Jisc Access and Identity Management (AIM) Evolution and Delivery of Services Plan

Introduction

Jisc's Access and Identity Management (AIM) strategy (2013-2016) outlines the high level objectives to continue the evolution of access and identity management for the UK research and education sectors. This Plan describes how these objectives will be met over the next two years.

Both the AIM strategy and plan will have an annual review to ensure we continue to meet customer requirements. To engage with Jisc in this review and on an ongoing basis you can join the AIM community group at https://community.ja.net/groups/access-and-identity-management-aim and talk with your customer engagement representative: https://www.ja.net/support-advice/customer-engagement-team or usual Jisc contact.

Services

To ensure our portfolio of AIM services continues to meet customer needs we will strive to make them easier to adopt and run for both customers and their users, while maintaining excellence in service delivery and value for money.

To do this we have agreed a number of targets over the next two years. Some are service-specific whilst others are common across services to help produce a single coherent and consistent user experience.

Objective	Target	Date
Maintain a customer focus	Develop a plan to devolve more direct control to customers e.g. self service portals.	31/03/2014
Maintain a customer focus	Implement a process for systematically obtaining and acting upon customer feedback.	TBD - Dependent on wider Jisc activity so as not to overburden institutions
Deliver value for money	Identify critical software and experts and produce sustainability plan.	31/03/2014
Deliver value for money	Identify opportunities for cost and efficiency savings through integration of national and international operational infrastructures.	31/03/2014
Ensure Jisc is an exemplar in the implementation and usage of AIM	Ensure federated access is included in all Jisc services internally and externally.	31/03/2014
Deliver value for money	Produce revised service business models	31/07/2014

Maintain a customer focus	Investigate managed service options to make services easier to adopt and run.	30/09/2014

eduroam (UK) – https://www.ja.net/eduroam

eduroam is a highly successful and popular worldwide network access service that is implemented on a federated basis. Participating organisations, using their existing infrastructures, connect to nationally operated RADIUS systems and overlay eduroam network services, which adhere to comprehensive technical standards. eduroam provides the user with authenticated network logon and access to the Internet through a single Wi-Fi profile and set of credentials, wherever the service has been made available by participating organisations. By eduroam-enabling the network, organisations can provide guest network access services to visitors without the need for guest account management, saving time and cost for both the organisation and the visitor.

There are currently 66 countries providing eduroam across the world and in the UK each month there are almost 10 million successful roaming authentications from 200,000 unique devices. To help influence international development we will work with GÉANT partners in the Global eduroam Governance Council.

In eduroam, communication between the access point and the user's home institution is based on the IEEE 802.1X and IETF EAP standards. Jisc will continue to track the standards and development of the technologies behind eduroam to ensure that we, our customers, and their users have the capability to benefit from improvements and new features.

Despite the large uptake of eduroam in HE and research, some customers still have issues in successfully implementing the technology. To reduce the number of issues we will engage with partners developing tools to make it easier to deploy the technologies and for users to get access. For example, we will actively engage with the GÉANT GN3plus task that is developing the eduroam CAT tool to provide assistance in configuring the correct profiles for devices.

Objective	Target	Date
Increase coverage of eduroam	Develop plan to increase coverage with wider public sector and commercial organisations.	31/03/14
Increase coverage of eduroam	Engage with school sector to demonstrate benefits of eduroam and discover how best to implement by piloting within at least one local authority.	31/03/2014
Increase adoption of eduroam within the Jisc community	Discover why FE adoption is relatively low and develop plan for increased adoption.	31/03/2014

The UK Access Management Federation – http://www.ukfederation.org.uk

The UK Access Management Federation provides the UK schools, further and higher education, and research sectors with a framework for accessing online learning material by using federated identity solutions, such as Shibboleth. This gives institutions a route to single sign-on to resources and reduces user support requirements for publishers and service providers by passing authentication decisions back to identity providers and allowing for more accurate compliance with licence conditions.

