Interactive and agile/responsive sharing mesh of storage, data and applications for EOSC

Fact Sheet

Project Information

**CS3MESH4EOSC**

Grant agreement ID: 863353

**Funded under**

EXCELLENT SCIENCE - Research Infrastructures

**Total cost**

€ 5,956,696,25

**EU contribution**

€ 5,858,571,25

**Coordination by**

ORGANISATION EUROPEENNE POUR LA RECHERCHE NUCLEAIRE

Switzerland

**DOI**

10.3030/863353

**Start date**

1 January 2020

**End date**

30 June 2023

Project description

*Integrated open-source system to boost collaboration in cloud storage services*

Cloud storage services for synchronisation and sharing are an indispensable element of the daily workflow routine, allowing research groups, scientists and engineers to share, transfer and synchronise data in simple but powerful ways. The services are operated and funded by major e-infrastructure providers such as the National Research and Education Networks and major research institutions. However, these services remain largely disconnected from each other. The EU-funded
CS3MESH4EOSC project will integrate the existing application ecosystem by promoting vendor-neutral application programming interfaces and protocols. State-of-the-art connected open-source infrastructure will provide researchers with a broader access to services and boost collaborative research.

**Objective**

In recent years Cloud Services for Synchronization and Sharing (CS3) have been widely deployed in the research and educational space. The services are operated and funded by major e-infrastructure providers, NRENs (National Research & Education Networks) and major research institutions. The CS3 services have become successful on a national level at the scale of individual institutions and started becoming an indispensable element of daily workflows for hundreds of thousands of users including researchers, students, scientists and engineers. The community deploying these services grew bottom up and found its home at the yearly CS3 conferences ([cs3.cern.ch](http://cs3.cern.ch)). However, these services remain largely disconnected, and they are developed and deployed in isolation from each other. At the current state of maturity and community uptake however, combining these various systems and services would allow to boost open-science by presenting a joint, coordinated service to the users in the research and education space on a pan-European level. CS3MESH4EOSC implements a service for the European Open Science Cloud (EOSC) with a built-in sustainability model using the on-premise service delivery by utilizing existing key technology enablers: Open Cloud Mesh (OCM) standardized protocol and EduGAIN service. It consolidates and integrates the existing application ecosystem by promoting vendor-neutral APIs and protocols following the open-source strategy for delivering services -- a platform for a thriving application ecosystem in EOSC. CS3MESH4EOSC empowers service providers in delivering state-of-the-art, connected infrastructure to boost effective scientific collaboration across the entire federation and data sharing according to FAIR principles. The project delivers the core of a scientific and educational infrastructure for cloud storage services in Europe through a lightweight federation of existing sync/share services and integration with multidisciplinary application workflows.

**Fields of science**

natural sciences > biological sciences > ecology > ecosystems

**Programme(s)**

H2020-EU.1.4. - EXCELLENT SCIENCE - Research Infrastructures

H2020-EU.1.4.1.3. - Development, deployment and operation of ICT-based e-infrastructures
Topic(s)

INFRAEOSC-02-2019 - Prototyping new innovative services

Call for proposal

H2020-INFRAEOSC-2018-2020

See other projects for this call

Sub call

H2020-INFRAEOSC-2019-1

Funding Scheme

RIA - Research and Innovation action

Coordinator

ORGANISATION EUROPEENNE POUR LA RECHERCHE NUCLEAIRE

Net EU contribution

€ 1 942 750,00

Address

Esplanade Des Particules 1 Parcelle 11482 De Meyrin Batiment Cadastral 1046
1211 Geneve 23

Switzerland

Region

Schweiz/Suisse/Svizzera > Région lémanique > Genève

Activity type

Research Organisations

Links

Contact the organisation
Website
Participation in EU R&I programmes
HORIZON collaboration network

Other funding

€ 0,00
Participants (14)

DANMARKS TEKNISKE UNIVERSITET

Network EU contribution
€ 284 250,00

Address
Anker Engelundsvej 1 Bygning 101 A
2800 Kgs Lyngby

Region
Danmark > Hovedstaden > Københavns omegn

Activity type
Higher or Secondary Education Establishments

Links
- Contact the organisation
- Website
- Participation in EU R&I programmes
- HORIZON collaboration network

Other funding
€ 0,00

SURF BV

Network EU contribution
€ 680 500,00

Address
Science Park 140
1098 XG Amsterdam

Region
West-Nederland > Noord-Holland > Groot-Amsterdam

Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links
- Contact the organisation
- Participation in EU R&I programmes
- HORIZON collaboration network
Other funding
€ 0,00

