

Update on:

CRAMS and the data dashboard

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Part of the Collect & Protect initiative

CRAMS

data dashboard

Continue to empower researchers

- Continued partner in NeCTAR and RDS/VicNode. Continued recipient as trusted environment for ANDS.
- Sustain Monash data collections previously established as “nationally meritorious” (*)
- Tight integration with our computational environments
- Provide storage at scale

Underpinning infrastructure

- Re-use ATL from SONAS (means “tape” style storage becomes a scalable resource, as per disk and public cloud)
- Create a software defined “data management” environment (more like: readily provide “personalised” data-management services)
- Disaster recovery¹, user shares, etc - based on \$/tb, access time, and Recovery Time Objectives (RTO)

Democratize data management

- Engage with community to develop consolidation of “personalised” data-management (increase from “Market” and “Vault” to a spectrum of tiering from disk only to all offsite)
- Enable mechanisms to self-service to the “software defined data management environment”
- Establish a set of vendors/technologies that can provide further domain specific data mining (etc) capabilities.

Multi-tenancy & quality assurance²

- Continue trajectory that all resource allocations to users are tracked and managed as journal transactions with meta-data, per tenant (CRAMS).
- Manage media capacities (disk/tape/cloud) independently to allocations
- Add quality processes to the tenancy business model.

1. Gaps in tooling for backup/disaster-recovery have been identified, and addressed here
2. These activities are delivered by the MeRC/R@Cmon 2017 QA activities

Objectives

Accountability

- Transparent view all storage resources: **capacity**, **allocated** and **utilised** by individual **researchers**, **faculties**, **tenants** (institutions)
- Implementation of allocation (access) process as per Platform's ISO9k

Democratisation

- Self-service (requests, increases)
- Increased automation of data (storage, management, policies) into research applications

