

DAMAP demo

Cluster Forschungsdaten Expo: January 16, 2025





Agenda

- Intro -10 minutes
 - Background
 - Goals of the session
- Hands on demo of DAMAP -30 minutes
- Post-demo -10 minutes
 - Customizing DAMAP
 - Questions





Background

- DAMAP was created as part of the FAIR Data Austria project and a partnership between research data centers at TU Wien and TU Graz.
- We are funded as part of the Shared RDM Services and Infrastructure project through the research data cluster.
- Shared RDM goals include:
 - Developing a critical base infrastructure for research data management and also concepts for crossuniversity operating models for shared RDM services and infrastructures.
 - Ensuring a leading role of Austrian universities for shared RDM services in an international context.
 - Establishing networking with European and international initiatives, projects, and infrastructures.







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Tell us about yourself

- What institution are you coming from?
- What is your experience with DMPs?
- Have you used other DMP tools?





Goals of the session

By the end of the session you will know:

- What a DMP tool is and what it should do
- What DAMAP is and why you would use it
- How to use DAMAP to begin creating a DMP



What a Data Management Plan (DMP) Tool is

• DMP tools guide researchers through the creation of a DMP





What a DMP tool should do

- Make it easier for researchers to create an accurate, high quality DMP
- Integrate and reuse information from internal and external systems (including Current Research Information Systems -CRIS)
- Be built on the principle of machine actionability to ensure future adaptability





What DAMAP is

DAMAP is a community-based, open-source platform for creating machineactionable DMPs.





How we built it: maDMP

 DAMAP was developed with the RDA recommendations for maDMPs in mind, i.e., we focus on modelling information, not questionnaires.





How we built it: Science Europe practical guide

• DAMAP aligns directly to an established standard for DMPs: the Science Europe practical guide.







How we built it: Science Europe practical guide (cont.)

DMP topics:

- 1. Data description and collection or re-use of existing data
- 2. Documentation and data quality
- 3. Storage and backup during the research process
- 4. Legal and ethical requirements, codes of conduct
- 5. Data sharing and long-term preservation
- 6. Data management responsibilities and resources

Includes:

- guiding questions and explanations for researchers
- evaluation rubric for funders: "comply or explain"





Why would you use DAMAP?

- Requires less effort from researchers
 - Reuses information from internal and external systems
 - Uses "Comply or explain" principle
- Improves the quality of DMPs through:
 - Step-by-step guidance
 - Cross checking and validation
 - Providing recommended services
- Makes DMPs actionable
 - Integrated with other systems, e.g., your institution's CRIS
- Meets funders' goals
 - Accurate, high-quality DMPs
 - Science Europe and Horizon Europe compliant

Wi	/ill personal data be collected/used as part of the project?
0	Dption currently selected in the CRIS system: No.
•) Yes
С) No
9	lease select the datasets containing personal data:
	🗌 A large-scale COVID-19 Twitter chatter dataset for open scientific research - an international collaboration 🛛 🖉 testdaten interview 🔲 Test 2.pdf
ŀ	How will compliance with data protection be ensured?
ſ	How will compliance with data protection be ensured?
۰ ۱	How will compliance with data protection be ensured? by gaining informed consent for processing personal data by anonymisation of personal data for preservation and/or sharing (truly anonymous data are no longer considered personal data)
•	How will compliance with data protection be ensured? by gaining informed consent for processing personal data by anonymisation of personal data for preservation and/or sharing (truly anonymous data are no longer considered personal data) by pseudonymisation of personal data (the main differences with anonymisation is that pseudonymisation is reversible)
	How will compliance with data protection be ensured? by gaining informed consent for processing personal data by anonymisation of personal data for preservation and/or sharing (truly anonymous data are no longer considered personal data) by pseudonymisation of personal data (the main differences with anonymisation is that pseudonymisation is reversible) by encryption of personal data (the encryption key must be stored separately from the data, for instance by a trusted third party)



Demo: How to use DAMAP to create a DMP







DEMO BEGIN



How to Login

- Go to DAMAP.org
- Scroll to "Try it out" section
- Click the "here" hyperlink
- Use the credentials on your card





