UNIVERSITY OF OSLO

Spectrum Discover for Data Management – FAIR@uio

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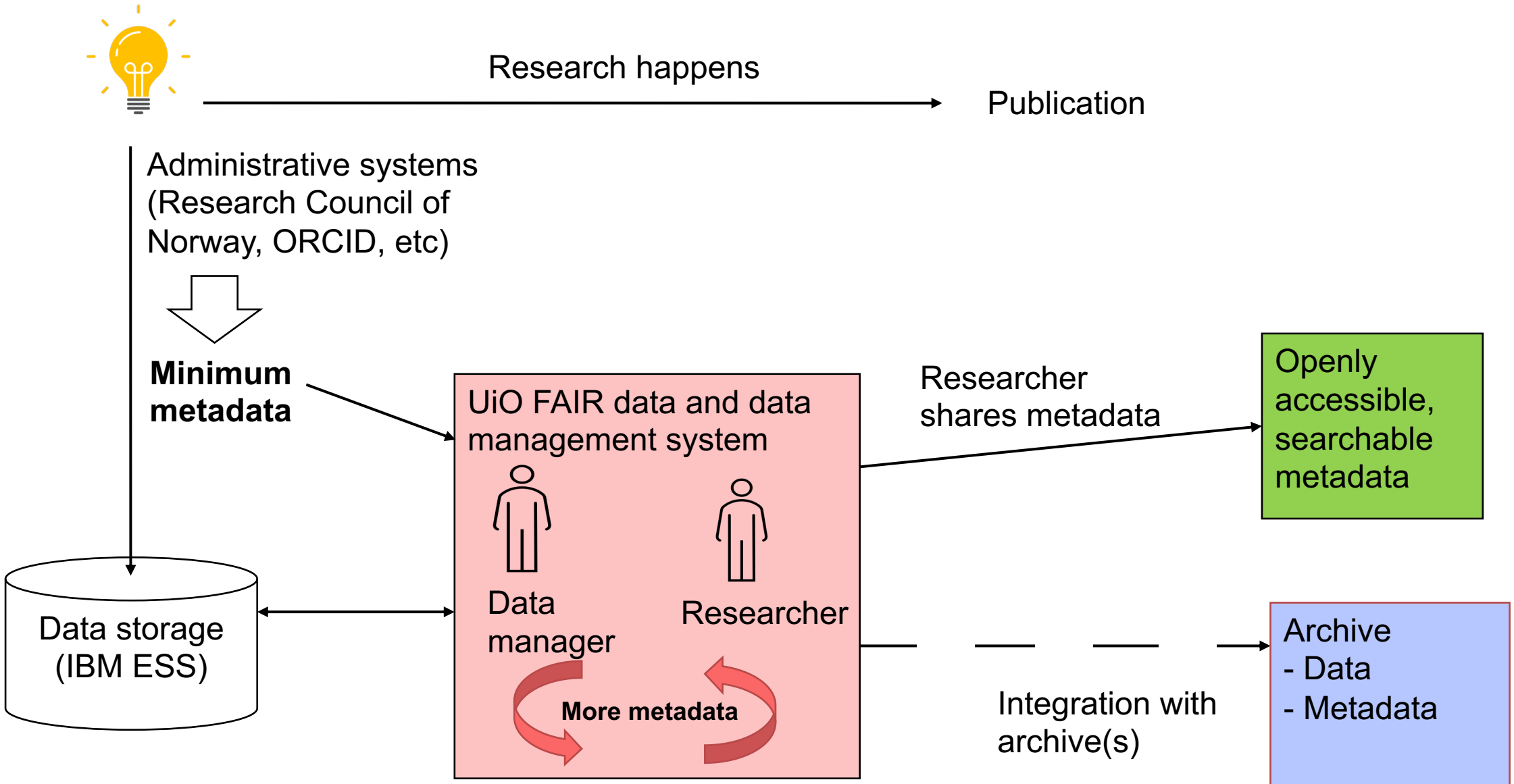
Findable Accessible Interoperable Reusable

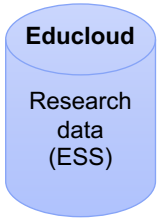
The FAIR@uio project

- **Goal: to collect as much metadata as possible automatically**
- Started out in late 2020
- Combination of IBM Spectrum Discover and our own software
- Every researcher manages their own (meta)data
- Make it easier to keep track of large data collections
- Share metadata openly


