

Coscine Selection Policy

Criteria for approving DataStorage.nrw storage space requests via Coscine

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1. Introduction

This document is intended for researchers from participating universities in the Digital University NRW (DH.NRW) and researchers supported by the NFDI who wish to apply for storage space on DataStorage.nrw for their Coscine project. It contains the criteria for the approval of DataStorage.nrw resources in Coscine, which Coscine Service Management has implemented based on the management concept of FDSI.nrw².

DataStorage.nrw resources in Coscine are available to researchers from DH.NRW universities who have signed the necessary contracts³. Researchers with a clear affiliation to an NFDI consortium can also apply for storage space if active support and review by the NFDI or the relevant consortium is guaranteed (e.g., by an NFDI data steward).

Important: *If you are unsure whether your home organization is authorized to use Coscine, please check with RDM staff or your NFDI consortium.*

Coscine⁴ is a platform for research data management (RDM) that enables structured storage, collaborative work, and long-term storage of research data within research projects. Coscine implicitly supports the FAIR principles⁵.

Storage space is requested via an electronic project application process, which is carried out via the Coscine-JARDS platform⁶. When completing a storage space application, the criteria described below must be observed. The listed criteria must be taken into account in order for the application to be approved. This also ensures that your application can be processed as quickly as possible, as the RDM staff will have little or no need to contact you to obtain missing information.

2. Preparations

2.1. Project Creation

The storage space application must include the URL(s) of the Coscine project for which storage space is requested. Therefore, the project and any subprojects must be created in Coscine before the application is submitted.

Important: *Based on the funding guidelines, storage space applications for DataStorage.nrw must always be submitted on a per-project basis. A storage space request refers to a single research project and cannot be submitted for multiple research projects. Storage space requests for entire institutes/working groups, for example, will be rejected.*

2.2. Decision for a Resource Type

Storage space in the Coscine project is allocated via so-called DataStorage.nrw resources. There are three resource types: Web, S3, and WORM (see [appendix](#) for a brief description). Only one resource type can be selected per storage space request via Coscine-JARDS, so you

² <https://zenodo.org/records/17342215>

³ <https://about.coscine.de/en/about/participating-universities/> (accessed on 16.10.2025)

⁴ <https://about.coscine.de/en/> (accessed on 16.10.2025)

⁵ <https://doi.org/10.5281/zenodo.14886335>

⁶ <https://jards.coscine.de/> (accessed on 16.10.2025)

must select the resource type **in advance**. The questions in the storage space request vary depending on the selected resource type.

Below is a diagram to help you decide:

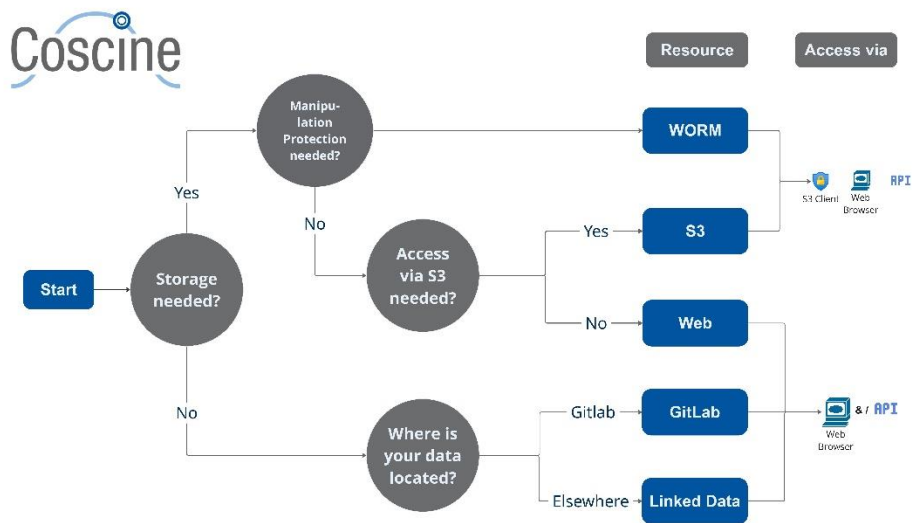


Abbildung 1: Decision Chart for Resource Creation

(<https://docs.coscine.de/en/resources/types/#resource-types>)

2.3. Metadata

The focus of the storage space application is on describing metadata management. You must describe in as much detail as possible how the research data and metadata will be stored in your Coscine project.