Logging in to DAMAP -customization examples

TU Graz _{EN} DMP Tool		TU Graze	
E→	TU Graz DMP Tool		
Home DMPs	Welcome to TU Graz DMP Tool, a service that helps you to create and update the Data Management Plan (DMP) for your project. My DMPs + Create new DMP What is a DMP? A DMP is a structured document that keeps record of what research data is created and what happens to that data during and after a process, managing your data in accordance with the FAIR Principles, and defining rights and responsibilities in a research project inverted Graz DMP Tool	a project. It helps with planning the research olving several researchers or institutions.	
	 guides you step by step through the different sections of a DMP following the <u>Science Europe Practical Guide</u> exports a pre-filled DMP as a document that you can customize and use for submission to European and national funders delivers DMPs for FWP projects in the funder-specific format saves you work by pre-filling content with detailed information from your CRIS application and other systems providing wizards, guidance, and item lists to choose from suggesting answers that you can either comply with or adjust to your needs is compatible with the RDA recommendation on machine actionable DMPs. 	TU WIEN LOGIN ← TU.IT HOME	TU WIEN STUDIES RESEARCH PARTNERSHIPS SERVICES TU Wien Login Student? Your student number (eight-digit) without any letter prefix. Seven-digit student numbers require a leading 0. Student?
			Enter your username and password dmolnar
			Two-Factor Authentication Key
			Log in Forgot password?
			Login with ID Austria



Step 1: Choosing a project -instructions

- Create a new DMP
- Input project manually
- Enter project information:
 - Title: Forschungsdaten Demo Project
 - Start: 1st June 2025
 - Duration: 12 months
 - Description: be creative 🙂
- Update project







Step 1: Choosing a project -customization examples

• What you would see if you connected DAMAP to your project database

Choose project from the project database	Input project manually	Choose project from the project database Input project manually
Please select the project you want to create a DMP for: Search project FAIR Q		Please select the project you want to create a DMP for: Search project global
Accompanying Measures to Fair Flow Europe 4 Directed to Incoming Countries (FFE TO CEC) Dec 1, 2001 - Nov 30, 2004)	IEA IETS Task XV - Industrial excess heat recovery - Subtask 4 □ Dec 31, 2023 - Dec 30, 2025
Carbon Diet - Opportunities for a climate-friendly degree of mobility by defining fair individua	al mobility budgets	Operation of the bio-geophysical variables systematic monitoring of the ■ Aug 11, 2023 - Aug 10, 2025
Fair RecSys - Al-based recommender systems: fairness, transperency and regional economy		Im Zuge des angedachten Projektvorhabens zwischen der Firma Global- May 31, 2023 - Dec 30, 2023
		IMSIL-GlobalTCAD



Step 2: People involved in data management -instructions

- Add person via ORCID
 - Name: Tomasz Miksa
 - Change role to Supervisor
- Add person via manual contributor
 - Name: yourself
 - Change your role to Data Manager
 - Add your email
 - Mark yourself as a contact
- Save changes

i Select a contact from the list of contributors using the button									
Find person and servi	ice search solutions:								
Search for person	Q Search service University -								
No project members available	e. Vniversity								
	ORCID								
2	Choose project People involved in data management								
	Search contributor Input contributor manually								
3	Specify research data								



Step 2: People involved in data management -customization examples

• What you would see if you connected DAMAP to your HR database

 Persons who are not mer of TU Graz must be person informed by you about th collection of their data in tool. Ilire Hasani-Mavriqi ilire.hasani-mavriqi@tu 	mbers onally he 2 hthis ugraz.at	<u>97-7076</u>	
 Laura Thaci ☑ Ithaci@tugraz.at 			
Search for person David Eck	Q	Search service field University	•
David Eckhard			





Step 3: Specifying the research data -instructions

• Add <u>new datasets</u> according to the following information:

Name	Туре	Size	Sensitive data	Deletion	Storage during research	Repository	License
Interview recordings	Audiovisual data	1-5 GB	yes	31.03.26 by Tomasz Miksa	Institutional Cloud	no	-
Anonymised interview transcripts	Standard office document	100-1000 MB	no	no	Institutional Cloud	Zenodo	CC BY 4.0
Analysis software	Software application	< 100 MB	no	no	Institutional GitLab	GitHub/ Zenodo	MIT
Interpreted results	Standard office document	< 100 MB	no	no	Institutional Cloud	Zenodo	CC BY 4.0

• Add <u>a reused dataset</u>: doi:10.5281/zenodo.6430412



Step 4: Documenting data organization and quality -instructions

- How will you structure the data and handle versioning?
 - The respective work package leader...
- Please indicate which metadata will be provided to help others identify, discover and reuse the data.
 - As there are no domain specific...at **project** level (remove other text)
- How will you provide documentation needed to validate data analysis and facilitate data reuse?
 - We will provide documentation needed to validate data analysis and facilitate data reuse in accompanying README files
- How will the consistency and quality of data collection be controlled?
 - Data entry validation
 - Representation with controlled vocabularies



Step 5: Storage and back-up during the research process: -instructions

• Select Storage, add other storage location with the following info

Name	Туре	Size	Sensitive data	Deletion	Storage during research	Repository	License
Interview recordings	Audiovisual data	< 5 GB	yes	31.03.25 by Tomasz Miksa	Institutional Cloud	no	-
Anonymised interview transcripts	Standard office document	< 1 GB	no	no	Institutional Cloud	Zenodo	CC BY 4.0
Analysis software	Software application	< 100 MB	no	no	Institutional GitLab	GitHub/ Zenodo	MIT
Interpreted results	Standard office document	< 100 MB	no	no	Institutional Cloud	Zenodo	CC BY 4.0



