National Federated Compute Services NetworkPlus

NFCS projects

First round funding

1. **Inclusive Futures: User stories and mapping pathways for National Federated Compute Services**
2. **Federated AI application container platform / registry feasibility study**
3. **Enhancing HPC adoption through user-centred design**
4. **UKRI Research data landscape survey**
5. **Bridging the Gap: Aligning project administration with access to digital research infrastructure**
6. **Federated Edge HPC architectures for AI workflows in privacy-sensitive and real-time domains**
7. **UNITED: A framework for federated computing roadmaps**
8. **Exploring the requirements and technologies for a data centre API for federated data movement**
9. **Federation of compute and infrastructures in the arts and humanities**

10 **Federated IAM for existing infrastructures**

11 **Federated data movement**

12 **Exploring the governance requirements for enabling UK DRIs to adopt MyAccessID**

13 **ACCoRD:
A community for contract regulation for data**

1 Inclusive Futures: User stories and mapping pathways for National Federated Compute Services

Explores how federated digital research infrastructures such as National Federated Compute Services, shape scientific collaboration and culture.

Through interviews, workshops and stakeholder engagement, it aims to identify challenges and opportunities, promoting inclusive, ethical and sustainable digital science across academic, public and private sector communities.

Lead organisation
UCL / Institute of Education

Principal Investigator
Allison Littlejohn

2 Federated AI application container platform/ registry feasibility study

UNIVERSITY OF CAMBRIDGE

Investigates the feasibility and community needs for a UK-wide federated platform that streamlines access to hardware-optimised AI application containers.

It aims to simplify deploying complex AI software across varied national research computing resources, addressing interoperability challenges and supporting more efficient, accessible AI research and development.

Lead organisation
Cambridge University

Principal Investigator
Christopher Edsall

3 Enhancing HPC adoption through user-centred design

UWE Bristol

A Roadmap for inclusive innovation in environment, health and the built environment

Aims to make HPC systems in the UK more accessible, trusted and useful for a wider range of users.

Through user engagement activities – including workshops, surveys and focus groups – we will explore the full user journey: from trying to apply for access, to navigating technical systems after being granted access, to evaluating what users want from the future of national HPC infrastructure.

Lead organisation
University of the West of England

Principal Investigator
Tariq Umar

4 UKRI research data landscape survey

epcc

Will survey and assess the body of Research Data held across UKRI funded institutions, building on the methods and outputs of the Software Sustainability Institute's recent studies of research software.

Using interviews, workshops and practice analysis, it will uncover integration and governance needs. Findings will inform a step-by-step guide to help institutions improve internal access management and support broader adoption of federated systems in the UK.

Lead organisation
University of Edinburgh / EPCC

Principal Investigator
Kieran Leach

5 Bridging the Gap: Aligning project administration with access to digital research infrastructure

The Rosalind Franklin Institute

Engage stakeholders including research administrators, IT teams, data providers and governance leads, to identify technical and policy barriers in research access.

These findings will shape the development of a practical, step by-step guide that institutions can use to improve how they manage research access internally and prepare for wider adoption of federated systems nationally.

Lead organisation
Rosalind Franklin Institute

Principal Investigator
Laura Crawford

6 Federated Edge–HPC architectures for AI workflows in privacy-sensitive and real-time domains

Aims to assess the feasibility of federating HPC resources, like Isambard AI, with edge computing at Cardiff and Newcastle.

Centered on community and technology, it will explore integration between systems to support wider collaboration and innovation across institutions, enhancing the UK's national computational infrastructure.

Lead organisation
Cardiff University

Principal Investigator
Theodoros Spyridopoulos

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UNITED: A Framework for federated computing roadmaps

National Oceanography Centre

User needs informed technologies for environmental data. Informs strategic planning for a national federated compute infrastructure using environmental data as a pilot.

Given its interdisciplinary, data-driven nature and broad societal impact, the project will explore real-world applications, technical needs and policy considerations across diverse environmental data users in public, private and third sectors.

Lead organisation
National Oceanography Centre

Principal Investigator
Monica Hanley

8 Exploring the requirements and technologies for a data centre API for federated data movement

University of BRISTOL

Investigates data centre APIs for federated data movement through community surveys and landscape analysis.

It aims to develop a prototype reference architecture based on current and future user and operator needs. A detailed review of FirecREST will help clarify requirements and inform broader technology assessments.

Lead organisation
University of Bristol

Principal Investigator
Matt Williams

9 Federation of compute and infrastructures in the arts and humanities

University of Brighton

Engages Arts and Humanities communities to support the Community pillar of the NetworkPlus project.

Through four parallel community-facing activities, it will gather validated requirements for federation based on current practices, needs and user stories, building on existing insights from A&H research stakeholders and initiatives.

Lead organisation
University of Brighton

Principal Investigator
Karina Rodriguez Echavarria

10 Federated IAM for existing infrastructures

THE UNIVERSITY of EDINBURGH

Evaluate the benefits and challenges of expanding Identity and Access Management (IAM) federation across UK academia.

By engaging IAM system operators and identifying use cases from research communities, it will explore a bottom-up, incremental approach to federation, assessing opportunities and barriers within the existing IAM landscape.

Lead organisation
University of Edinburgh / EPCC

Principal Investigator
Stephen Booth

11 Federated data movement

Durham University

Tackles challenges in large-scale, researcher-led distributed data management, guided by science cases in fusion energy, cosmology and astronomy.

By engaging UK DRI stakeholders, it will develop good practices and technology demonstrators to inform the federated computing landscape and support researchers in managing and leveraging their data effectively.

Lead organisation
Durham University

Principal Investigator
Alistair Basden

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Exploring the governance requirements for enabling UK DRIs to adopt MyAccessID

University of BRISTOL

Aims to develop a Governance Framework for Data Contracts to streamline research data agreements across the UK's DRI ecosystem.

Through stakeholder engagement and community development, it will identify challenges, best practices and solutions for data sharing. The project will deliver evidence, components and a roadmap to guide future implementation.

Lead organisation
University of Bristol

Principal Investigator
Christopher Woods

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ACCoRD: A community for contract regulation for data for the project name

Investigates the feasibility and community needs for a UK-wide federated platform that streamlines access to hardware-optimised AI application containers

It aims to simplify deploying complex AI software across varied national research computing resources, addressing interoperability challenges and supporting more efficient, accessible AI research and development.

Lead organisation
UCL

Principal Investigator
Michelle Harricharan

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UKRI