4th Rucio Community Workshop (Virtual)

Report of Contributions

Contribution ID: 1 Type: **not specified**

LOFAR Use Cases in ESCAPE - Experience and Future Directions

Wednesday 29 September 2021 15:50 (15 minutes)

We will be presenting our experiences and results for LOFAR use case using ESCAPE data lake and Rucio. Reflections on future requirements including for other data sets (e.g. APERTIF) shall also be deliberated.

Author: GRANGE, Yan (ASTRON)

Presenter: GRANGE, Yan (ASTRON)

Session Classification: Community Reports

Type: not specified

Contribution ID: 2

ESCAPE Data Lake as a Service

Wednesday 29 September 2021 17:00 (15 minutes)

Experiments and scientists, whether in the process of designing and building up a data management system or managing multi-petabyte data historically, gather in the European Science Cluster of Astronomy & Particle physics ESFRI research infrastructures (ESCAPE) project to address computing challenges by developing common solutions in the context of the EOSC.

A modular ecosystem of services and tools constitutes the ESCAPE Data Lake, which is exploited by flagship ESFRIs in Astro-particle Physics, Electromagnetic and Gravitational-Wave Astronomy, Particle Physics, and Nuclear Physics to pursue together the FAIR and open-access data principles. This infrastructure fulfils the needs of the ESCAPE community in terms of data organisation, management, and access, and dedicated assessment exercises demonstrated its robustness.

As a result, collaborating sciences are choosing their reference implementations of the various technologies among the proposed solutions.

A variety of challenges and specific use cases boost ESCAPE to carefully take into account both user and infrastructure perspectives, and contributed to successfully conclude the pilot phase beyond expectations, embarking on a like-production prototype stage.

The ongoing phase of the project aims at consolidating the functionalities of the services, e.g. integrating token-based AuthN/Z or deploying a tailored content delivery and caching layer, and at simplifying the user experience. Specifically for this reason, a considerable effort is being devoted towards a DataLake-as-a-Service whose goal is to provide the end-user with a Notebook ready-to-be-used and fully integrated with the Data Lake.

ESCAPE milestones achieved during the length of the project represent a fundamental accomplishment under both sociological and computing model aspects for different scientific communities that should address upcoming data management and computing challenges in the next decade.

Author: Dr DI MARIA, Riccardo (CERN)

Presenter: Dr DI MARIA, Riccardo (CERN)

Session Classification: Community Reports

Contribution ID: 4 Type: **not specified**

MAGIC telescope rucio deployment

Wednesday 29 September 2021 15:20 (15 minutes)

Presenter: BRUZZESE, Agustin

Session Classification: Community Reports

Contribution ID: 5 Type: **not specified**

CTA rucio use case and development with cloud storage

Wednesday 29 September 2021 15:35 (15 minutes)

Presenter: GILLARDO, Frederic (Centre National de la Recherche Scientifique (FR))

Session Classification: Community Reports

Contribution ID: 6 Type: not specified

SKA Rucio deployment and metadata/ data lifecycle use case

Wednesday 29 September 2021 15:05 (15 minutes)

Presenter: JOSHI, Rohini (SKA Organisation)

Session Classification: Community Reports

Contribution ID: 8 Type: not specified

Session Introduction

Wednesday 29 September 2021 15:00 (5 minutes)

Presenter: BOLTON, Rosie (SKA Organisation)

Session Classification: Community Reports

May 22, 2025

Contribution ID: 9 Type: **not specified**

Prep for panel session - gather questions / share whiteboard??

Session Classification: Community Reports

Contribution ID: 11 Type: not specified

Rucio for LSST data replication

Presenter: SCHWARZ, Lionel (IN2P3)

Session Classification: Community Reports

Contribution ID: 12 Type: not specified

Rucio for the Light Dark Matter eXperiment (LDMX)

Tuesday 28 September 2021 16:00 (15 minutes)

The Light Dark Matter eXperiment (LDMX) is a planned small-scale accelerator-based experiment to search for dark matter in the sub-GeV mass region. Finalizing the design of the detector relies on Monte-Carlo simulation of expected physics processes. A distributed computing pilot project was initiated based around existing software used by other communities, including Rucio for data management. Rucio is primarily used as a dataset catalog, and LDMX also makes extensive use of Rucio metadata to record physics properties as well as bookkeeping information on the data produced. In this talk we describe how Rucio is used by LDMX and propose some possible extensions to the metadata functionality.