Coscine offers you the option of using metadata profiles for storing metadata in resources. You can reuse metadata profiles already created by other researchers or create your own metadata profiles tailored to your individual needs using the metadata profile generator⁷. If you want to use one or more individual metadata profiles for the research project you are applying for, you must complete their creation **before** submitting the storage space application. Please note that a submitted metadata profile is subject to a technical review, which can take approximately two weeks.

2.4. Data Protection

If you have any uncertainties regarding the storage of personal data, please contact a data protection officer **before** submitting your application to clarify any possible requirements (for further details on the storage of personal data, see [Personal Data](#)).

Important: As a researcher, you are responsible for the correct handling of personal data (Art. 9 GDPR), even if you store it in Coscine.

⁷ <https://docs.coscine.de/en/metadata/generator/about/> (accessed on 16.10.2025)

2.5. Test Projects

If you would like to test your workflow for storing research data and metadata in Coscine, you can request a test project from the RDM staff at your home institution⁸. This will be available to you for two months after consultation with the respective RDM staff. Your RDM staff will need the following information for this:

- E-Mail addresses of all test users
- How many resources of which resource types are required?
- Which metadata profile should be used for which resource?
- How much storage space should be allocated to each resource? (Maximum 100 GB web and 100 GB S3 per test project for **all** resources combined)

3. Filling out the Storage Space Application

3.1. Contact Information

Storage space applications begin with the mandatory entry of contact information for the Principal Investigator (PI) and Person of Contact (PC). It is possible to enter the same person as both PI and PC. The person with PI status must be responsible for the project (= owner of the requested project). This is usually the responsibility of postdocs or professors.

Ideally, the PI and/or PC should be available on a long-term basis so that they can be contacted during the active project period and the subsequent ten-year archiving period.

Important: *Persons who only work on a project for a short period of time and/or, for example, apply for storage space for their thesis (bachelor's, master's, doctoral thesis) (without additional permanent employment at your university) are not eligible to apply as PI.*

3.2. Project Information

The Coscine project URL must be provided, as is required for the allocation of storage space. Please use this example as a guide when listing projects and URLs:

<https://coscine.rwth-aachen.de/p/testprojekt>

Important: *The full URL of a Coscine project is required for the allocation of storage space. The project name alone is not sufficient for allocation.*

3.2.1. Abstract

One criterion for the allocation of DataStorage.nrw resources is project-based use. You must clearly state in the abstract that this is a self-contained research project. The research project may be about to start (applications can be submitted up to three months in advance), currently underway, or already completed (archiving). Research projects must have the following characteristics:

⁸ <https://about.coscine.de/en/about/participating-universities/> (accessed on 16.10.2025)

- **Time frame:** A research project is limited in time. The start and end dates are specified in the associated metadata. Subsequent changes to the project duration are registered and checked by Coscine.
- **Research data:** The collected data has a clear contextual connection. This must be reflected in uniform metadata for research projects. The conditions and requirements for contributing data are defined. Quality assurance processes are defined and implemented.
- **Actors:** Projects are carried out by a defined group of people, the composition of which may change over time. There is one or more principal investigators (PI), who usually remain constant throughout the project duration. Individuals who are primarily responsible for requesting and using storage space on DataStorage.nrw are employed at a university in DH.NRW or have a direct connection to an NFDI consortium.
- **Organizational location:** A research project is located at one or more research institutions. If several institutions are involved, one of them is the consortium leader and must be primarily assigned to the project.

These features enable research data to be handled in accordance with the research data lifecycle. Research data from projects that are already being stored long-term elsewhere by a recognized organization may not be stored twice.