Step 5: Storage and back-up during the research process -customization examples

 Recommended storage locations can be configured to your institution's repositories

oose the best storage option for each da	taset.	
TU Graz GitLab	TU Graz Cloud	
More information	Select corresponding datasets HDF5 datasets and python scripts to generate figures in *Bt	utterfly distribution of relativistic electrons drive
TU Graz FTP Server	HDF5 datasets and python scripts to generate figures i driven by parallel propagating lower band whistler chor	in "Butterfly distribution of relativistic electrons rus waves"
Mars information	A new Dataset	

Choose the best storage option for each datas	set.
D TUfiles More information	COMPARENT Select corresponding datasets Raw simulation results
Server Housing More information	TUhost
TUownCloud	Select corresponding datasets interpreted project results
TUgitLab <u>More information</u>	•



Step 6: Legal and ethical aspects -instructions

Legal Aspects

- Is your data or part of it sensitive...? Yes
- Please select the datasets containing sensitive data: "interview recordings"
- Will personal data be collected/used as part of the project? Yes
- Please select the datasets containing personal data: "interview recordings"
- How will compliance with data protection be ensured? By gaining informed consent... and Anonymization for preservation
- Are there any other legal restrictions on how data is processed or shared? No

Ethical Aspects

- Will you involve human participants in the project...? Yes
- Beyond the use of personal data, are there any other ethical issues associated...? No
- Was your research plan reviewed by an ethics committee...? No



Step 6: Legal and ethical aspects -integration example

• DAMAP shows what was selected in the project database for your institution





Step 7: Data access and licensing -instructions

- Assign the licenses to your datasets based on the following info:
 - Note: Data Access for the "Interview recordings" data set will be "Closed" and you will need to mark the dataset for deletion.

Name	Туре	Size	Sensitive data	Deletion	Storage during research	Repository	License
Interview recordings	Audiovisual data	< 5 GB	yes	31.03.25 by Tomasz Miksa	Institutional Cloud	no	n/a
Anonymised interview transcripts	Standard office document	< 1 GB	no	no	Institutional Cloud	Zenodo	CC BY 4.0
Analysis software	Software application	< 100 MB	no	no	Institutional GitLab	GitHub/ Zenodo	MIT
Interpreted results	Standard office document	< 100 MB	no	no	Institutional Cloud	Zenodo	CC BY 4.0



Step 8: Specifying repositories for publication and preservation -instructions

• Select the relevant repositories

Name	Туре	Size	Sensitive data	Deletion	Storage during research	Repository	License
Interview recordings	Audiovisual data	< 5 GB	yes	31.03.25 by Tomasz Miksa	Institutional Cloud	no	-
Anonymised interview transcripts	Standard office document	< 1 GB	no	no	Institutional Cloud	Zenodo	CC BY 4.0
Analysis software	Software application	< 100 MB	no	no	Institutional GitLab	GitHub	MIT
Interpreted results	Standard office document	< 100 MB	no	no	University Cloud	Zenodo	CC BY 4.0



Step 8: Specifying repositories for publication and preservation -customization examples



Step 9: Detailing your reuse of data -instructions

- Who is the target audience and who could be interested in reusing the data and why?
 - Students and general public
- Indicate whether potential users need specific tools or software to access and (re)use the data
 - The analysis software is provided in GitHub



Step 10: Costs -instructions

- Select: "as outlined below..."
- Add Cost
- Name: Change from "New cost" to "DAMAP Demonstration"
- Estimated cost: you decide 🙂
- Cost type: Training





Step 11: Summary

- Review the ten steps to see if any information is missing
- As needed, click on any of the sections to provide additional info
- If you made any changes, click "Save changes"

Summary		
Summary of the information you provided:		
Step	Completeness	Status
Choose project		Project: CRIS2024 Demo Project.
People involved in data management		Contact person set. Contributors selected: 2
Specify research data		Produced datasets: 4. Reused datasets: 1. Data generation/reuse info missing
Documentation and data quality		All information necessary provided.
Storage and backup during the research process		Some information provided. Usage explanation is missing.
Legal and ethical aspects		Partially filled out.
Data access and licensing		Some information is missing.
Specify repositories for publication and preservation		All data are deposited.
Reuse of data		All information necessary provided.
Costs		2 cost items specified.



