ZIH Colloquium
RSE
Stephan Janosch, janosch@extern.mpi-cbg.de
October 6th
10.6084/m9.figshare.21293790
Please join BBB

- if you can
- https://bbb.tu-dresden.de/b/har-oa6-col-lmy
me

- IST 00 -> Dipl-Inf (FH)
- 2009 at MPI-CBG
- 2016 1st RSE conference UK
- 2018 https://de-rse.org/
- full stack dev, ELN specialist and RDM supporter
- RSE catalyst
Who is here?

A. Fraunhofer
B. Helmholtz
C. HRK (TUD, HTW)
D. MPG
E. Leibniz
F. other

https://bbb.tu-dresden.de/b/har-oa6-col-lmy
RSE

- Research Software Engineers / Engineering
  - Research Software
  - E_engineering
  - E_engineers
- community
- events
RS - research software

<table>
<thead>
<tr>
<th></th>
<th>Proprietary</th>
<th>Open Source</th>
<th>something else</th>
</tr>
</thead>
<tbody>
<tr>
<td>costs</td>
<td>+</td>
<td>-</td>
<td>?</td>
</tr>
<tr>
<td>effort</td>
<td>++</td>
<td>- - / ++</td>
<td>- / +</td>
</tr>
<tr>
<td>control</td>
<td>-</td>
<td>++</td>
<td>+</td>
</tr>
<tr>
<td>team</td>
<td>++</td>
<td>- - / ++</td>
<td>-</td>
</tr>
<tr>
<td>sustainability</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
</tbody>
</table>
How old is your GSP policy?

A. 10 years and older
B. less than 3 years
C. don’t know
Engineering - activity
Software in research cycle

Research Infrastructure

Create Hypothesis

Acquire Resources (e.g., Funding, Software, Data)

Perform Research (Build Software & Data)

Publish Results (e.g., Paper, Book, Software, Data)

Gain Recognition

Knowledge

https://doi.org/10.5281/zenodo.7071457
Artefact

- different maturity levels
- coexists with result, data, models, …
- FAIR ?
- needs maintenance
- can YOU exit?
Execution

Toward long-term reproducible research using Guix

https://doi.org/10.1038/s41597-022-01720-9
Do run 10 year old code of yours?

A. Yes

B. No
Engineers

- term coined 10 years ago in UK
- domain <--> software engineer
- not a job description
- intl. RSE survey 2022
- attract problems 😁
Can you get the number of coders @work?

A. Yes
B. No
C. well…
## Community scopes

<table>
<thead>
<tr>
<th>Scope</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Here</td>
<td>ZIH</td>
</tr>
<tr>
<td>Local</td>
<td>TUD</td>
</tr>
<tr>
<td>Regional</td>
<td>DRESDEN-concept</td>
</tr>
<tr>
<td>Federal</td>
<td>Saxony</td>
</tr>
<tr>
<td>National</td>
<td>de-RSE e.V., <a href="https://www.allianzinitiative.de/">https://www.allianzinitiative.de/</a> monthly call</td>
</tr>
<tr>
<td>International</td>
<td>RSE council, RESA</td>
</tr>
</tbody>
</table>
Problems

- “Our software needs a maintainer! I can’t handle that anymore.”
- “We need to communicate about features and future. How to get a community manager?”
- “My software needs 3 months of maintenance. Do you know a proxy which could apply for funding hiring somebody?”
Infrastructure behind infrastructure

- https://rsetoolkit.github.io/
- NFDI
  - section common infrastructure - wg RSE
- EOSC
  - EOSC Task Force on Infrastructures for Quality Research Software
- RDA/RESA
Events

- 2022 Oct 13th - 2nd international RSE day
- 2022 November - monthly community call
- 2023 February - deRSE23 - conference in Paderborn 🇩🇪
- 2023 September - un-deRSE23 - unconference/workshops in Jena
Dresden chapter?

- What?
- Why?
- When?
- Who?

https://de-rse.org/chapter/
Dankeschön!
Community - never walk alone

- de-RSE