

Update on National AAAI Pathfinder

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RCUK (all seven RCs)

Pathfinder is complete

Work Package	
WP 1.1	<ul style="list-style-type: none">• Identified eight key Authorisation requirements for AAI and compared Moonshot against prevalent technologies.• Set up Assent pilots at Durham and EPCC. Integrated DiRAC SAFE with Assent.
WP 1.2	<ul style="list-style-type: none">• Assent IdP set up by EPCC; it can generate IDs for anyone with a valid email address, irrespective of whether they have Assent at their home site.

Reports and Roadmap

- The pathfinder reports will be put on the HPCSIG website this week for you all to read and ponder
- RCUK will organise a workshop in 2018 with the community to see what is of value in what we have done and think about how we set up AAI services in the UK.
 - HPCSIG Officers will be invited to attend and contribute
- The aim is to have single sign on based upon credentials issued by HEIs, ROs and authorised entities that have IGTF accreditation
 - Direct approach – use Moonshot technology and Aseent Service and provided IDs
 - Indirect approach – use a credential conversion service to access other AAIs such as those for international projects for instance
- We hope it will improve security – even DiRAC wants 2 factor AAI!

WP 1.3

- Successfully tested Assent and SAFE in a secure environment and on an OpenStack system. However unable to test 2-factor authentication.
- Set up a pilot SAFE infrastructure that allows user registration, encapsulates the eMedLab project-approval workflow and demonstrates SAFE's reporting capabilities.
- The pilots prove that eMedLab's OpenStack infrastructure is amenable to the use of Assent for user authentication and that a SAFE-like instance can encapsulate the user and project workflows of a Cloud-based, scientific infrastructure
- eMedLab, Crick, QMUL, Sanger installed Assent services;

WP 2

- Use SAFE in a HEI environment, Oxford.
- EPCC have offered further enhancements for ARC deployment, making SAFE work with ARC accounting schema.

WP 3.1	<ul style="list-style-type: none">• OpenSAML attribute authority was developed and linked to SAFE database. DiRAC SAFE can thus provide user attributes to Assent.
WP 3.2	<ul style="list-style-type: none">• A prototype <i>credential conversion service</i> has been produced that enables users with sufficiently high levels of assurance (through their Assent IdP) to obtain a certificate from an IGTF CA.• An application for membership of IGTF (specifically EUGridPMA) based on IdPs is currently under review
WP 4	<ul style="list-style-type: none">• Consultation on business model with Nel PDG and HPC-SIG members during meetings in April-May 2018.

- The Moonshot authorisation technology and Assent service can be integrated with Authorisation and Accounting Infrastructures such as SAFE.
- A working SAFE+Assent prototype now exists
- This was tested in the eMedLab project
- The eMedLab field test showed that Assent can interoperate with a Cloud Management System's AAI.
- Setting up Assent sites proved difficult. A clear requirement is to know who works in both networking and identity management at sites and organise an outreach programme and assistance for these key individuals. The 2017 Nel Survey was used to identify these people.

- Two important outcomes which will benefit the UK community are
 - Moonshot documentation has improved on the Wiki, in line with feedback from EPCC
 - SAFE documentation has improved based on ARC feedback and text.
 - Still Room for improvement
- We have piloted the generation of a weak-assurance Moonshot ID that can be used for use by non academic users such as in Industry and Public Sector.
- Adoption of Moonshot by other services will allow use of this facility on a service other than eMEDLAB.
- Productisation will benefit from dissociating this service from SAFE, a task that should be technically straightforward to achieve. The output is an Assent API.
- Early tests will be made using DIRAC and GRIDPP in March-April 2018

- RAL set up a *credential conversion service* that enables users with sufficiently high levels of assurance (through their Assent IdP) to obtain a certificate from an Interoperable Global Trust Federation Certificate Authority (IGTF CA).
- IGTF CA is being set up for this purpose
- DiRAC-GRIDPP and Elixir are the identified use cases and are being readied for testing
- This will show Assent can interoperate with other Identity Management platforms and so allow UK researchers, for instance, to access international projects with their Assent credentials.

RCUK AAAI Workshop

- Organised by RCUK for April May 2018
- it is proposed that a small workshop be conducted in 2018 to:-
- Understand the lessons learned from the Pathfinder for the Technical Architecture of an Assent service based upon Moonshot.
- Propose a technical architecture for an Assent service and the requirements for Authorisation and Accounting services that are needed in order to use Assent.
- Propose a Roadmap for Assent Service development and deployment
- Cost the Assent service and propose a Business Plan that includes charging models
- Senior HPCSIG Officers will be invited.
- The new Chair of the UKRI E-infrastructure Board wants to attend