

Das Helmholtz Research Software Directory im Kontext des Software Indikators

Christian Meeßen¹, Paula Stock¹, Volker Hofmann², David Pape³

1) GFZ Helmholtz Centre for Geosciences

2) Forschungszentrum Jülich GmbH

3) Helmholtz-Zentrum Dresden – Rossendorf e. V.

Task Group Helmholtz-Qualitätsindikatoren für Daten- und Softwareprodukte

Potsdam, 29. September 2025

The Helmholtz Research Software Directory

<https://helmholtz.software>

Research Software Directory Search or jump to... Click Software Projects Organisations Sign in

HELMHOLTZ
Research for grand challenges.

Promote and Discover Research Software
Because software matters

Browse software

Latest news

- CADET**
WEDNESDAY, 17 SEPTEMBER 2025
New Spotlight process and Software Heritage integration
- API Access Tokens**
FRIDAY, 15 AUGUST 2025
Automatically update your software entry via API Access Tokens
- ScienceServe: Boosting Research Software at Helmholtz**
TUESDAY, 29 APRIL 2025
Projektförderung zur Verbesserung der Nachhaltigkeit und Qualität von Forschungssoftware

News archive

The Helmholtz RSD in numbers

415 Registered software packages	1984 Contributors to research software	56298 Mentions of research software in science	220 International partner organisations
--	--	--	---

- Online service to collect and present software in an **academic context**
- For **Research Software Engineers**
 - Show impact their software has in research
 - Show relations to organisations, research projects and other software
 - Guide visitors to codebase
- For **Researchers**
 - Discover software they need in their research field
 - Get help for citing code they use
- For **Organisations**
 - Keep track of software
 - Metrics and evaluation

The RSD is open source!



<https://github.com/research-software-directory/RSD-as-a-service>

The screenshot shows the GitHub repository page for 'research-software-directory / RSD-as-a-service'. The repository is public and has 21 forks and 36 stars. The main branch is 'main'. The repository description states: 'This repo contains the new RSD-as-a-service implementation'. The file list includes folders like .github, .vscode, LICENSES, authentication, backend-postgrest, backend-tests, background-services, codemeta, data-generation, database, deployment, documentation, e2e, frontend, and mail. The right sidebar shows repository statistics: 36 stars, 21 forks, and 84 tags. The 'About' section includes a link to 'research.software' and a 'Report repository' button.

Fork



Contributions



<https://codebase.helmholtz.cloud/research-software-directory/RSD-as-a-service>

The screenshot shows the Codebase repository page for 'RSD-as-a-service'. The repository is public and has 2 unstars and 1 fork. The main branch is 'main'. The repository description states: 'Repository of helmholtz.software'. The file list includes folders like .github, .gitlab, .vscode, LICENSES, authentication, backend-postgrest, backend-tests, background-services, codemeta, data-generation, database, deployment, documentation, e2e, and mail. The right sidebar shows repository statistics: 2 unstars, 1 fork, and 70 tags. The 'Project information' section includes a progress bar and a 'Latest Release' button for 'v5.2.0-hifis1'. The 'Created on' section shows the repository was created on March 28, 2023.

