LMU LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN

DIGITAL SERVICES

UB

LMU and UGA Libraries: Emerging Trends in Research Data Management

Lightning Talk “Technical Components of RDM”

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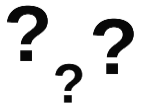
Disclaimer

- Based on personal experiences @ University Library LMU Munich
- Reflection on the challenges during the implementation of our project(s)

Decisions, decisions

- What are my options?
  - Solution “out of the box”  
  - DIY  + 
- Project planning
  - What are my needs?
  - How does my data look like?

Our ecosystem

- Fedora (→ OCFL)
- Solr
- Blacklight
- “Magic” (in form of ETL and Integration Patterns)

Our current (and expected) data

- Several projects with different data requirements
  - ~5.000.000 files / ~150GB on disk / text-based / complex metadata
  - ~200 objects / ~900GB on disk / misc. / simple metadata
  - ~5.000 objects / ~10TB on disk / digitization / (very) complex metadata

Challenges

- Problems to unify information internally
  - Unique identifiers across all platforms?
  - Metadata requires transformations and (lots of) adjustments
- Very intense and extensive ETL processes
  - Each project requires a different approach
  - Data transformations
  - Indexing your data. How is your index going to support everything
  - Requirements are volatile

Why choosing this option?!

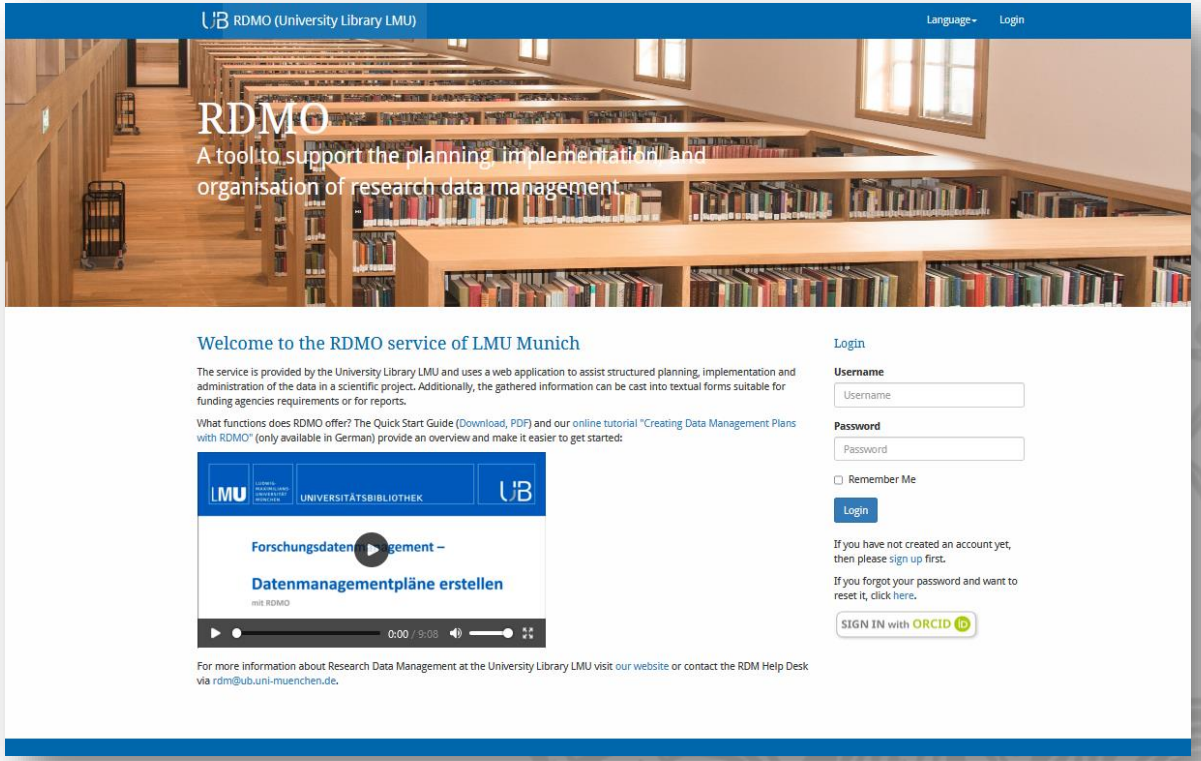
- Flexibility
- Achievements
  - Unified metadata format (rdUB)
  - Unique identifiers across all our platforms within the framework
  - Integration with other platforms
- Fedora was key
  - OCFL
  - Messaging
  - Documentation

