1st International Workshop on ODRL and beyond: Practical Applications and challenges for poLicy-base access and usage control (OPAL2025)

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Abstract

The goal of the first International Workshop on "ODRL and beyond: Practical Applications and challenges for poLicy-base access and usage control" (OPAL2025)[1] is to bring together researchers and practitioners interested in the scientific, technological, and practical aspects and challenges in implementing systems to control policy-based access to and use of online data and resources. The workshop was held in conjunction with the 22nd Extended Semantic Web Conference (ESWC 2025) in Portorož, Slovenia, on 1st June, 2025.

Keywords

Open Digital Rights Language (ODRL), Policy, Permissions, Prohibitions, Obligations, Duties.

1. Introduction

The goal of the first International Workshop on "ODRL and beyond: Practical Applications and challenges for poLicy-base access and usage control" (OPAL2025)[1] is to bring together researchers and practitioners interested in the scientific, technological, and practical aspects and challenges in implementing systems to control policy-based access to and use of online data and resources.

Indeed empowering individuals and organisations to share data responsibly and efficiently has become a critical challenge in today's digital landscape. Over the past few years, various standards, descriptive languages, and technologies have emerged to address this need, enabling greater control, transparency, and interoperability in data-sharing practices. Among these, the Open Digital Rights Language (ODRL) is the W3C language to represent policies related to permissions, prohibitions, and obligations in various data-usage and digital rights management scenarios. ODRL 2.2 has a core Information Model[2] and a Core and Common Vocabulary[3] specified using Semantic Web technologies.

In recent years, significant efforts have been dedicated to enforcing and evaluating ODRL policies, moving from theoretical exploration to practical implementations. This progress is exemplified by the recognition of ODRL as a recommended standard for building data spaces as discussed by the International Data Spaces Association, Gaia-X, or FIWARE, as a road to European digital sovereignty.

However, while ODRL has proven valuable for establishing rights management frameworks, several questions remain regarding its real-world application and the challenges associated with practical use

[1]https://opal-workshop.github.io/2025/

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[1]https://opal-workshop.github.io/2025/
[2]https://www.w3.org/TR/odrl-model/
[3]https://www.w3.org/TR/odrl-vocab/

cases. The workshop aimed to gather researchers, practitioners, and stakeholders to share practical experiences, innovative applications, and lessons learned from using ODRL in diverse scenarios.

The workshop was held in conjunction with the 22nd Extended Semantic Web Conference (ESWC 2025) in Portorož, Slovenia, on 1st June, 2025. The workshop received 11 submissions, of which 8 were accepted as regular papers for publication in the proceedings and 3 as poster/demo papers.

2. Chairs

- Andrea Cimmino, Universidad Politécnica de Madrid, Spain.
- John Domingue, The Open University, United Kingdom.
- Nicoletta Fornara, Università della Svizzera italiana, Switzerland.
- Víctor Rodríguez-Doncel, Universidad Politécnica de Madrid, Spain.

3. Program Committee

- Ines Akaichi, Institute for Information Systems & New Media, Austria.
- Cristina Baroglio, Dipartimento di Informatica, Università di Torino, Italy.
- Piero Bonatti, University of Naples Federico II, Italy.
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- Renato Iannella, Semantic Identity, Australia.
- Luis Ibanez-Gonzalez, University of Southampton, UK.
- Monica Palmirani, ALMA MATER STUDIORUM - Università di Bologna, Italy.
- Harshvardhan J. Pandit, Dublin City University, Ireland.
- Yassir Sellami, Gaia-X Association for Data and Cloud, Belgium.
- Simon Steyskal, Siemens AG, Austria.

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