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JASMIN

Group Work Space Managers Webinar
08 February 2024

Centre for Environmental Data Analysis
SCIENCE AND TECHNOLOGY FACILITIES COUNCIL
NATURAL ENVIRONMENT RESEARCH COUNCIL

Scientific Computing
Science & Technology Facilities Council

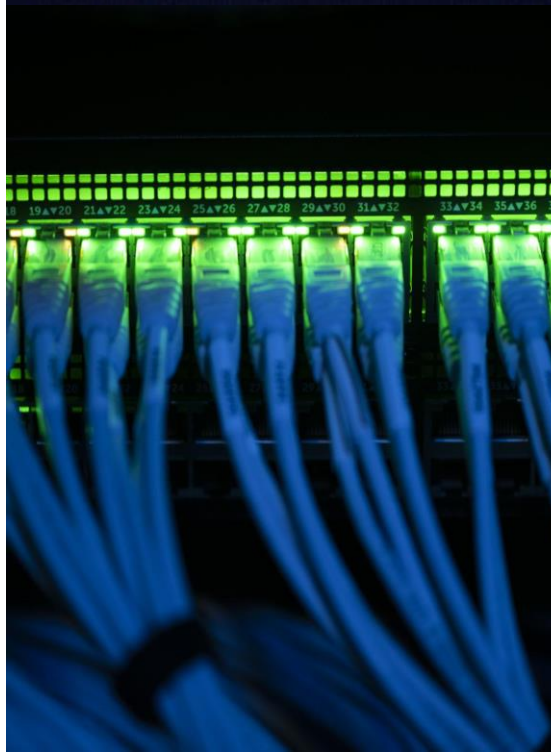
National Centre for Atmospheric Science
NATURAL ENVIRONMENT RESEARCH COUNCIL

National Centre for Earth Observation
NATURAL ENVIRONMENT RESEARCH COUNCIL

RAL Space

Outline

- Introduction
- Survey feedback
- The need for cleanup
- Benefits of cleaning up GWS
- Tools for Monitoring GWS
- What actions can we take together
- Question and answer session



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Introduction

Overview

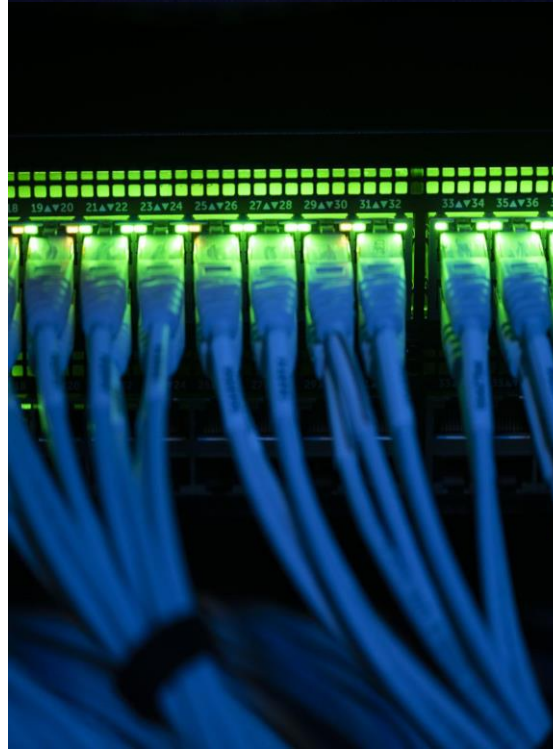
- Engagement
- Collaboration
- Strategies of resolution
- Information sharing
- The world and its finite resources

Objectives

- Reduce cost
- Optimise storage usage
- Reduce power/energy consumption

JASMIN has finite resources

- Storage
- Compute
- Cloud
- Staff
- £££

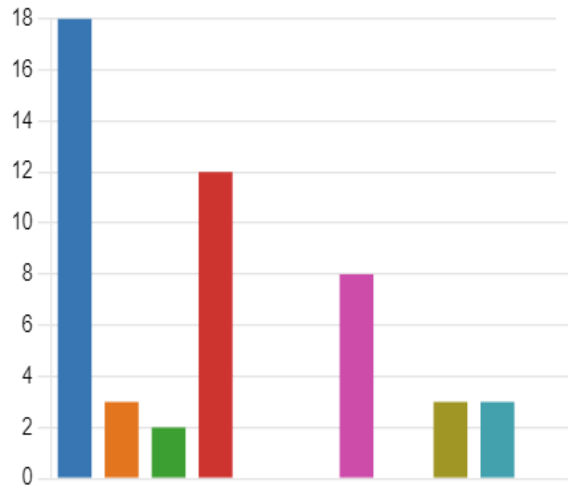


Survey Feedback

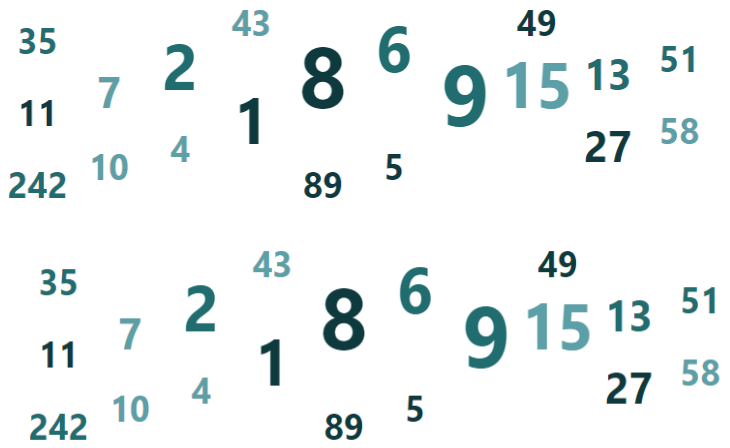
Responses so far

- Responses Per Consortium

atmos	18
director	3
ecohydro	2
eoclim	12
genomics	0
geology	0
jwcrp	8
npg	0
oceanss	3
polsci	3
semp	0



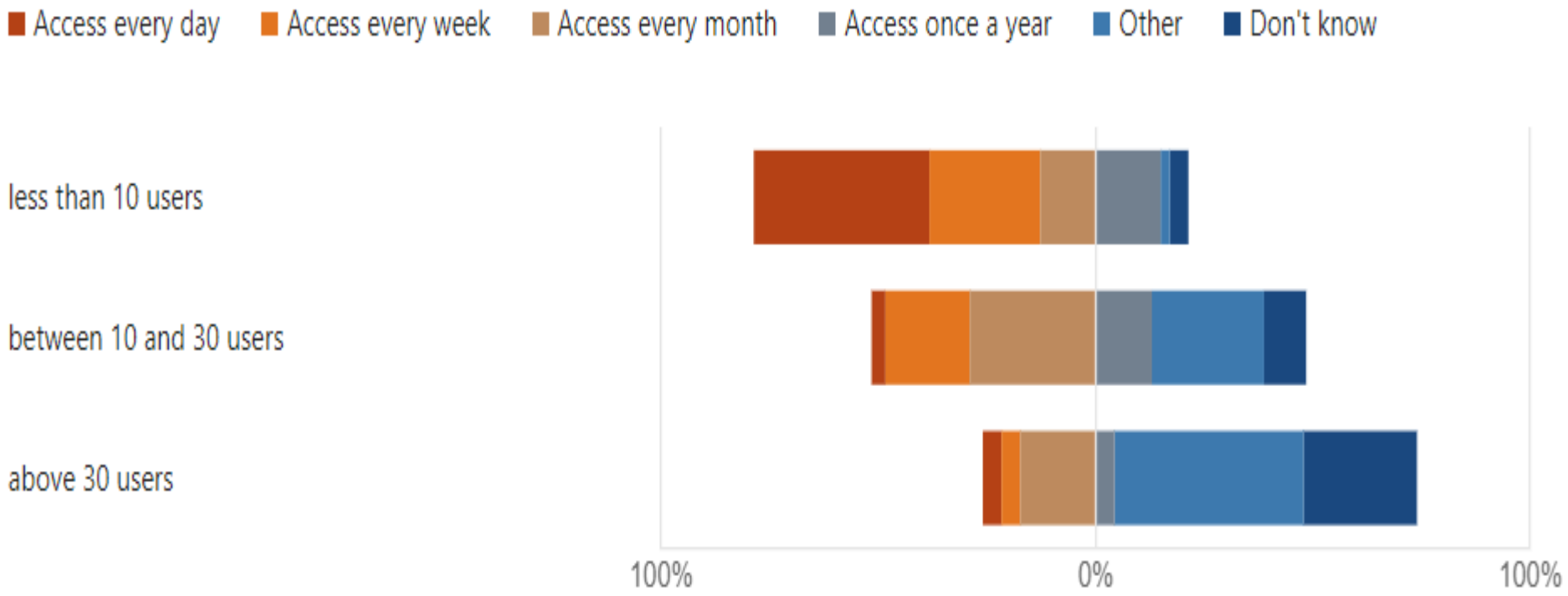
- Users per GWS



Survey Feedback

Responses so far

- Frequency of user access



Survey Feedback

Responses so far

- Collecting user access patterns

Survey Feedback

Responses so far

- Size TB (SOF)

75 84 110
433 42 60 15 2 1 19 109 72 164
372 41 50 10 295 100 250

- Size TB (SMF)

0537 01 158
0108

- Storage (PFS)

