



**Coscine**  
Makes research data FAIR!



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- Problems for Researchers:

- Limited knowledge about RDM and FAIR principles

- Additional work before publishing

- Metadata not complete

- Repeat experiments

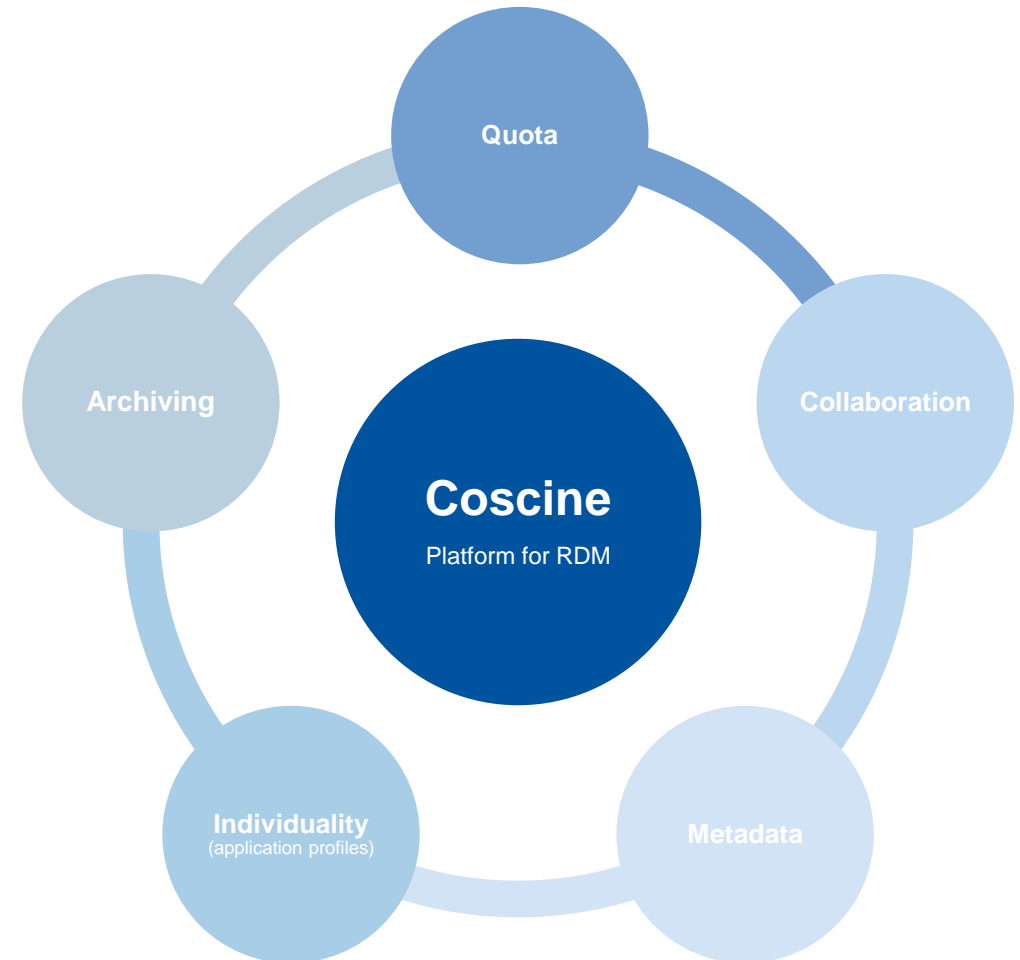
- Ensure Reuse and Interoperability

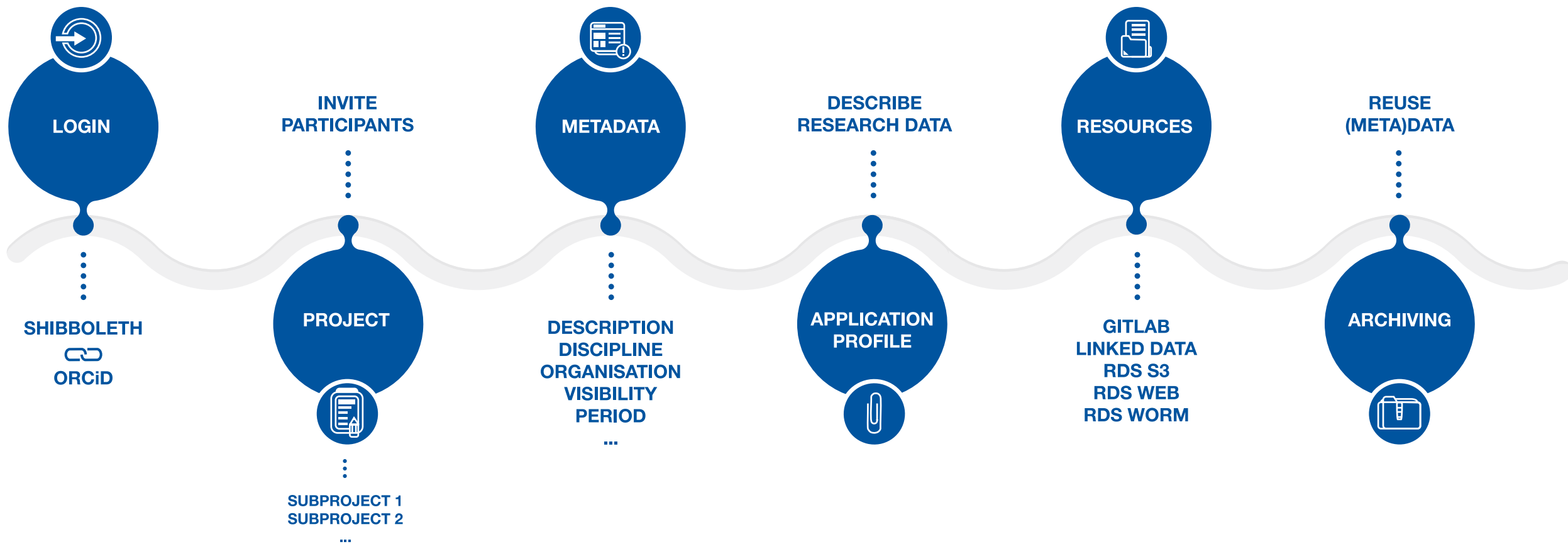
- Solution:

- Integration of RDM in daily workflow

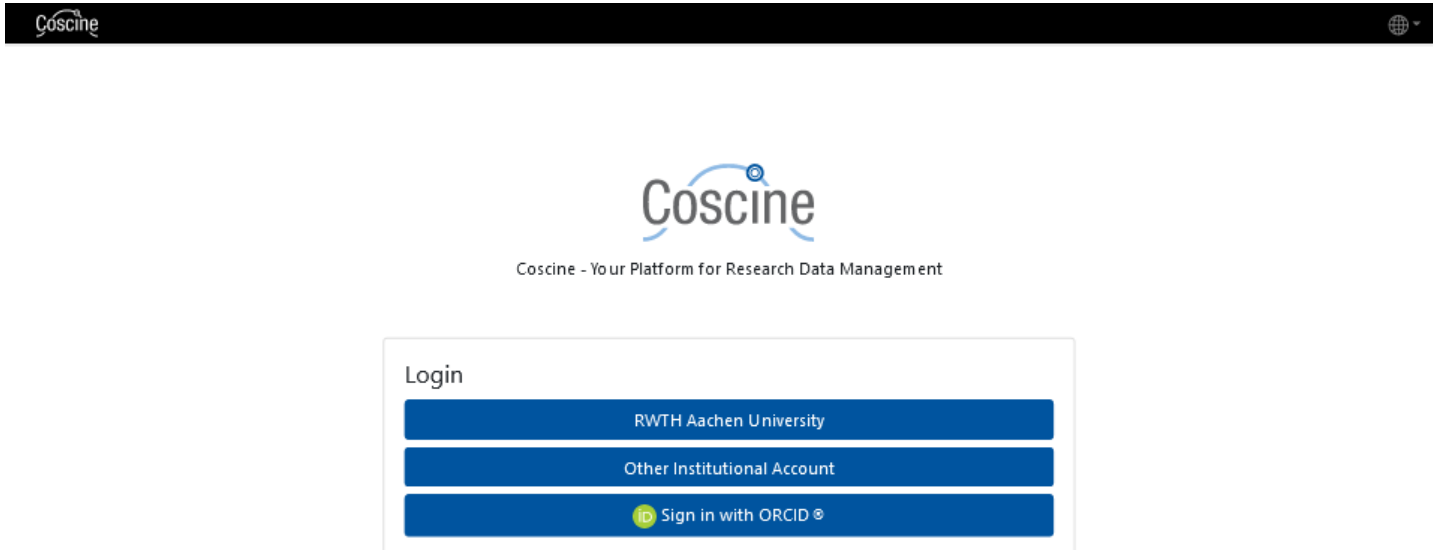
- Use of platforms which help to follow FAIR principles

- Coscine, RDMO, Jarves, etc.





