

First stop: storage. Next stop: the world

...of research data.



Designed at The University of Queensland




















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UQ Research Data Manager (UQRDM)

- UQ built and supported research data management system launched in 2018
- 24,000 project records
- 26,000 total active users (12k UQ staff, 10k UQ students, 4k external collaborators)
- 25PB of research data stored in the first instance

Project Record

Services	Permissions	Collaborators			
 Storage 1	 Read/Write	 Read/Write	 Read only		
 Storage 2	 Read/Write	 No access	 No access		
 Notebook	 Admin	 User	 No access		
 Impact Tracker	 Owner	 No access	 Co-investigator		

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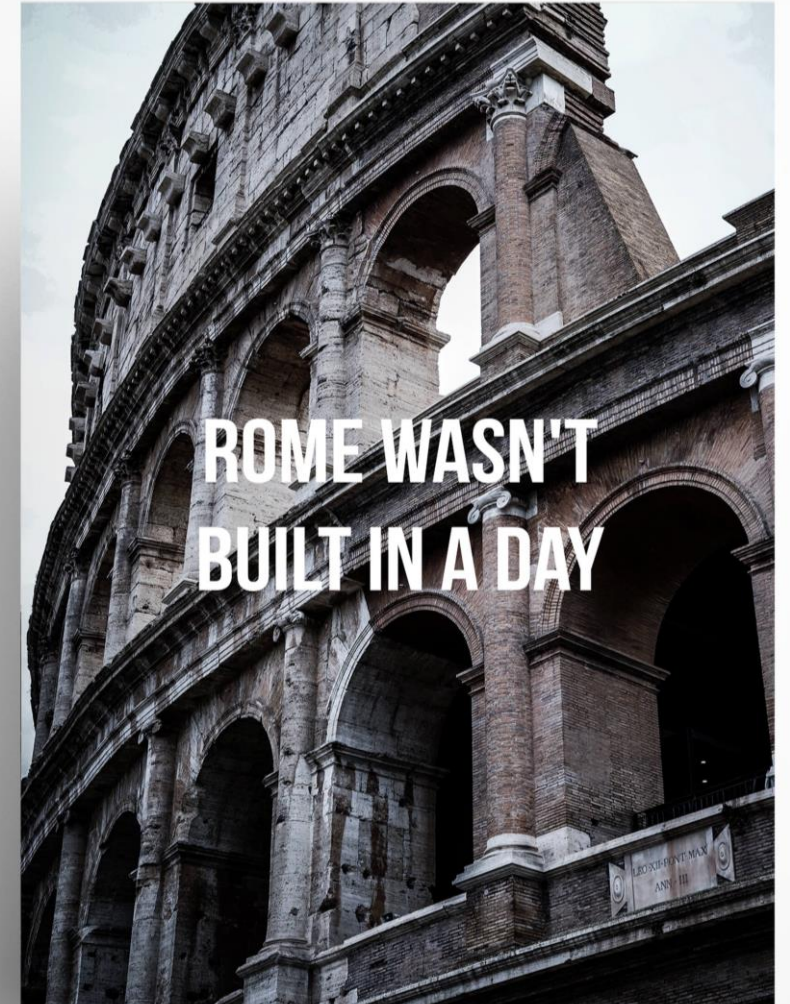
But... What does UQRDM do?
How is it managing data?
Why are there users at all?

What are we striving for?