195 65 130 13 78

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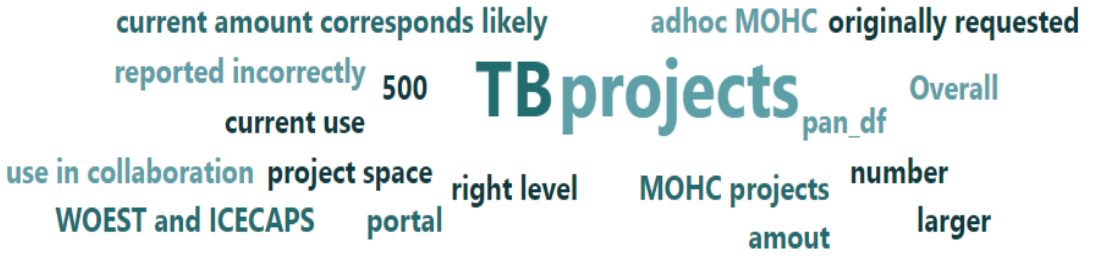
Survey Feedback

Responses so far

- Checking that allocated resource is consistent with what was requested

Yes	39
No	6
Other	4

General comments



GWS Usage scenarios

Domains

Consortium	Name
atmos	Atmospheric Science
director	Director's cross-cutting activities
ecohydro	Ecology & Hydrology
eoclim	Earth Observation & Climate
genomics	Genomics
geology	Geology
jwcrp	Joint Weather & Climate Research Programme
npg	National Public Good
oceanss	Ocean & Shelf Seas
polsci	Polar Science
semp	Solid Earth & Mineral Physics

JASMIN supports

- diverse and complex data
- a variety of workflows

Benefits of cleaning up GWS

- Active management of data
- Ability to share data
- Data security
- Data deduplication
- Long-term preservation*

The need for cleaning up GWS

- Cost
- Energy
- Security
- Time

Solution

Actively manage what data is used & kept
Use colder storage as part of workflow
Move data to the archive if appropriate
Delete obsolete and redundant data
Free up resources to support more projects

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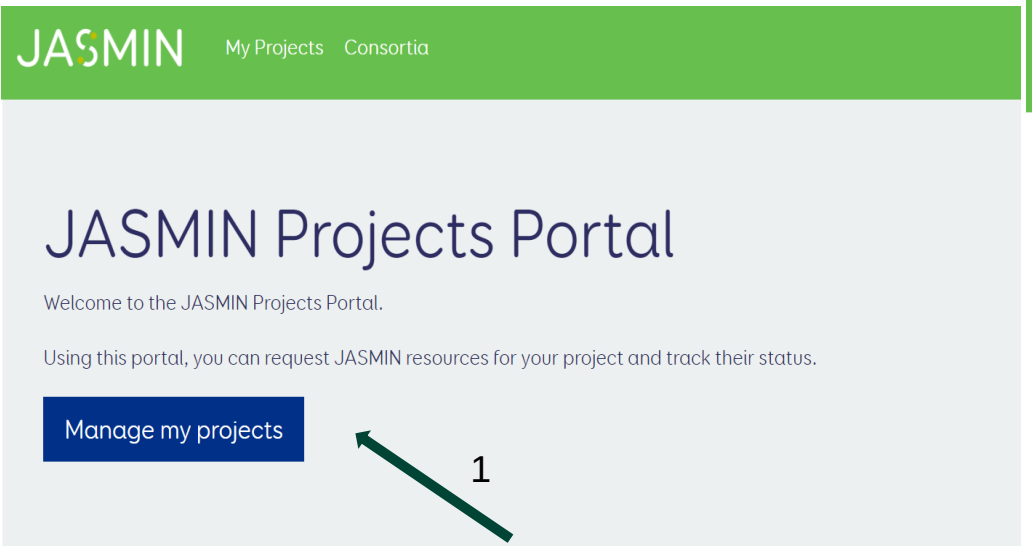
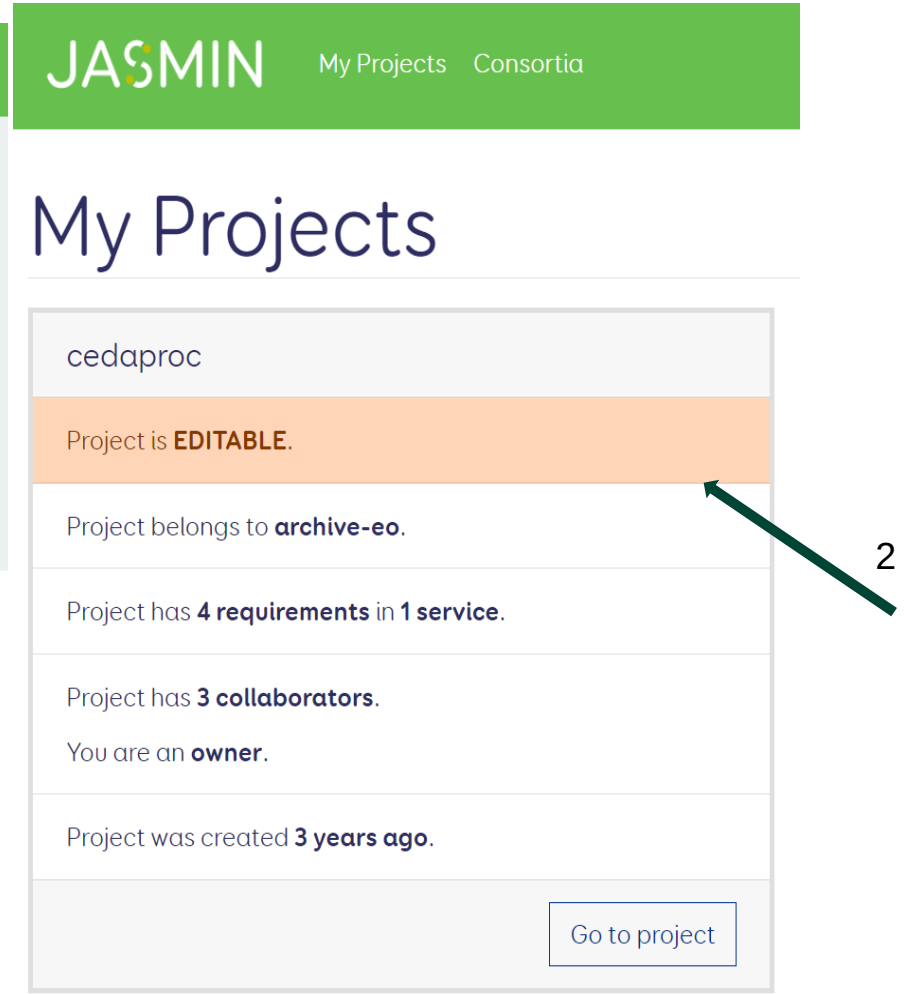
Tools for monitoring GWS