## Login possibilities:



- Institutional account or ORCID



- Connection of both login possibilities recommend

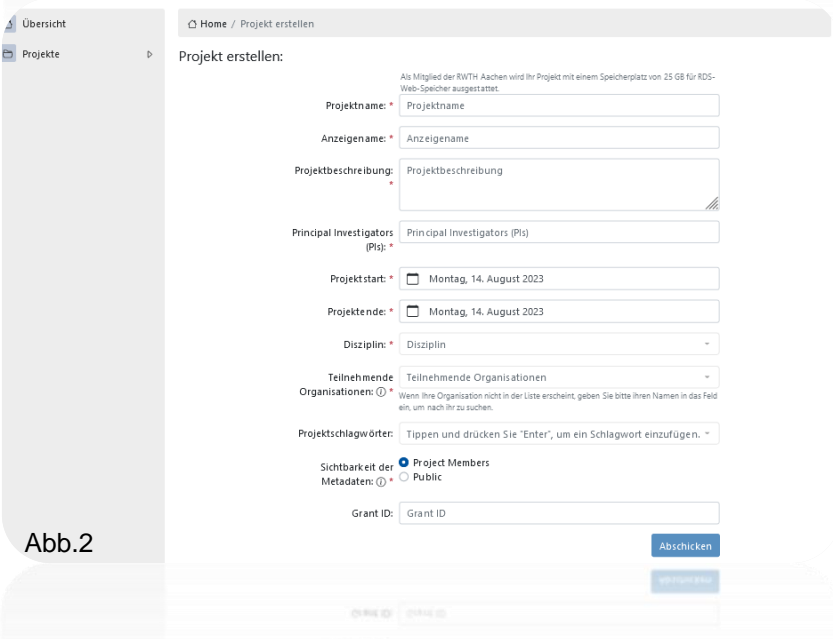
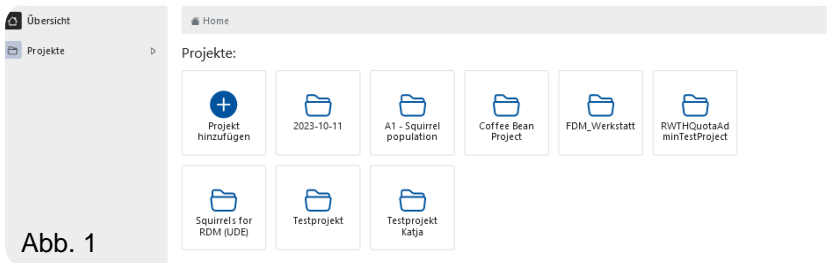
**!Attention!**

Login only with ORCID

→ No quota on the RDS available



## Creation of projects/subprojects:



- Click on Button „Add project“ (s. Abb. 1)

New window opens (s. Abb. 2)



- Fill in at least all fields marked with \*.
- If you are not sure, please refer to the Coscine documentation.
- Submit = new project is created.
- After clicking on the name of the newly created project, subprojects can be created and resources added.



## Ressourcentypen:

Ressourcentyp	RDS-Berechtigte	Externe	Antrag
<i>RDS-Web</i>	<i>25 GB Standard; bis zu 100 GB mit Selbstzuweisung</i>	<i>kein Speicherplatz</i>	<i>RDS-Web Ressourcen</i>
<i>RDS-S3</i>	<i>Kein Standard; bis zu 125TB mit Antrag</i>	<i>kein Speicherplatz</i>	<i>RDS-S3 Ressourcen</i>
<i>RDS-WORM</i>	<i>Kein Standard; bis zu 125TB mit Antrag</i>	<i>kein Speicherplatz</i>	<i>RDS-WORM Ressourcen</i>
<i>Linked Data</i>	<i>Ohne Limit/kein Speicherplatz nötig</i>	<i>Ohne Limit/kein Speicherplatz nötig</i>	<i>kein Antrag nötig</i>
<i>GitLab</i>	<i>Ohne Limit/kein Speicherplatz nötig</i>	<i>Ohne Limit/kein Speicherplatz nötig</i>	<i>kein Antrag nötig</i>