- Drive excellent data management practice
- Eliminate 'planning' for the researcher

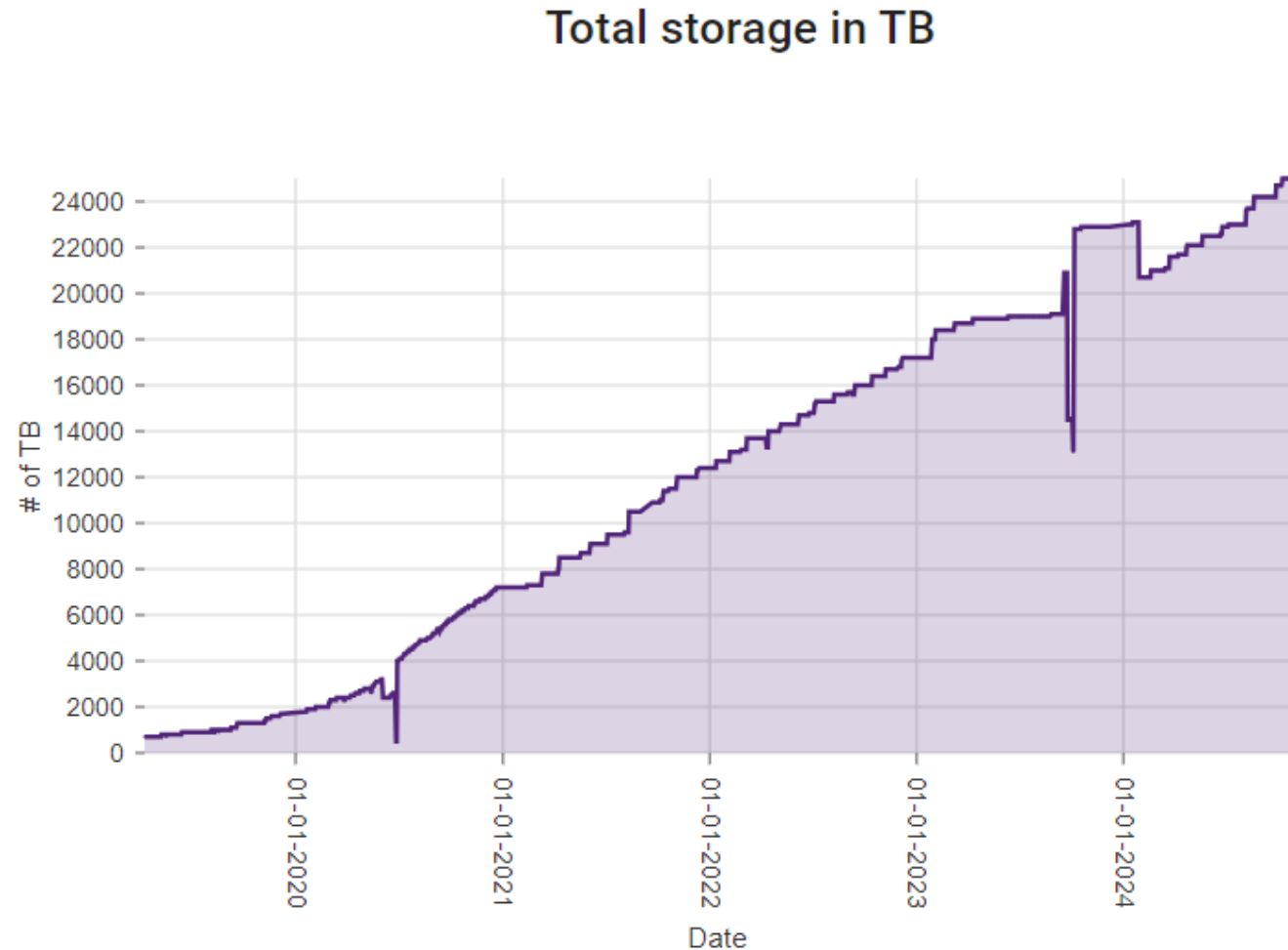
And how we are doing it?

- One brick at a time
- Make good data management the easiest option
- Exchange useful services for good practice
 - Storage for security and findability
 - Data sharing for accountability and access data
 - Publishing, thesis submission, etc, etc.