Research happens
Publication
Administrative systems (Research Council of Norway, ORCID, etc)
Minimum metadata
UiO FAIR data and data management system
Data manager
Researcher
More metadata
Researcher shares metadata
Openly accessible, searchable metadata
Data storage (IBM ESS)
Integration with archive(s)
Archive
- Data
- Metadata

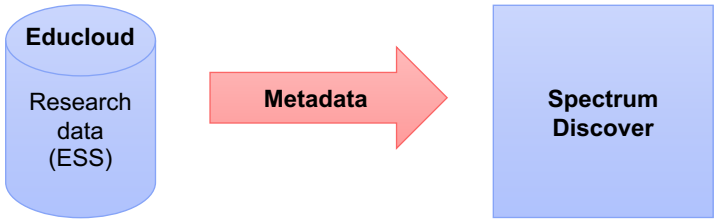
Educloud and Spectrum Discover

- Research data stored in Educloud project storage (ESS)



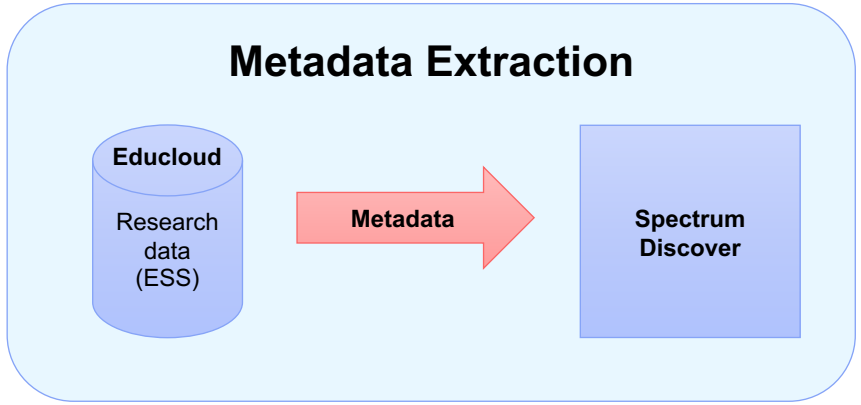
Educloud and Spectrum Discover

- Research data stored in Educloud project storage (ESS)
- Metadata extracted by Spectrum Discover (with applications)



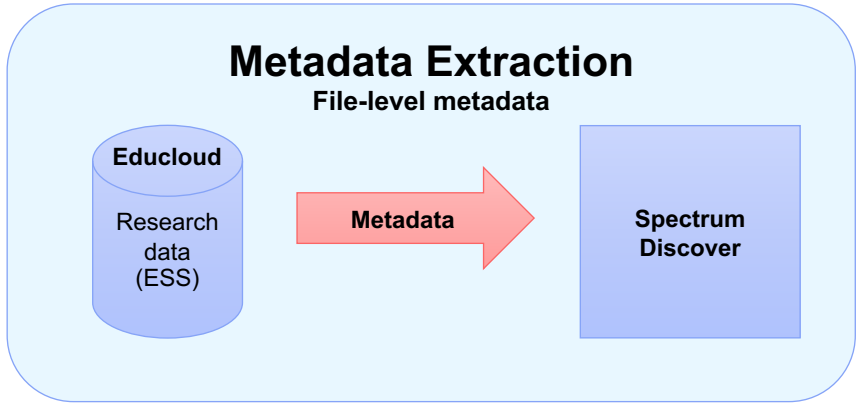
Educloud and Spectrum Discover

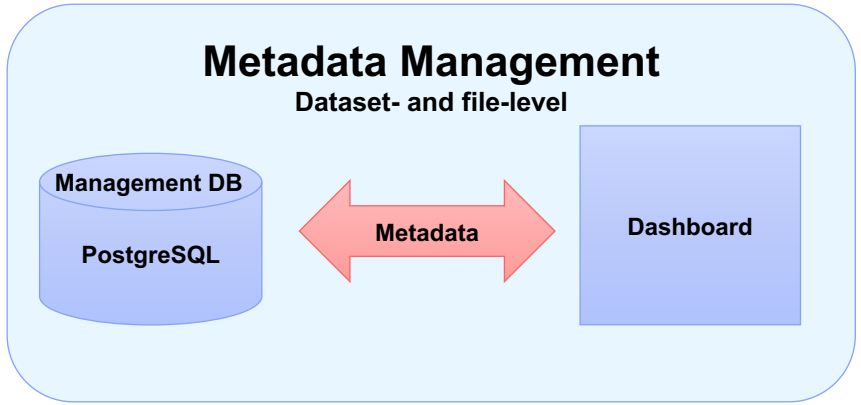
- Research data stored in Educloud project storage (ESS)
- Metadata extracted by Spectrum Discover (with applications)
- *File-level* metadata