To assist customers (both suppliers and institutions) in providing more granular access to resources and services we will investigate greater exploitation of attribute availability and release.

The UK federation is a member of the eduGAIN service, which enables the trustworthy exchange of information related to identity, authentication and authorisation between the GÉANT (GN3plus) Partners' federations and the global community. The eduGAIN service delivers this through co-ordinating elements of the federations' technical infrastructure and a policy framework controlling the exchange of this information. There are more than 20 countries in eduGAIN and we will work with the eduGAIN service to increase usage by UK federation members by demonstrating the benefits afforded to their users in increased international collaboration. Where international federations are not currently members of eduGAIN we will continue to work with them to demonstrate the benefits of interfederation by establishing bilateral agreements.

Objective	Target	Date
Assist customers in monitoring and controlling resource consumption	Work with members to better understand federation usage by implementing tools such as Raptor and JUSP.	31/03/2014
Increase UK participation in global activities	Assist at least 3 federation members in participating in eduGAIN.	31/03/2014
Widen usage of the UK federation to have a coherent solution for education and research	Start exploring the use of higher assurance in federations where services require them.	31/07/2014
Widen usage of the UK federation to have a coherent solution for education and research	Work with NEN Technical Strategy Group[1] to increase school sector usage following recent structural and funding changes.	31/12/2014
Widen usage of the UK federation to have a coherent solution for education and research	Increase usage by FE organisations so that 80% of off-campus FE logins to Jisc's free to FE resources (such as eBooks for FE and Jisc Media Hub) are via the UK federation.	31/12/2014
Widen usage of the UK federation to have a coherent solution for education and research	Increase number of services provider customers (including outsourced entities) by 10% to also include a wider range beyond that of traditional publisher resources.	31/12/2014

Certificate service – https://www.ja.net/jcs

The Janet Certificate Service (JCS) provides SSL server certificates that are used to secure network services. Where a web service is secured with an SSL certificate, information between the service and the user's web browser is encrypted and cannot be eavesdropped on by a third party. SSL certificates also provide some level of assurance regarding the owner of the web service. Some certificates provide higher assurance levels than others, the highest being the Extended Validation certificate.

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[1] www.nen.gov.uk

JCS provides all the popular types of SSL server certificates and recommends Extended Validation (EV) SSL certificate as they typically provide the most appropriate level of assurance for end users. Most modern internet browsers will display EV SSL-secured web sites in a way that allows visitors to see at a glance that a particular site is secure and can be trusted, by turning the browser address bar or padlock green. All Certification Authorities (CAs) who issue EV Certificates must undertake vetting to ensure they follow the same high security standards when processing certificate requests. This means that visitors to EV SSL-secured web sites can trust that the organisation that operates the site has undergone and passed the EV SSL authentication process as defined by the CA/Browser Forum. By implementing EV certificates, users will be able to trust that web sites are what they claim to be, rather than fraudulent mirror sites.

Janet acts as a Registration Authority, carrying out validation checks on member organisations and verifying certificate requests, on behalf of the commercial certificate authority, Comodo. Comodo signs the certificates provided to Jisc customers.

Objectives	Target	Date
Improve user experience and increase security	Reduce time and effort to obtain High Assurance Certificates by 50%.	30/06/2015

Research and Development

To ensure our services continue to evolve to meet the needs of our customers we undertake a programme of research and development both to enhance existing services and with a view to developing new services.

Co-design: Identity Management

Co-design is a new approach building on the way that Jisc already works with partner organisations, taking it to a deeper level. The partner organisations (RLUK, UCISA, RUGIT, SCONUL), have each identified issues that are proving difficult to manage within their particular areas of interest, and a number of these have been developed into projects to take forward.

Each partner is staying closely involved in their particular projects from the initial generation of ideas, through the project implementation stage and into the development of products, services and other outputs. It means that the workstreams are under constant scrutiny so that the project team can make faster, better-informed decisions to change their focus if new avenues look more fruitful, speed up or even stop a project completely if it looks unlikely to yield useful results. The aim is to ensure outputs are optimal, cost-effective and meet all the requirements of end-users.

