



**Erasmus Data  
Collaboratory**



**Erasmus Centre for  
Data Analytics**

AI, Data &  
Digitalisation

EnergySHR, a Data Sharing & Collaboration Platform

*The Erasmus data Summit was founded by*



**Flagship centre and community**  
for cross-disciplinary insight  
on the societal impact of Data,  
Artificial Intelligence, Digitalization  
and Immersive Technologies  
at the Erasmus University Rotterdam.



Convergence initiative to foster an inclusive, open  
experimenting environment for data and AI,  
where people can collectively think, work,  
innovate, and learn. The EDC | House of AI is  
facilitated by the Erasmus Centre for Data  
Analytics



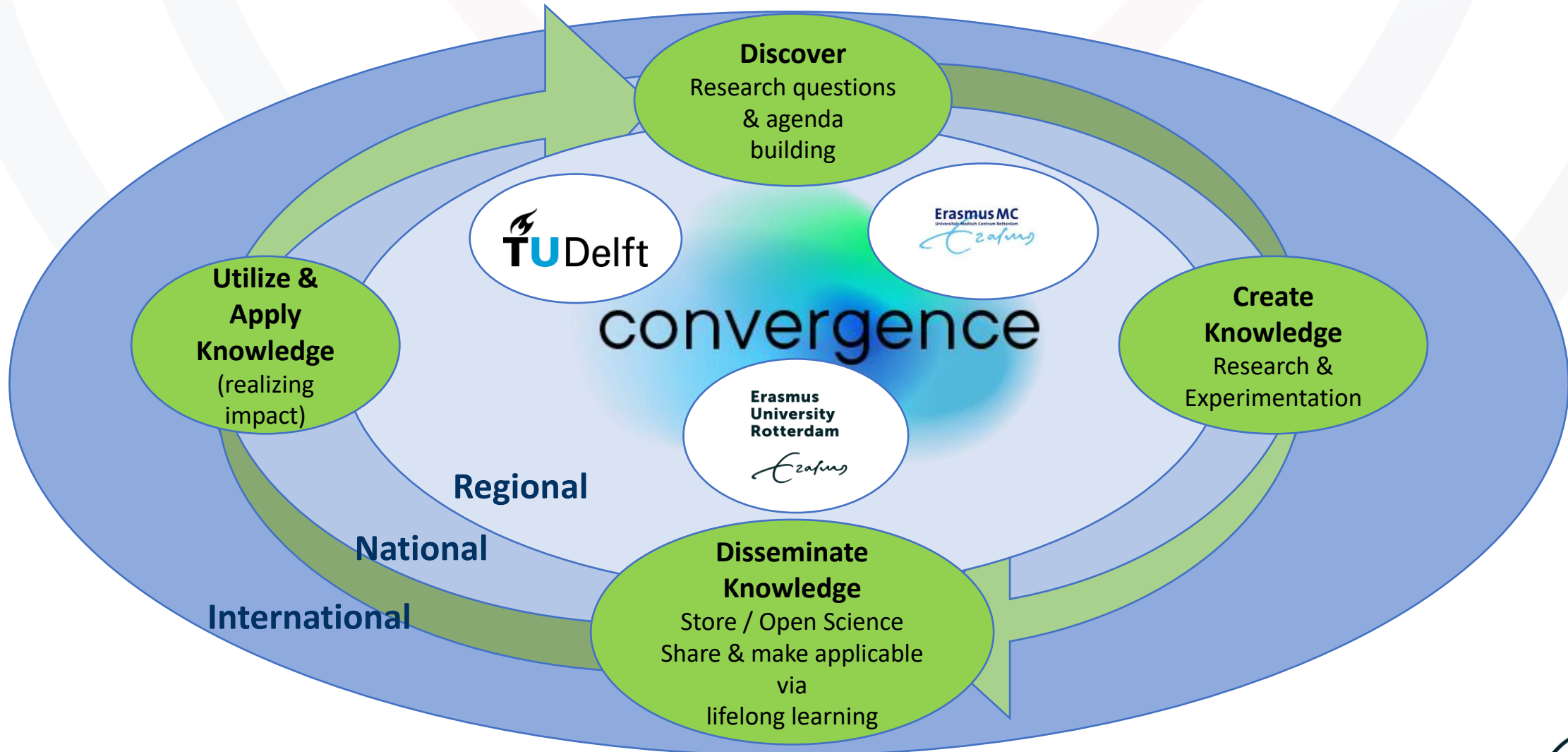


# Convergence

The urgent and complex societal challenges of our time call for convergence; transcending boundaries between institutes and disciplines to create new perspectives and solutions. For this reason, TU Delft, Erasmus MC and Erasmus University Rotterdam have joined forces in Convergence.



# Building Learning Communities & Innovation Ecosystems



# INNOVATING RESEARCH THROUGH OPEN DATA: BUILDING THE COLLABORATION PLATFORM OF THE FUTURE

**F**indable, for humans and machines; metadata & DOI's

**A**ccessible, within well defined conditions; metadata access

**I**nteroperable, open standards and structures, compatibility

**R**eusable, with clear documentation, licensing and context for easy use in research

# Digital Object Identifier (DOI)

***Unique, permanent alphanumeric string assigned to digital objects, such as journal articles, books, datasets, and research reports, to ensure they can be reliably identified and accessed on the internet. It serves as a persistent link to the object, even if its location (URL) changes over time.***

## Key features

- **Uniqueness:** Each DOI is unique to the object it identifies.
- **Persistence:** The DOI remains constant, even if the object's URL changes. This ensures long-term access through updates in the DOI database.
- **Structure:** A DOI consists of two parts:
  - **Prefix:** Always starts with "10" and identifies the publisher or organization.
  - **Suffix:** A unique string assigned by the publisher to identify the specific object (e.g., `10.1016/j.addbeh.2008.11.004`) -> <https://doi.org/10.1016/j.addbeh.2008.11.004>

# Testing Social Cognitive Theory as a theoretical framework to predict smoking relapse among daily smoking adolescents ☆

Rinka M.P. Van Zundert  , Linda M. Nijhof, Rutger C.M.E. Engels

Show more ▼

+ Add to Mendeley  Share  Cite

<https://doi.org/10.1016/j.addbeh.2008.11.004> ↗

Get rights and content ↗

● Full text access



# Data Sharing 1985 😊





# Data Sharing 1987



**UCI**  
Machine Learning Repository  
Center for Machine Learning and Intelligent Systems

[About](#) [Citation Policy](#) [Donate a Data Set](#) [Contact](#)

☒ Repository ☐ Web 

[View ALL Data Sets](#)

## Welcome to the UC Irvine Machine Learning Repository!

We currently maintain 622 data sets as a service to the machine learning community. You may [view all data sets](#) through our searchable interface. For a general overview of the Repository, please visit our [About page](#). For information about citing data sets in publications, please read our [citation policy](#). If you wish to donate a data set, please consult our [donation policy](#). For any other questions, feel free to [contact the Repository librarians](#).

