



ESCAPE

European Science Cluster of Astronomy &
Particle physics ESFRI research Infrastructures

OSSR: Application for SciCodes Membership

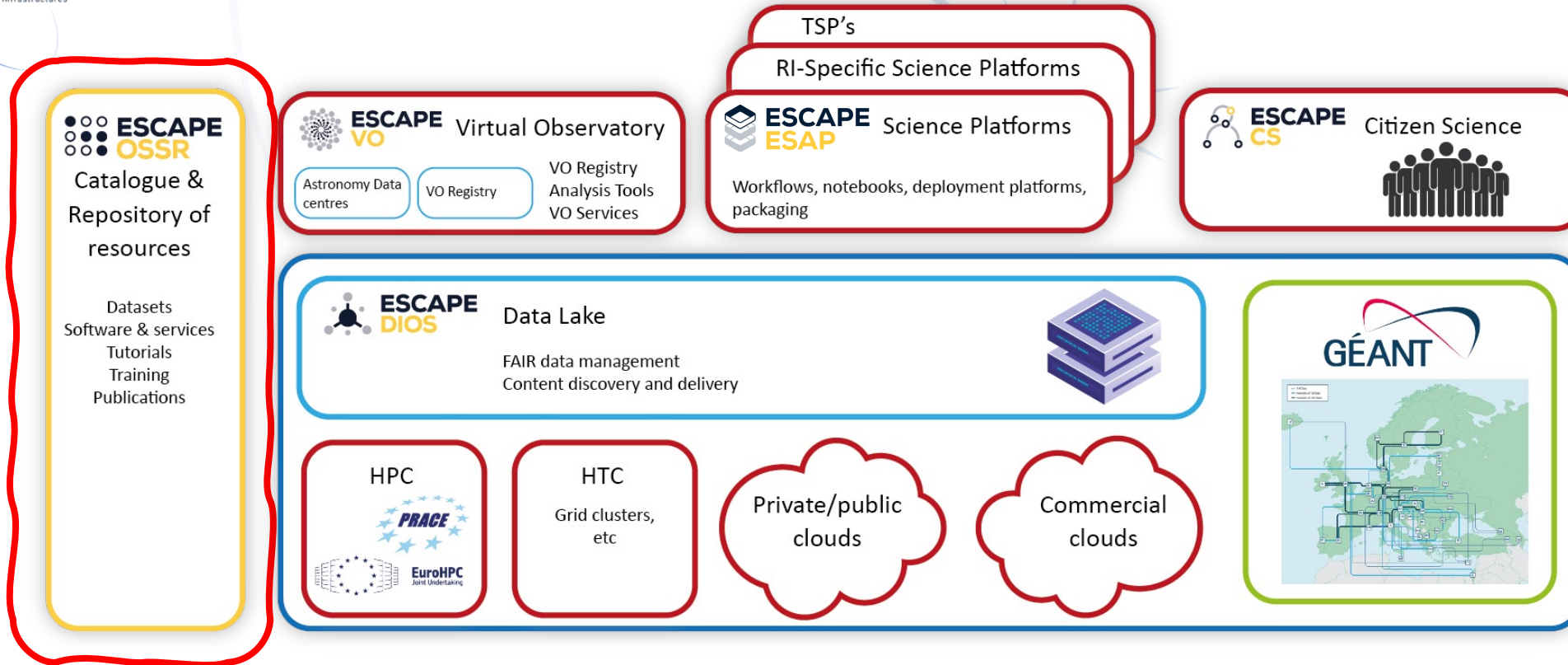
Kay GRAF

ECAP, Erlangen Centre for Astroparticle Physics, Friedrich-Alexander-Universität Erlangen-Nürnberg

on behalf of the OSSR Group

ESCAPE - The European Science Cluster of Astronomy & Particle Physics ESFRI Research Infrastructures has received funding from the European Union's Horizon 2020 research and innovation programme under the Grant Agreement n° 824064.