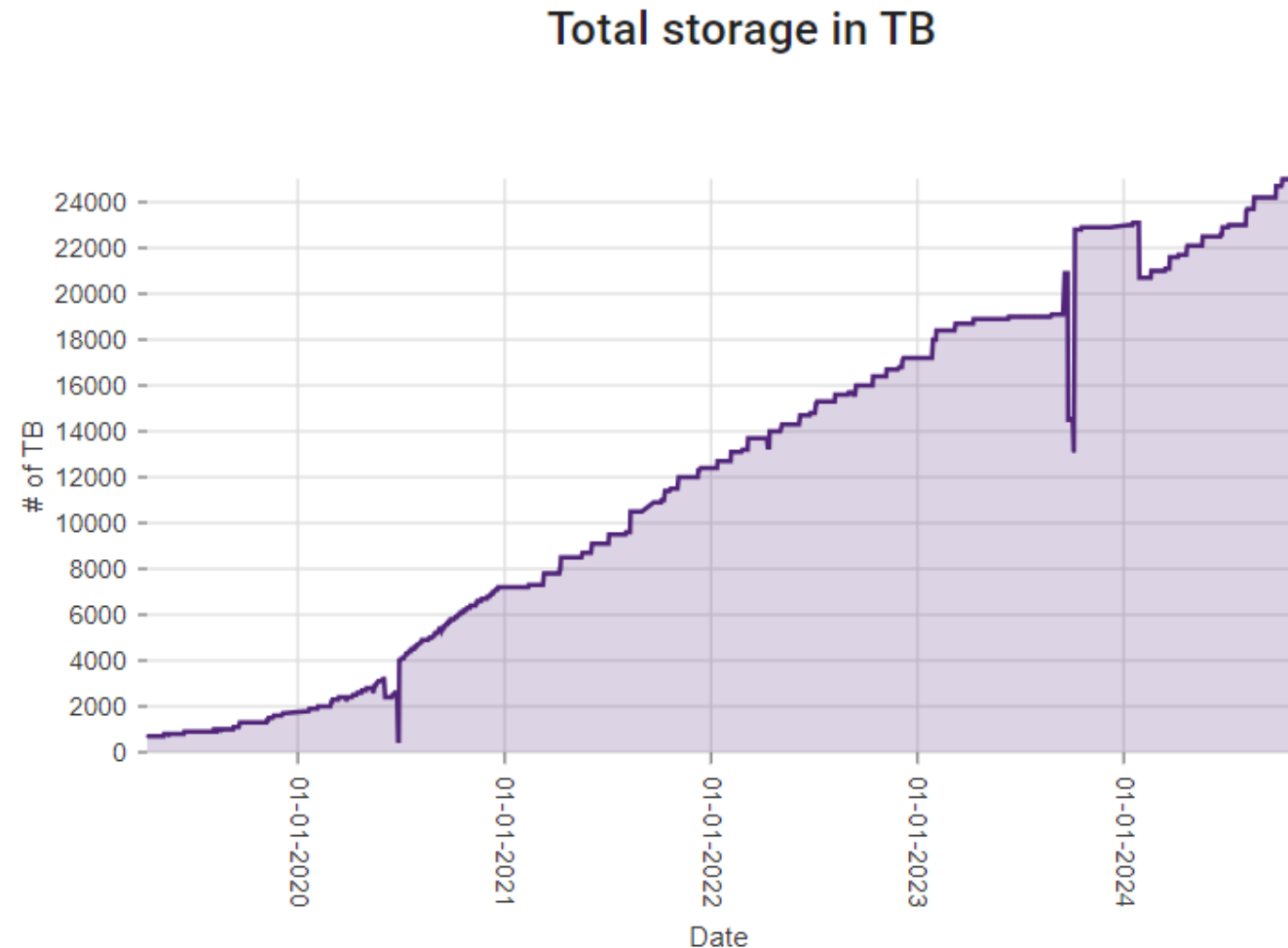
Researcher – Unlimited free storage

- UQ managed data storage
 - Free and unlimited capacity
- 23,262 allocations from 3 use-specific storage types
 - Standard, Identifiable, HPC
- Accessible via mapped drive, cloud, sync client, and HPC
- UQ and external collaborator access