Supported By:  In Collaboration With: 

### Latest News:







**09-24-2018:** Welcome to the new Repository admins Dheeru Dua and Efi Karra Taniskidou!  
**04-04-2013:** Welcome to the new Repository admins Kevin Bache and Moshe Lichman!  
**03-01-2010:** [Note](#) from donor regarding Netflix data  
**10-16-2009:** Two new data sets have been added.  
**09-14-2009:** Several data sets have been added.  
**03-24-2008:** New data sets have been added!  
**06-25-2007:** Two new data sets have been added: UJI Pen Characters, MAGIC Gamma Telescope

### Featured Data Set: [Statlog \(Landsat Satellite\)](#)






**Task:** Classification  
**Data Type:** Multivariate  
**# Attributes:** 36  
**# Instances:** 6435

### Newest Data Sets:

- 06-05-2021:**  [Average Localization Error \(ALE\) in sensor node localization process in WSNs](#)
- 05-25-2021:**  [9mers from culldb](#)
- 05-18-2021:**  [TamilSentiMix](#)
- 05-02-2021:**  [Accelerometer](#)
- 04-21-2021:**  [Synchronous Machine Data Set](#)
- 04-21-2021:**  [Synchronous Machine Data Set](#)

### Most Popular Data Sets (hits since 2007)

- 4645978:**  [Iris](#)
- 2466800:**  [Adult](#)
- 2001229:**  [Dry Bean Dataset](#)
- 1908607:**  [Wine](#)
- 1855217:**  [Wine Quality](#)
- 1852257:**  [Heart Disease](#)



**UCI**  
Machine Learning Repository  
Center for Machine Learning and Intelligent Systems

## Iris Data Set

Download: [Data Folder](#), [Data Set Description](#)

**Abstract:** Famous database; from Fisher, 1936



Data Set Characteristics:	Multivariate	Number of Instances:	150	Area:	Life
Attribute Characteristics:	Real	Number of Attributes:	4	Date Donated	1988-07-01
Associated Tasks:	Classification	Missing Values?	No	Number of Web Hits:	4659866

### Source:

Creator:

R.A. Fisher

# Data Sharing 2010

kaggle

[About us](#) [How it works](#) [Find a competition](#) [Host a competition](#) [Blog](#) [Help](#)

is a platform for data prediction competitions that allows organizations to post their data and have it scrutinized by the world's best data scientists. [See how it works.](#)

## CURRENT COMPETITIONS

**HEARST** *magazines*

### Hearst Challenge

The objective of this competition is to predict the optimal number and type of newspapers that should be placed on different news stands. **This competition is being powered by Kaggle but run on a standalone website.**

 Ends in 5 days  58 teams  \$25,000.00



### IJCNN Social Network Challenge

This competition requires participants to predict edges in an online social network. The winner will receive free registration and the opportunity to present their solution at IJCNN 2011.

 Ends in 6 weeks  38 teams  USD 950.00

**dataists**

### R Package Recommendation Engine

The aim of this competition is to develop a recommendation engine for R libraries (or packages). (R is opensource statistics software.)

 Ends in 10 weeks  28 teams  USD 150.00

Get started now to create or enter competitions:

[Sign up](#)

or just [join our mailing list](#)

## RETURNING USER SIGN IN

☐ Remember me?

[Forgot your Username/ Password?](#)

## Current Competitions

### Hearst Challenge

 5 days  58 teams  \$25,000

### IJCNN Social Network Challenge

 6 weeks  38 teams  \$950

### R Package Recommendation Engine

# Data Sharing 2025



**HARVARD**

Dataverse

zenodo



**DRYAD**



figshare



ckan



**4TU**.ResearchData

SCIENCE • ENGINEERING • DESIGN

**INVENIO**



Mendeley Data



Open  
Metadata



OSF



A Single Place to Discover, Collaborate and get your Data Right



Erasmus Data  
Collaboratory



# Why Build a New One?

## ENERGY DATA SHARING HOUSE

Erasmus Data Collaboratory | House of AI  
Erasmus Center for Data Analytics  
Erasmus University Rotterdam



