

# HIFIS

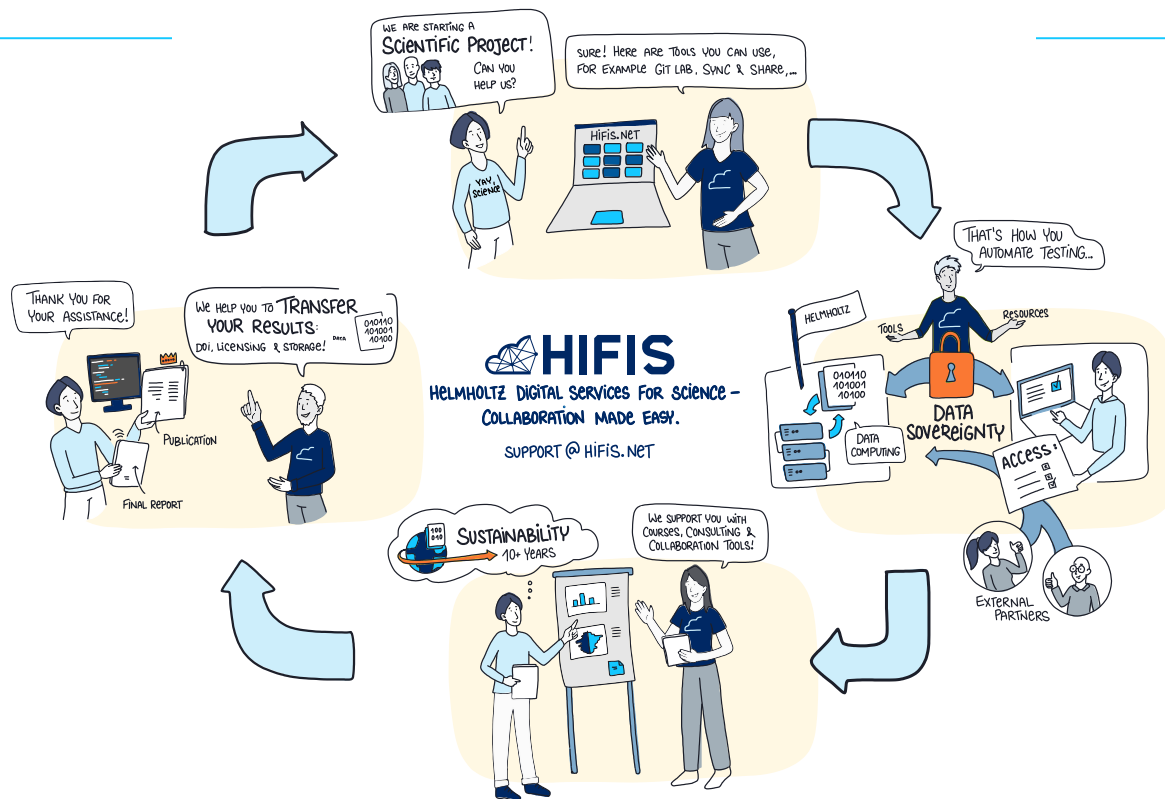
## An Overview

Tobias Huste



# Empowering Scientists with digital Services

## Our Vision



# Empowering Scientists with digital Services

## Mission and Goals

### We aim to

- Facilitate cooperation across scientific disciplines and institutions
- Build the best cloud platform for science
- Provide federated sovereign digital infrastructures, advocating and developing them
- Promote awareness for scientific software as a driver of scientific progress
- Enable all people creating software at Helmholtz to apply modern and sustainable software engineering principles

### We provide

- **Helmholtz Cloud** and **Helmholtz ID** -
  - Single login, cross-organisational access and groups
  - Numerous Cloud Services for Science and beyond
- **Support for good Research Software** -
  - Know-how: Training, Consulting, Tutorials, Community Building
  - Codebase: Technical Infrastructure for Software Engineering

Q Text

Search services...

Category

Chat Cloud Infrastructure

Compute Data Analysis

Data Transfer

Event Management

Metadata Repository Publish

Software Development

Storage Survey Sync & Share

Ticket system Write

Provider

DESY DKFZ FZJ GFZ

HMGU HZB HZDR KIT



## Apptainer

Container Runtime on HAICORE

Container runtime environment on  
KIT HAICORE HPC systems.



## Apptainer

Container-Runtime

Container runtime environment on  
HPC systems at FZJ / Jülich  
Supercomputing Centre (JSC).



## B2SHARE, based on Invenio

B2Share

Research Data (+ corresponding  
Metadata) Publishing service.



## Blablador

The Large Language Model  
inference server of the Helmholtz  
Association, with privacy built-in



## dCache

dCache InfiniteSpace

Store large-scale scientific data and  
access it through different  
protocols.



## FileSender

FileSender by DKFZ for  
Helmholtz.Cloud is a secure way to  
share large files with anyone!



## GitLab

Helmholtz Codebase

A web-based DevOps lifecycle tool  
that provides a Git-repository  
manager.



## HAICORE

Dedicated Computing Resources for  
the Helmholtz AI community.



