CS3 MESH4 EOSC

Connecting European Data

Science Mesh core applications

Introduction to applications and use-cases presentations

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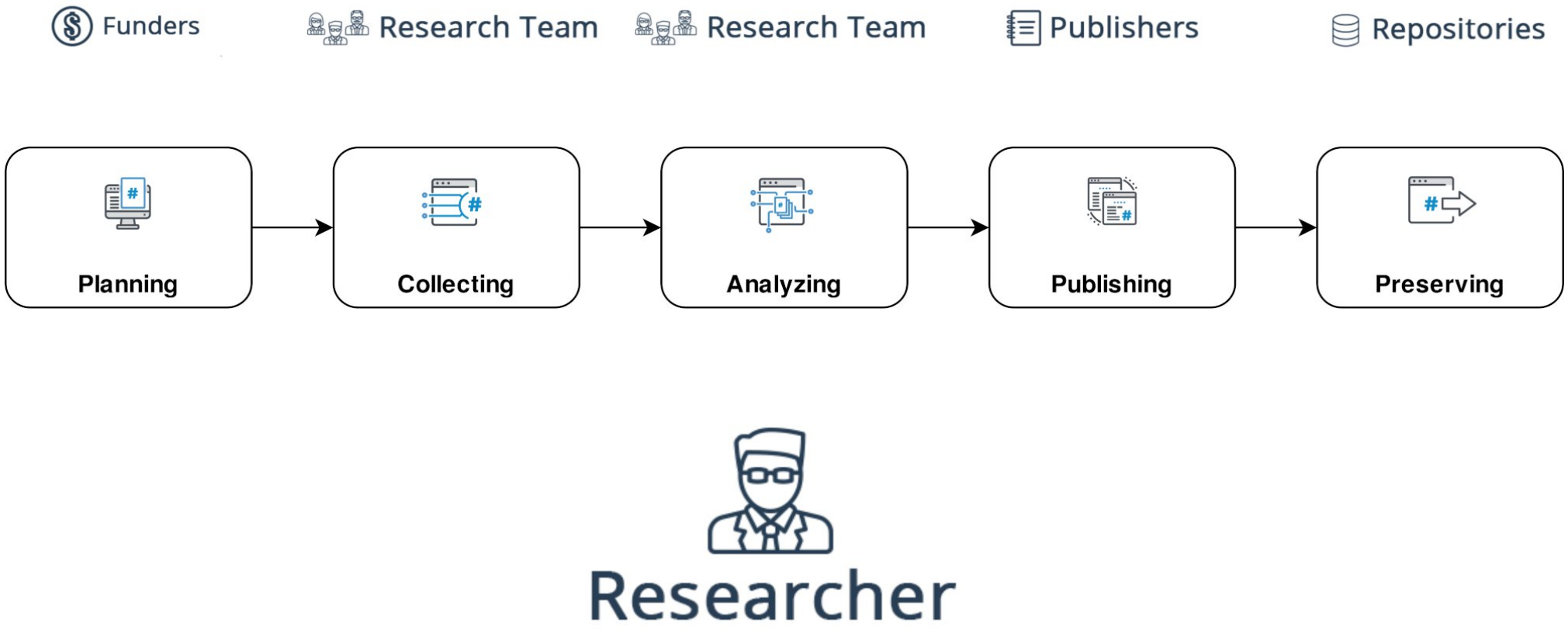
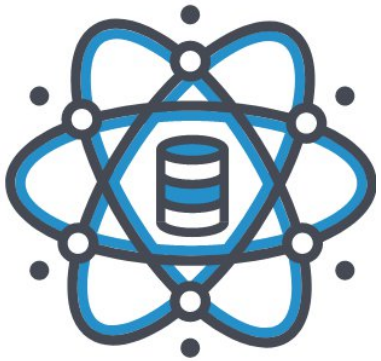
SCIENCE MESH **CORE APPLICATIONS**

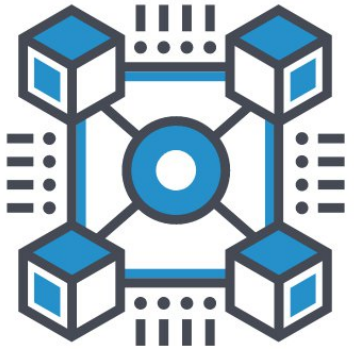
ADDRESSING THE **FULL RESEARCH DATA FLOW** (researchers's view):



SCIENCE MESH **CORE APPLICATIONS**

ADDRESSING THE **FULL RESEARCH DATA FLOW** (project's response):





Data Science Environments	On-demand data transfers	Collaborative Documents	Open Data Systems