Exporting the document -instructions

- Click on the "Export Document" button
- Select Science Europe

People involved in data management		Step	Completeness	Status					
		Choose project		- No project selected yet					
Specify research data		People involved in data		Contact person is missing. No contributors selected yet					
Documentation and data quality		<u>management</u> Specify research data		Produced datasets: 1. Data generation/reuse info missing.					
Storage and Backup	The file download	has started.		No information provided.					
	Please note that you are not do fine-tuning.	one yet. The exported documen	t may still require	Some information provided. Partially filled out.					
Legal and ethical aspects	Choose type of export	•	Cancel						
Data access and licensing		licensing		Some information is missing.					
Repositories and preservation		Repositories and preservation		Not all data deposited yet.					
		Reuse of data		No information provided.					
Reuse of data		Costs		Not specified yet.					
Costs									



Comparing exports and machine actionability

```
"contributor" : [ {
   "contributor_id" : {
    "identifier" : "0000-0002-5164-2690",
    "type" : "orcid"
   },
   "mbox" : "moritz.staudinger@tuwien.ac.at",
   "name" : "Moritz Staudinger",
   "role" : [ "Data Manager" ]
```

Data management plan (DMP) Globally orientated artificial laser pulse spectrometry (GO-ALPS)	Project decisis Project Constraint Project Constraints Interpreter to the Interpreter t	n na st, "TU Wen, ROR na st, TU Wen, ROR 0003-3178-498, TU Wan puwen as st, TU Wen, ROR	Content 4 Nonce (not park), FUR data 4 International and cultures 5 International and cultures 5 International and cultures 5 International and cultures 6 International and cultures 6 International and cultures 7 Internatione and c		S	Globally orientated artificial laser pulse bectrometry (GO-ALPS) Data Management Plan (DMP)	Definerable district This define the law Weinstein the first of the law Mile State COTRECE NOTE: Define the law Define the law	et bit bit bit bit bit bit bit bit bit bi	(DAD) for the Blocky (70) prioritic classifier (70) prioritic classifier (70) prioritic classifier (Policy produced by (product produced by (produced produced by (p	Acrenym Dars Mar DAP Dars Mar CSY Comma S EOSC Enropean PAR ZARA MB Magazyst POP Portubel WP Work Pac	Definition agement Plan Open Series Chud Open Series Chud Des Series Chud Internet Parmat Destinent Parmat
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DEMO END



Customizing DAMAP for your institution

Simple changes:

- Colors for look and feel of tool
- Default suggested answers
 - IT Storage options
 - Export document policy
- Default text in template
- ORCID, re3data (list of data repository), OpenAire (for reused data sets)
- FITS (use to upload a sample file, automatically tells you the format)

More complex changes:

- Integration with your institutions' CRIS and other systems, e.g. HR and project databases.
- Setting up Single Sign On (SSO)





Revisiting the goals of the session

By the end of the session you will know:

- What a DMP tool is and what it should do
 - 1) Make it easier for researchers to create an accurate, high quality DMP
 - 2) Integrate and reuse information from internal and external systems
 - 3) Be built on the principle of machine actionability to ensure future adaptability
- What DAMAP is and why you would use it
- How to use DAMAP to begin creating a DMP



Questions?



Stay in Touch!

Contact us at: info@DAMAP.org

Code:

tuwien-csd/damap-frontend (github.com)
tuwien-csd/damap-backend (github.com)





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Laura Thaci







Tomasz Miksa

Zeno Casellato

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	🖿 .d	Re-add files cleaned up from history cleanup.	last month				
	github/workflows	Prepare POM for github workflows and use official workflow (#2)	4 days ago	research data management quarkus			
	🖿 58	(Bugfix) Update deployment config	9 months ago	Readme			
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	dockerignore.tmp	8 months ago					
	D .en-sample	wip yami config	9 months ago	Releases			
	D gitignore	3 years ago	S 20 tags				
	CONTRIBUTING.md	[Doc] Propose a common OpenSource doc file structure based on Gitea.	last month				
	CUSTOMISING.md	[Doc] Propose a common OpenSource doc file structure based on Gitea.	Packages (2)				
	Dockerfie	[Docker] Cleanup and document Dockerfile, use rockylinux as base runn	@ damap-backend				
	INSTALLATION Ind	[Doc] Propose a common OpenSource doc file structure based on Gitea.	/ atac.tuwien.damap-backend				
	D LICENSE	(task) add copyright holder	last month				
	D README.md	(task) adding authors,	last month	Contributors 4			
	D pomami	Prepare PDM for github workflows and use official workflow (#2)	TenoLC Zeno Casellato				
				🔝 clarascu Clara Schuster			
	README.md			8 flozzone Florin Hillebrand			
	DAMAP			Ejmill Ejmi Shkrei			
	DAMAP is a tool that is currently being is based on the idea of machine acti- data management plans (DMPs) for environment, collecting information research data and personnel data for several times. Finally DAMAP deliver whose information can be used at m Practical Guide to the international /	Languages					
	For a showcase of some of the tools						



END