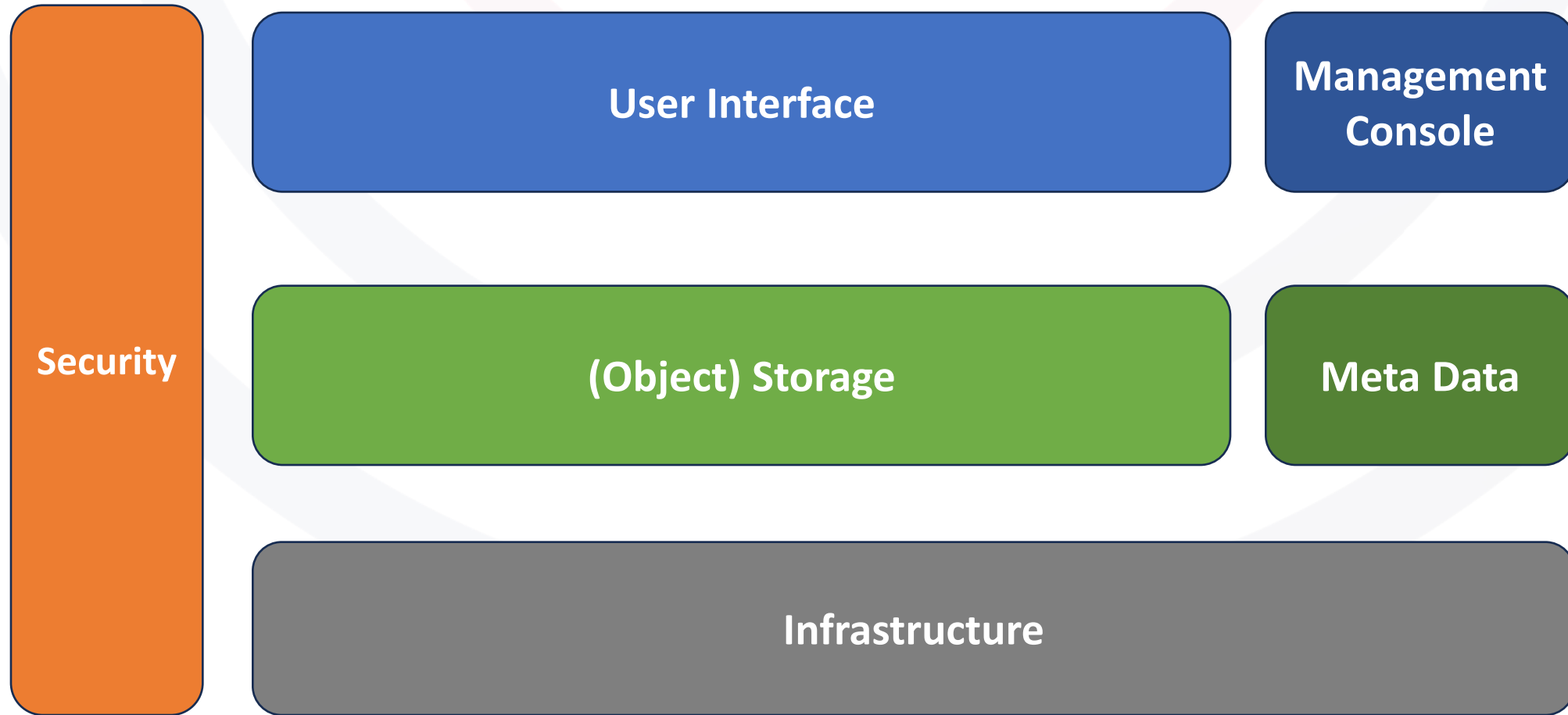
convergence

# High Level Requirements

The EnergySHR platform is designed to facilitate the sharing, discovery, and management of datasets and code, with a focus on collaboration, data integrity, and access control. Key functionalities include:

- User Authentication and Access Control: Secure login and permissions management to protect sensitive data.
- Dataset and Code Publication: Tools for publishing datasets and code with detailed metadata and licensing options.
- Search and Discovery: Advanced search features for finding relevant datasets and code efficiently.
- Version Control: Support for tracking changes in datasets and code repositories.
- Collaboration Features: Platforms for discussion, feedback, and collaborative projects.
- Notification System: Alerts for updates or changes to datasets of interest.
- Automatic Updates: Synchronization of derivative datasets with upstream data changes

# High Level Design



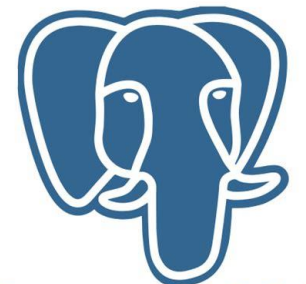


# Selecting Software Components

- Open Source
- Open Standards
- Python based
- S3 compatible



django



PostgreSQL





# Why Django?



1. **Speed & Efficiency:** Rapid development with built-in tools.
2. **Security:** Robust protection against common web vulnerabilities.
3. **Scalability:** Handles high traffic and large applications.
4. **Documentation & Community:** Excellent resources and support.
5. **Versatility:** Suitable for diverse projects and applications.