More: https://cs3mesh4eosc.eu/data-services

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SCIENCE MESH **CORE APPLICATIONS**

ADDRESSING THE **FULL RESEARCH DATA FLOW** (project's view):

Data Science Environments	On-demand data transfers	Collaborative Documents	Open Data Systems
Data Science applications enable sharing notebooks, edit them collaboratively, using common federated storage backend (EFSS); notebooks can be run on the datasets in EFSS;	Fast transfer of data from remote to local sites EFSS sites, supporting use-cases not able to extend processing to remote sites (data locality)	Sharing and editing documents in real-time; many types of material: office-like documents, markup–based content, simple text, notes, codes, graphics.	Datasets preparation for open access and re-use. Annotation and packaging, deposit to repository from withing the EFSS interface and/or research data management system.

More: https://cs3mesh4eosc.eu/data-services

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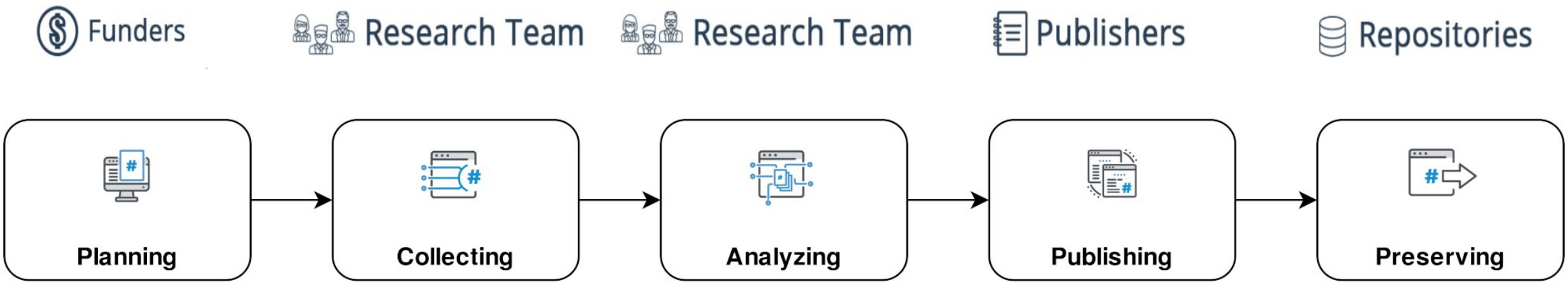
RESEARCH DATA FLOW vs APPLICATIONS



jupyterlab
voilà
SWAN

Data Science Environments

ONLYOFFICE
CodiMD
Overleaf

Collaborative Documents

sciebo
dieCampuscloud
zenodo
RO-Crate
OSF

Open Data Systems

RCLONE
FTS
RUCIO
SCIENTIFIC DATA MANAGEMENT

On-demand data transfers

CREDITS TO HOLGER ANGENENT FOR PREPARING THIS PICTURE

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SCIENCE MESH **CORE APPLICATIONS**

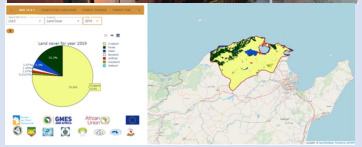
APPLICATIONS & USE-CASES PRESENTATIONS

Data science environments:

High Energy Physics (HEP) – CERN
Earth Observation (EO) - JRC

Marcin Sieprawski - head of Big Data Lab @Ailleron/Softwaremind:

- *High Energy Physics - analysing data streams from particle detector*
- *JRC - supporting decision-making in sustainable management of natural resources*



On-demand data transfer:

LOFAR (RadioAstronomy) – Astron et al.)

Ron Trompert - leader of the online data service group @SARA:

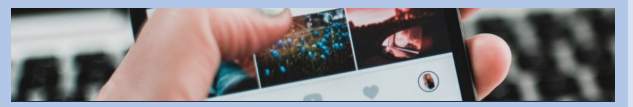
- *LOFAR - Low Frequency Array*

Collaborative environments:

Social Media Research – RISE_SMA

Holger Angenent - @WWU - University of Munster:

- *Social Media Analytics and Crisis communication*



Open Data systems:

Humanities - PARADISEC, endangered languages

Guido Aben - director of eInfrastructure partnerhips @AARNet:

- *PARADISEC - guarantee long-term usefulness thanks to metadata*

USE CASE-RELATED IMAGES – CREDITS TO RELEVANT PROJECTS

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Thank you!

Discover more on...

cs3mesh4eosc.eu

company/cs3mesh4eosc

CS3org

CS3MESH4EOSC Project

https://www.youtube.com/channel/UCHKcZEkMqXjCvc3MLFjFxbw

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