



Poznańskie Centrum Superkomputerowo-Sieciowe

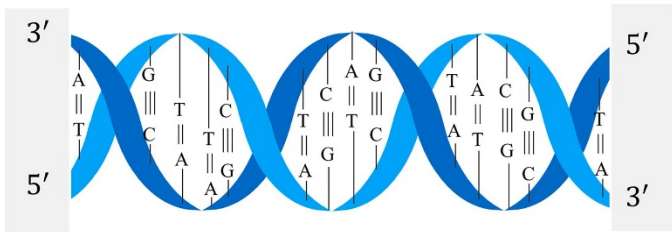
61-139 Poznań
ul. Jana Pawła II 10
tel: (+48 61) 858-20-01
fax: (+48 61) 852-59-54
office@man.poznan.pl
www.pcss.pl

Jan Todek, Maciej Łabędzki,
Marcin Wolski

Oprogramowanie Naukowe - zapomniany artefakt Otwartej Nauki

Setting up a mindset with an example

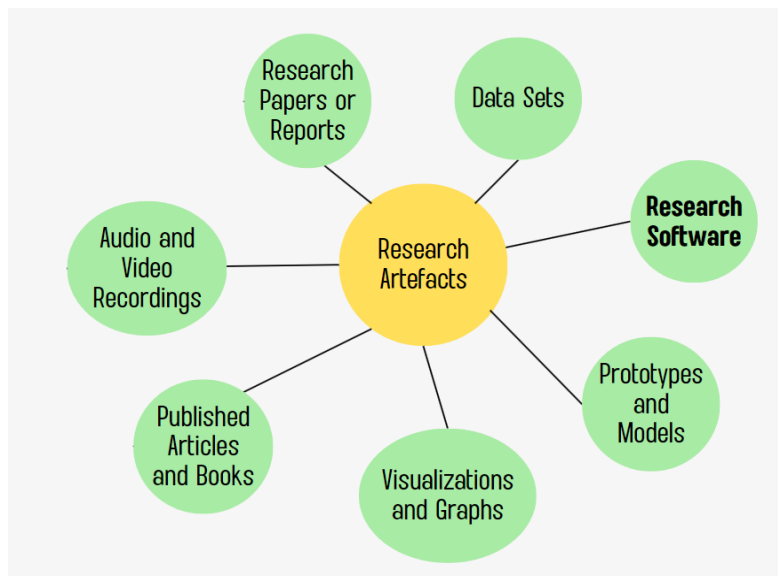
Story of Sarah



Research Artefacts

Research Software

- Research software (RS) refers to software developed or utilized within the context of academic or scientific research*



*S.J. Hettrick et al, UK Research Software Survey 2014 (accessed December 4, 2014), 10.5281/zenodo.14809.

Different perspectives on Research Software

Creating vs reusing

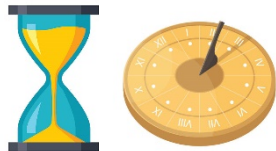
- Research Software is **created** to produce results - as means to an end
- Usually Research Software is created with creator being the only intended user
- The least effort for the most value
- Software is **reused** to reproduce results.
- Does not know how to operate/ run the Research Software
- Wants Research Software to be easily accessible and easy to learn