Authors: KONYA, Balazs (Lund University (SE)); CAMERON, David (University of Oslo (NO)); BRYN-

GEMARK, Lene Kristian (Stanford University (US))

Presenter: CAMERON, David (University of Oslo (NO))

Session Classification: Community Reports

IVOA

Contribution ID: 13 Type: not specified

IVOA

Wednesday 29 September 2021 16:05 (15 minutes)

Presenter: MORRIS, Dave

Session Classification: Community Reports

May 22, 2025

Contribution ID: 14 Type: not specified

Customizing Rucio at LCLS

Tuesday 28 September 2021 17:00 (15 minutes)

This talk will present the speaker's onboarding experience as someone new to Rucio, covering the aspects of using documentation, building and standing up the containers, and configuring the Rucio system. Furthermore, specifics will be discussed in regard to the customization in development to meet the project requirements for LCLS, a free electron laser that produces ultra fast X-ray pulses.

Authors: HANUSHEVSKY, Andrew Bohdan (SLAC National Accelerator Laboratory (US)); LO, Kenny (SLAC National Accelerator Laboratory); YANG, Wei (SLAC National Accelerator Laboratory (US)); KROEGER, Wilko (SLAC)

Presenter: LO, Kenny (SLAC National Accelerator Laboratory)

Session Classification: Community Reports

CMS

Contribution ID: 15 Type: not specified

CMS

Tuesday 28 September 2021 15:45 (15 minutes)

Presenter: VAANDERING, Eric (Fermi National Accelerator Lab. (US))

Session Classification: Community Reports

ATLAS

Contribution ID: 16 Type: not specified

ATLAS

Wednesday 29 September 2021 11:55 (15 minutes)

Presenter: LASSNIG, Mario (CERN)

Session Classification: Community Reports

May 22, 2025

Belle II

Contribution ID: 17 Type: not specified

Belle II

Wednesday 29 September 2021 11:25 (15 minutes)

Presenter: SERFON, Cedric (Brookhaven National Laboratory (US))

Session Classification: Community Reports

May 22, 2025

FTS: Updates, Direction and Plans

Contribution ID: 18 Type: not specified

FTS: Updates, Direction and Plans

Tuesday 28 September 2021 17:30 (15 minutes)

Presenter: PATRASCOIU, Mihai (CERN)

Session Classification: Community Reports

Contribution ID: 19 Type: not specified

AAI/Tokens IAM

Tuesday 28 September 2021 17:45 (15 minutes)

Presenter: CECCANTI, Andrea (Universita e INFN, Bologna (IT))

Session Classification: Community Reports

Contribution ID: 20 Type: not specified

Multi-VO Rucio

Thursday 30 September 2021 15:10 (15 minutes)

Presenter: NOBLE, Timothy John (Science and Technology Facilities Council STFC (GB))

Session Classification: Community Reports

Europe view (EGI)

Contribution ID: 21 Type: not specified

Europe view (EGI)

Thursday 30 September 2021 15:25 (15 minutes)

Presenter: MANZI, Andrea

Session Classification: Community Reports

May 22, 2025

Contribution ID: 22 Type: not specified

Fermilab view

Thursday 30 September 2021 15:40 (15 minutes)

Presenter: WHITE, Brandon (Fermi National Accelerator Lab. (US))

Session Classification: Community Reports

May 22, 2025

Panda

Contribution ID: 23 Type: not specified

Panda

Wednesday 29 September 2021 10:00 (15 minutes)

Presenter: NILSSON, Paul (Brookhaven National Laboratory (US))

Session Classification: Community Reports

DIRAC

Contribution ID: 24 Type: not specified

DIRAC

Wednesday 29 September 2021 10:15 (15 minutes)

Presenter: STAGNI, Federico (CERN)

Session Classification: Community Reports

Contribution ID: 27 Type: not specified

Rucio @ SDC/KIS

Wednesday 29 September 2021 16:20 (15 minutes)

Presenter: CALIGARI, Peter (KIS)

Session Classification: Community Reports

Contribution ID: 28 Type: not specified

DUNE Rucio Usage and Status

Tuesday 28 September 2021 16:15 (15 minutes)

We present the current state of the DUNE Rucio deployment and plans for extension and expansion. Results will include new monitoring and testing that has been added as well as plans for moving from the current hybrid system to a native Rucio deployment.

Authors: WHITE, Brandon (Fermi National Accelerator Lab. (US)); TIMM, Steven (Fermi National Accelerator Lab. (US)); ILLINGWORTH, Robert (Fermi National Accelerator Lab. (US))

Presenter: TIMM, Steven (Fermi National Accelerator Lab. (US))

Session Classification: Community Reports

Contribution ID: 30 Type: not specified

Rucio and ScienceMesh: Enabling data management for the CS3 community

Wednesday 29 September 2021 11:40 (15 minutes)

Presenters: LO PRESTI, Giuseppe (CERN); CHAUHAN, Rahul

Session Classification: Community Reports

IGWN

Contribution ID: 31 Type: not specified

IGWN

Tuesday 28 September 2021 17:15 (15 minutes)

Presenter: FRONZE', Gabriele Gaetano (INFN Torino (IT) and LIGO-Virgo-Kagra Collaboration

(US/IT/JP))