Metadata management

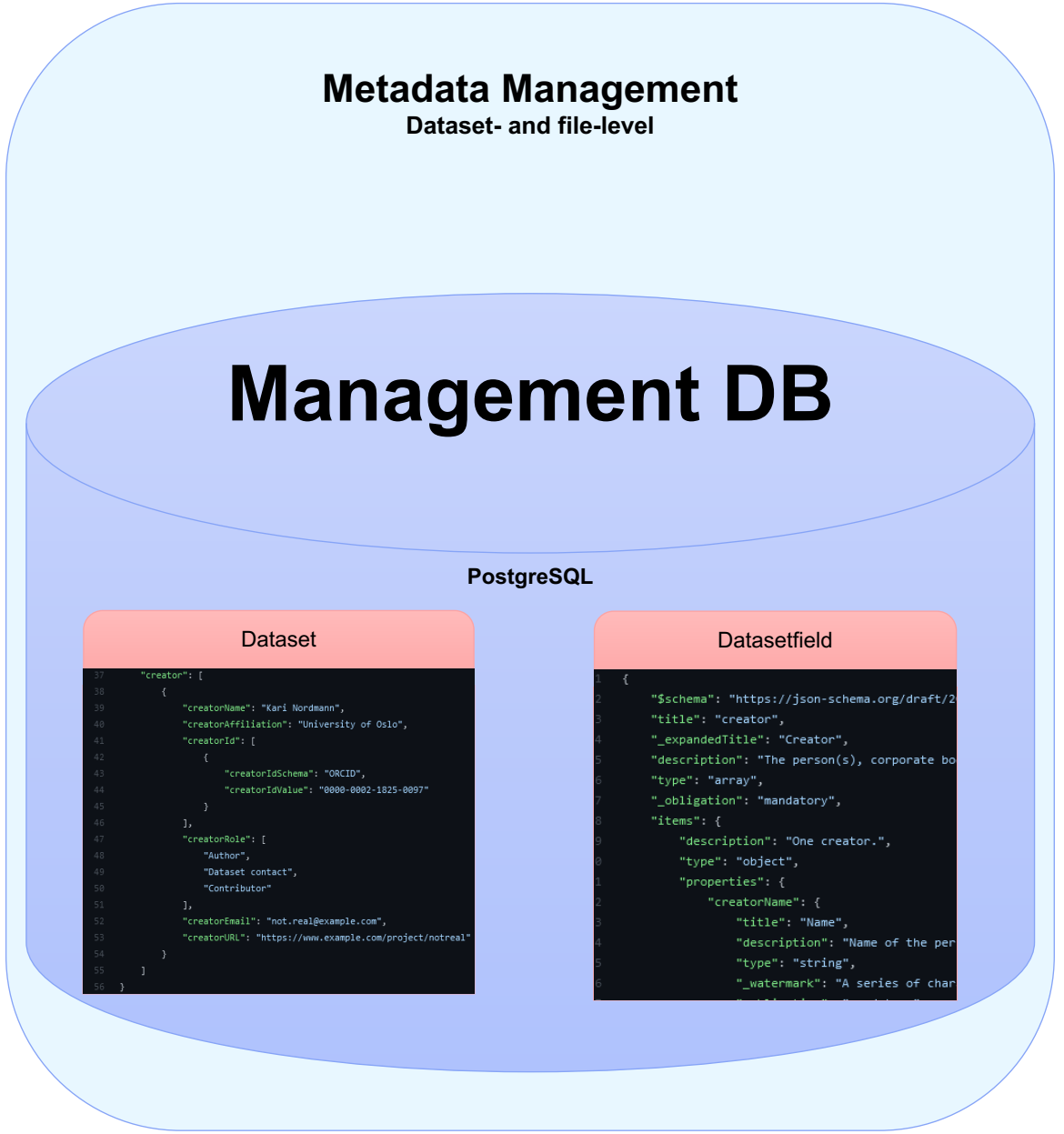
- *Dataset-level* metadata
- Import from external sources
- Export to multiple formats





Metadata management

- Why PostgreSQL?
  - Combines relational and document DB
- Data validation with json-schema
- Dataset metadata stored as JSON
- Researcher information
- Project information