<https://docs.coscine.de/de/rdm/resources/about/#ressourcen>

- Application for RDS-Web >100 GB as well as RDS-S3 and RDS-WORM by using the platform Jards possible

For **quota on the RDS** are eligible:

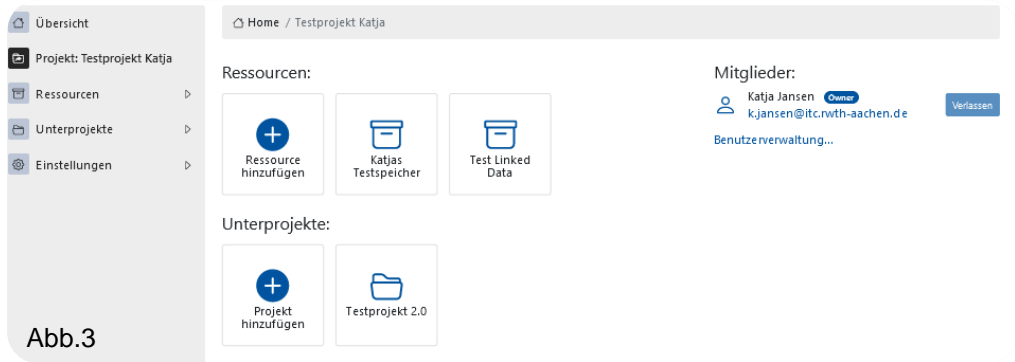
- RWTH Aachen (RWTH-RDS)
- FH Aachen (RWTH-RDS)
- Universität Duisburg-Essen (UDE-RDS)
- TU Dortmund (TUDO-RDS)
- HAWs & FHs of NRW (NRW-RDS)
- Cooperation with NFDI (NRW-RDS)

Use Coscine for non-RDS eligible individuals?

- GitLab oder LinkedData resource
- Cooperation with one of the above mentioned institution
- Invitation as external (guest) to a project



## Adding of resources:



- Click button „Add resource“ (s. Abb. 3)



- The following must be specified:
  - 1) Resource type,
  - 2) resource name,
  - 3) description,
  - 4) discipline,
  - 5) metadata visibility,
  - 6) Application profile selection



## Short demonstration of Coscine

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### Application profile:

- Metadata = data on (research) data.  
→ e.g. author, date of creation, exposure of the photo etc.
- Metadataschema = set by e.g. Organisation
- Application profile = individual profile with fields for filling the metadata for a file
- Choice between already existing or a completely individual

↓  
Using e.g. certain standards for a research area

↓  
Creation with application profile generator (AIMS)



<https://coscine.rwth-aachen.de/coscine/apps/aimsfrontend/#/editor>



## Application profile:

Add Resource:

Step 1: Resource Configuration    Step 2: General Information    **Step 3: Resource Metadata**    Step 4: Overview & Confirm

Application Profile:  OR

Contact *	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="button" value="+"/>
Creator *	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="button" value="+"/>
Worked	<input type="text" value="Select..."/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="button" value="+"/>
Worked Note	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="button" value="+"/>
Title *	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="button" value="+"/>
Type	<input type="text" value="Select..."/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="button" value="+"/>
Keywords	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="button" value="+"/>
Subject Area	<input type="text" value="Select..."/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="button" value="+"/>
Creation Date *	<input type="text" value="No date selected"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="button" value="+"/>
Publication Date *	<input type="text" value="No date selected"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="button" value="+"/>
Embargo End Date *	<input type="text" value="No date selected"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="button" value="+"/>
Version *	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="button" value="+"/>
Mode *	<input type="text" value="Select..."/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="button" value="+"/>



### Default value

→ Fixed value (e.g. always same PI)



### Hidden fields

→ If fields don't match own data (not for mandatory fields)




















### Add fields

→ If more fields are needed

## Show data in a resource:

Ressourcen:

Red Squirrels in DE - Web   33.07 KB / 44 GB

Name	Geändert	Dateigröße		
 20200501_GPS_data_DE.txt	13.9.2022	2.72 KB		
 20200502_GPS_data_DE.txt	13.9.2022	2.72 KB		
 20200503_GPS_data_DE.txt	13.9.2022	1.6 KB		
 20200503_GPS_data_UK.txt	14.9.2022	2.72 KB		
 20200504_GPS_data_DE.txt	13.9.2022	1.54 KB		
 20200505_GPS_data_DE.txt	13.9.2022	1.7 KB		
 20200506_GPS_data_DE.txt	13.9.2022	1.82 KB		
 20200507_GPS_data_DE.txt	13.9.2022	2.72 KB		
 20200508_GPS_data_DE.txt	13.9.2022	2.72 KB		
 20200509_GPS_data_DE.txt	13.9.2022	2.72 KB		
 20200510_GPS_data_DE.txt	13.9.2022	2.72 KB		
 20200511_GPS_data_DE.txt	13.9.2022	1 KB		
 20200512_GPS_data_DE.txt	13.9.2022	928 Bytes		
 20200514_GPS_data_DE.txt	13.9.2022	2.72 KB		
 20200515_GPS_data_DE.txt	13.9.2022	2.72 KB		

To add a new file,  
the fields\* must be  
filled in accordingly

\* Displayed fields differ depending  
on resource type and application  
profile

Files selection panel:

Ersteller \*

Titel \*

Erstelldatum \*

Fachrichtung

Ressource

Berechtigung

Rechteinhaber



## Short demonstration of Coscine

Role distribution:

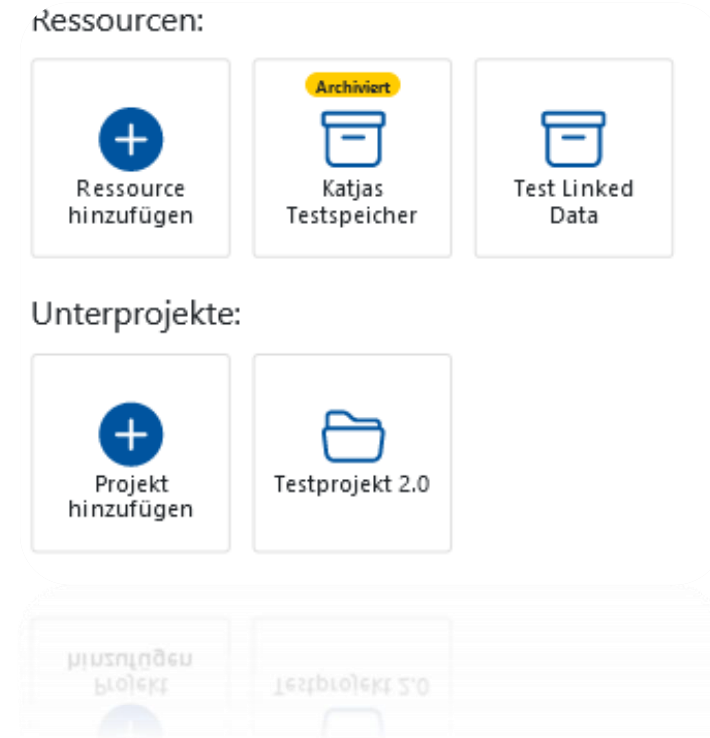
	Owner	Member	Guest
<b>User management</b> (add/remove members)	<input checked="" type="checkbox"/>		
<b>Change project settings</b>	<input checked="" type="checkbox"/>		
<b>Write access</b> (view, add & edit data)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>Read access</b> (view & download data)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

## Archiving:

- Set the status of a resource to "Archive resource"