- From the projects portal:
  Navigating to Manage My Projects

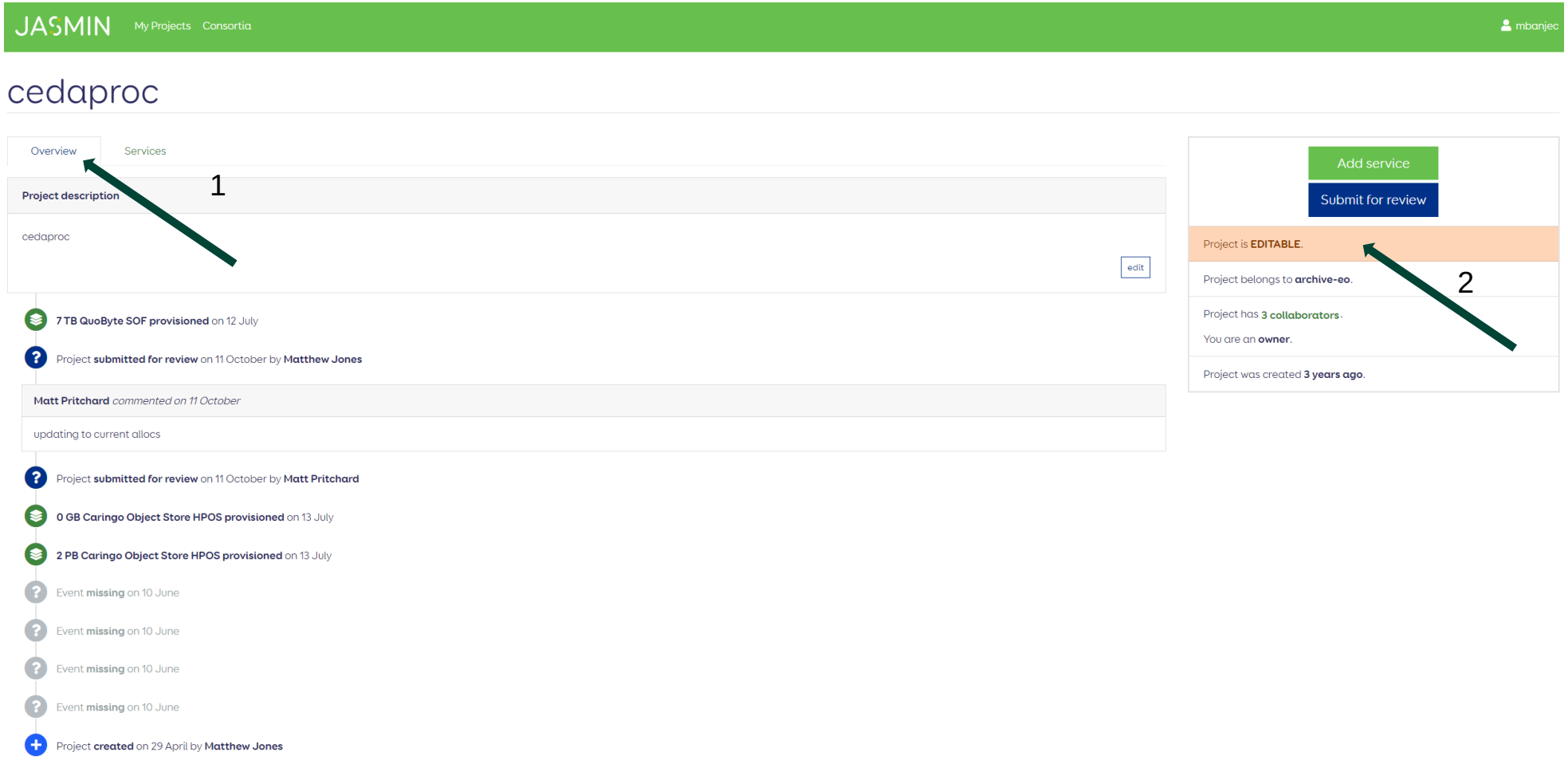


- From the My Projects -> Go to project

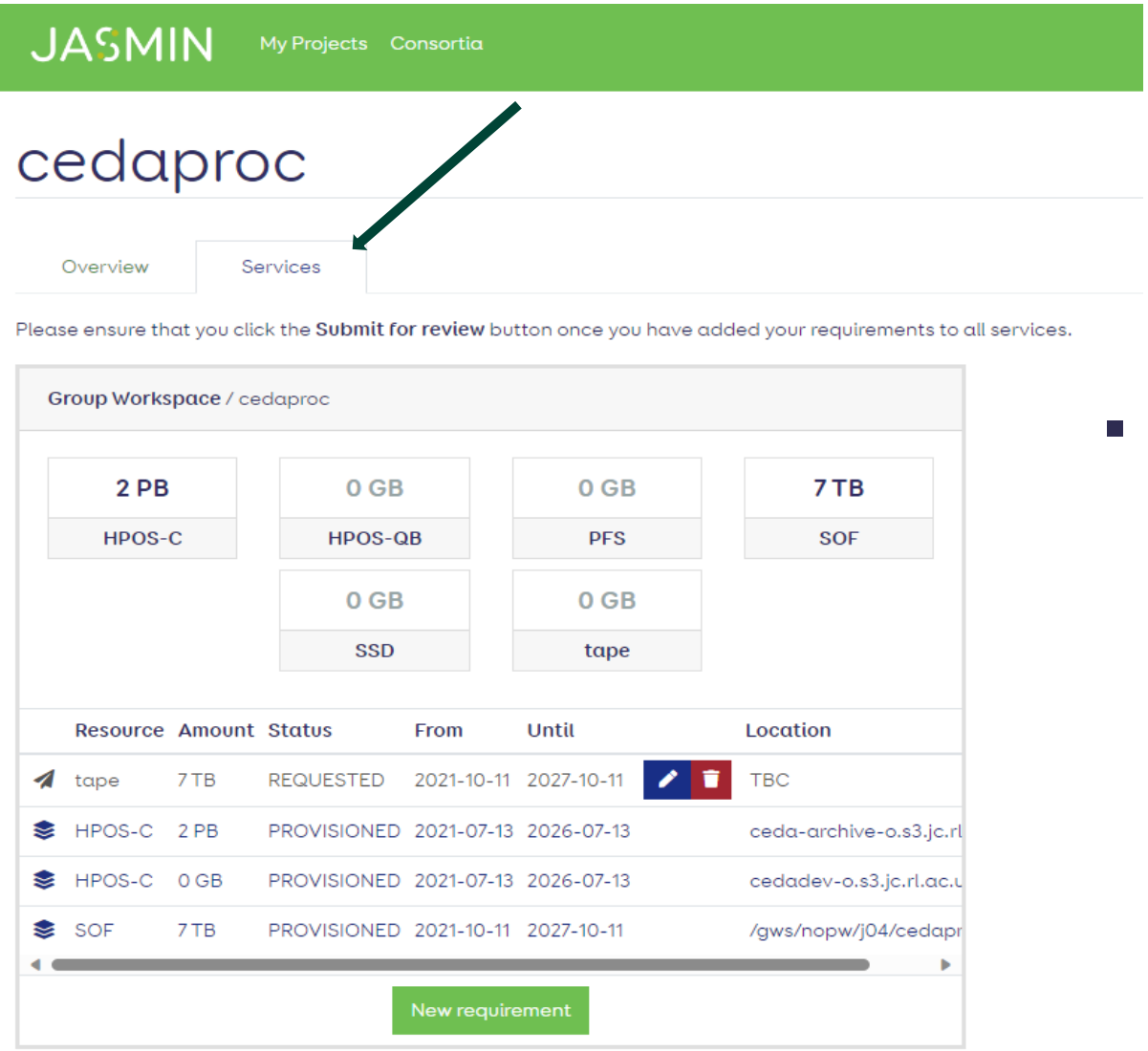


In the My Projects overview you can see

- What was provisioned,
- When it was provisioned, and the resource provisioned



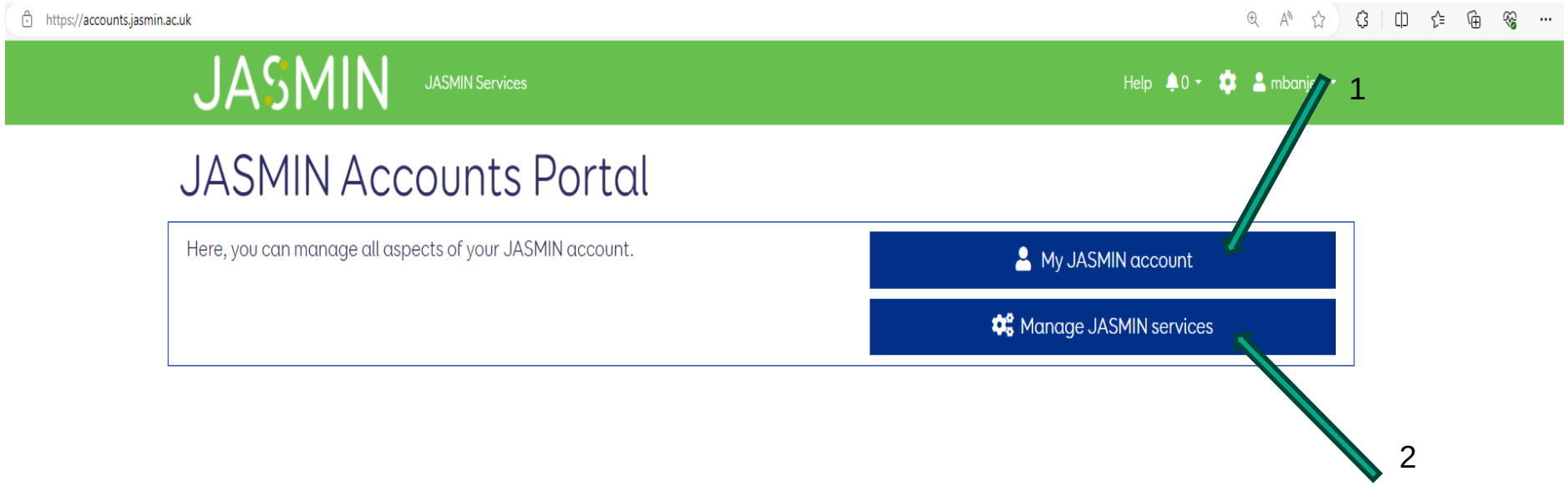
Select the Services Tab



- View the resource type, location status, and size
  - SOF (Scale-Out File System)
  - HPOS-C (High-Performance Object Store)
  - SMF (Small File Storage)
  - PFS (Parallel File System)

From the accounts portal

- To view JASMIN services and account information



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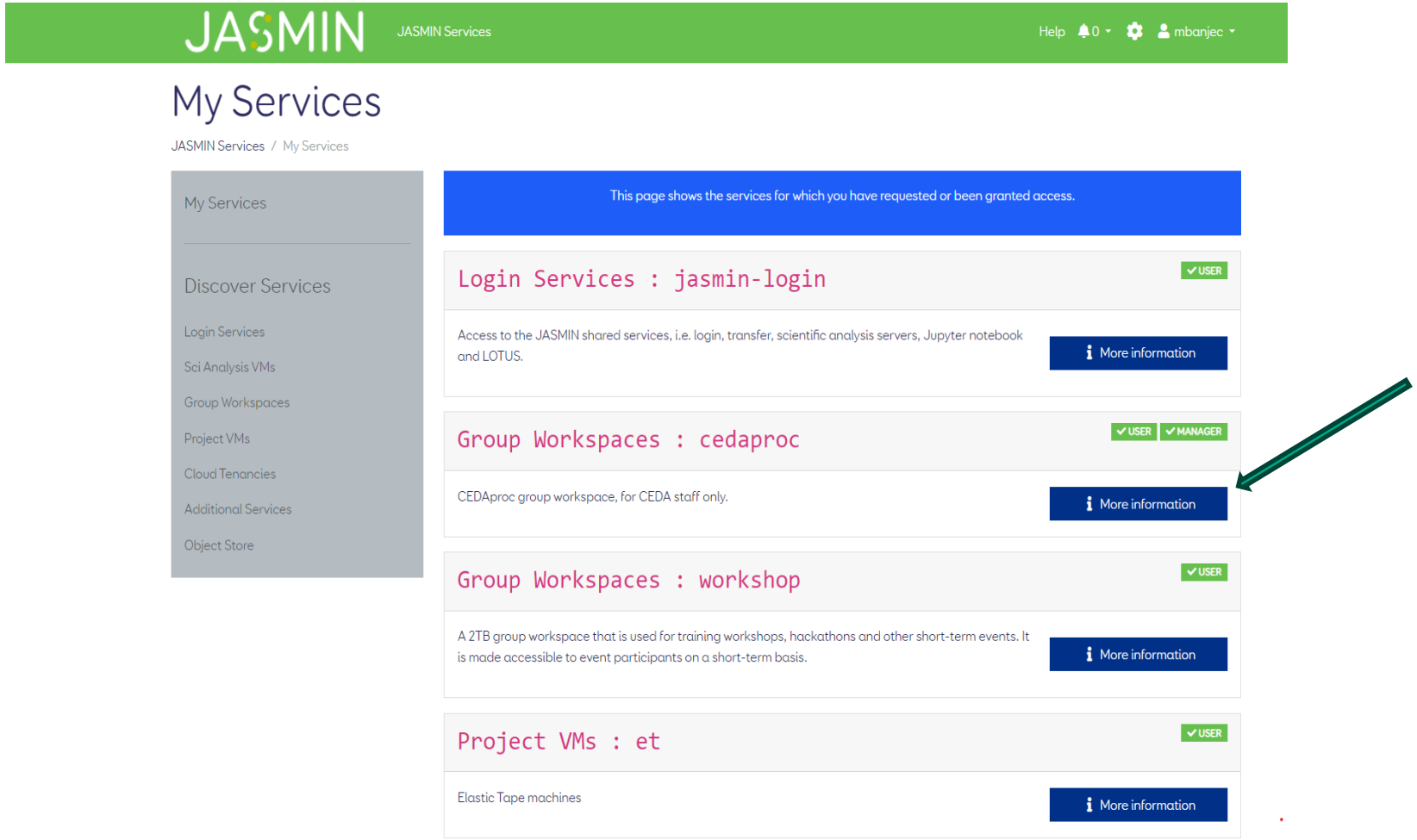
From My Services