UQRDM – 24,000TB of stored data

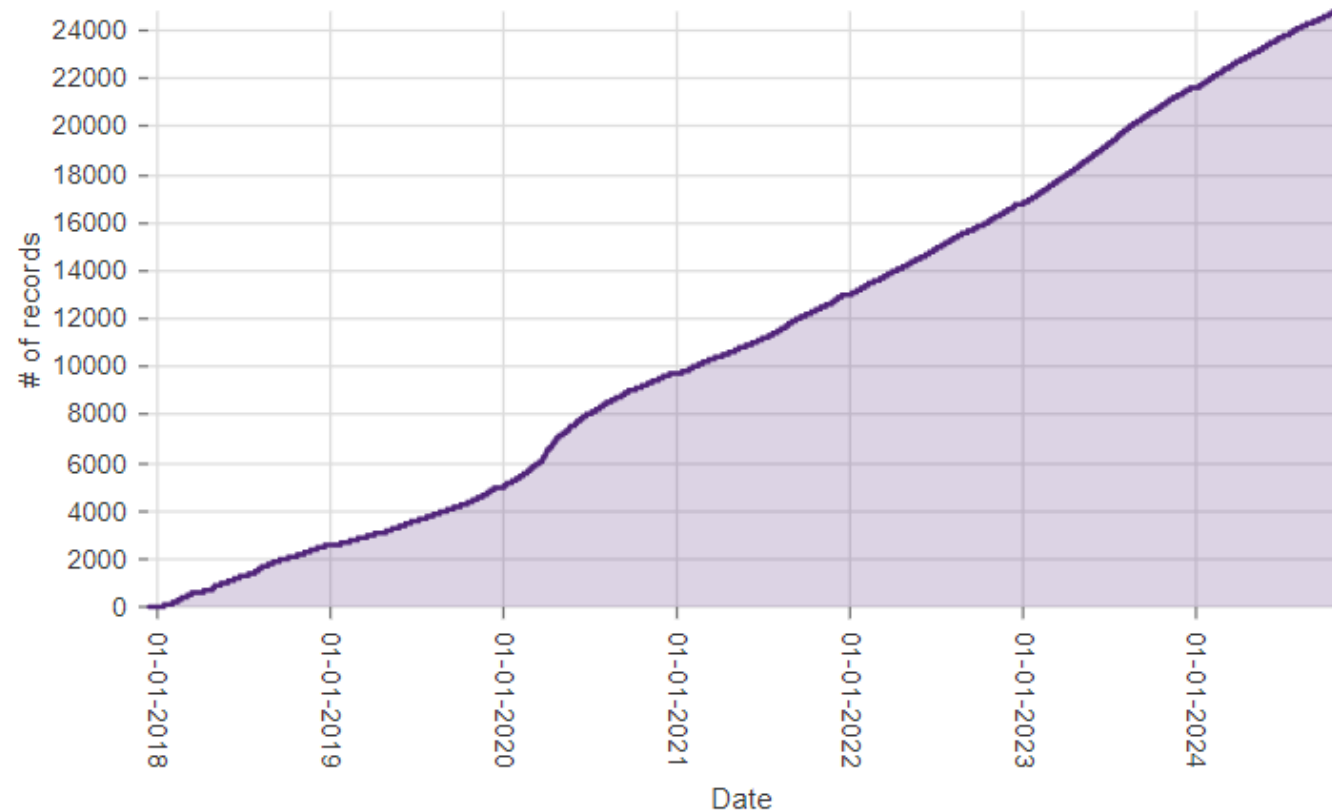
- UQ managed data storage
 - Secure and visible
 - Minimises loss of data
 - Findable
- 24 PB of research data preserved
- Oversight into the quantity of UQ generated data



Researcher – Organised project records

- Project-based RDM system
 - Instant log of a research activity
 - Included storage
- Metadata collected
 - Researchers and collaborators
 - Org unit
 - FoR codes and project duration

