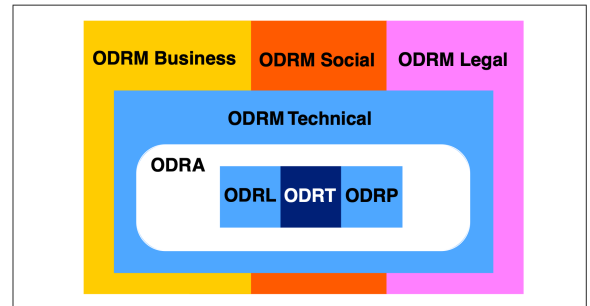


Figure 1. ODRM Framework

The ODRM Technical stream consists of an Architecture (ODRA) which includes a Trading Protocol (ODRT) and Protection (ODRP) mechanisms with the Language (ODRL) clearly focused on solving a common and extendable way of expressing Rights assertions within this Architecture.

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Early days: DRM Wars, Patents!



International ODRL Workshop 2004

Vienna, Austria

22-23 April 2004



Critical review of MPEG LA software patent claims
The usage of open source rights expression languages
must be royalty free

By: Dr. Susanne Guth, Vienna, Austria and Dr. Renato Iannella, Brisbane, Australia

INDICARE Monitor Vol. 2, No 1, 25 March 2005

https://www.itas.kit.edu/downloads/projekt/projekt_orwa04_indicare_99.pdf

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ODRL - Recent Activities



International Standard
 Information technology — JPEG Trust —
 Part 1: Core foundation
 ISO/IEC 21617-1
 First edition 2025-01

ROLLING PLAN FOR ICT STANDARDISATION 2026
 Study on copyright and new technologies: Copyright data management and artificial intelligence
WORLD WIDE WEB CONSORTIUM (W3C)
 with standards for signing and encryption, The Open Digital Rights Language (ODRL), a policy expression language that provides a flexible and interoperable information model, vocabulary, and encoding mechanisms for representing statements about the usage of content and services.
COPYRIGHT TASK FORCE

Gaia-X
INTERNATIONAL DATA SPACES ASSOCIATION
DATA SPACES SUPPORT CENTRE
ODRL Profile for Attribute based access/usage control using Verifiable Credential claims

Domains/Sectors

Media, Publishing & Creative Industries (original stronghold)
Finance: Market Data Licensing
 JPMorganChase

AI Governance
Vocab

Research/Academic
 AgentODRL: A Large Language Model-based Multi-agent System for ODRL Generation
 Wenzhe Zhang, Keman Huang*, Xinyang Du
 School of Information, Renmin University of China
 Denotational Semantics for ODRL: Knowledge-Based Constraint Conflict Detection
 Dabian M. Mustafa^{1,2}, Diego Collares³, Yixin Peng¹, Rafiqul Haque⁴, Christof Lamm-Peterson^{1,2}, Christof Ohm^{1,2}, and Stefan Dieckel^{1,2}

W3C Standard ODRL Policy gaining industry adoption
<https://www.w3.org/blog/2025/w3c-standard-odrl-policy-gaining-industry-adoption/>
<https://w3c.github.io/odrl/landscape/>

Linked Web Storage Protocol 1.0
 W3C Working Draft 22 June 2026

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Key Strategic Points



- The original ODRL Information Model is “sound and robust”
 - But needs to be supported by a “Semantic Model” to provide clarity in policy evaluation
- The ODRL vocabulary is ever expanding (and small community profiles are rare)
 - Redesign of the vocab hierarchy (use and reuse...)
 - Need a new dynamic way to include new terms and governance
 - W3C Registry Track: <https://www.w3.org/policies/process/#registries>
 - Register terms for the rightOperand?
- Community Profiles need more tangible guidance
 - Develop a comprehensive example to use as a template
- Some Community Profiles are very strategic...
 - Finance...Media (images)...Data Spaces...AI... ?
 - Can these become W3C Recommendations?
 - Others may take longer time frames (Publishing...?) and need support in the CG longer term