- View all services you have access to

Navigate to more information for a specific service



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From the My Services page you can see the following tabs

Navigate to the Users Tab

JASMIN JASMIN Services Help 0 mbanjec

Take note of the number of users and the toggle filters switch.

Group Workspaces : cedaproc

JASMIN Services / Group Workspaces / cedaproc

Details | Users | Pending requests | Grant role

Toggle filters

1

Username	Name	Institution	Role	Status	Expires	Granted By	
alisonp	Jane Pamment	Science and Technology Facilities Council (STFC), United Kingdom	USER	ACTIVE	27 Oct 2032	amanning	Revoke
amannin2	Alex Manning	Science and Technology Facilities Council (STFC), United Kingdom	USER	ACTIVE	12 Jun 2024	amanning	Revoke
amanning	Alex Manning	Science and Technology Facilities Council (STFC), United Kingdom	USER	ACTIVE	22 Nov 2027	amanning	Revoke
amwaterfall	Alison Waterfall	Science and Technology Facilities Council (STFC), United Kingdom	USER	ACTIVE	7 Jun 2033	spepler	Revoke
archread	- archread	Independent, United Kingdom	USER	ACTIVE	17 Jun 9999	_IMPORTED_	Revoke
astephen	Ag Stephens	Science and Technology Facilities Council (STFC), United Kingdom	USER	ACTIVE	20 Oct 2027	astephen	Revoke
astephens	Ag Stephens	Science and Technology Facilities Council (STFC), United Kingdom	USER	ACTIVE	11 Sep 2025	_IMPORTED_	Revoke
coan	Brian Coan	Science and Technology Facilities Council (STFC), United Kingdom	USER	REVOKED	26 Aug 2025	IMPORTED	

2

et_jasmin		
ewilliamson01		
fchami	Fatima Chami	Ce
gparton	Graham Parton	Scienc

74 grants / 67 users

«Page 1 of 4»

Grou

JASMIN Services

Details

Toggle filters

Filters

Role

USER
DEPUTY
MANAGER

Status

ACTIVE
EXPIRING
EXPIRED
REVOKED

Apply

3

Gro

JASMIN Servic

Details

Toggle filters

Filters

Role

USER
DEPUTY
MANAGER

Status

ACTIVE
EXPIRING
EXPIRED
REVOKED

Apply

4

coan
dch1fc
esmith88
jhaigh0
jhaydock
jrainnie

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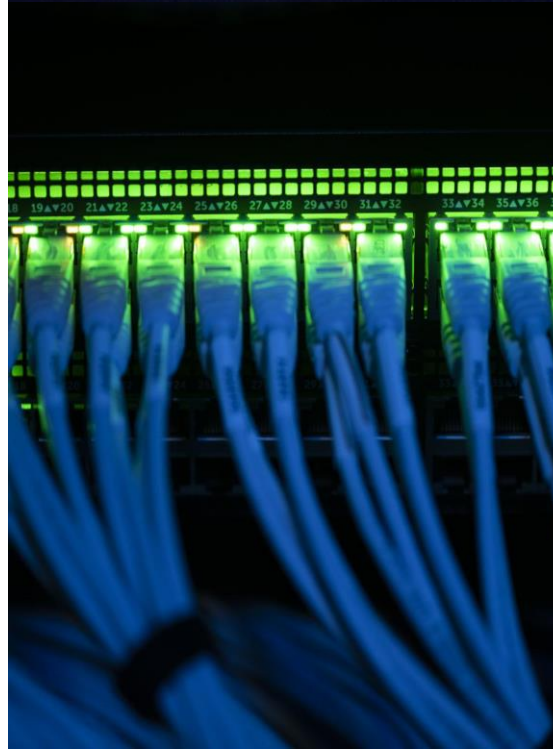

GWS Scanner Introduction

Background

- Need a way to see how space is being used
  - scans run in the background, centrally,

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GWS Scanner

- Navigate to: https://gws-scanner.jasmin.ac.uk/
- Login using your JASMIN account

1

2

Login to JASMIN

- From the My GWSs
- Select a GWS to view

4

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GWS Scanner Cont ..

- From the list of GWSs select one to view its usage

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My Group Workspaces

The group workspaces you have access to are listed below. Click on the location to go to the tree page.

Service Name	Location
cedaproc	/gws/nopw/j04/cedaproc
workshop	/gws/pw/j07/workshop
workshop	/gws/nopw/j04/workshop

1

- From the selected GWS observe some metrics

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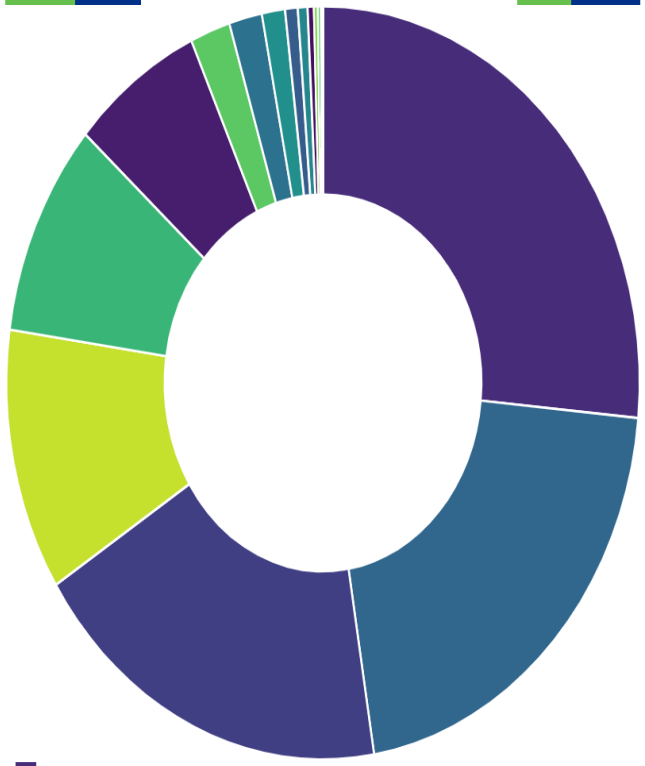
2

/gws/nopw/j04/cedaproc

User Breakdown

Graph | Table

Size | Count

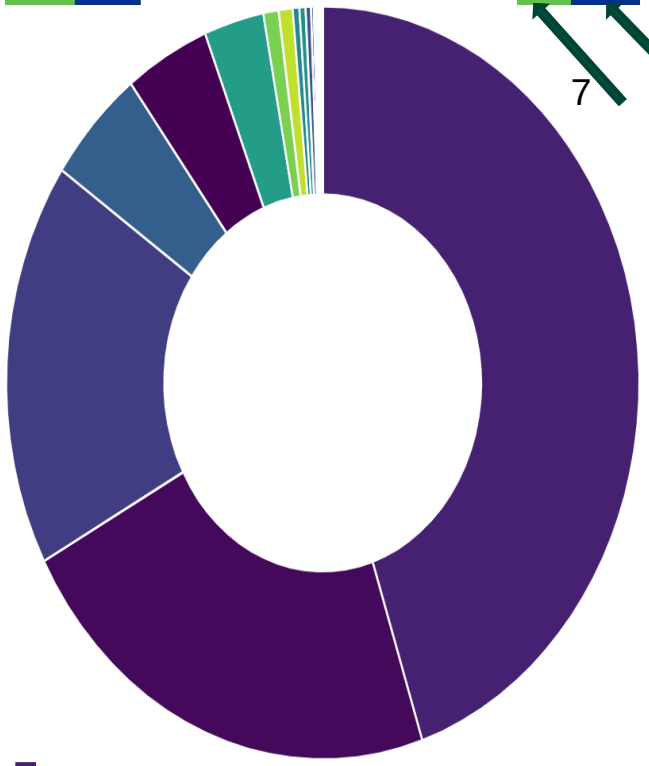


- iwi
- nfsnobody
- badc
- mjuckes
- astephen
- root
- mjones07
- nrmassey
- fchami
- astephens
- spepler