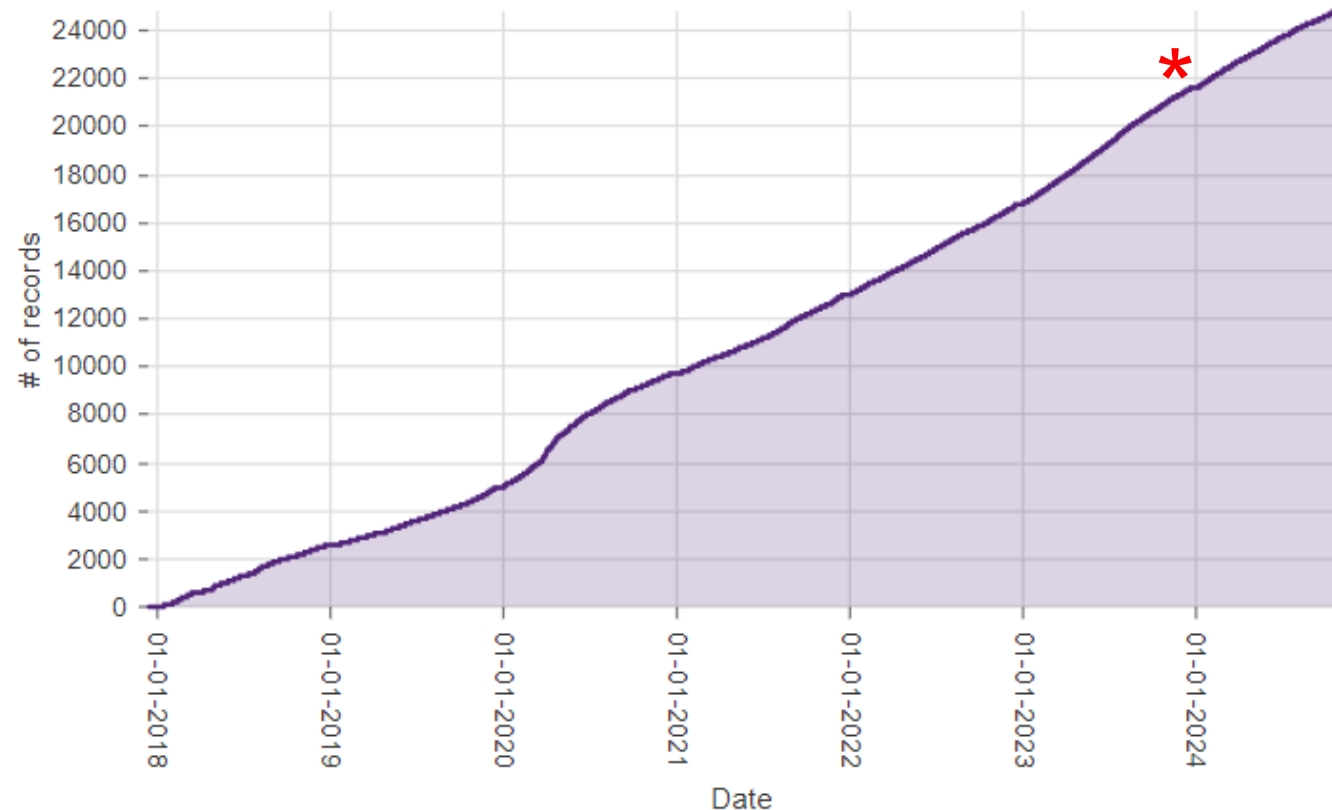
Total number of records



UQRDM – Over 24,000 project records

- UQRDM 2.0 - redesign
 - Instant log of research activity
 - Maybe storage *
 - Granular user permissions
- More metadata collected
 - Project description
 - Research subjects (ethics), HDR

Total number of records



Researcher – Data sharing and collaboration

- Sharing data integral to research and research data management
- Adding collaborators increases uptake
 - Simple, easy invitation and management of access
- Collect access permission data





Add collaborators to your collaborator list ?