The Helmholtz RSD in numbers

415

Registered software packages

1984

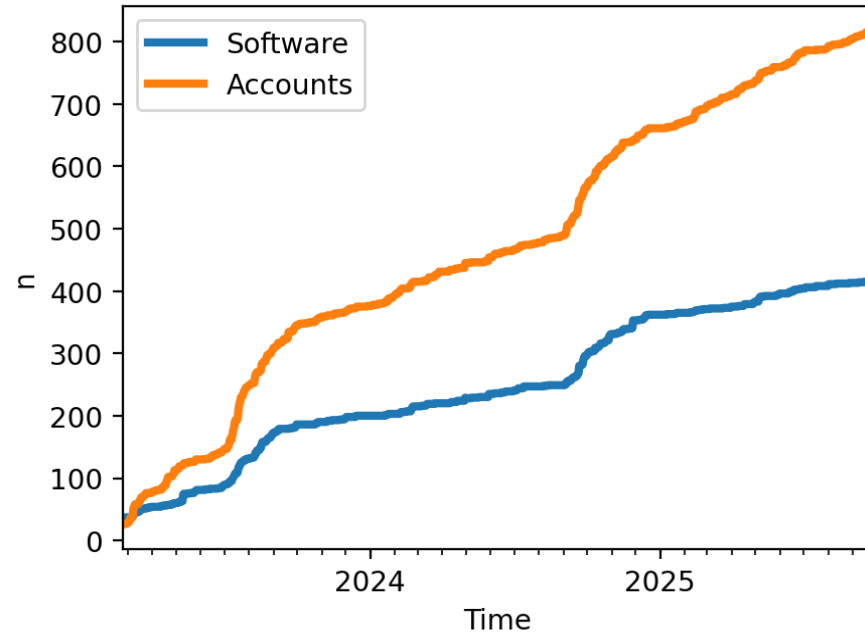
Contributors to research software

56298

Mentions of research software in science

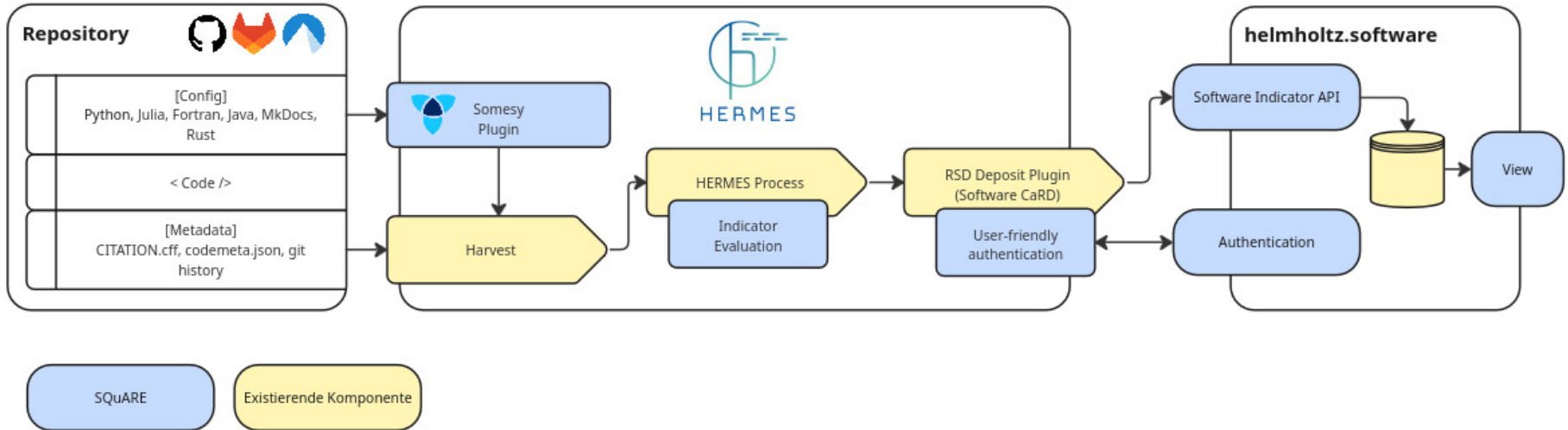
220

International partner organisations



Software Quality Reporting Ecosystem (SQuARE)

- Eingereichter Projektantrag bei Helmholtz Science Serve 2025
- Automatisierung der Berechnung und Visualisierung des Software Indikators