Important: Storage space is not allocated to individual researchers, institutes, or core facilities without reference to a specific research project. Furthermore, no storage space requests will be approved for data exclusively related to teaching. If you would like to request storage space for an entire institute via Coscine, you can do so by dividing it into smaller subprojects with specific project references.

3.2.2. NFDI-Association

Please indicate whether the project belongs to an NFDI consortium and, if so, to which one.

3.3. Storage Space

The questions in the storage space applications vary depending on the selected resource type. The following sections indicate for which resource type information must be provided.

3.3.1. Scope

Resource Types: All

The required storage space is specified in gigabytes (GB). For your application to be approved, the amount of storage space must be reasonable in relation to the project description, file formats, and file volumes. Therefore, please provide as much detail as possible about whether data has already been collected as part of the research project and, if so, indicate the approximate number of files and the amount of storage space already used. Please estimate as accurately as possible how many files of what size have been generated and/or will be generated for the research project.

Example:

- Five simulations are expected to be carried out in the research project
- The raw data for each simulation comprises 10,000 GB and the evaluated data 15,000 GB
- This means you will need 125,000 GB of storage space for the research project

Important: You are an expert in your field of research and are most familiar with the file formats and their storage space requirements. The reviewers are unlikely to have this specialist knowledge, so contextual information is essential to describe the application transparently and thus speed up approval.

Important: Even though applying for storage space does not involve any direct costs for you as a researcher, the material and personnel costs for providing it amount to around €3.30 per terabyte (TB) per month (see table, as of July 2025). Please avoid unnecessary costs by not requesting more than you need. Instead, take advantage of the low-threshold option of submitting a subsequent request (see Submitting a [follow-up request or extension request](#)).

Storage Capacity	Project Duration	Archiving Period	Costs
0,5 TB	3 Years	10 Years	Approx. 257 €
1 TB	3 Years	10 Years	Approx. 515 €
10 TB	3 Years	10 Years	Approx. 5148 €
125 TB	3 Years	10 Years	Approx. 64.350 €

3.3.2. Related Subprojects

Resource Types: All

It is currently not possible to transfer storage space from a main project to a subproject in Coscine. This means that all subprojects that require storage space must also be listed in the storage space request. It is important to note that the main project and the associated subprojects must already have been created in Coscine and the corresponding URLs must be specified. Otherwise, it will not be possible to allocate storage space; the total amount of storage space for the individual projects is equal to the total amount of storage space requested.

Example:

Total-Quota = 50 TB

- <https://coscine.rwth-aachen.de/p/testprojekt> = 20 TB
- https://coscine.rwth-aachen.de/p/unterprojekt_a = 20 TB
- https://coscine.rwth-aachen.de/p/unterprojekt_b = 10 TB

3.3.3. Data Types

Resource Types: All

All currently known file types can be stored on DataStorage.nrw, and there are no restrictions in this regard.

3.3.4. Personal Data

Resource Types: All

The storage of personal data on DataStorage.nrw is not excluded in principle. However, it is the responsibility of researchers to check whether their specific research data may be stored here and what additional security measures are required (see also [Security measures for personal data](#)).

3.4. Metadata Profile

Resource Types: All

Based on the funding guidelines of DataStorage.nrw, all data stored there must be described with metadata. Coscine metadata profiles are used for entering metadata. You can select existing metadata profiles when creating resources or create individual metadata profiles.

When using S3 resources, other annotations of data with metadata can be selected in addition to metadata profiles, but these must be described in detail in the application (see [Location of metadata storage and metadata annotation](#)).

Important: When asked about the metadata profile, please provide not only the exact (!) name of the profile, but also a brief explanation for your selection. If you have established a workflow for storing metadata that does not use the metadata profiles available in Coscine, please describe it in as much detail as possible under [Metadata storage location and Metadata annotation](#). A PDF file can be attached to the storage space application as an additional explanation, for example, to illustrate the workflow for data storage and metadata entry.

3.5. Reasons for using Coscine

Resource Types: All

The main reason for using Coscine must be stated in the storage space application. This makes it easier for reviewers to better assess the status of the respective research project.