Dashboard

Researcher interaction

- Project overview
- File-level metadata
  - Browse and edit
- Dataset-level metadata
- Metadata standards (tags)
- Researcher information
- Metadata publishing

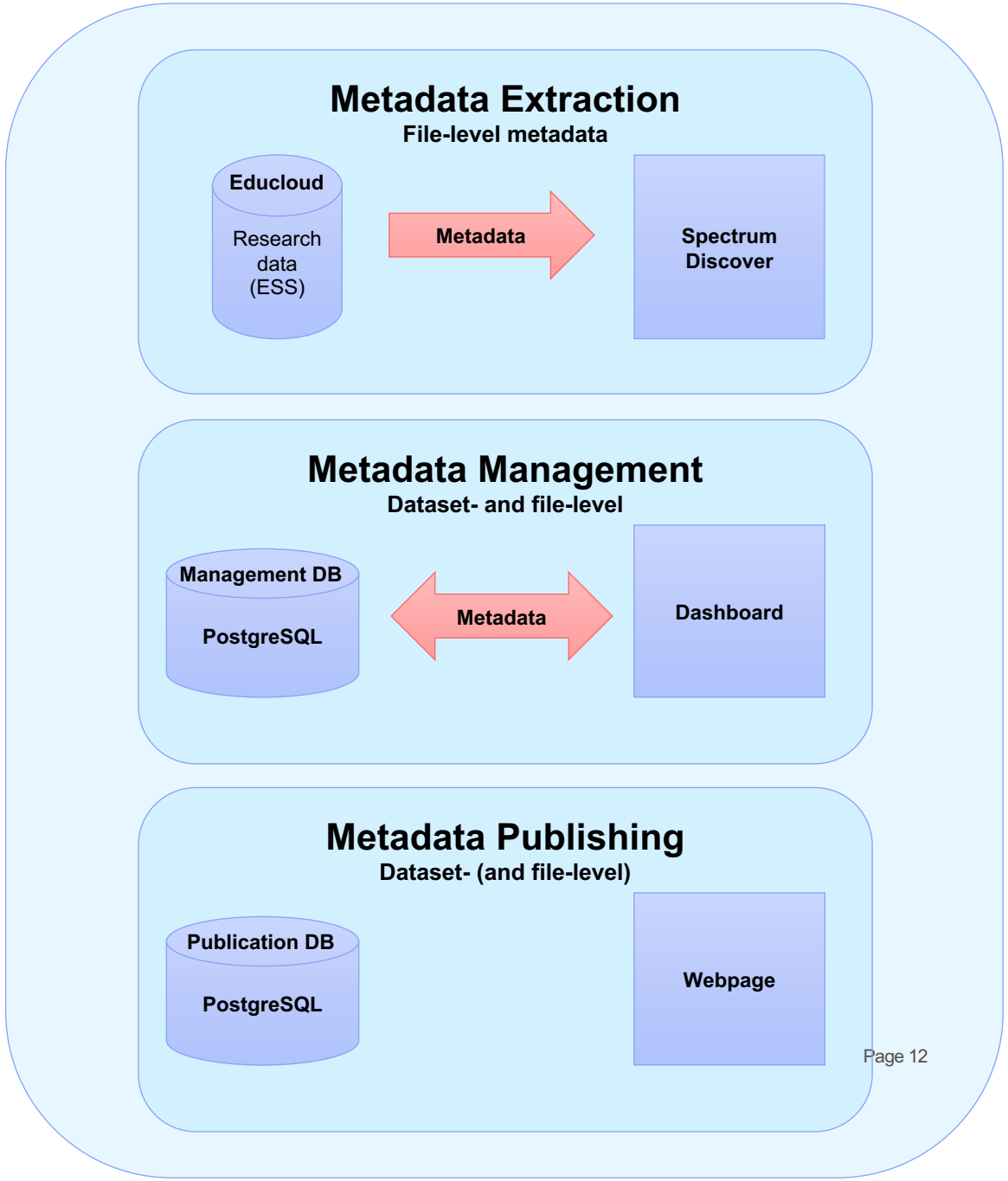
Publishing

Querying published datasets

- Active opt-in by researcher
- Open to the world
- Dataset metadata
- File-level metadata
- Data

Metadata service

- Offered inside Educloud soon™
- Expand to general UiO storage (NFS)
- Services for Sensitive Data



Thanks for listening!

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