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Theme

2. Empowering Research Communities: Turning Metadata into Action
OR
5. From Minimum Requirements to FAIR and AI-Ready: Assessing Metadata Quality

Format

Extended Workshop (2 × 1.5 hours with a short break)
Interaction format – training, hack session

Technical requirements

- Projector
- Whiteboard, pens & pointer
- Sticky notes
- Stable internet connection
- Technical requirements for attendees: own laptop, notebook, Firefox installed

Target audience

Repository managers, datastewards, PID infrastructure providers.

Absolute beginner to advanced & users who work with DOI metadata but may never have used an API before.

Building Confidence with Research Metadata at Scale

Description

This hands-on, in-person workshop empowers research support professionals to move beyond static metadata views and actively **interrogate, assess, and act on DOI metadata at scale** using the DataCite API. Using the DataCite metadata schema as a practical reference point, participants will work directly with real DOI metadata to identify **which metadata elements most strongly influence discovery, reuse, trust, and decision-making**. While DataCite is used as a reference implementation, the principles shown in this workshop apply to other PID-based and metadata-rich infrastructures as well.

Rather than inspecting records one by one, the workshop introduces the DataCite API as an accessible way to **turn metadata into evidence**. Participants will learn how to translate everyday institutional and research questions such as *Which records are missing licenses?*, *How well are ORCIDs or RORs adopted?*, or *Which outputs are funded by a specific organisation?* into concrete, reproducible API queries.

The focus is not on software development, but on **practical metadata literacy**: understanding how metadata is structured, how it can be queried systematically, and how enriched metadata can be used to support curation, reporting, policy monitoring, remediation planning, and decision support systems. Through guided, browser-based exercises, participants will explore high-impact metadata fields, including licenses, relatedIdentifiers, subjects (controlled and free-text), affiliations, funders, descriptions, and relations, across repositories and disciplines. Assessing this kind of structured metadata is not only a prerequisite for machine-actionable reuse but also a way to evaluate FAIR maturity and AI-readiness.

By the end of the workshop, participants will be equipped to move from abstract discussions about “better metadata” to **actionable insights**, using APIs not as technical barriers but as practical tools for quality assurance, institutional reporting, and strategic communication within their research communities.

Expected Outcomes

After the workshop, participants will be able to:

Turn metadata into evidence for decision-making

- Create **clear, defensible reports** to support management, policy, and strategic decisions.
- Use API results to prioritise metadata remediation and quality improvement efforts.
- Understand and explain the **value of specific metadata fields** (e.g. licenses, relations, controlled subjects) to stakeholders.

Communicate metadata value effectively

- Translate technical metadata signals into **insights meaningful to researchers, managers, and decision-makers**.
- Demonstrate how enriched, structured metadata supports machine-actionable reuse, improves discovery, and trust.
- Help researchers understand how they can **enhance their own records** to increase visibility and impact.

Confidently answer practical metadata questions using the DataCite API, including how to:

- Assess metadata completeness and quality
- Explore people, organisations, and funding
- Analyse topics, types, and descriptions
- Investigate relationships and structure

Overall, participants will leave with a **reusable set of query patterns**, a stronger understanding of how metadata functions as infrastructure, and the confidence to use metadata as an **operational asset** for research support, discovery, and decision support systems.