National Federated Compute Services
NetworkPlus

Autumn conference
22–23 September 2025

NetworkPlus project PI panel Q&A

UKRI

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**

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

UCL

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 both surveys and interviews it will aim to assess the landscape of research data in the UK which may be available upon DRI services, to establish what challenges and barriers are faced by data holders and to report back on how future DRI services can best remove these challenges and barriers.

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

7 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.

These findings will shape the development of a practical, step-by-step guide that institutions can use to streamline digital research infrastructure access and prepare for wider adoption of federated systems nationally.

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

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

12 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 identity federation. The project will deliver evidence and reference implementations to guide future adopters.

Lead organisation
University of Bristol

Principal Investigator
Christopher Woods

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

Addresses the contracting challenges that currently hinder data from being accessed, moved and processed efficiently for ground-breaking research.

A research data contract stipulates the terms under which data is shared for research purposes. It forms the foundation for the storage, management, transfer and use of data. However, the data contracting process fraught with challenges, inefficiencies and uncertainty which significantly delay or block innovative research.

Lead organisation
UCL

Principal Investigator
Michelle Harricharan

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