Filetype Breakdown

Graph | Table

Size | Count

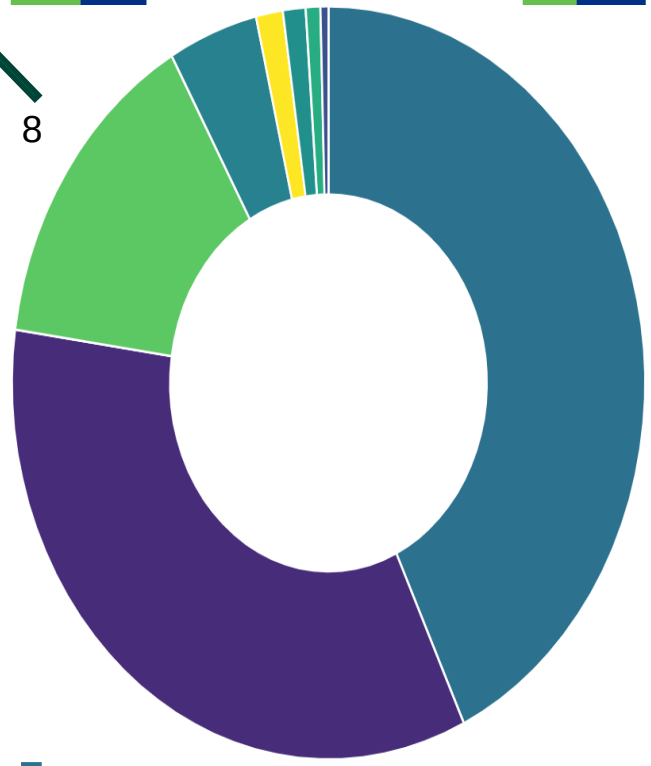


- application/x-netcdf
- application/zip
- __unknown_file__
- application/x-tar
- text/plain
- application/json
- application/octet-stream
- application/x-director
- application/x-troff-man
- text/x-python
- application/x-python-code

Heat Breakdown

Graph | Table

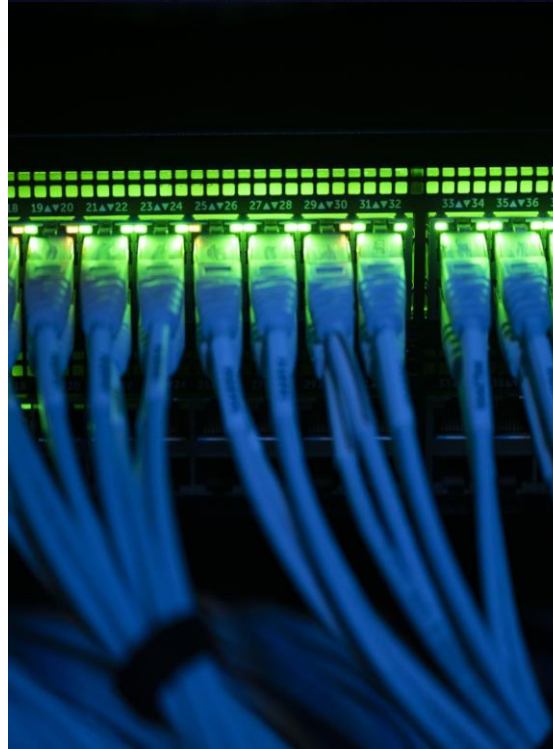
Size | Count

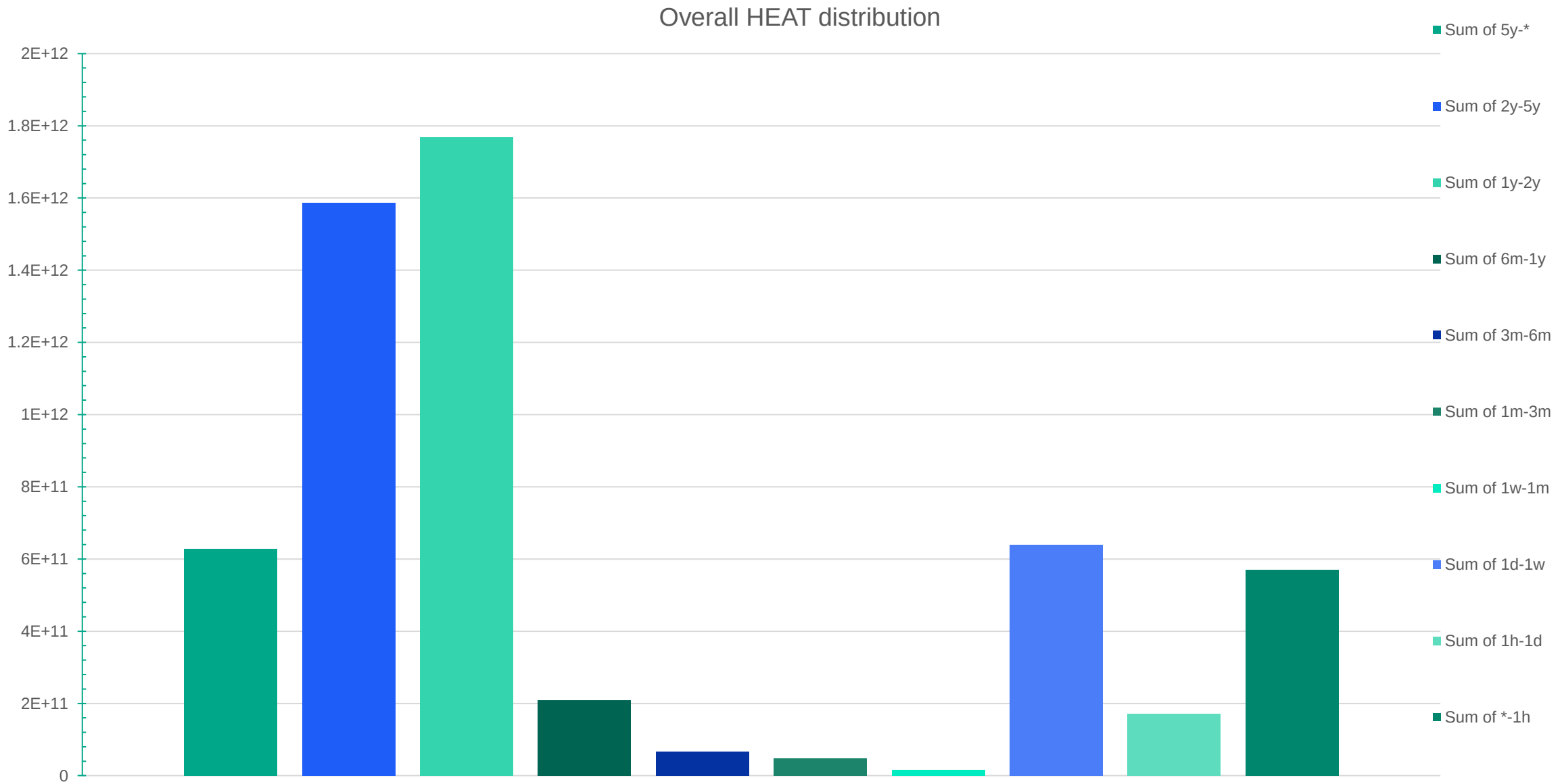


- 1y-2y
- 2y-5y
- 5y-*
- 6m-1y
- 3m-6m
- 1m-3m
- 1h-1d
- 1w-1m
- *-1h

Help ?