# S3-compliant storage

**Ease of use:** direct data access

**Flexible:** wide support in tools, vendors

**Data variety:** structured & unstructured

**Scalable:** virtually limitless

**Cost efficient:** on premise; no vendor lock in



# S3 Options



Open-IO



MicroCeph



MINIO



SWIFT

*an OpenStack Community Project*



GLUSTER



ceph



leafcloud

HETZNER



OVHcloud



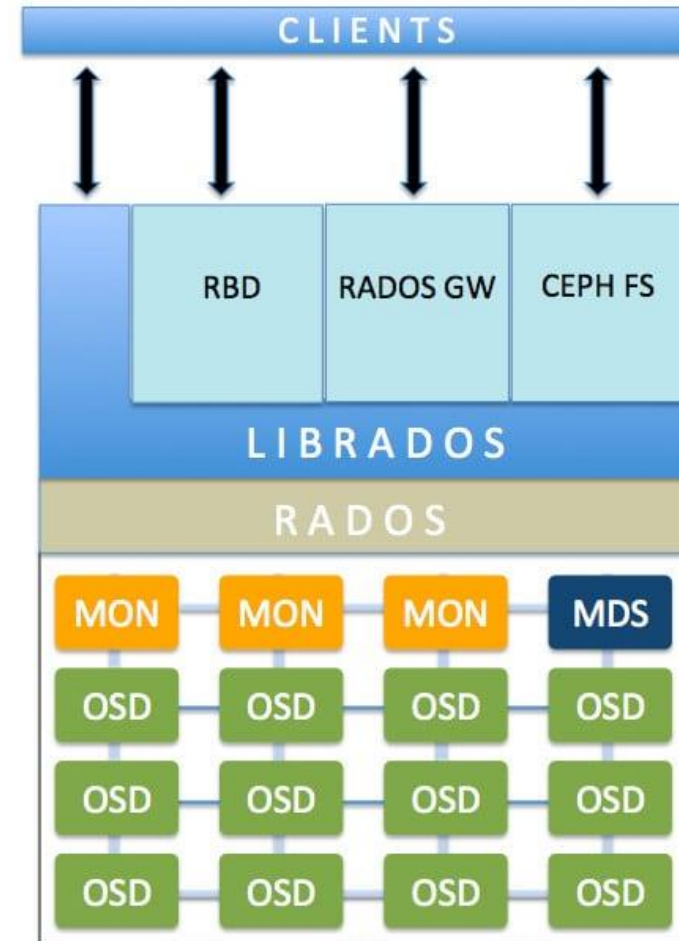
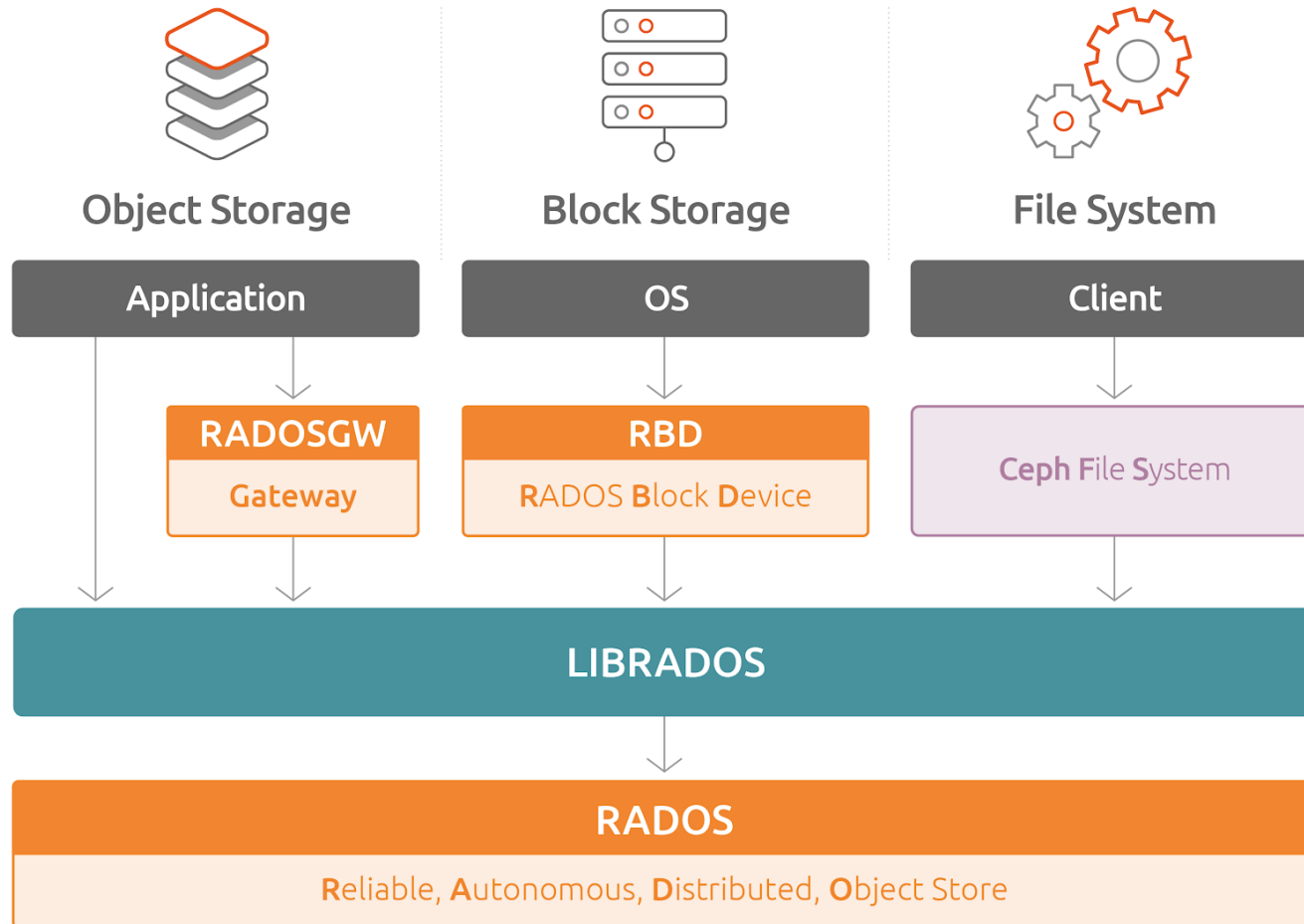
Amazon S3

Microsoft Azure  
Blob Storage



Google Cloud Storage

# CEPH Overview



Best Ceph Tutorial Ever: <https://youtu.be/jJrnJ9rj6fs?si=C94VJv5h8UGSzBV2>

# Ceph in Proxmox

## Health

### Status



HEALTH\_OK

Ceph Version: 19.2.0

### Summary

No Warnings/Errors

## Status

### OSDs

	In	Out
Up	12	0
Down	0	0

Total: 12



● active+clean:

## Services

### Monitors

mini1: ✓ mini3: ✓ mini5: ✓

### Managers

mini2: ✓ mini3: ✓ mini4: ✓

### Meta Data Servers

mini1: ✓ mini2: ✓ mini4: ✓

Name	Class	OSD Type	Status	Version	weight	reweight	Used (%)	Total	Apply/Commit Latency (ms)	PGs
default										
mini6				19.2.0						
osd.11	nvme	bluestore	up / in	19.2.0	3.2715	1.00	0.22	3.27 TiB	3 / 3	33
osd.10	nvme	bluestore	up / in	19.2.0	3.2715	1.00	0.17	3.27 TiB	4 / 4	26
mini5				19.2.0						
osd.9	nvme	bluestore	up / in	19.2.0	3.2715	1.00	0.19	3.27 TiB	4 / 4	35
osd.8	nvme	bluestore	up / in	19.2.0	3.2715	1.00	0.34	3.27 TiB	4 / 4	37
mini4				19.2.0						
osd.7	nvme	bluestore	up / in	19.2.0	3.2715	1.00	0.22	3.27 TiB	4 / 4	37
osd.6	nvme	bluestore	up / in	19.2.0	3.2715	1.00	0.33	3.27 TiB	8 / 8	36
mini3				19.2.0						
osd.5	nvme	bluestore	up / in	19.2.0	3.2715	1.00	0.18	3.27 TiB	2 / 2	17
osd.4	nvme	bluestore	up / in	19.2.0	3.2715	1.00	0.28	3.27 TiB	3 / 3	40
mini2				19.2.0						
osd.3	nvme	bluestore	up / in	19.2.0	3.2715	1.00	0.21	3.27 TiB	5 / 5	35
osd.2	nvme	bluestore	up / in	19.2.0	3.2715	1.00	0.27	3.27 TiB	3 / 3	34
mini1				19.2.0						
osd.1	nvme	bluestore	up / in	19.2.0	3.2715	1.00	0.27	3.27 TiB	2 / 2	29
osd.0	nvme	bluestore	up / in	19.2.0	3.2715	1.00	0.12	3.27 TiB	4 / 4	28