# Helmholtz Cloud

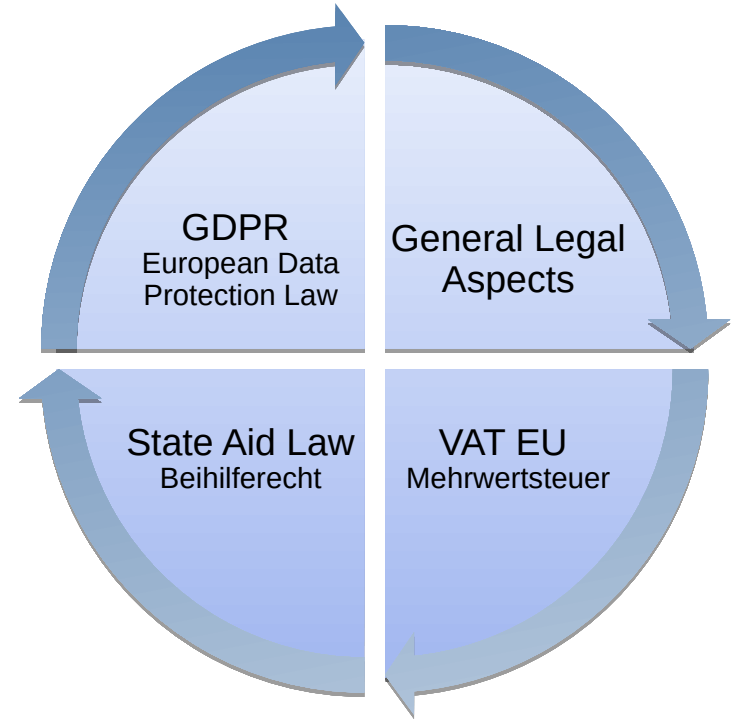
## Procedures & Legal

### Processes

- Management of the service portfolio
- Brokering of (cloud) services
- Coordination and partial operation of User Support

### Finance

- HIFIS funding by Helmholtz Association
- Use of services is free of charge
- Provision of services by the centres



# Helmholtz Software: Supporting good Software Engineering Education, Mentoring & Community Building

<https://hifis.net>

**HIDA** HELMHOLTZ  
Information & Data Science Academy

## COURSE CATALOG

Browse data science related trainings throughout the Helmholtz

### TAGS

HIDA (27) Programming (18)

Programming Languages (14) **HIFIS (13)**

Software (9) Methods (6) AI (5)

Data Visualization (5) Open Science (5)

Reproducibility (5) ML (4) Processing (4)

Regression (4) Statistics (4) Data Analytics (3)

FAIR (3) Helmholtz AI (3)

Open Research Software (3) Big Data (2)

Deep Learning (2) HMC (2) Helmholtz Imaging (2)

Imaging (2) MarDATA (2) Modelling (2)

Sustainability (2) Testing (2) Applications (1)

Classification (1) Clustering (1) Correlation (1)

Data Cleansing (1) Decision Trees (1)

Show more tags ▼

13 results reset filters ARCHIVE

# TEACH

## Explore Exchange Excel

**HIDA** HELMHOLTZ  
Information & Data Science Academy

**HIFIS** HELMHOLTZ  
FEDERATED IT SERVICES



Jobs  
ADD EVENT

## Helmholtz Summer School

From Data to  
Knowledge

**HIDA** HELMHOLTZ  
Information & Data  
Science Academy

**<HMC>** HELMHOLTZ  
COLLABORATION

**HELMHOLTZAI** ARTIFICIAL INTELLIGENCE  
COOPERATION UNIT

... on python, programming,  
software development, ....

↓ First Steps with Python	21 - 23 May 2024
are	23 - 24 May 2024
- Online - 16.-27.09.2024	29 - 30 May 2024
Data	12 - 14 Jun 2024
	19 - 21 Jun 2024
(OOP)	26 - 28 Jun 2024
(OOP)	7 - 9 Aug 2024
Data	16 - 18 Oct 2024
	24 - 25 Oct 2024

See also:  
**Workshop Materials**

# Helmholtz Software

## Helmholtz Incubator Software Award

- Promote development of professional and high-quality research software
- Commitment to software as the basis of modern Data Science
- 1<sup>st</sup> round: 41 submissions from 16 Helmholtz centers
- 2<sup>nd</sup> round: **just started!**
- Three categories
  - Scientific Originality
  - Sustainability
  - Newcomer

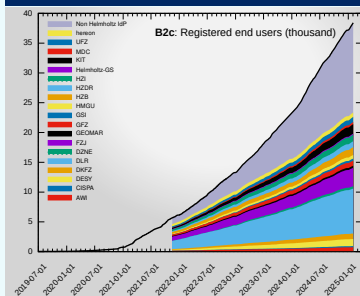


**HELMHOLTZ** Open Science

# Facts & Figures

**> 10,000** (+45%)

Active Helmholtz ID Users  
Within 30 Days



**> 110** (+65%)

Partner Institutions  
With 20+ Users



**7,933** (+22%)

Training hours  
570 Participants  
in 31 Courses

**>360** (+80%)

Entries in  
Helmholtz Research  
Software Directory

The Helmholtz RSD in numbers

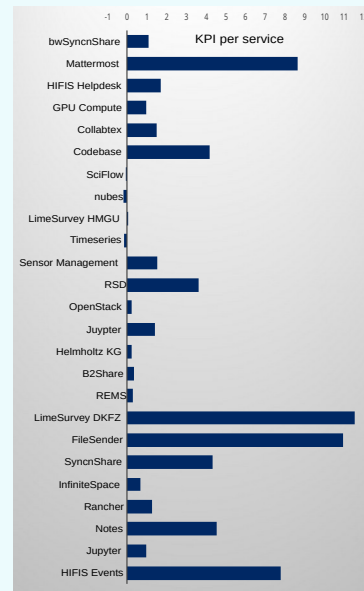
370	1840	48958	202
Registered software packages	Contributors to research software	Mentions of research software in science	International partner organizations

**1,100** (+22%)

Monthly Active Projects  
In Codebase

**+259%** (+55% in '24)

Overall increase of  
Cloud Service  
Users + Usage



Cloud Legal Ruleset

GDPR Agreement

**42** (+3 candidates)

Helmholtz Cloud Services,  
Better Coverage Equality