1 2 3 4 5 6 7 8





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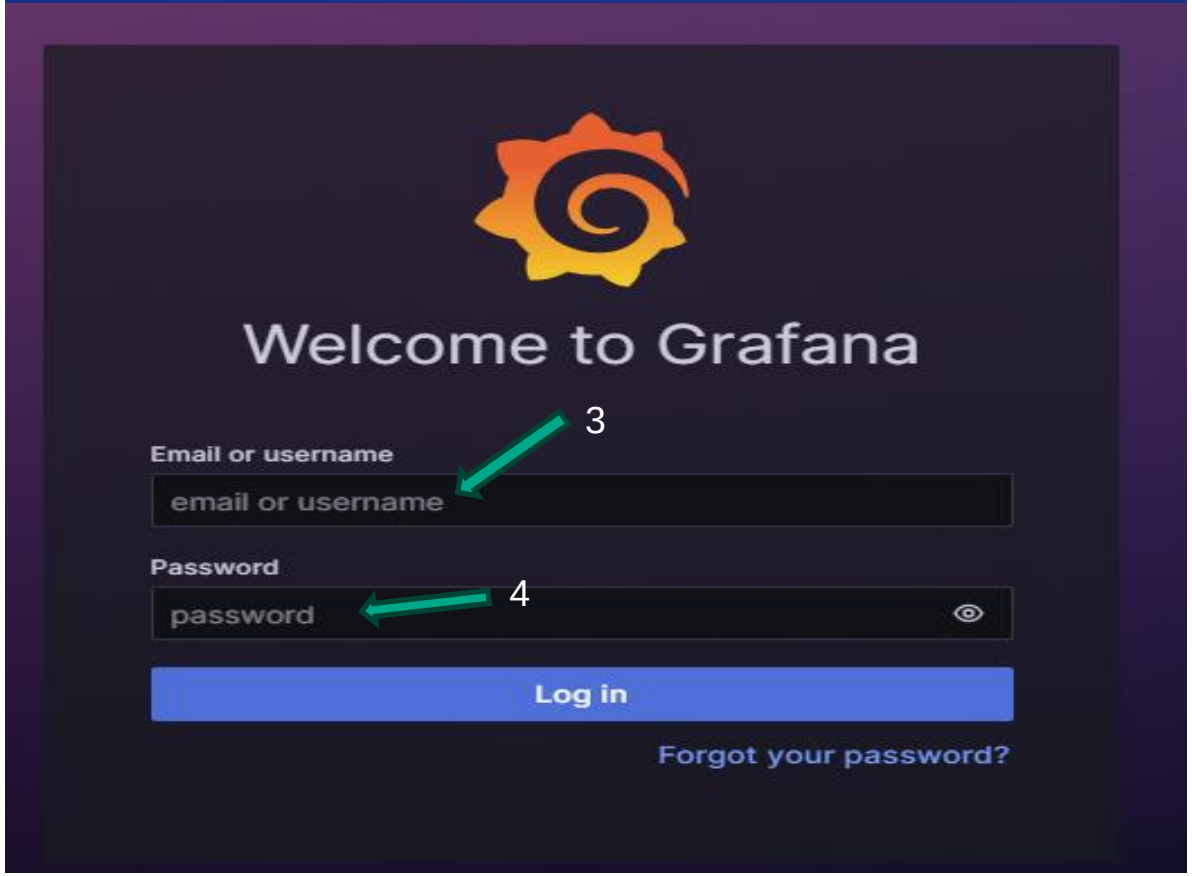
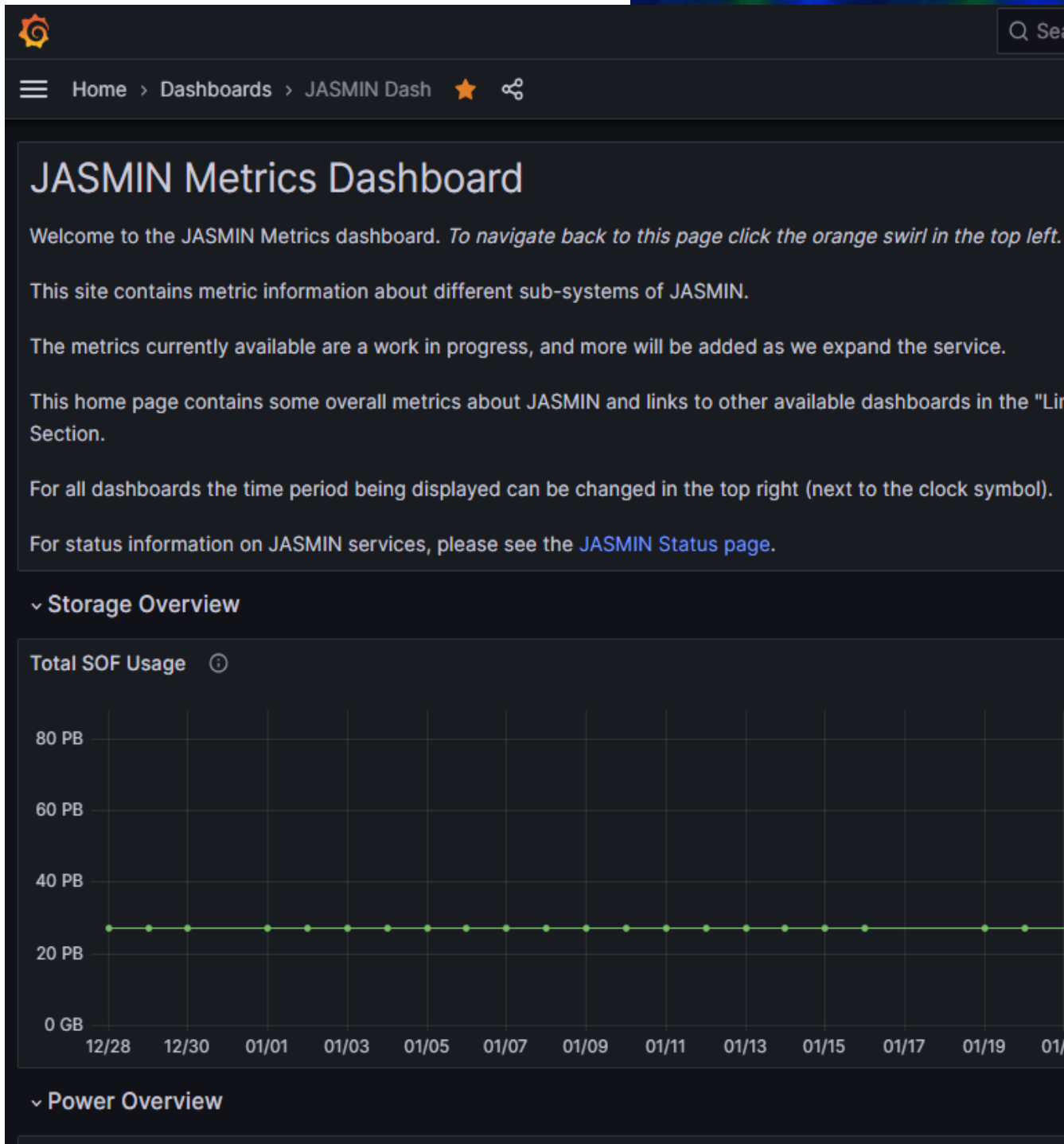
JASMIN Metrics Dashboard

- Navigate to: ttps://mon.jasmin.ac.uk/ 1
- Login using your JASMIN account 2

Login to MON.JASMIN





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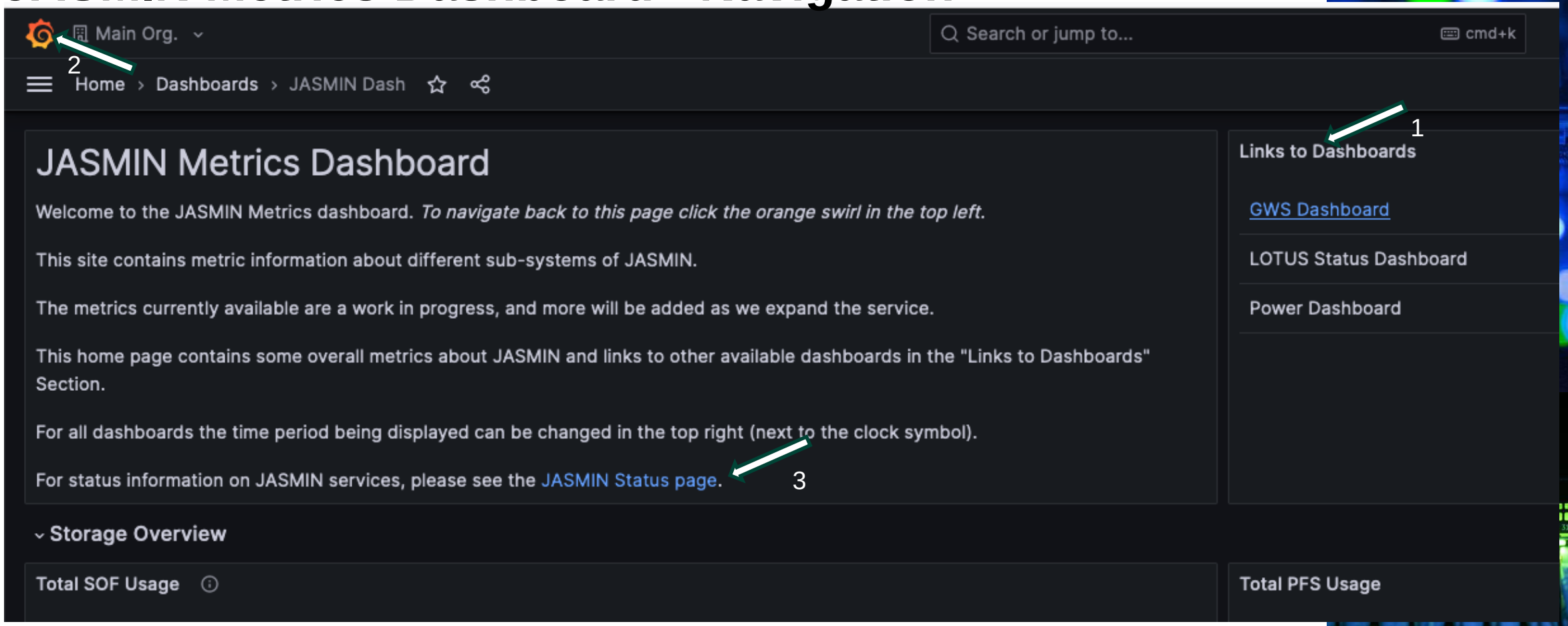
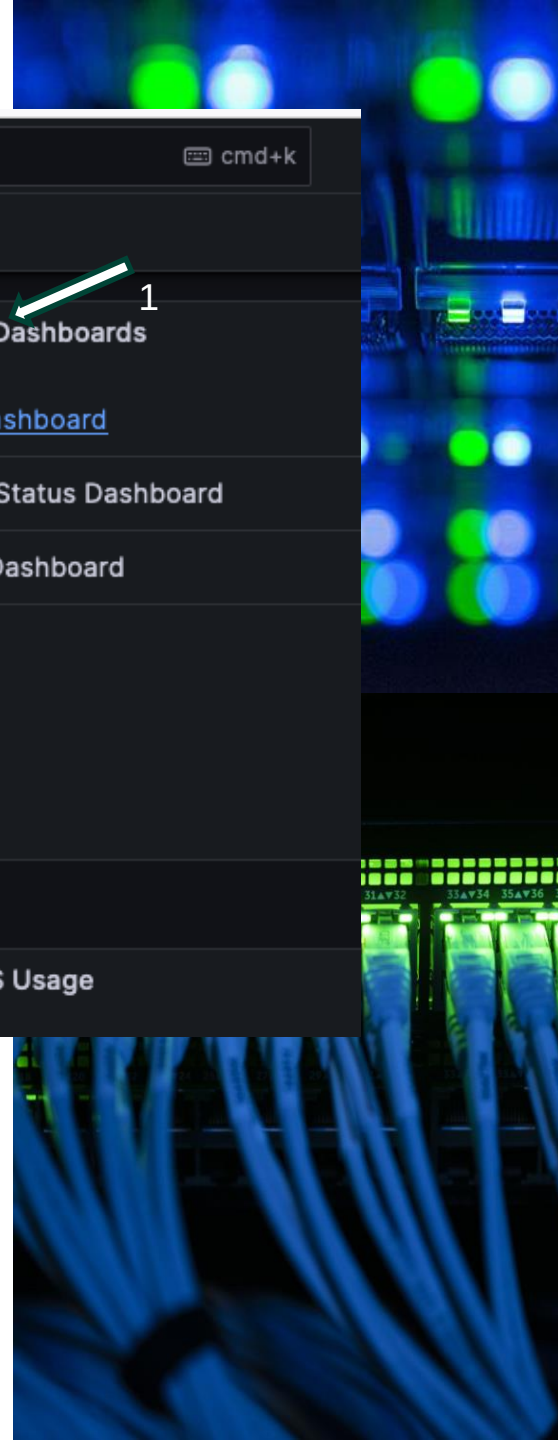
JASMIN Metrics Dashboard - Navigation