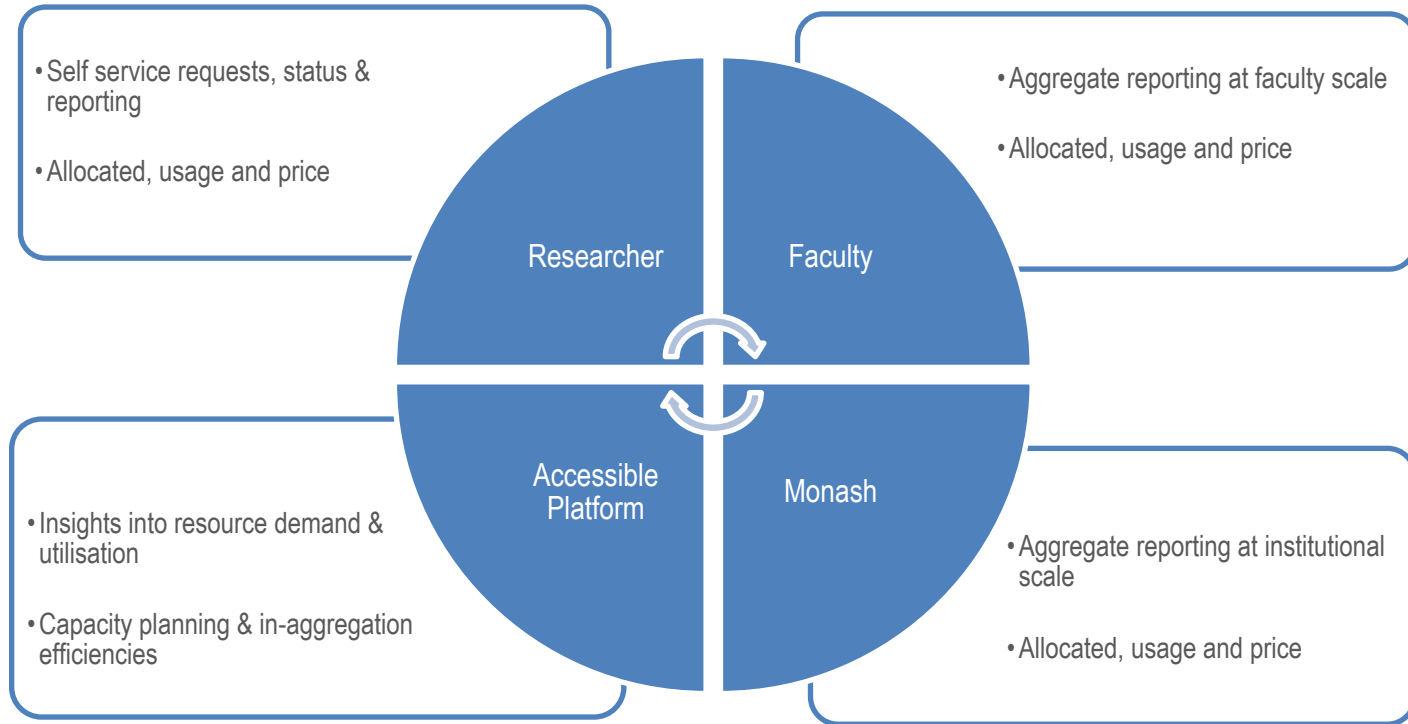
Efficiency

- Aggregated view: Platform (R@CMon), Monash, Faculty and researcher
- Packing per-researcher storage onto scalable media

Leverage

- Leverage on the initial investments from NCRIS NeCTAR and VicNode
- Position for future NCRIS facilities


Ambidextrous: researcher & stakeholder



Allocation request...

 Dashboard

 Allocations 

 New Requests

 My Requests

Storage Request Application

By submitting this application, you agreed that R@CMon has the right to share the information contained in this form with any people, institutions, or systems involved in processing this application, and that R@CMon may retain this application for future reference.

Info: Required fields are marked with an *

Authority *

Please confirm that you have the authority to store this collection on R@CMon infrastructure.

--- Select --- 

Section 1: Contact Detail

Data Custodian *

The storage requestor is Custodian/Steward or Principal Investigator of the collection. This role will be the primary contact.

Add Data Custodian

Technical Contacts *

The Technical Contact may be required to work with R@CMon on technical issues related to this application and its implementation. The Technical Contact may be the Data Custodian.

Note: Please add at least one technical contact.

What researchers see...

Dashboard

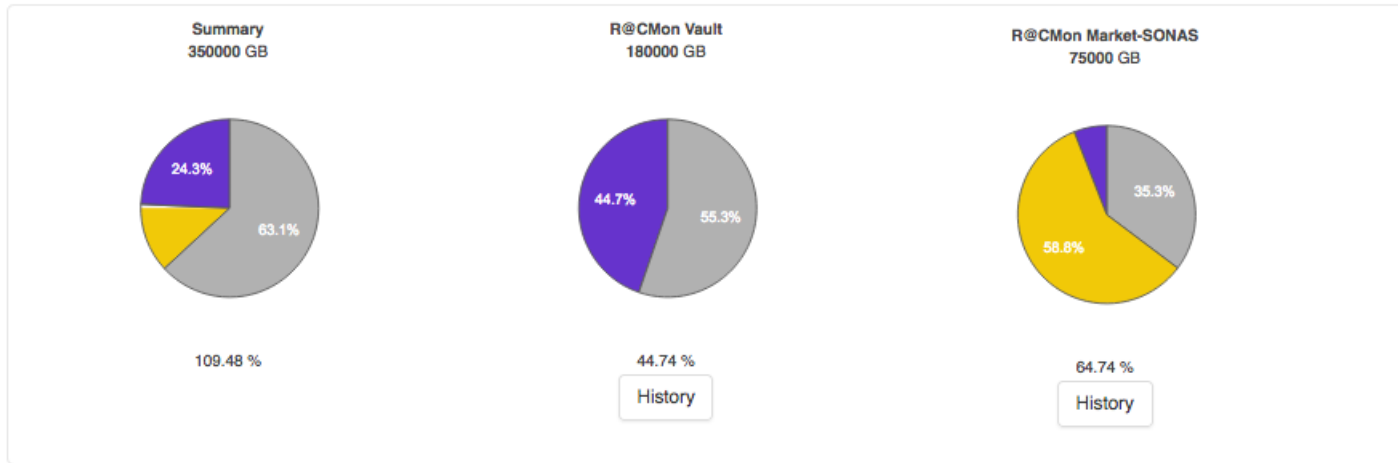
Allocations

Switch to

Cost View

Available Used (Disk) HSM (Tape) Over Draft None

Biomedical Applications of Phase Contrast X-ray Imaging



Faculty view...

