

# The safe share project

# Highlight report 5

# **Background**

To address the need for research in the UK to use and share sensitive data securely and safely, Jisc and leading UK universities are collaborating to provide Higher Assurance Network (HAN) connectivity over the Janet network and access management mechanisms between research centres.

## **Recent Major Achievements**

- Consolidation and improvement of the core infrastructure, including the addition of the Hardware Security Module to provide certificate based authentication for the encrypted tunnels
- Inclusion of a new pilot site, Hillingdon Borough Council, to test safe share for the extension of the Public Services Network (PSN) to public sector organisations who are neither able to access nor afford a dedicated PSN connection.
- Making Moonshot support available for CentOS 7, the Operating System that is used with OpenStack for the AAAI pilots eMedLab and Cloud Infrastructure for Microbial Genomics (CLIMB).

# **Project status**

# Stream 1 update - Higher Assurance Network (HAN)

- This quarter has been focused on further consolidation of the HAN core; the aim has been to assure
  confidence with a resilience- tested infrastructure before introducing the pilot sites further. Internal
  project resources have been stretched and the Project Director has procured specialist technical help
  from a Juniper engineer to ensure that faster progress can be made.
- The Hardware Security Module has been set up and tested and now provides certificate based authentication for the encrypted tunnels; this increases the security and allows for more control.
- Routers have been delivered to Swansea, Cardiff and Manchester, which means with St Andrews and Southampton, there are now 5 end sites available for testing. Jisc has also deployed routers in Harwell and at the Janet NOC to assist with testing.
- Following the discussion at the March project board where the outlines were agreed, further progress has been made on developing the safe share Terms and Conditions and Service Level Descriptions.
- The ongoing talks with the Cabinet Office have continued about using the safe share project as a means to extend the reach of the Public Services Network (PSN) to public sector organisations who are neither able to access nor afford a dedicated PSN connection. Hillingdon Borough Council has agreed to be a pilot site and Jisc is meeting to discuss requirements and potential use cases at the end of June 2016. A procurement has taken place for a PSN connection and installation is due next month in July 2016.



There has been more work on the Business Case, in particular looking at costings and charging options.

# Stream 2 update - Authentication, Authorisation and Accounting Infrastructure (AAAI)

- Having identified the importance of OpenStack to both the eMedLab and Cloud Infrastructure for Microbial Genomics (CLIMB) projects, Moonshot support is now available for CentOS 7, the Operating System they both use for OpenStack.
- Plans have been made for a workshop in the summer with the CLIMB and eMedLab partners.

#### **Next Steps**

- Full deployment of HAN equipment at pilot sites that are ready, followed by testing i.e. Swansea University, Cardiff University, University of Manchester.
- Configuration and deployment of routers to University of Leeds and Hillingdon Borough Council.
- Working with the other HAN pilot sites for the Farr service slice on the use cases that will support their involvement (London and Edinburgh/Scotland)
- A security workshop to test the feasibility of the planned ADRN service slice, and whether safe share can meet the requirements of the ADRCs and the ESRC SafePods project.
- The AAAI workshop with CLIMB and eMedLab partners. Progress chasing with the Leeds HPC AAAI pilot working with Leeds and Manchester.

### **Further Background**

The safe share project is working with two particular research communities that use sensitive data to pilot the infrastructure:

- Biomedical researchers e.g. through the Farr Institute and the MRC Medical Bioinformatics initiative
- Administrative data researchers e.g. through the Administrative Data Research Network.

The safe share project is piloting a high capacity, encrypted network between research centres across the Janet network and investigating using the safe share infrastructure with local authorities and the cabinet office to extend the reach of the Public Services Network (PSN).

The project is also piloting an Authentication, Authorisation and Accounting Infrastructure (AAAI) to demonstrate how Jisc's trust and identity services can be used to control access to sensitive data to further enhance the UK's research capacity in areas, such as medical, clinical, health and the social sciences.

This communication was reviewed at the last Project Board meeting on 8<sup>th</sup> June 2016. The next meeting is on 14<sup>th</sup> September 2016.

For more information, please contact malcolm.teague@jisc.ac.uk, see https://www.jisc.ac.uk/rd/projects/safe-share, join the Community group at https://community.jisc.ac.uk/groups/safe-share-project, and follow #jiscsafeshare