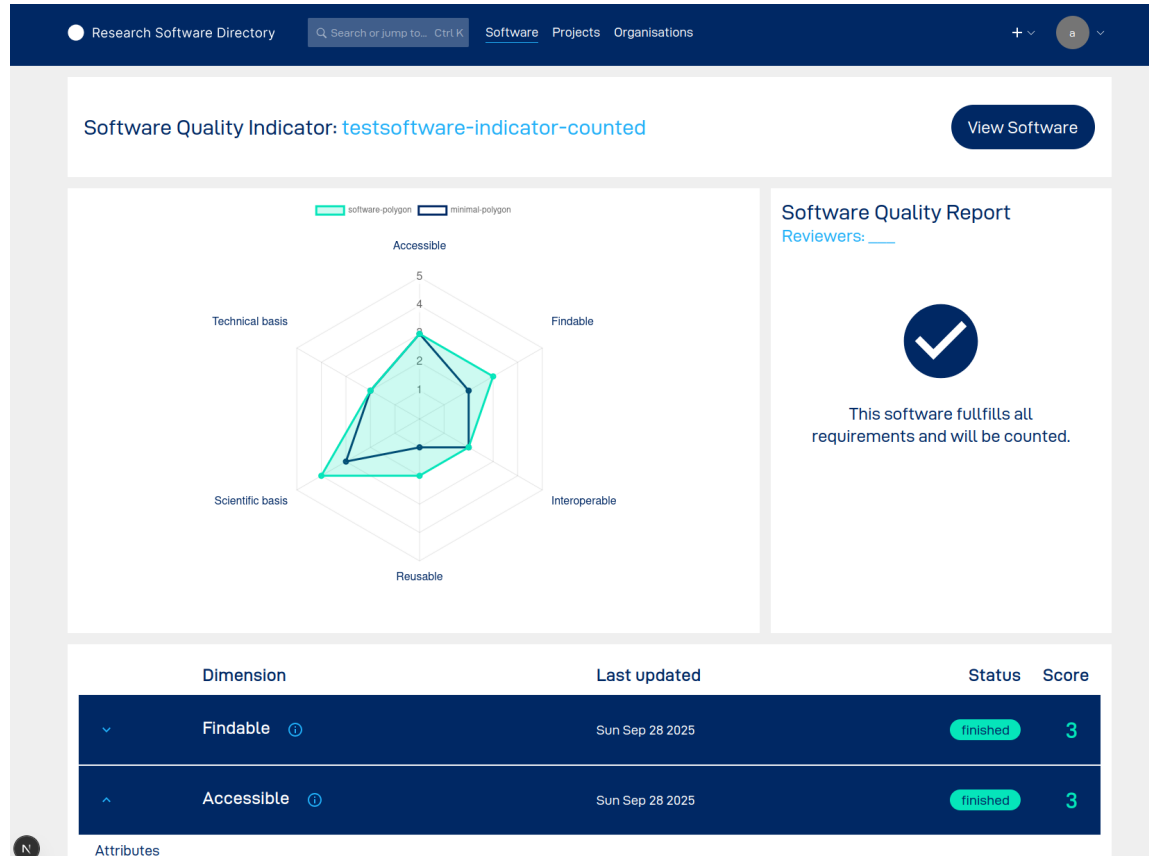


Nutzungsszenarien von SquARE in helmholtz.software

- **„DIY“ durch RSE**
 - HERMES konfigurieren (hermes init)
 - CI Pipeline erstellen (Runner)
 - Authentifizierung mit dem RSD
 - Pro: Bei jeder Aktualisierung der Software auch aktualisierter Indikator, volle Kontrolle
 - Con: Relativ aufwändig

- **Via Helmholtz RSD User Interface**
 - RSE startet Evaluierungs-Prozess im RSD
 - HERMES/SQuARE Pipeline wird automatisch konfiguriert und durchlaufen
 - Pro: einheitliches UI, wenig Aufwand
 - Con: Problematisch bei Closed-Source Software

Visualisierung des Software Indikators im Helmholtz RSD



Live Demo!

Thank you!