[Search for a user](#)

Search for UQRDM users by name or email address

[Or invite a new user to UQRDM](#)

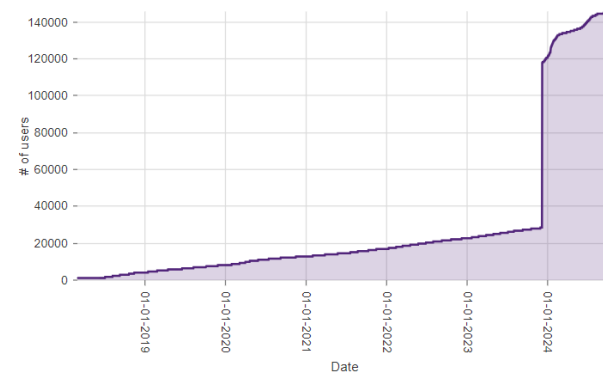
Storage Allocation 2 USERS WITH PERMISSIONS

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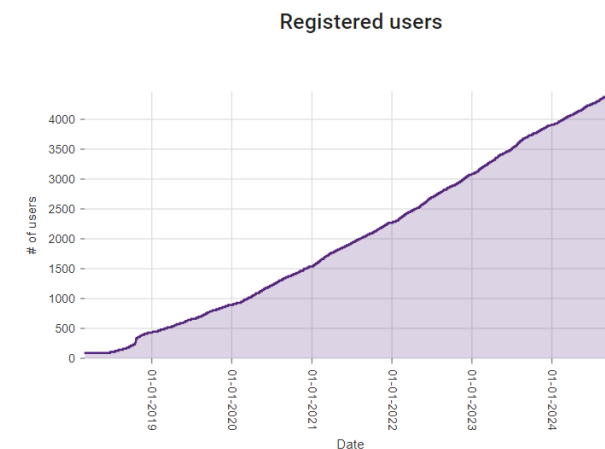
Name/Email	Read / Write	Read Only	No access	?
Mrs Mariana Kaiser m.kaiser@uq.edu.au	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Dr Andrew Kneynsberg a.kneynsberg@uq.edu.au	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

UQRDM – User adoption

- Steady increase in users
 - UQ staff, students, external collaborators
- Integration with UQ central database to allow simple collaborator management