### Details: OSD 7

Reload

### General Network Devices

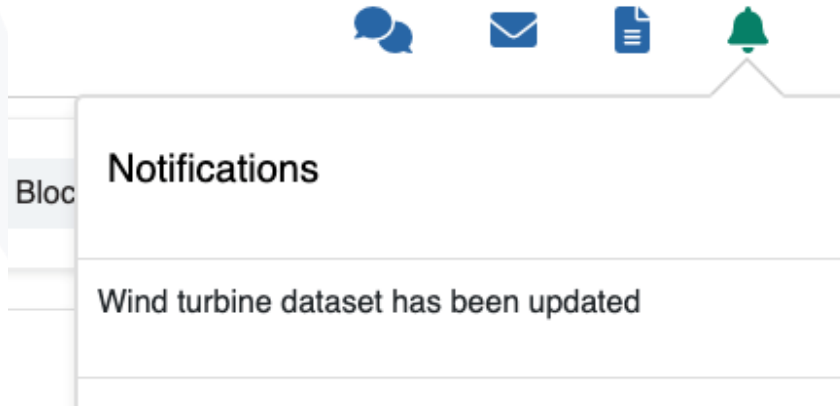
Device	Type	Physical Device	Size
block	ssd	nvme1n1	3.27 TiB

### Volume Details for block

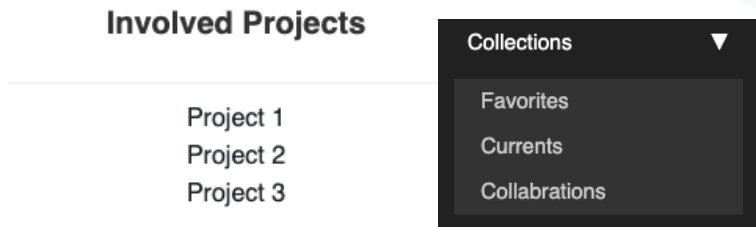
Creation time	2025-01-29 12:01:21 +0100
LV Name	osd-block-cdeb74ef-803f-4afa-bb19-8e11266747f6
LV Path	/dev/ceph-209f4379-e3b6-4663-8acb-a2c8cd6fabcc/osd-block-cdeb...
LV UUID	kWsGjj-7mGa-AzkO-6B3W-y4WA-rrpu-tkjFlt
VG Name	ceph-209f4379-e3b6-4663-8acb-a2c8cd6fabcc



# Notable EnergySHR Features



**Integrated mail, messaging, discussion & notification system**



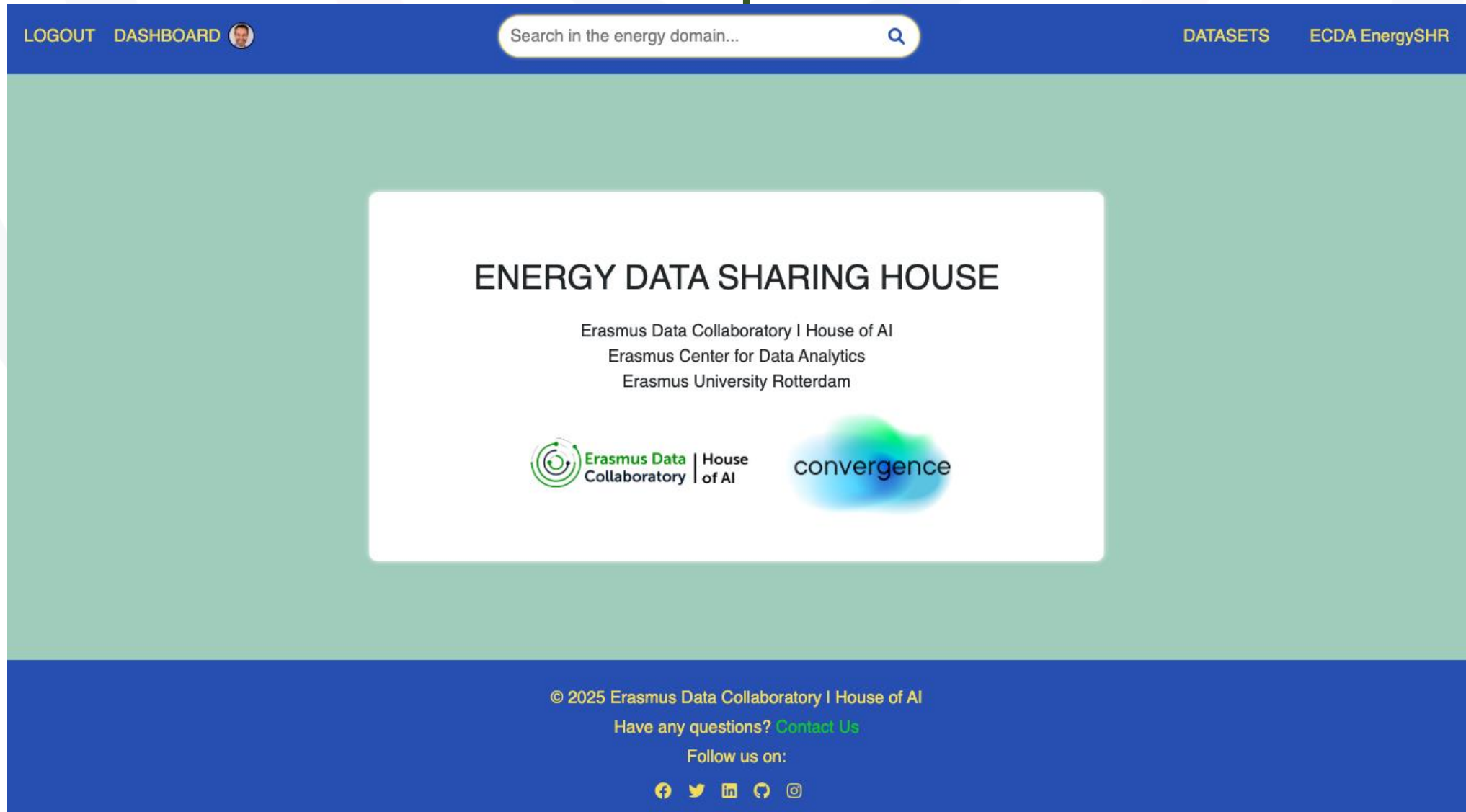
**Projects (collaborations) & Collections (Datasets, Code, Doc)**