Session Classification: Community Reports

XENON

Contribution ID: 33 Type: not specified

XENON

Wednesday 29 September 2021 17:15 (15 minutes)

Presenter: PASCHOS, Paschalis (University of Chicago)

Session Classification: Community Reports

Contribution ID: 34 Type: not specified

GO/QoS/MAS

Wednesday 29 September 2021 17:30 (15 minutes)

Presenter: SNYDER, Matt (Brookhaven National Laboratory)

Session Classification: Community Reports

Contribution ID: 35 Type: not specified

CMS Workload Management and Rucio integration

Wednesday 29 September 2021 10:30 (15 minutes)

Presenter: IVANOV, Todor Trendafilov (University of Sofia - St. Kliment Ohridski (BG))

Session Classification: Community Reports

Discussion

Contribution ID: 36 Type: not specified

Discussion

Wednesday 29 September 2021 10:45 (20 minutes)

Session Classification: Community Reports

Contribution ID: 38 Type: not specified

Pipe Dreams (and Nightmares)

Wednesday 29 September 2021 09:15 (45 minutes)

Australia's Academic and Research Network (AARNet) was established in 1989 and is widely regarded as the founder of the Internet in Australia and renowned as the architect, builder and operator of world-class network infrastructure for research and education.

We are Australia's National Research and Education Network (NREN). We connect over one million users—researchers, faculty, staff and students—at institutions across Australia, supporting education and research across a diverse range of disciplines including high energy physics, climate science, genomics, radio astronomy and the arts.

Nationally, AARNet interconnects Australian universities, the CSIRO, and other organisations who have a research and education mission, or with whom the education and research sector interacts. These include hospitals, vocational training providers, schools and museums. Internationally, AARNet interconnects the Australian Research and Education (R & E) community to the world – and continuously develops new capabilities and partnerships to facilitate seamless data access and transfer.

Today, we'll talk about some of the work we've done in the data access and transfer space, challenges we've faced, and our plans for the future.

Presenter: CHUA, Crystal Michelle **Session Classification:** Keynote

Welcome

Contribution ID: 39 Type: not specified

Welcome

Tuesday 28 September 2021 15:00 (5 minutes)

Presenter: BARISITS, Martin (CERN)

 $\textbf{Session Classification:} \ \ \textbf{Opening \& Closing}$

Contribution ID: 40 Type: not specified

Agenda & Logistics

Tuesday 28 September 2021 15:05 (10 minutes)

Presenter: LASSNIG, Mario (CERN)

Session Classification: Opening & Closing

Contribution ID: 41 Type: not specified

Rucio: State of the Union

Tuesday 28 September 2021 15:15 (30 minutes)

Rucio: State of the Union

Presenter: BARISITS, Martin (CERN)

Session Classification: Opening & Closing

Contribution ID: 42 Type: not specified

Transfer & Storage panel

Thursday 30 September 2021 16:10 (1 hour)

Presenters: CECCANTI, Andrea (Universita e INFN, Bologna (IT)); HANUSHEVSKY, Andrew Bohdan (SLAC National Accelerator Laboratory (US)); SHORT, Hannah (CERN); BARISITS, Martin (CERN); PATRASCOIU, Mihai (CERN); MILLAR, Paul

Session Classification: Panels

Contribution ID: 43 Type: not specified

Rucio in a non-grid environment panel

Tuesday 28 September 2021 18:00 (1 hour)

Presenters: DEWHURST, Alastair (Science and Technology Facilities Council STFC (GB)); MANZI, Andrea; CAMERON, David (University of Oslo (NO)); VUKOTIC, Ilija (University of Chicago (US)); LASSNIG, Mario (CERN); KEEBLE, Oliver (CERN)

Session Classification: Panels

Contribution ID: 44 Type: **not specified**

Astronomy & Metadata

Wednesday 29 September 2021 18:00 (1 hour)

Presenters: SERFON, Cedric (Brookhaven National Laboratory (US)); MORRIS, Dave; DAUES, Greg

(NCSA); VISHAMBHAR, Pandey (ASTRON); BARNSLEY, Rob (SKAO)

Session Classification: Panels

Contribution ID: 45 Type: not specified

Introduction - What is the 'Long Tail of Science'?

Thursday 30 September 2021 15:00 (10 minutes)

Presenter: DEWHURST, Alastair (Science and Technology Facilities Council STFC (GB))

Session Classification: Community Reports

Discussion

Contribution ID: 46 Type: not specified

Discussion

Thursday 30 September 2021 17:10 (30 minutes)

Session Classification: Opening & Closing

Photo

Contribution ID: 47 Type: **not specified**

Photo

Thursday 30 September 2021 17:40 (5 minutes)

Session Classification: Opening & Closing

Closing

Contribution ID: 48 Type: not specified

Closing

Thursday 30 September 2021 17:45 (10 minutes)

Session Classification: Opening & Closing