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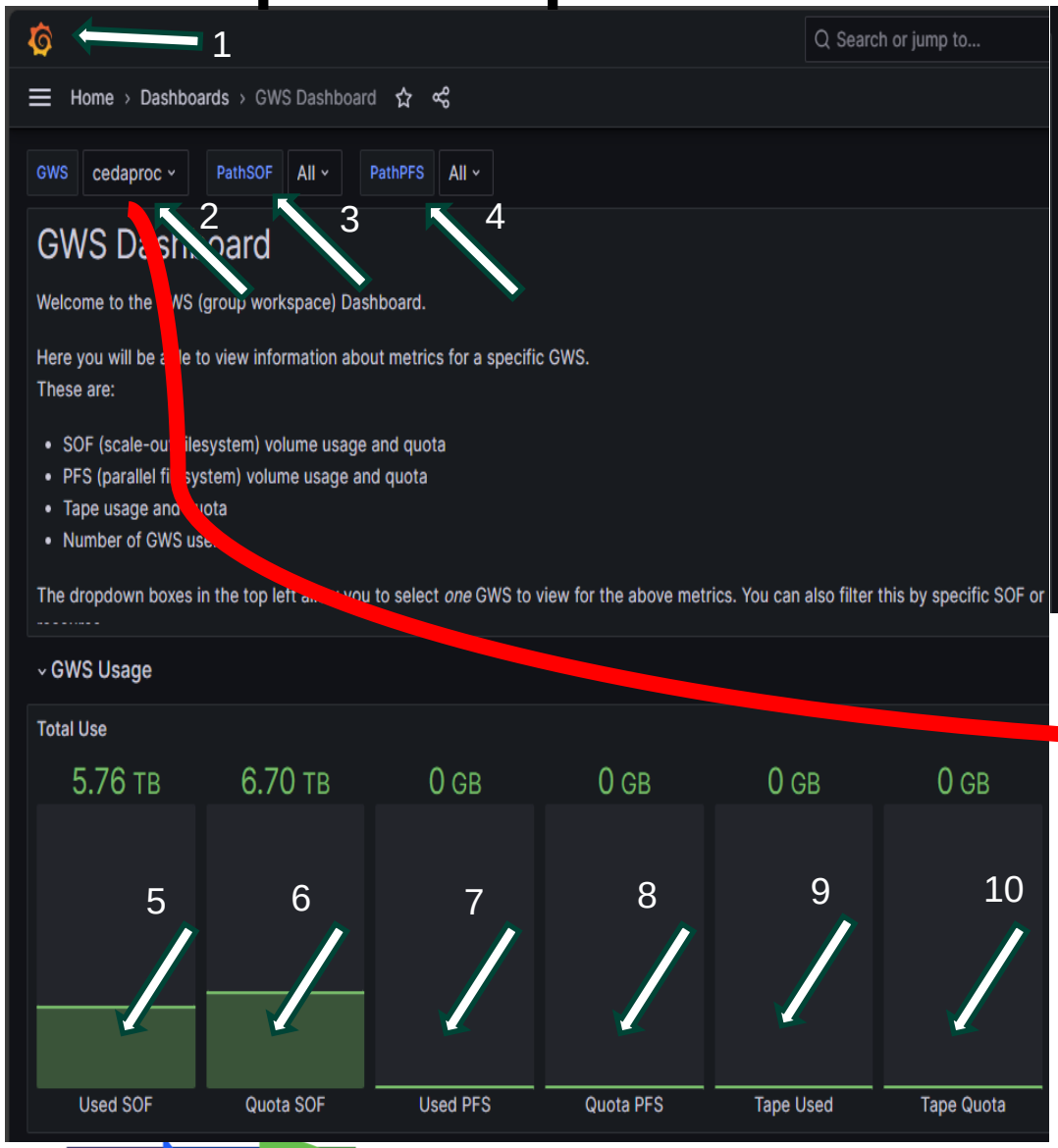
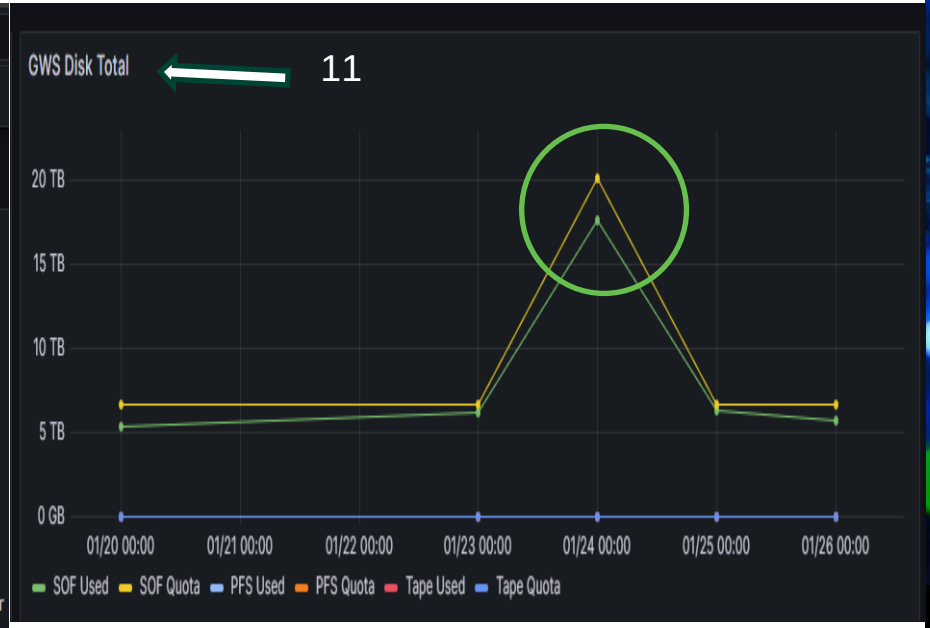
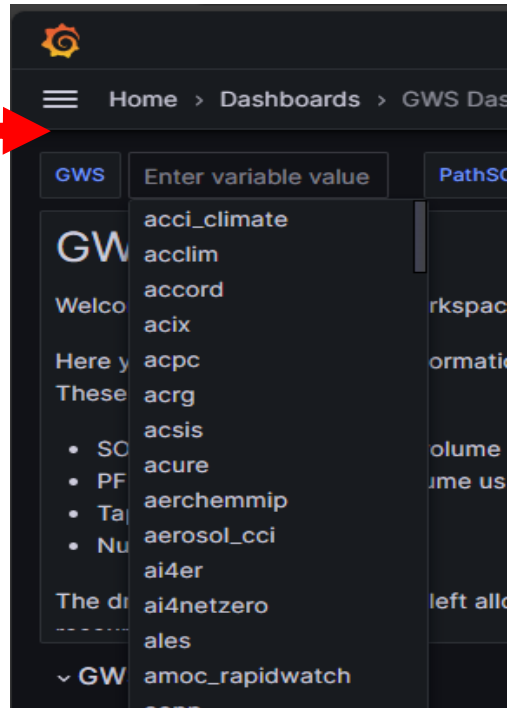
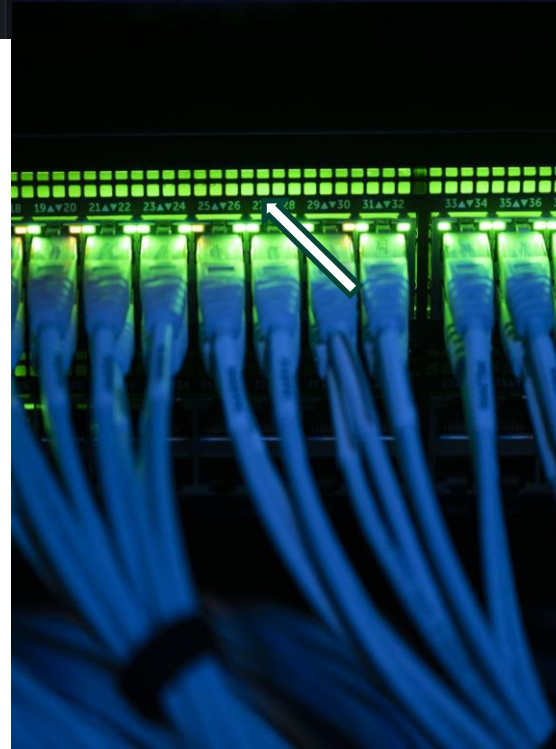
Group Workspace Dashboard