## Dataset availabilities:


- ☐ Restricted
- ☒ Public
- ☐ Follower
- ☐ Friend
- ☐ Colleague

**Fine grained sharing & authorization options**


# Simple UI




# Simple UI: User Dashboard



**Jos van Dongen**


Home 


Create 


New Dataset


Retrieved Dataset


New Project

Datasets 

Collections 

Projects 

Inbox 



About me

Edit Profile

Followers

Following

Friends





Blo

**About me:**


- Director of the Erasmus Data Collaboratory, where Data & AI come to life
- Experienced consultant/team leader/trainer in all areas of data & analytics
- Speaker at national and international conferences on topics such as Data Visualisation
- Author of the Dutch book 'Low cost, high value? Open Source oplossingen voor Business Intelligence'
- Co-author of the Wiley books 'Pentaho Solutions' and 'Pentaho Kettle Solutions'

Specialties: Data Visualisation, Data Analytics, Data Science, Data Warehousing

First name:	Jos
Last name:	van Dongen
Email:	jos.vandongen@rsm.nl
Phone:	0610172008
Department:	Erasmus Data Collaboratory
Position:	Director
LinkedIn:	<a href="https://www.linkedin.com/in/jvdongen/">https://www.linkedin.com/in/jvdongen/</a>




**Notifications**




**Zaman Ziabakhshganji**  
added comment on **Wind Turbine Data** dataset

Yesterday



**Zaman Ziabakhshganji**  
added comment on **Wind Turbine Data** dataset

Mar 13, 2025



**Zaman Ziabakhshganji**  
added comment on **Wind Turbine Data** dataset

Mar 13, 2025

[View all](#)

# Simple UI: Datasets & Search

The screenshot displays a web application interface for datasets and search. The top navigation bar is blue and contains links for LOGOUT, DASHBOARD, a search bar with the placeholder text "Search in the energy domain...", and links to DATASETS and ECDA EnergySHR. A dark sidebar on the left is titled "DATASETS" and lists various categories: All Categories, Artificial Intelligence, Smart City, Radiant (Solar), Geothermal, Thermal (Heat), Electricity, Wind, and CCS. The main content area shows a search result for "ecda" with the text "4 datasets found". A dropdown menu is open, showing "Highest Rated" and a toggle for grid/list view. Below this, three dataset cards are visible: "Weather Dataset" (posted March 15, 2025, 1:46 p.m., Rate: 0.0), "Global Energy Data" (posted March 15, 2025, 2:04 p.m., Rate: 0.0), and "Energy Consumption in the Netherlands" (posted March 11, 2025, 2:33 p.m., Rate: 0.00). A "SEARCH RESULTS" overlay is present, showing a "Filter" section with "Apply" and "Reset" buttons, and a "Data Type" section with checkboxes for CSV, Parquet, JSON, XML, and XLSX. On the right, a section titled "Results for ecda" shows a user profile for "ECDA ECDA" with the status "Not provided".

LOGOUT DASHBOARD Search in the energy domain... DATASETS ECDA EnergySHR

**DATASETS**

- All Categories
- Artificial Intelligence
- Smart City
- Radiant (Solar)
- Geothermal
- Thermal (Heat)
- Electricity
- Wind
- CCS

4 datasets found Highest Rated

**DATASETS**  
**Weather Dataset**  
Posted on March 15, 2025, 1:46 p.m.  
Rate: 0.0

**DATASETS**  
**Global Energy Data**  
Posted on March 15, 2025, 2:04 p.m.  
Rate: 0.0

**DATASETS**  
**Energy Consumption in the Netherlands**  
Posted on March 11, 2025, 2:33 p.m.  
Rate: 0.00

**SEARCH RESULTS**

Filter

Apply Reset

People

Datasets

Data Type

- ☐ CSV
- ☐ Parquet
- ☐ JSON
- ☐ XML
- ☐ XLSX

Results for **ecda**

**ECDA ECDA**  
Not provided



# Full user control over everything

Wind Turbine Data

Details

Data card

Comments

Codes

Suggestions

Questions

Similar Datasets

Categories:

Wind

Keywords:



predictive maintenance

Owner: [Jos van Dongen](#)

Title: Wind Turbine Data

Rating: ★★★★★

doi: [10.1234/5376fe32-c554-4157-beae-73cb21451d79](https://doi.org/10.1234/5376fe32-c554-4157-beae-73cb21451d79)

Description:  

Small dataset with data from 4 wind turbines to build and demonstrate anomaly detection using subspace tracking for predictive maintenance purposes

Links:  
<https://www.sciencedirect.com/science/article/pii/S0031>

Last Modified: Mar 6, 2025 (No editor assigned)

Modifications by: No edition assigned




Publish Date: March 6, 2025

Institute: [Erasmus University Rotterdam](#)



Start Date: Not specified

End Date: Not specified

Data Files:  
[turbine.csv](#)



 2  2  2



License:  
[CC BY 4.0](#)

 0  3

Owner Current project:  
☒ Yes

Dataset availabilities:  
☐ Restricted  
☒ Public  
☐ Follower  
☐ Friend  
☐ Colleague

 Current 

 Favorite 

Collaboration

# Restrict Dataset access

## Categories:

Thermal (Heat)

## Keywords:

No keywords  
available.

Owner: [ECDA ECDA](#) 

Title: Weather Dataset

Rating: ★★★★★

doi: [10.1234/9e1d575a-a026-47e6-869b-c1601067a2f6](https://doi.org/10.1234/9e1d575a-a026-47e6-869b-c1601067a2f6)

Description:  

Weather dataset in Parquet format

## Links:

No links available.