3.6. Workflow and Structure

Resource Types: S3 & WORM

This section describes the planned data delivery, for example via the web interface, the REST API, or S3 clients. If automated processes are planned for data delivery, these must be described here. For projects that have already been completed and that Coscine wishes to use for archiving, an existing data management plan (DMP) can be attached as a PDF file. This saves you time in the description process and speeds up the review process.

3.7. Data Flow

Resource Types: S3 & WORM

Here you describe where your data comes from, for example, from a microscope, literature research, etc., and how it will be used by Coscine (or DataStorage.nrw) for your project. If the workflow is very complex, you can also upload a PDF with a diagram of the workflow in the application.

3.8. Upload of Files

Resource Types: S3 & WORM

In this section of the application, please explain how data will be delivered: e.g., via the web interface, the REST API, or S3 clients. If you plan to deliver data via the web interface and are applying for S3 resources, please explain in detail why a web resource cannot meet your needs in this case. If you want to use an S3 client to upload files, please specify which one (e.g., Cyberduck). If another workflow already exists for your research project, please describe it in as detail as possible.

3.9. Data Structure and Findability

Resource Types: S3 & WORM

Based on the funding guidelines, data must be organized on DataStorage.nrw and stored according to an agreed structure. Please describe your data structure, including how files are stored and saved, and how their retrievability is ensured. It is important that the description explains how the data will remain retrievable in the coming years.

3.10. Location of Metadata Storage and Metadata Annotation

Resource Types: All

Based on the funding guidelines of DataStorage.nrw, all data stored there must be described with metadata. The reviewers require a clear description of the already established or planned workflow for delivering metadata. When using web resources, metadata must be entered in a metadata profile via the web interface or the REST API. When using S3 resources, other annotations of data with metadata can be selected in addition to metadata profiles, but these must be described in detail in the application.

The presentation of the selected description of data with metadata is a key criterion for the approval or rejection of the application!

The following guiding questions can help you describe the questions in the storage space application for metadata storage and annotation as detailed and specific as possible. If you have a diagram of the (planned) workflow for storing metadata in your research project, please include it in the application.

Guiding Questions:

- At which points in the project workflow are metadata collected and stored?
- Is an existing metadata profile from Coscine used?
- Was a individual metadata profile created? If so, please provide the merge request in the Git repository⁹ and the exact profile name. Please also provide a brief explanation of why you chose the new metadata profile.
- If the application is submitted for S3: Please describe in detail the workflow for storing metadata. Have you automated any (sub)steps for this, e.g., using a script?
- How is the research data linked to metadata?

4. Procedure and Duration of the Assessment

After completing the storage space application via Coscine-JARDS, it will be submitted to your responsible RDM staff for review. They will check whether the criteria specified here have been met based on the review guidelines¹⁰. If they have any questions, your RDM staff will contact you by email. If the RDM staff rejects your application, you have the option of resubmitting a revised version. If the RDM staff approves the application, it will be forwarded to an external participating university of the DH.NRW¹¹ for the most objective evaluation possible. If the

⁹ Coscine-GitRepository, „profiles“ with Merge Requests, URL https://git.rwth-aachen.de/coscine/graphs/applicationprofiles/-/tree/master/profiles?ref_type=heads

¹⁰ <https://zenodo.org/records/16411392> (accessed on 16.10.2025)

¹¹ <https://about.coscine.de/en/about/participating-universities/> (accessed on 16.10.2025)

university also approves the application, you will be allocated the requested storage space. You will receive a confirmation email.

If the second university rejects your application, it will be submitted to a third university for review. If the third university approves the application, you will be allocated storage space and informed accordingly. If the result of the third review is also negative, the application will be rejected. You then have the option of revising the application in line with the feedback and submitting it via Coscine-JARDS so that it can be reviewed again.

Please note that each individual review can take up to two weeks. In addition, three working days are allowed for each transfer between the different universities. This means that the review of your application can take around six weeks in a two-stage process and up to eight weeks in a three-stage process.

5. Extension Application and Follow-Up Application

If necessary, you can submit an extension request or follow-up request for storage space. With an extension request, you have the option of requesting an additional 25 percent of the storage space already approved via Coscine-JARDS. The prerequisite for this is that you have already used around 75 percent of the storage space previously requested.