INSTYTUT CHEMII BIOORGANICZNEJ POLSKIEJ AKADEMII NAUK

Poland
Net EU contribution
€ 757 000,00

Address
Noskowskiego 12-14
61 704 Poznan

Region
Makroregion północno-zachodni > Wielkopolskie > Miasto Poznań

Activity type
Research Organisations

Links
Contact the organisation
Website
Participation in EU R&I programmes
HORIZON collaboration network

Other funding
€ 0,00

CESNET ZAJMOVE SDRUZENI PRAVNICKYCH OSOB

Czechia
Net EU contribution
€ 261 375,00

Address
Zikova 4
160 00 Praha 6

Region
Praha > Hlavní město Praha

Activity type
Research Organisations

Links
Contact the organisation
Participation in EU R&I programmes
AARNET PTY LTD
Australia
Net EU contribution
€ 0,00
Address
3 Richardson Place Bingry Centre Level 2 Building
2113 North Ryde
Activity type
Other
Links
Contact the organisation
Participation in EU R&I programmes
HORIZON collaboration network
Other funding
€ 98 125,00

SWITCH
Switzerland
Net EU contribution
€ 265 500,00
Address
Effingerstrasse 15
3008 Bern
SME
Yes
Region
Schweiz/Suisse/Svizzera > Espace Mittelland > Bern / Berne
Activity type
Other
Links
WESTFAELISCHE WILHELMS-UNIVERSITAET MUENSTERS

Germany

Net EU contribution

€ 367,968,75

Address

Schlossplatz 2
48149 Muenster

Region

Nordrhein-Westfalen > Muenster > Muenster, Kreisfreie Stadt

Activity type

Higher or Secondary Education Establishments

Links

Contact the organisation
Website
Participation in EU R&I programmes
HORIZON collaboration network

Other funding

€ 0,00

AILLERON SA

Poland

Net EU contribution

€ 655,125,00

Address

Aleja Jana Pawla II 43 B
31-864 Krakow

SME

Yes

Region

Makroregion południowy > Małopolskie > Miasto Kraków
CUBBIT SRL
Italy
Net EU contribution
€ 107,875,00
Address
Via Della Zecca 1
40121 Bologna
SME Yes
Region
Nord-Est > Emilia-Romagna > Bologna
Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)
Links
Contact the organisation Website Participation in EU R&I programmes HORIZON collaboration network
Other funding
€ 0,00

JRC -JOINT RESEARCH CENTRE- EUROPEAN COMMISSION
Belgium
Net EU contribution
€ 81,977,50
Address
Rue De La Loi 200
1049 Brussels

Region
Région de Bruxelles-Capitale/Brussels Hoofdstedelijk Gewest > Région de Bruxelles-Capitale/ Brussels Hoofdstedelijk Gewest > Arr. de Bruxelles-Capitale/Arr. Brussel-Hoofdstad

Activity type
Research Organisations

Links
Contact the organisation Website Participation in EU R&I programmes HORIZON collaboration network

Other funding
€ 0,00

FUNDACION ESADE
Spain
Net EU contribution
€ 88 500,00

Address
Avenida Pedralbes 60-62
08034 Barcelona

Region
Este > Cataluña > Barcelona

Activity type
Higher or Secondary Education Establishments

Links
Contact the organisation Website Participation in EU R&I programmes HORIZON collaboration network

Other funding
€ 0,00

TRUST-IT SRL
Italy
Net EU contribution
€ 242 500 00
Address
Via Francesco Redi 10
56124 Pisa

SME 🌱
Yes

Region
Centro (IT) > Toscana > Pisa

Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links
Contact the organisation ✉️
Participation in EU R&I programmes ✉️
HORIZON collaboration network 🌐

Other funding
€ 0,00

THIRD-PARTY 🌐
COMMPLA SRL

Italy

Net EU contribution
€ 117 000,00

Address
Via Francesco Redi 10
56124 Pisa 🌐

SME 🌱
Yes

Region
Centro (IT) > Toscana > Pisa

Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links
Contact the organisation ✉️
Participation in EU R&I programmes ✉️
HORIZON collaboration network 🌐

Other funding
€ 0,00
THIRD-PARTY

TRUST-IT SERVICES LIMITED

United Kingdom

Net EU contribution € 6,250,00

Address
Chase Side 42 Chase Green House
EN2 6NF Enfield

SME Yes

Region
London > Outer London — East and North East > Enfield

Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links
Contact the organisation
Participation in EU R&I programmes
HORIZON collaboration network

Other funding
€ 0,00

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