OSSR was developed as part of the ESCAPE project (Astro/particle, Particle Physics and Astronomy Research Infrastructures) in the EOSC (European Open Science Cloud)

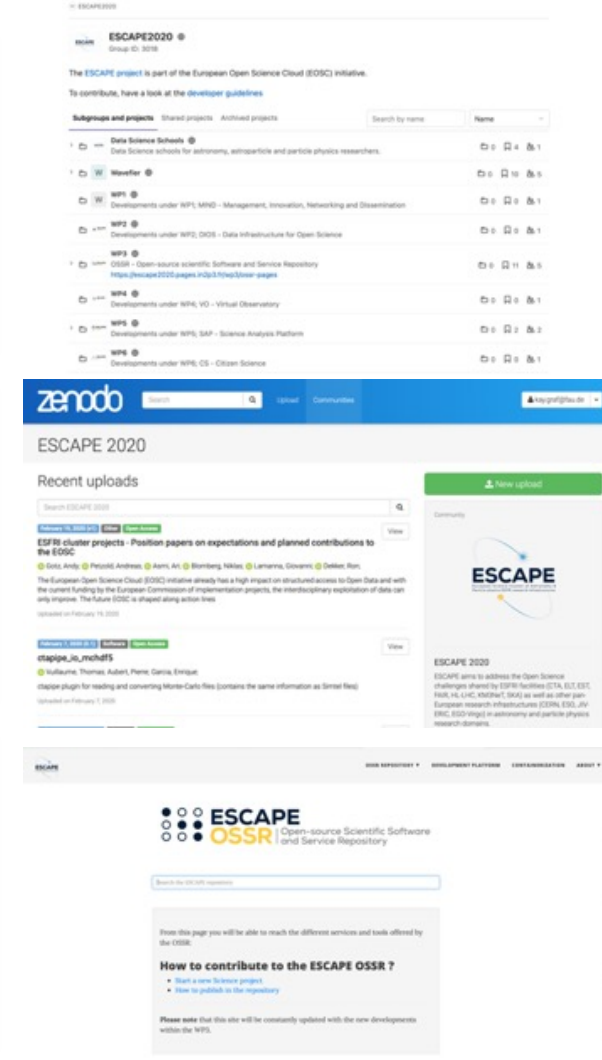
- servicing the needs of the RIS
- Since 03/2023: ESCAPE is an Open Collaboration



The ESCAPE Open-source Scientific Software and Service Repository (OSSR) is a **sustainable open-access repository** to share scientific software, services to the **astro-particle-physics-related communities** and enable open science. It is built as a **curated [Zenodo community](#)** integrated with **dedicated tools** to enable a complete software life-cycle. The OSSR is fully onboarded into the **[EOSC explorer](#)**.

OSSR Aims and Structure

- Development Platform**
 - Software Development
 - Integration & Automation
- Repository**
 - Service Aggregation
 - Preservation / Archive
 - (link to EOSC)
- Landing Page**
 - Entry point, Link Aggregation
 - Search



OSSR – Provider Workflow

FAIR Open-source




- publishes source code (updates your existing record with new versions)

Long-term



- long term archived
- findable
- citable

Integration

- integrates into ESCAPE EOSC cell

- develop/maintain software
- tag a version(release)
- add metadata (CodeMeta)
- let the CI do the rest

- builds a container image

Reprocessing



- publishes image

- registers image

implemented in [eOSSR library](#) **eOSSR**

DOI 10.5281/zenodo.5524912



OSSR Onboarded Entries

Direct: Zenodo

Aggregated:
EOSC Portal via
OpenAIRE

zenodo escape2020 Found 52 results.

Sort by: Best match asc.

August 10, 2022 (v1.0) Software Open Access
ESCAPE Data Science School 2022
 Thomas Vuillaume; Enrique Garcia; Maximilian Linhoff; Karl Kosack; JouvinLea; Martino Sorbaro; Tamas Gal; Mikael Jacquemont; Dr. Rachael Ainsworth;
 Lectures material of the ESCAPE Data Science Summer School 2022. The aim of the school is to provide theoretical and hands-on training on Data Science and Python development for astrophysics, astroparticle physics and particle physics. Find all the school information on the interactive portal: htt
 Uploaded on August 10, 2022

July 12, 2021 (v1.0) Lesson Open Access
ESCAPE Data Science School 2021
 Thomas Vuillaume; Maximilian Nöthe; Julien Peloton; Axel Donath; Arturo Sanchez Pineda; Eduardo Rodrigues; Enrique Garcia; Karl Kosack; Tamas Gal; Benson Muite; Alberto Iess; Martino Sorbaro; Claudia Beleites; Jutta Schnabel; Rachael Ainsworth;
 Lectures material of the ESCAPE Data Science Summer School 2021. The school is held as a continuation of the Asterics/Obelics summer schools that were organised in-person in Annecy, France in 2017, 2018 and 2019. The aim of the school is to provide theoretical and hands-on training on Data Science
 Uploaded on July 13, 2021