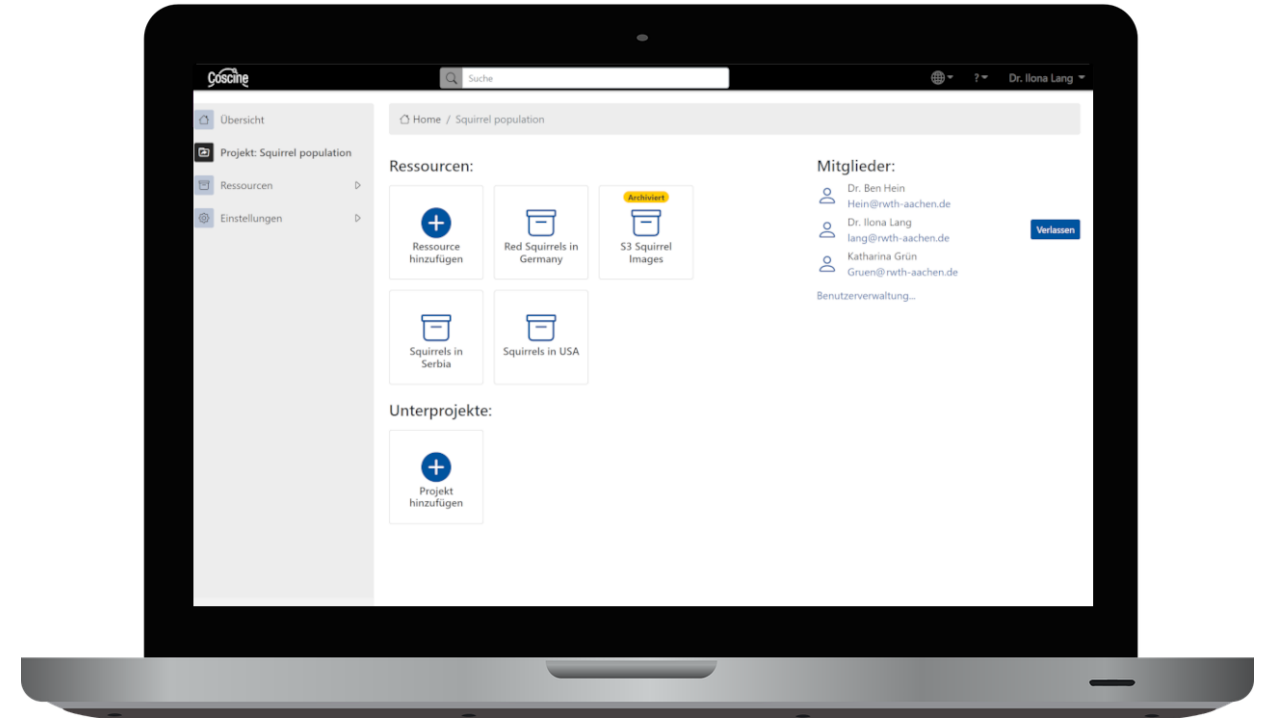
↓  
All data within this  
resource are now on  
Read-only\* status