Last Modified: Today at 1:46 PM (No editor assigned)

Modifications by: No edition assigned

Publish Date: March 15, 2025

 0  0  0

License:  
[CC BY 4.0](#)

 0  3

Owner Current project:

☒ Yes

## Dataset availabilities:

- ☐ Restricted
- ☐ Public
- ☐ Follower
- ☒ Friend
- ☐ Colleague

available.

Modified: Today at 1:46 PM (No editor assigned)

Modifications by: No edition assigned

Publish Date: March 15, 2025

Institute: [Erasmus University Rotterdam](#)

Start Date: Not specified

End Date: Not specified

Views: 2 Downloads: 0

Data Files: Restricted access

To access of the dataset files, you should follow or be as a friend or colleague of [ECDA ECDA](#).

## Dataset availabilities:

- ☐ Restricted
- ☐ Public
- ☐ Follower
- ☒ Friend
- ☐ Colleague

 Current 

 Favorite 

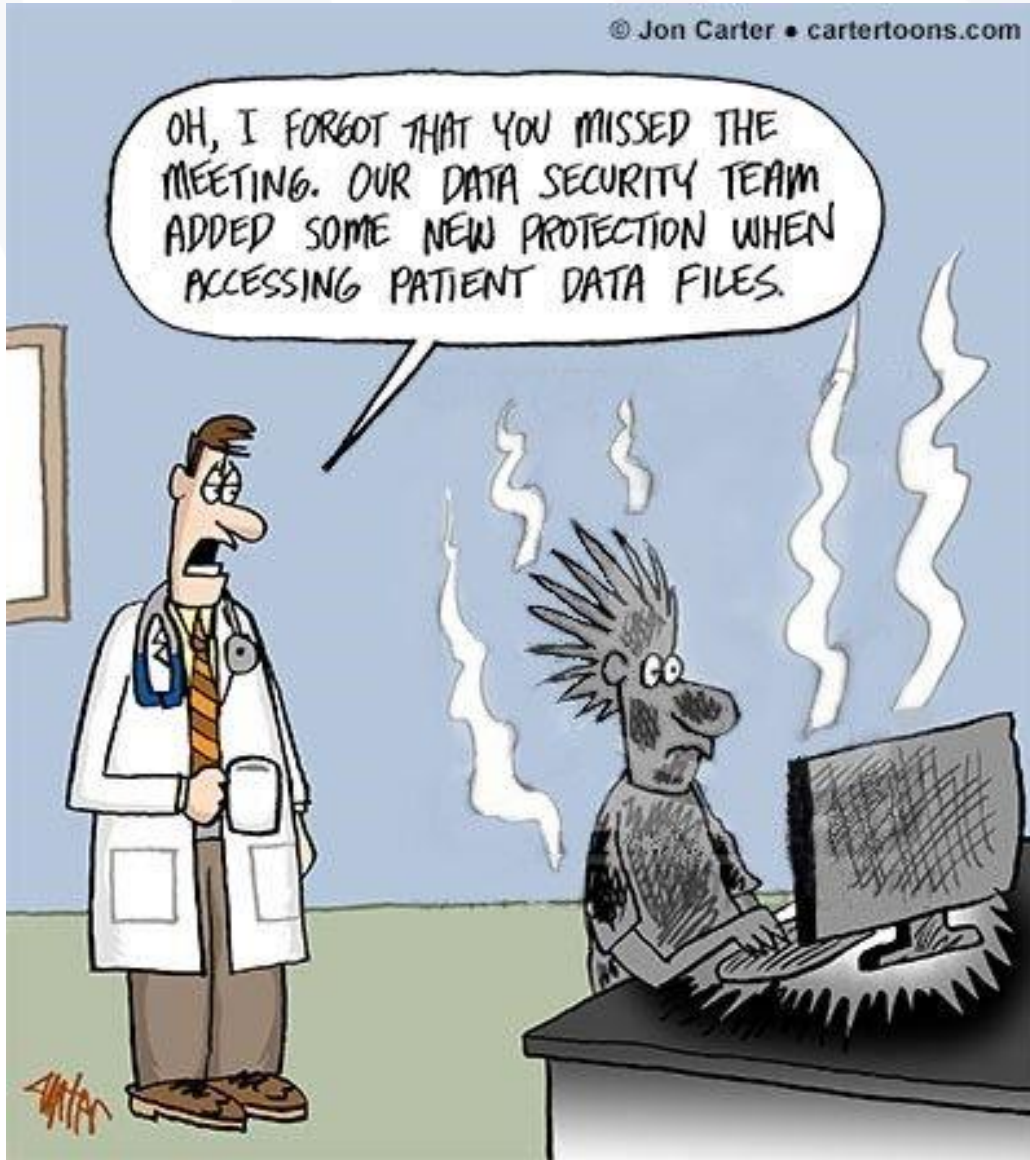
Collaboration

Report Dataset

User A

User B

# Dataset Access Levels



- Restricted: only you
  - Public: anyone
  - Follower: people who follow you
  - Friend: only friends
  - Colleague: project members
- > You can also block people

# Following Users, Friend Requests

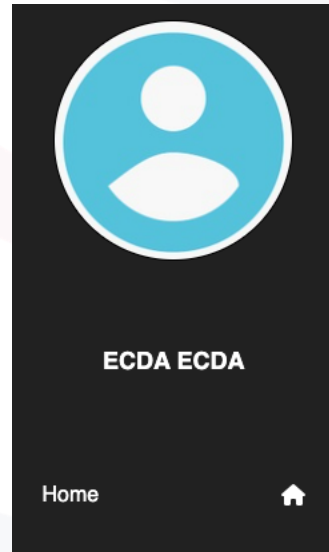


## Confirm Action

Are you sure you want to follow this user?