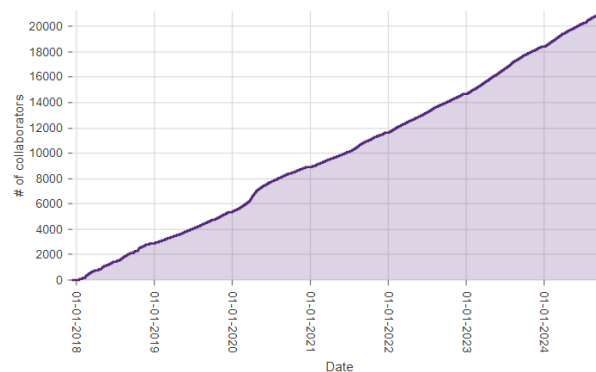


All users UQ users External users



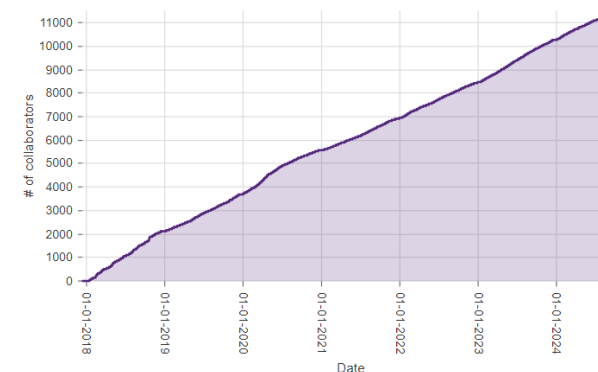
All users UQ users External users

Total active, unique UQ record collaborators



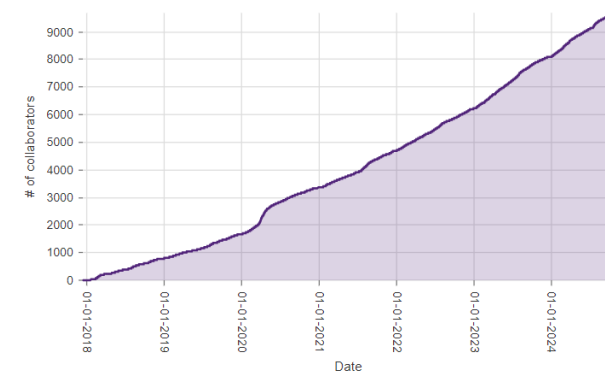
All UQ users UQ students UQ staff

Total active, unique UQ record collaborators



All UQ users UQ students UQ staff

Total active, unique UQ record collaborators



All UQ users UQ students UQ staff

Researcher – Share data with DOI

- Research data already stored in UQRDM published with instant DOI
- Easy step workflow
 - Use existing project metadata
 - Access managed through UQRDM project record

Publish your dataset

✓
Dataset details

✓
Dataset contact and creators

3
Folder selection

4
Access and licensing

5
Confirm and publish

Folder selection

[HOW FAIR IS YOUR DATA? CLICK TO VIEW THE FAIR DATA SELF ASSESSMENT TOOL.](#)

If you are now ready to publish, move only the chosen files into a new folder in the current UQRDM storage allocation. Do not zip up the files. Note that the dataset files in this folder will be copied by ITS once you submit your publication request. DO NOT change or access the files during this time. If you are still working on the data, take a copy before you publish or consider publishing later.

Select the one folder that contains all the data to be published. All data, files, subfolders in the selected folder will be included in the final product.

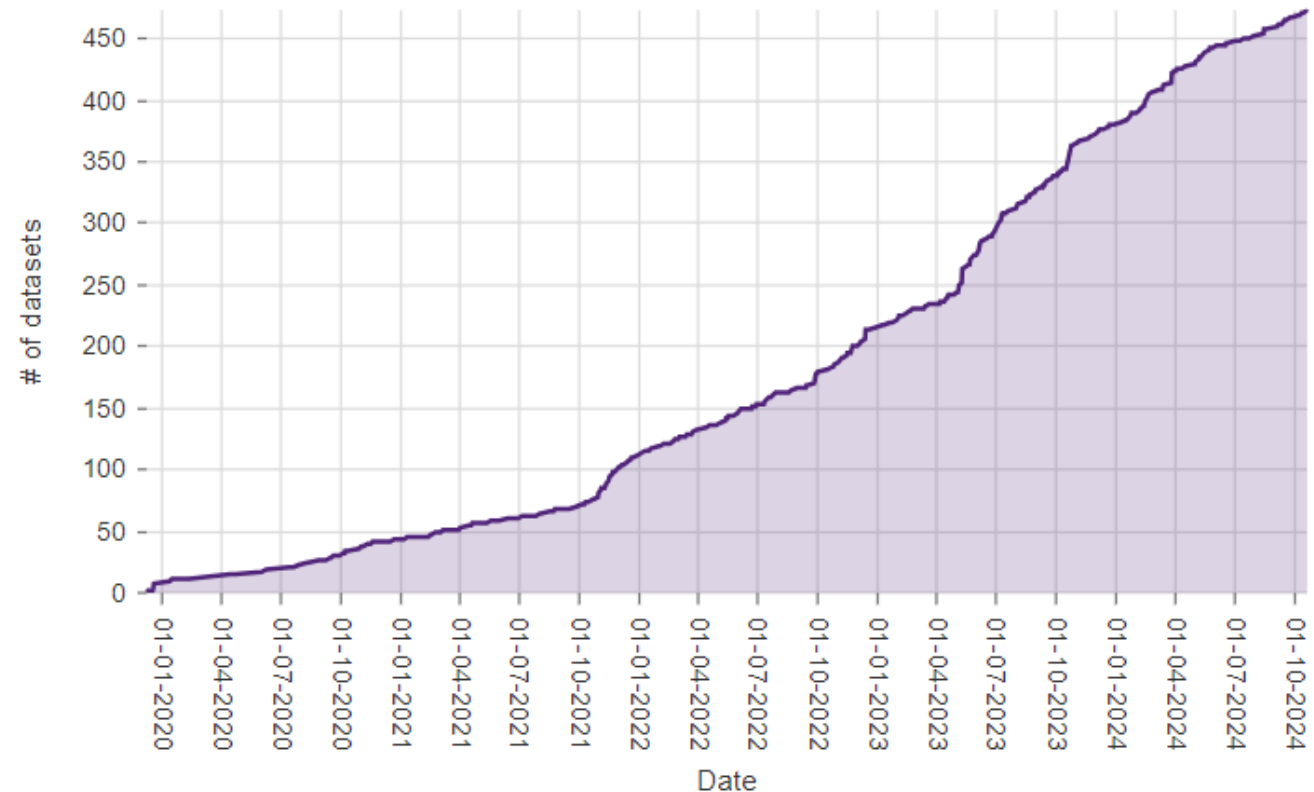
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↻ ^