↓  
Archiving period  
= 10 Jahre

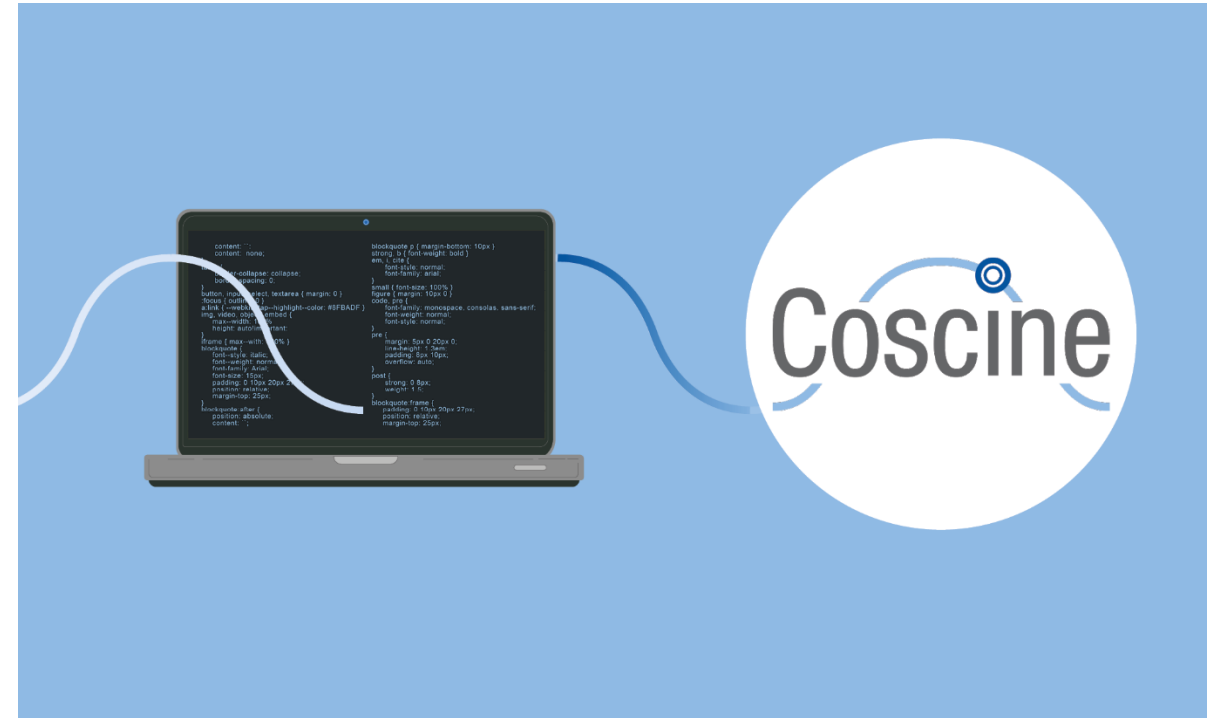


\* Can be reset by project owner and then archived again (e.g. for changes to files)

- Create a project
- Invite members
- Apply for storage space through Jards
- Add a resource
  - Select resource type (e.g. RDS-S3, -Web)
  - Define storage size
  - Chose an application profile



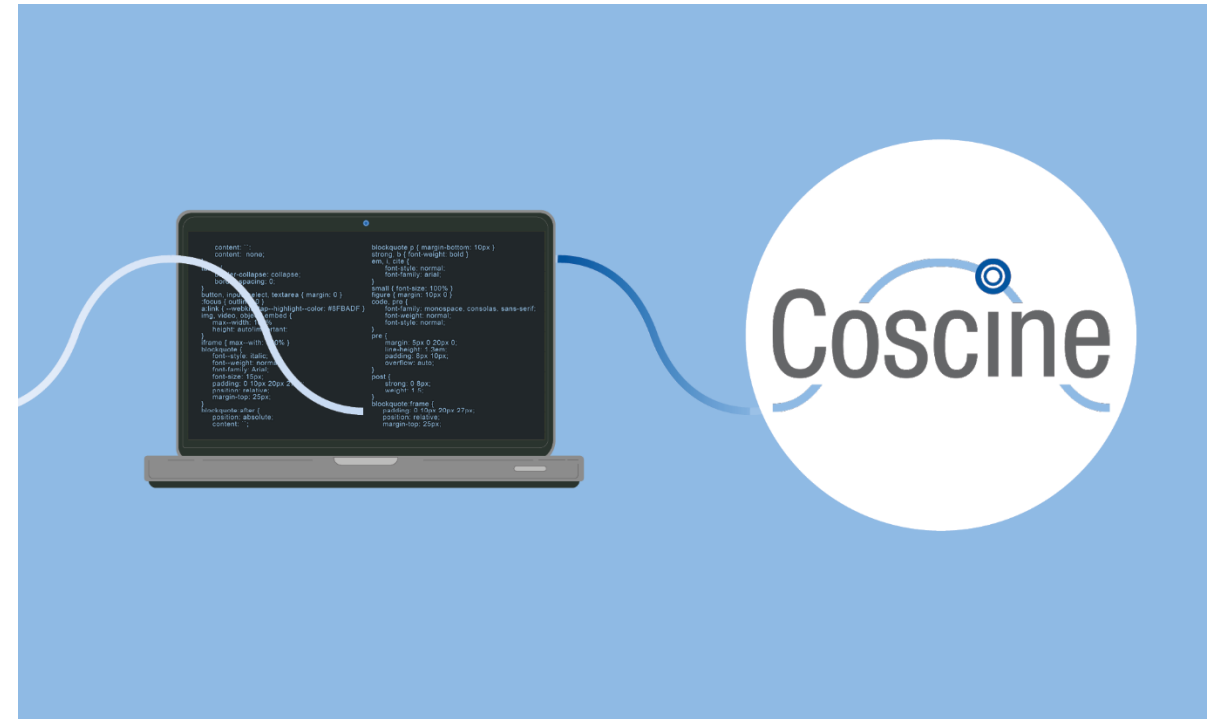
- Upload the data
  - Example programs for working with S3
    - minIO
    - rclone
- Add metadata
  - Write/use a parser to process the locally stored metadata
  - Upload the metadata through the API
    - new API version since 1 month
    - Faster, more stable, better and easier usage etc.