Yes

No



About me

Edit Profile

Followers

Following

Friends

Blocked

## Followers

All followers

Recently Added

Birthdays

Colleage

Project

Collection



**Jos van Dongen**

Director

Remove

Follow

Add Friend

Following

ECDA ECDA sent you a friend request:

Accept

Reject

Block

Biography

Followers

Following

Friends

Block

Report



# Integrated Mail/Messaging/Notifications



## Notifications



**ECDA ECDA** sent you a  
friend request.

2:22 PM



**Zaman Ziabakhshganji**  
added comment on **Wind  
Turbine Data** dataset

Yesterday



## Inbox



**Jos van Dongen** Thanks!  
So cool we are friends no...

2:24 PM

# Administration backend

## ECDA EnergySHR

### Admin

ACCOUNTS		
Profile reports	+ Add	✎ Change
Profiles	+ Add	✎ Change
AUTHENTICATION AND AUTHORIZATION		
Users	+ Add	✎ Change
FRIENDSHIP		
Blocked Relationships	+ Add	✎ Change
Following Relationships	+ Add	✎ Change
Friends	+ Add	✎ Change
Friendship Requests	+ Add	✎ Change
HOME		
Authors	+ Add	✎ Change
Categories	+ Add	✎ Change
Comments	+ Add	✎ Change
Dataset files	+ Add	✎ Change
Datasets	+ Add	✎ Change
Editor histories	+ Add	✎ Change
Licenses	+ Add	✎ Change
Recoveries	+ Add	✎ Change
Report comments	+ Add	✎ Change
Report datasets	+ Add	✎ Change

### Recent actions

#### My actions

- ✖ f.radman@rsm.nl  
User
- ✖ hasanabadi@rsm.nl  
User
- ✖ Wind Turbine Data  
Comment

## ECDA EnergySHR

Home > Friendship > Friends

Start typing to filter...	
ACCOUNTS	
Profile reports	+ Add
Profiles	+ Add
AUTHENTICATION AND AUTHORIZATION	
Users	+ Add
FRIENDSHIP	
Blocked Relationships	+ Add
Following Relationships	+ Add
Friends	+ Add

### Select Friend to change

Action: ----- Go 0 of 2 selected

- ☐ FRIEND
- ☐ User #4 is friends with #15
- ☐ User #15 is friends with #4

2 Friends

## ECDA EnergySHR

WELCOME, ECDA VIEW SITE / CHANGE PASSWORD / LOG OUT

Home > Home > Datasets

Following Relationships	+ Add
Friends	+ Add
Friendship Requests	+ Add
HOME	
Authors	+ Add
Categories	+ Add
Comments	+ Add
Dataset files	+ Add
Datasets	+ Add
Editor histories	+ Add
Licenses	+ Add
Recoveries	+ Add
Report comments	+ Add
Report datasets	+ Add
User requests	+ Add

### Select dataset to change

Q

Search

Action:

-----

Go

0 of 4 selected

<input type="checkbox"/>	USER	TITLE	CREATE	START DATE	END DATE	CREATE	
<input type="checkbox"/>	<a href="#">ecda_admin</a>	Global Energy Data	March 15, 2025, 2:04 p.m.	Jan. 1, 2000	Dec. 31, 2024	March 15, 2025, 2:04 p.m.	g
<input type="checkbox"/>	<a href="#">ecda_admin</a>	Weather Dataset	March 15, 2025, 1:46 p.m.	-	-	March 15, 2025, 1:46 p.m.	w
<input type="checkbox"/>	<a href="#">jos.vandongen@rsm.nl</a>	Energy Consumption in the Netherlands	March 11, 2025, 2:33 p.m.	Jan. 1, 2013	Dec. 31, 2020	March 11, 2025, 2:33 p.m.	-
<input type="checkbox"/>	<a href="#">jos.vandongen@rsm.nl</a>	Wind Turbine Data	March 6, 2025, 1:19 p.m.	-	-	March 6, 2025, 1:19 p.m.	tr

4 Datasets

ADD DATASET +

FILTER	
Show counts	
↓ By user	
All	doron.golnast@eur.nl
	ecda_admin
	f.radman@rsm.nl
	jos.vandongen@rsm.nl
	M.M.deWeerd@tudelft.nl
	S.Deb-1@tudelft.nl
	ziabakhshganji@rsm.nl
↓ By title	
All	Energy Consumption in the Netherlands
	Global Energy Data
	Weather Dataset
	Wind Turbine Data

# Security: Surf Research Access Management

**SURF** Research Access Management

Easy and secure access to  
research applications for  
research collaborations

Log in

New to SURF Research Access Management? Log in and create a collaboration with your institution.





**SURF** Research Access Management

Home > EnergySHR

EnergySHR

**EnergySHR**  
Delft University of Technology


 34 members & no groups

 Member since July 31, 2023


Home > EnergyShare



**EnergyShare**

 Short name: **energyshare**

 Connected to 2 collaborations & available for 2 organisations

 [Open the application](#) or [Visit the website](#)

Details & settings

Admins

Groups

Connected collaborations

Access rules

Connection requests

# Security: Network Access Policies

leafcloud

erasmus-data-collaboratory

admin@e

Project

API Access

Compute

Rating

Volumes

Container Infra

Network

Network Topology

Networks

Routers

Security Groups

Load Balancers

Floating IPs

Orchestration

DNS

Project / Network / Security Groups / Manage Security Group Rul...

Manage Security Group Rules: EnergySHR  
(2cf79202-dbf9-4597-b861-da8cb9f8caaf)

+ Add Rule

Delete

Displaying 10 items

<input type="checkbox"/>	Direction	Ether Type	IP Protocol	Port Range	Remote IP Prefix	Remote Security Group	Description	Actions
<input type="checkbox"/>	Egress	IPv4	Any	Any	0.0.0.0/0	-	-	Delete
<input type="checkbox"/>	Egress	IPv6	Any	Any	::/0	-	-	Delete
<input type="checkbox"/>	Ingress	IPv4	TCP	22 (SSH)		-	-	Delete
<input type="checkbox"/>	Ingress	IPv4	TCP	80 (HTTP)		-	-	Delete
<input type="checkbox"/>	Ingress	IPv4	TCP	443 (HTTPS)		-	TUD HTTPS 3 (Private BClass2)	Delete
<input type="checkbox"/>	Ingress	IPv4	TCP	443 (HTTPS)		-	TUD HTTPS 1 (BClass)	Delete



# Roadmap



Now – April 10: ironing out final issues



April 10: Launch at Erasmus Data Summit



Q2 2025: Packaging & deployment



Q3 2025: Open Source



Q4 2025: Analytics Integration (Jupyter? Superset?)

# Questions?