A follow-up application can also be submitted via Coscine-JARDS. To do this, you can copy the application that has already been approved from Coscine-JARDS and indicate on the first page that this is a follow-up application. This saves you a lot of time and allows reviewers to establish a direct connection between the first application and the follow-up application.

6. Acknowledgements in Publications

The allocation of storage space has supported your research project, and you have managed promising research data in accordance with the FAIR principles. Please acknowledge the use of Coscine and DataStorage.nrw as follows in the acknowledgements section of your publications:

"The data used in this publication was managed via the Coscine research data management platform, whose storage space was provided by DataStorage.nrw of the DFG and the Ministry of Culture and Science of the State of North Rhine-Westphalia (MKW: 214-76.01.09-7-7937, DFG: INST 222/1530-1)."

7. Questions and Suggestions

Based on the Coscine support structures¹², first-level support is provided at your own university. If you have any questions, please contact your local RDM team. You can find the contact details for your university's RDM team after logging in to the Coscine platform under the "?" and "Contact" tabs.

¹² <https://about.coscine.de/en/contact/> (accessed on 16.10.2025)

Appendix

Here you will find a brief description of the possible resource types in Coscine. In addition to this document, you will find a detailed explanation and additional assistance in selecting the right resource type in our documentation¹³.

A. Web-Resources

The web resource type is used to store smaller file sizes (e.g., survey results). Web resources can only be accessed via the Coscine web interface or REST API. This means that the metadata management provided by Coscine must be used when uploading data by using appropriate metadata profiles. Data can only be uploaded if at least the mandatory fields of the selected metadata profile have been filled in. You can choose between metadata profiles of varying scope, extend them yourself using the metadata profile generator, or create new ones.

For DataStorage.nrw, employees of authorized universities are provided with 100 GB of storage space per project for web resources as standard. Storage space exceeding this must be requested via a storage space application via Coscine-JARDS.

B. S3-Resources

S3 resources¹⁴ provide direct access to the storage system behind Coscine (in this case, DataStorage.nrw) and can be used, for example, to store and manage large amounts of data. S3 resources can also be mounted in other systems, offering a high degree of flexibility in the research process. Access to the stored data is preferably via S3 clients (e.g., Cyberduck) but can also be implemented via the web interface or the REST API. This allows the metadata management provided by Coscine to be used via metadata profiles, but it is not enforced when uploading directly via the S3 interface. Here, too, you can choose between metadata profiles of varying scope, extend them yourself using the metadata profile generator, or create new ones. However, metadata management can also be implemented using your own procedures. These must be clearly explained in the application. A storage space application for the S3 resource type must always be submitted via Coscine JARDS.

C. WORM-Resources

WORM (**W**rite **O**nce, **R**ead **M**any) -Resource Types are available for storing research data that requires a high level of protection in terms of immutability. Files stored in this resource type cannot be modified or deleted after uploading. Access to the data is equivalent to the S3 resource type. In addition to the metadata management that is not enforced as a result, the WORM resource type also entails a high level of responsibility for uploaded files, as deletion is not possible (e.g., regarding personal data). For this reason, a storage space application via Coscine-JARDS is always required and is the most comprehensive.

With WORM resources, it is not possible to delete the data for at least five years. This is due to the replacement cycle of the underlying hardware. You must therefore demonstrate that you have all rights to the data and that, in the case of personal data, the right to erasure pursuant to Art. 17 GDPR does not apply.

¹³ <https://docs.coscine.de/en/resources/types/> (accessed on 16.10.2025)

¹⁴ S3 (Simple Storage Service) is a simple object storage interface for data that supports fast retrieval of object data.

Important: Before submitting a storage space application for WORM resource type, please carefully consider whether such a high level of protection against manipulation of research data is necessary! Find out whether your needs can also be met by appropriate role management within the project and by S3 resources! Before an application for WORM resource type can be approved, consultation with the RDM staff of your home organization **must** take place. Therefore, please contact your responsible RDM staff before submitting the storage space application!