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Key Strategic Points



- **ODRL Policy Evaluation**
 - Aka the “state of the world” work-in-progress
- **ODRL Policy Enforcement**
 - Need new “ODRL Authorisation Profiles”
 - Mapping of ODRL to current “Policy Management Platforms”
 - CEDAR - <https://docs.cedarpolicy.com>
 - Open Policy Agent - <https://www.openpolicyagent.org/docs/policy-language>
 - Google Zanzibar - <https://authzed.com/learn/google-zanzibar#what-is-google-zanzibar>
 - Open Security Controls Assessment Language (OSCAL) - <https://pages.nist.gov/OSCAL/>
- Greater enterprise integration will support wider industry adoption
- Publishing more working and supported Reference Software and Tools (Wizards!!)
- Do we need an “ODRL API” ?

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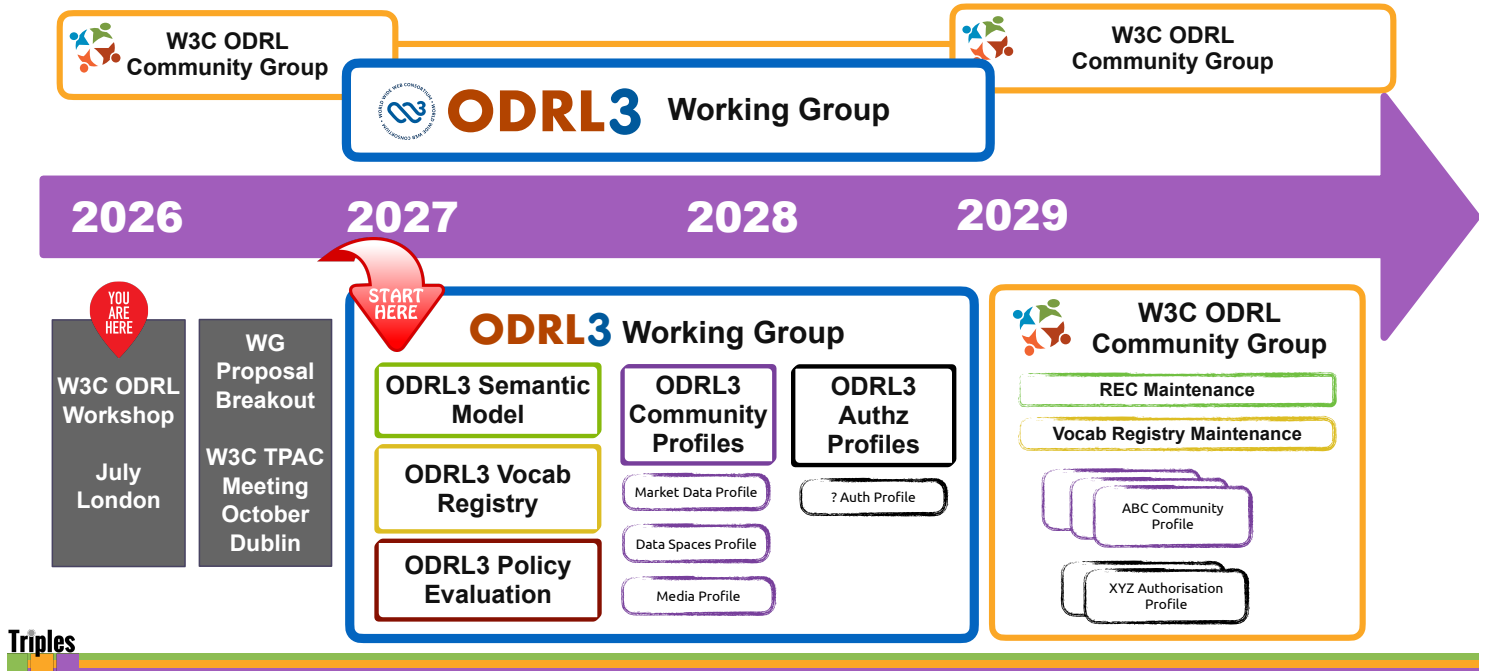
Some Technical Points



- **Use OWL more**
 - ODRL is not a SKOS Vocabulary (too limiting)
 - Add OWL reasoning axioms
- **Need SHACL rules for Validation**
 - Rules?
- **ODRL V3.0 will need a new Namespace**
 - (The WG may determine if it is a V2.5 ?)
- **Develop a forward-compatibility conversion process**
 - Backwards?