- Dashboard
- Allocations
- Approval
- Provision
- Admin
- Reports
- Faculty Usage**
- Product Demand
- Funding Allocation Costs
- Storage Transactions
- Collection Ingest
- Allocation Custodian Info

Switch to **Usage View**

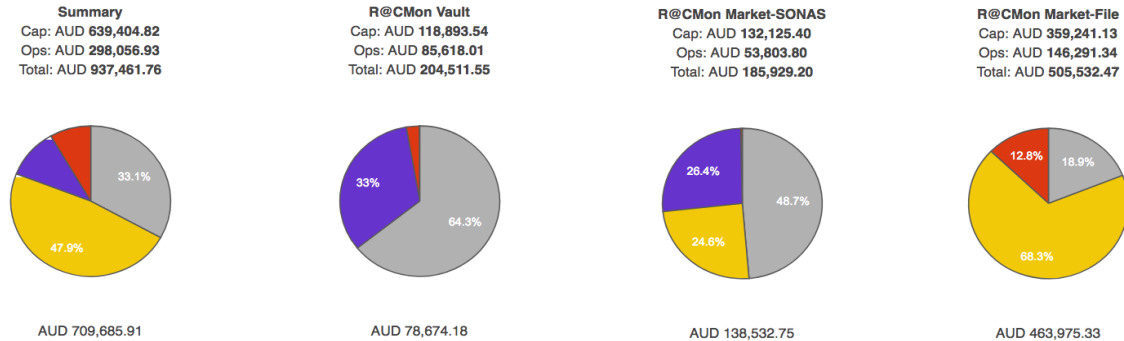
Available Used (Disk) HSM (Tape) Over Draft None

Select A Faculty

--- All ---

Faculty of Arts

Faculty of Medicine Nursing & Health Sci



Storage transactions...

Storage Transaction Records Report

Transaction Id	Provision Id	Date Allocation Approved	Collection	Storage Product	Size of Allocation (GB)	Capital Cost / Product (AUD)	Operations Cost / Product (AUD)	Allocation Scheme
2014R14.2	Market.Monash_2014R14.2		Monash School of Chemistry - X-Ray Diffraction Images	R@CMon Market-SONAS	5000	3670.15	1494.55	ReDS1/2
2014R14.2	Vault.Monash_2014R14.2		Monash School of Chemistry - X-Ray Diffraction Images	R@CMon Vault	10000	2141.30	1542.00	ReDS1/2
2014R14.3	Market.Monash_2014R14.3		3D Geological and Geophysical Model and Toolkit Library	R@CMon Market-SONAS	1000	734.03	298.91	ReDS1/2
2014R14.4	2014R14.4		Stock Price Impact Models	R@CMon Computational	10000	7265.30	3077.10	ReDS1/2
2014R14.4	stockprice		Stock Price Impact Models	R@CMon Vault	20000	4282.60	3084.00	ReDS1/2
RDS-RITP-405	data1/coe-ami		COE AMI	R@CMon Market-File	20000	14680.40	5978.20	RDSM
2015BAP10	2015BAP10_CIBF		CIBF	R@CMon Market-SONAS	65000	47711.95	19429.15	ReDS3-GEN

Note: numbers in charts are preliminary/draft

Per funding source...

Dashboard
Allocations ▼
Approval ▼
Provision ▼
Admin ▼
Reports ▼
Faculty Usage
Product Demand
Funding Allocation Costs
Storage Transactions
Collection Ingest
Allocation Custodian Info

Funding Accounts Allocation Costs Summary Report

Allocation Scheme	Storage Product	Demand / Fund (TB)	Ingested (TB)	Capital Cost / TB (AUD)	Operational Cost / TB (AUD)
RDSM	R@CMon Computational	75.00	16.89	54490.00	23078.00
RDSM	R@CMon Market-File	1435.58	1.41	1053741.00	429108.00
RDSM	R@CMon Market-SONAS	77.00	20.01	56520.00	23016.00
RDSM	R@CMon Vault	2923.29	174.11	625964.00	450771.00
RDSM	R@CMon Object	251.00	0	184239.00	75026.00
MASSIVE	R@CMon Computational	0.00	0	0.00	0.00
MASSIVE	R@CMon Market-File	0.00	0	0.00	0.00
MASSIVE	R@CMon Market-SONAS	0.00	0	0.00	0.00
MASSIVE	R@CMon Vault	0.00	1023.38	0.00	0.00
MASSIVE	R@CMon Object	0.00	0	0.00	0.00
ReDS1/2	R@CMon Computational	275.31	0.50	200025.00	84717.00
ReDS1/2	R@CMon Market-File	467.00	63.51	342787.00	139591.00
ReDS1/2	R@CMon Market-SONAS	726.93	17.20	533588.00	217287.00
ReDS1/2	R@CMon Vault	1524.14	11.96	326364.00	235022.00