- 📁 Files from CloudStor
- 📁 also research data
- 📁 more research data

UQRDM – 450+ datasets published

- Research data collected, stored, and curated in UQRDM published to institutional repository UQ eSpace
- Additional project metadata supplied by the researcher
 - Data type, data description, related publications

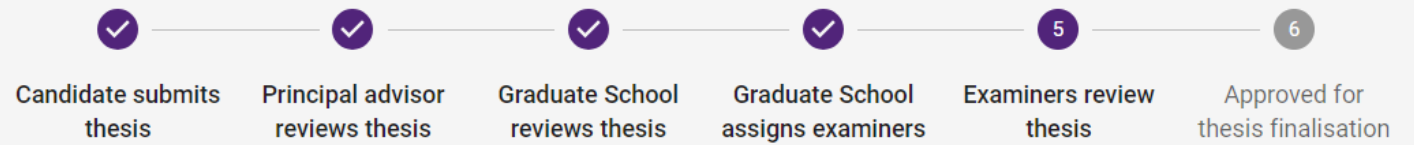
Total number of datasets



HDR Researcher – Submit thesis

- Submit thesis in easy stepped workflow
- Prefilled metadata about research project and principal advisor
- Connected to HDR project record where data is stored and shared with committee

Thesis submission



Examiners are reviewing your thesis

The examiners have been notified that you have submitted a thesis. They will review the submission and give the appropriate outcome. If you are required to complete an oral exam, this step will not progress until the oral has been completed.

UQRDM – Record theses and research

- Record of theses submitted linked to underlying research projects, advisors, collaborators, and research data
- Implement good data management habits in early researchers
- No loss of HDR research projects when students graduate

Thesis statistics

Thesis submission overview

Total active theses	Total theses conferred (YTD)	Time to conferral (avg/median)	Time to conferral - last 100 (avg/median)
622	1981	208.55/191.00 Days	147.43/146.00 Days

UQRDM: How do we drive adoption?

- Describe hierarchy of research data and how to gain oversight
- Storage
 - Know where it is and keep it safe
- Notebooks
- Datasets with DOIs
- Thesis
- Ethics



What's next for UQ and how can UQRDM deliver while providing researcher benefit?

- Visibility of project lifecycle and requirements for data management
 - Funding and grants
 - Ethics agreements
 - Publications and research outputs
- Provide integrated data management



Thank you

- Research Systems Team
- UQ Information Technology Services
- Research Computing Centre
- UQ Library Learning and Research Services



Research
Data
Manager

Designed at The University of Queensland

Questions?

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The next evolution of the University of Queensland's Research Data Manager

Jan Wisgerhof – Wednesday 11:05 – 11:25 Element room