Recommendations

- Do not be afraid to try
- Tools and documentation are there to help you
- Flexibility towards having the full control on what you need

Data Management Plans (DMP)

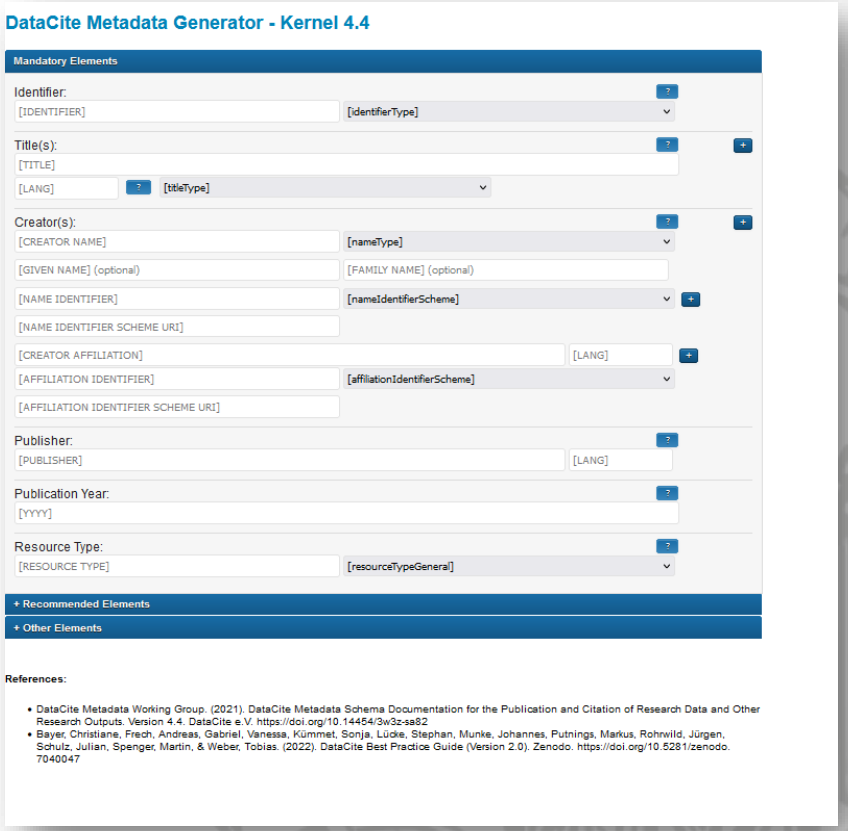
- Research Data Management Organiser (RDMO)
  - https://rdmo.ub.uni-muenchen.de/
  - Tool to create DMPs
  - Various questionnaires to address specific funder requirements
  - Various export formats and PDF support
  - Registration via ORCID ID or e-mail



Metadata Management

- DataCite Best Practice Guide
  - https://doi.org/10.5281/zenodo.7040047
  - Overview of DataCite (for researchers and library staff)
  - Detailed examples
  - Components on GitHub: https://github.com/UB-LMU/DataCite_BestPracticeGuide

- DataCite Metadata Generator
  - https://dhvlab.gwi.uni-muenchen.de/datacite-generator/
  - Tool to create machine-readable metadata
  - Based on DataCite Best Practice Guide
  - Easy to reuse: https://github.com/UB-LMU/datacite-metadata-generator



Thank you!

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