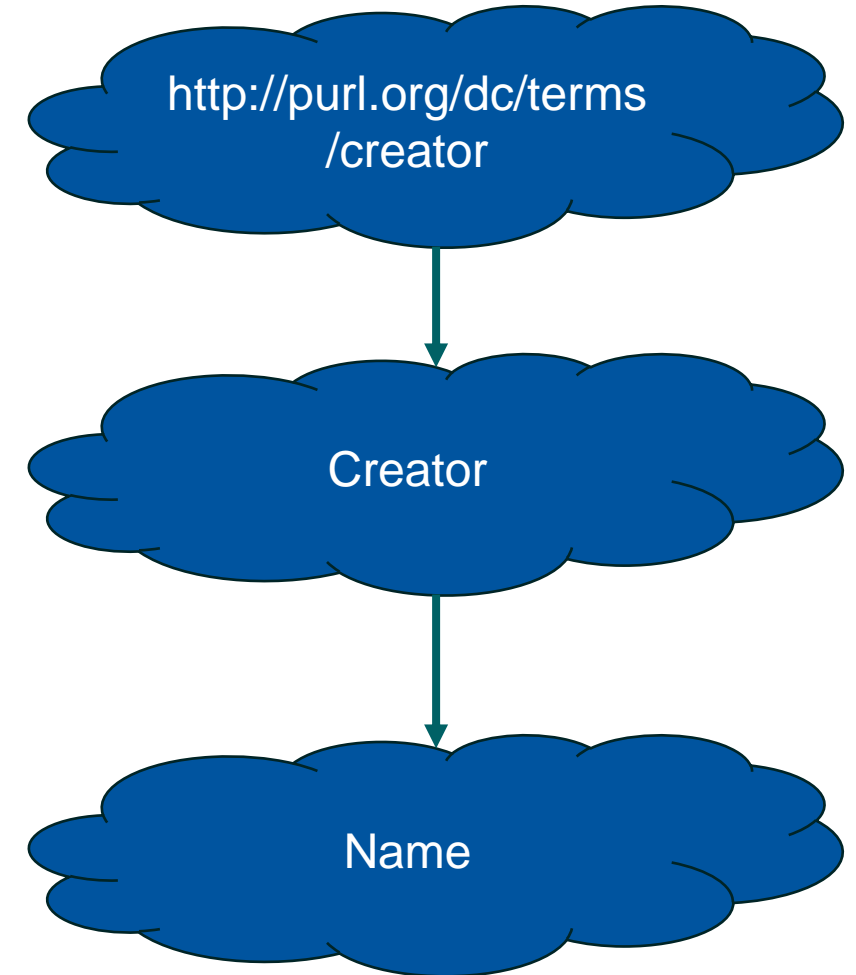


# Coscine – How to use the API

- Read the available documentation
- Create a token for authorization
- All functions can easily be executed and / or tested through a web application
  - Extensive documentation
  - Examples
  - Code snippets
- Create a script with the snippets and the token



- Process a local metadata file in the folder
- Key-Value structure
- Automatic processing of the application profile
  - Use labels from the profile instead of URLs
  - Additional configurable local mapping
- Add metadata to all files in the folder







- Special Group with the aim to support researcher in starting with Coscine
- Regular exchange with users
- Providing of
  - Scripts
  - Programs
  - Best Practices
  - Consultations

The screenshot shows a web page with the following content:

## Welcome to the Coscine Technical Adaption Project

This project is dedicated to everything involving the technical adaption of Coscine. The working group behind this project is composed of various members of the RWTH Aachen University's IT Center working in the [Research Process and Data Management \(RPDM\) department](#). Our goal is to bundle our experiences and knowledge in creating technical solutions to interacting with Coscine and further these adaptations by engaging with the research community.

### Existing Tools

You can find existing tools such as scripts and programs listed below.

### Scripts

- [Metadata to Coscine Examples](#) is a collection of generic and real world examples in which (meta)data are transferred from a local computer or server to a resource in Coscine using a Python script. Exmaples incorporating the ELN eLabFTW will follow soon.
- [Excel Spreadsheet to Application Profile](#) is a Jupyter Notebook that helps you generate the backbone of an application profile from an Excel spreadsheet and provides instructions on how to complete and submit it via the [Application Profile Generator](#). This is especially helpful for large application profiles.

# Thank you for your attention



Coscine platform



Coscine documentation



Coscine mailing list