Data Repository
ESCAPE OSSR OSSR The European Science Cluster of Particle Physics Open-source Scientific Software and Service Repository
 Open-source Scientific Software and Service Repository

OPENAIRE DATA (FUNDED, REFERENCED DATASETS) GERMANY FRANCE THEMATIC

Web page: <http://purl.org/escape/ossr>

Summary Publications (21) Research software (29) Other research products (1) Related > **Statistics**

Description
 The ESCAPE Open-source Scientific Software and Service Repository (OSSR) is a sustainable open-access repository to share scientific software, services and datasets to the astro-particle-physics-related communities and enable open science. It is built as a curated Zenodo community (<https://zenodo.org/communities/escape2020>) integrated with several tools to enable a complete software life-cycle. The ESCAPE Zenodo community welcomes entries that support the software and service projects in the OSSR such as user-support documentation, tutorials, presentations and training activities. It also

OAI-PMH
<https://zenodo.org/oai2d>

Detailed information @ re3data.org

Organizations

Summary Publications (21) Research software (75) Other research products (1) Related Data source > **Statistics**

Repository [registered at re3data.org](http://re3data.org); <http://doi.org/10.17616/R31NJN5V>



OSSR in the Open Collaboration Area

- Transition from project organisation into open collaboration under an MoU
- Three main areas of collaboration:
 - Policy, Strategy and Collaboration
 - Onboarding → Curated Repository!
 - Technical Developments
 - (further sub-groups under discussion)
- Aims:
 - Collect software to provide additional visibility and cite-ability for RSEs; strengthen software competence with quality in focus
 - Use of OSSR as forum to foster publications/opportunities
 - Offer standards for new communities to join

By software curation
& standards

Enable sustainability by
encouraging open
source software

Sharing best
practices

Foster co-development
of software



● Type of projects to onboard:

- Software/Services/Projects from the ESCAPE & EOSC-future (Astro/Particle/Physics) context
- Any open software from the scientific field beneficial for the community
- Analyses and workflows

● How to onboard:

- Register at the OSSR: <https://purl.org/escape/ossr/onboarding>
- Present your work at an OSSR onboarding session (several per year)
- Add your project to zenodo and get it curated



Further Reading: OSSR Publications

● [OSSR White Paper:](#)
*ESCAPE Work Package 3 (OSSR):
Achievements and Future Prospects*

● [Scientific paper:](#)
*The ESCAPE Open-source Software and
Service Repository*
ORE 2023, 3:46 (under review)

● [Policy Paper:](#)
Open Source and Service Repository Policy
DOI: [10.5281/zenodo.6757112](https://doi.org/10.5281/zenodo.6757112)



Project No 824064
Date 10.06.22

White Paper - ESCAPE Work Package 3 (OSSR): Achievements and Future Prospects

1. Introduction

Activities in ESCAPE Work Package 3 - OSSR - are broadly divided into three major areas:

1. Support a community-based approach for continuous development, deployment, exposure and preservation of domain-specific open-source scientific software and services in the global context of the EOSC catalogue of services - the OSSR itself;
2. Enable open science interoperability and software re-use for the data analysis of the ESCAPE ESFRI projects based on *FAIR* principles:

Open Research Europe






Open Research Europe 2023, 3:46 Last updated: 04 JUL 2023



OPEN LETTER

The ESCAPE Open-source Software and Service Repository

[version 1; peer review: awaiting peer review]

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June 26, 2022

Technical note Open Access

Open Source and Service Repository Policy







114

views

79

downloads

[See more details...](#)

 Gál, Tamás;  García, Enrique;  Graf, Kay;  Hughes, Gareth;  Kettenis, Mark;  Schnabel, Jutta;  Tacke, Christian;  Verkouter, Marjolein;  Vuillaume, Thomas

The ESCAPE Open-source Scientific Software and Service Repository (OSSR) is a sustainable open-access repository to share scientific software and services to the science community and enable high-quality open science. It hosts scientific software and services for data processing and analysis in astro-, particle and astroparticle physics, as well as test data sets, user-support documentation, tutorials, presentations and training activities.

The guidelines indicate how to provide software to the OSSR and under which conditions, in particular regarding licensing and provenance. They include the procedure to onboard contributions to the OSSR and an overview over the required metadata.

These guidelines are part of this OSSR policy and are therefore subject to change.

Indexed in

OpenAIRE

Publication date:



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OSSR started as EOSC Project and became an
Open Collaboration lately
Many overlapping topics with SciCodes

Thank you for your attention!