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ODRL - Future Roadmap



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ODRL WG Charter...



- **Proposed Timeline: Jan 2027 to Dec 2028**
- **Nominate Co-chairs**
- **Determine Task Groups and Leads**
- **Determine Deliverables List (Recommendations, Registries, Notes)**
 - **Determine Document Editors**
 - **Determine deliverable dependencies and dates**
 - **Some Profiles could start in the WG but may be transferred to the CG**
- **Determine meeting schedule (online and F2F at TPACs)**
- **Determine W3C/CG coordination (other WGs and CGs)**
 - **(Verifiable Credentials, Linked Web Storage, DCAT, SOLID)**
- **Determine External coordination**
 - **JPEG Trust, Data Spaces, Finance**
 - **(AD-ID, DDEX, IPTC, and ONIX)**
- **Draft WG Charter should be ready for TPAC meeting (end of October) Breakout Session**
 - **Gather more support/consensus**

<https://www.w3.org/2016/poe/charter>

Permissions & Obligations Expression Working Group Charter

1. Scope

The semantic information model, vocabulary, and serializations will start from the ODRL specifications, developed by the W3C ODRL Community Group. The ODRL work began 15 years ago and has been evolving the specification to meet industry and community requirements with wide scale adoption. Over the past few years the group transformed into the W3C ODRL Community Group and has created five updated Version 2.1 specifications (an information model, vocabulary, XML encoding, JSON encoding, and ontology). The current ODRL specifications are deployed as profiles by business sectors, for example the IPTC has adopted ODRL for licensing online news articles.

3. Deliverables

The titles of the deliverables are not final; the Working Group will have to decide on the final titles as well as the structures of the documents. The Working Group may also decide to merge some deliverables into one document or produce several documents that together constitute one of the deliverables.

3.4 Milestones (Recommendation)

Deliverable	FPWD	LCOR	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.

4. Dependencies and Liaisons

4.1 W3C Groups

Legal Publishing Interest Group

The Permissions & Obligations Expression work is highly relevant for the Publishing Community at large that this group represents within W3C. Data on the Web Best Practices and Spatial Data on the Web Working Groups. Permissions and Obligations are highly relevant to the sharing of data on the Web.

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ODRL WG Success...



- **Technical Success**
 - ODRL becomes the default, interoperable policy language for expressing permissions, prohibitions, obligations, and constraints
- **Industry Adoption**
 - Success means ODRL is used in production by organisations across multiple sectors, not just in research projects or standards discussions
- **Vendor Support**
 - Long-term success requires commercial support
- **Standards Ecosystem**
 - ODRL should become the policy layer used by other standards rather than operating in isolation
- **Governance Success**
 - The community should be self-sustaining
- **Educational Success**
 - ODRL should become something practitioners routinely learn
- **Policy Success**
 - The most important measure is that organisations stop inventing proprietary policy languages
 - Instead, they use ODRL as the common exchange language while retaining their own internal implementations

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ODRL Consortium Alliance...



- **ODRL Vision Statement**

“ODRL is the foundational policy layer for the digital economy, enabling data, AI, digital assets, and services to be governed through a common, machine-actionable rules language. By providing a shared semantic framework for expressing usage, compliance, and governance policies, ODRL enables organisations to exchange digital resources with confidence, automate policy-aware systems, and build interoperable ecosystems at global scale”
- ODRL needs an “Industry Alliance” behind it to meet this objective
- (Potentially a W3C Interest Group?)



Building the Future of Digital Policy



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