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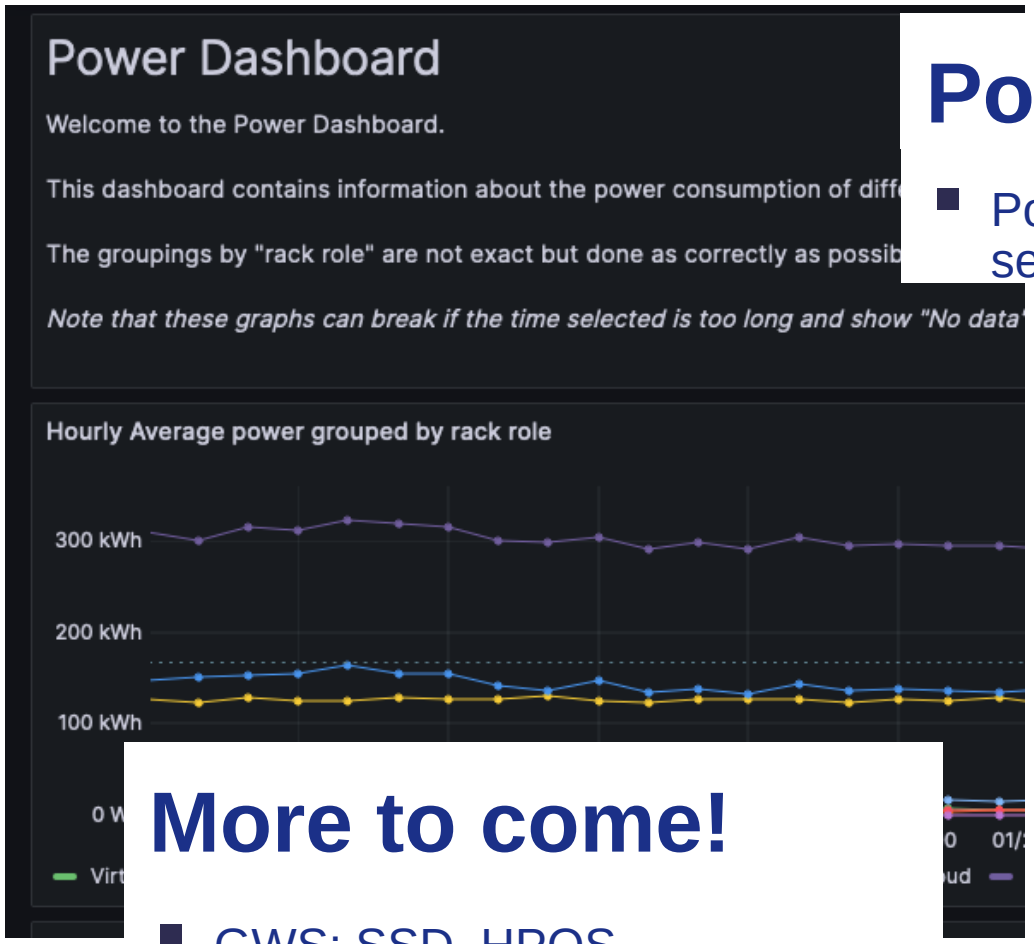
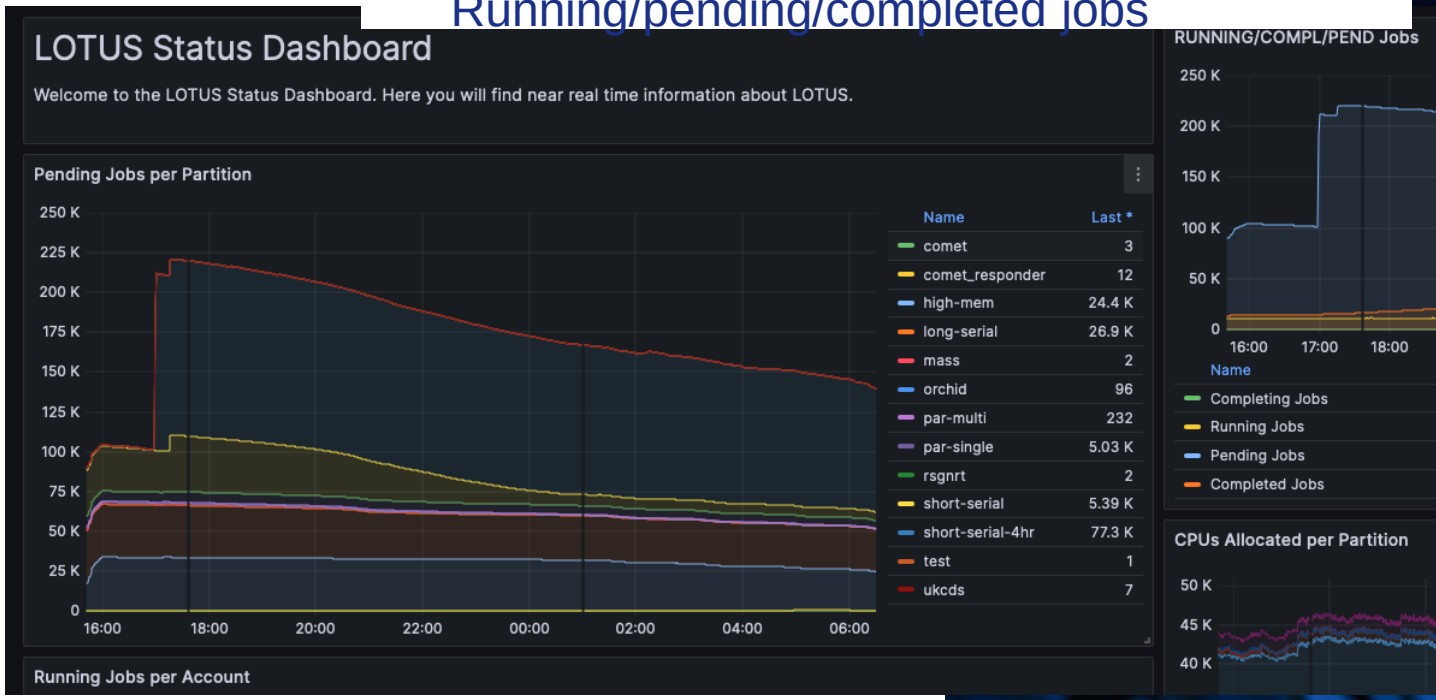


Power metrics

- Power consumption grouped by server type, and procurement phase

LOTUS Status

- Stats on the status of LOTUS incl. Running/pending/completed jobs



More to come!

- GWS: SSD, HPOS
- Scratch use
- JASMIN Notebook metrics
- LOTUS, JASMIN Users, Cloud, and more...

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What actions to Take and take away

User Breakdown

Graph | Table

User	Size
iwi	1.33 TB
mollymac	1.16 TB
nfsnobody	900 GB
badc	799 GB
mjuckes	485 GB
astephen	445 GB
root	288 GB
mjones07	87.7 GB
nrmassey	72.4 GB
fchami	51 GB
astephens	27.5 GB
spepler	21.6 GB
wcross	16.1 GB
mpritcha	10.4 GB
gparton	8.39 GB
mbanjec	4.15 GB
amwaterfall	1.27 GB
marcello	1.17 GB
amanning	913 MB
dwest77	869 MB
nlds	84.7 MB
jleland	67 MB
mpryor	138 kB

Filetype Breakdown

Graph | Table

Filetype	Size
__unknown_file__	2.14 TB
application/x-netcdf	1.94 TB
application/zip	965 GB
application/x-tar	218 GB
text/plain	185 GB
application/json	131 GB
application/octet-stream	33.8 GB
application/x-director	30.5 GB
application/x-troff-man	14.5 GB
text/x-python	13.4 GB
application/x-python-code	12.1 GB
application/x-java-pack200	5.96 GB
text/tab-separated-values	4.13 GB
text/html	2.91 GB
application/x-hdf	2.5 GB

Heat Breakdown

Graph | Table | Size | Count

Heat	Size
1y-2y	1.77 TB
2y-5y	1.59 TB
1d-1w	639 GB
5y-*	628 GB
*-1h	571 GB
6m-1y	208 GB
1h-1d	171 GB
3m-6m	66.8 GB
1m-3m	48.7 GB
1w-1m	17.1 GB

Abbreviation	Name
atmos	Atmospheric Science
director	Director's cross-cutting activities
ecohydro	Ecology & Hydrology
eoclim	Earth Observation & Climate
genomics	Genomics
geology	Geology
jwcrp	Joint Weather & Climate Research Programme
npg	National Public Good
oceanss	Ocean & Shelf Seas
polsci	Polar Science
semp	Solid Earth & Mineral Physics

1. Identify the locations of your files
2. Identify usage per user
3. Identify the file type and path
4. Identity HEAT and used storage
5. Plan ahead for the end of your project. Archive requirements need to be identified at the START of a project so CEDA Archive team can ensure data is curated properly.

Some useful links to documentation

- GWS Scanner:
  - https://help.jasmin.ac.uk/article/4499-gws-scanner
- GWS Scanner User Interface
  - https://help.jasmin.ac.uk/article/5101-gws-scanner-ui
- JASMIN STATUS page
  - https://www.ceda.ac.uk/status/
- JASMIN Documentation
  - https://help.jasmin.ac.uk/

Question and Answer Session

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