Software as a research artefact

Software and data



Data provides evidence, software provides a tool



The lifetime of software is generally not as long as that of data

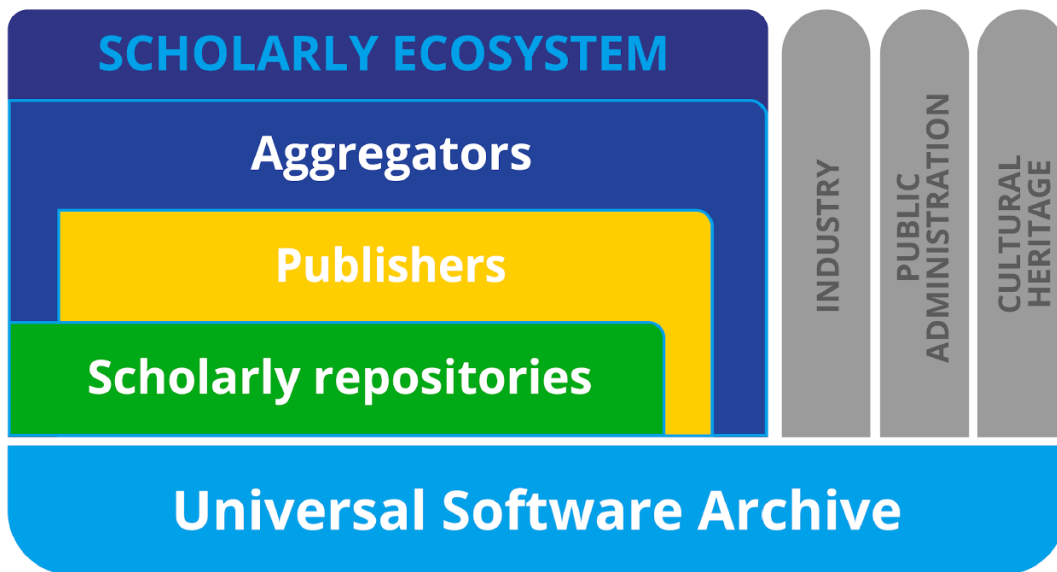


The software has usually complex dependencies

Katz DS, Niemeyer KE, Smith AM, Anderson WL, Boettiger C, Hinsén K, Hooft R, Hucka M, Lee A, Löffler F, Pollard T, Rios F. 2016. Software vs. data in the context of citation. PeerJ Preprints 4:e2630v1

Research Software environment

Task force of Quality Research Software





There is still a **gap** between the current functions provided by infrastructures and corresponding services supporting the management of RS and expected maturity of **archiving, referencing, describing and credit** for **software** source code in Research*

*Azzouz-Thuderoz, Maxence, Laura Del Cano, Leyla Jael Castro, Łukasz Dumiszewski, Daniel Garijo, Jose Benito Gonzalez Lopez, Morane Gruenpeter, Moritz Schubotz, i Marcin Wolski. „SIRS Gap Analysis Report”. Zenodo, 14 grudzień 2023. <https://doi.org/10.5281/zenodo.10376006>.

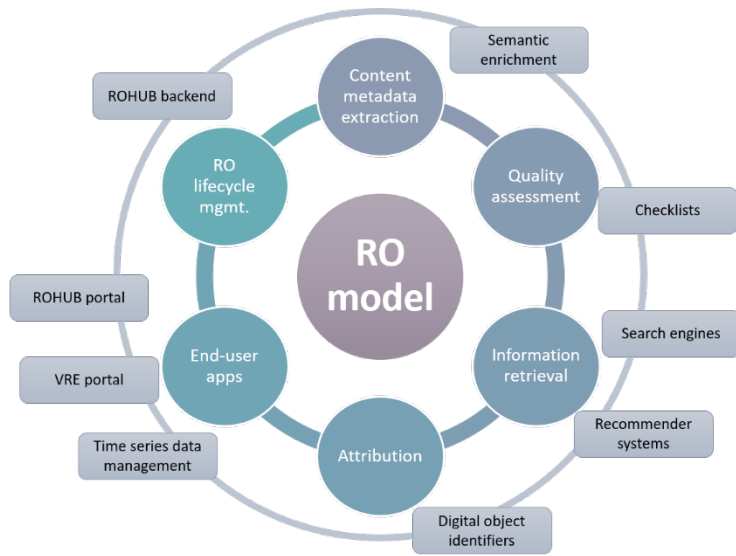
PSNC Open Software Catalogue

- The PSNC Open Software Catalogue (OSC) supports the management of the Open Software by **creating automatically** a full profile of a software project
- The tool can simplify sharing and resuing the software developed as a part of **scientific efforts**.



<https://sc.geant.org/ui/public/project/SOFTCAT>

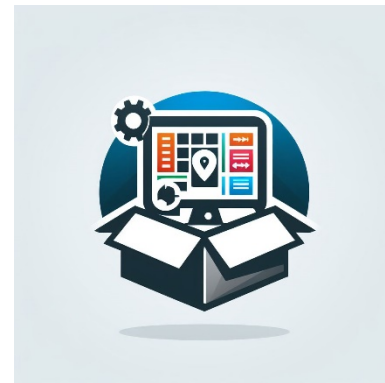
Integration with PIONIER RoHUB



Open Software Catalogue

Software metadata

Enriched metadata



Summary

- Research Software is an distinctive **Research Artefact**
- There is a need for solutions that would pay the way towards **FAIR** Research Software
- PSNC answers these needs by introducing **Open Software Catalogue**



Join our survey!

Research Software in Open Science and Research Community



<https://tinyurl.com/2mydsy48>



Poznańskie Centrum Superkomputerowo-Sieciowe

61-139 Poznań
ul. Jana Pawła II 10
tel: (+48 61) 858-20-01
fax: (+48 61) 852-59-54
office@man.poznan.pl
www.pcss.pl