Working with SCONUL, an identity management project has been developed to address the social and political barriers to good identity management. This project will investigate the cultural, social and political issues that are preventing excellent identity management in institutions, explore the issue from a user's point of view, and will identify practical options for addressing the barriers identified.

Identity management is a key issue for all of our digital interactions – technologies need to know who we are and/or what we are allowed to access or do. It is clearly a very important tool as it gives students and researchers access to the digital tools that they need to do their work. However there are many complex issues related to its management and it can be fraught with difficulties that are frustrating for students and staff and can restrict their ability to operate effectively. There are particular challenges now that institutions support a far broader range of students and staff, including students studying overseas and staff on a range of different employment contracts.

Outside of the research and education sector increasing efforts are being made to investigate and implement user-centric identity management solutions. We will monitor developments and identify areas where user-centric rather than institution-centric approaches will benefit our customers and their users.

We will also investigate better linking between identity management and content licences, for example, looking at the e-content licenses held in KB+.

In addition we will raise awareness of the benefits of good identity management using further work on the Identity Management toolkit, community building and by embedding the outputs of earlier programmes into our services (for example, implementing the Raptor tool within the UK Access Management Federation). Case studies of institutions that have gone some way to improving their identity management will show how costs can be saved and efficiency increased.

Objective	Target	Date
Raise awareness of good identity management	Devise plan to bring outputs from co-design process and previous Jisc calls into the wider AIM strategy.	31/03/2014
Improve user experience	Review user-centric identity management and assess customer demand.	31/12/2014
Raise awareness of good identity management	Provide monthly updates on relevant activity on the AIM community group https://community.ja.net/groups/access-and-identity-management-aim.	Monthly
Raise awareness of good identity management	Plan workshops and events in association with the co-design programme.	31/03/2015

Moonshot

Project Moonshot is a Janet-led initiative, in partnership with the GÉANT project and others, to develop a single unifying technology for extending the benefits of federated identity to a broad range of non-web services, including Cloud infrastructures, High Performance Computing and Grid infrastructures and other commonly deployed services including mail, file store, remote access and instant messaging.

The goal of the technology is to enable the management of access to a broad range of services and applications, using a single technology and infrastructure. This is expected to significantly improve the delivery of these services by providing users with a common single sign-on, for both internal and external services. Service providers will be able to more easily offer their services to users from other organisations using a single common authentication mechanism. This will enhance the user's experience, and reduce costs for those organisations supporting users, and delivering services to them.

Moonshot builds on the technologies that underpin both eduroam and the UK federation (EAP, RADIUS and SAML/Shibboleth) to solve non-web use cases so can be seen as being a complementary solution to these AIM services. Project Moonshot also provides a novel approach to establishing trust between network hosts and services, which may significantly improve the flexibility, robustness and scalability of federated services.

In response to requirements from customers across the research, education, and e-Infrastructure communities, we are delivering a pilot Moonshot service to apply federated identity across a much wider range of services and applications than can be supported by existing technologies. Involving colleagues from 43 different institutions across 6 countries the 18 month pilot will allow customers to test Moonshot within a stable operational environment and to help us refine the production service to fully meet customer requirements including defining service level agreements. The pilot will also enable us to fully test the service infrastructure, support and helpdesk functions; allow us to investigate different types of service including different managed service options; and to test and refine documentation and training.

Janet is also leading a subtask within the GÉANT GN3plus project involving 7 other NRENs to implement and test Moonshot: CARNet, CESNET, NORDUnet, RedIRIS, RENATER, SWITCH and NIIFI.

Objective	Target	Date
Meet non-web customer requirements	Complete service pilot.	31/10/2014
Meet non-web customer requirements	Complete GÉANT GN3plus pilot.	31/03/2015

Liaison and communications

We will establish a single point of customer contact to provide advice and support across all of Jisc's AIM activities to make it easier for our customers to inform us of any issues or requests. We will also look to integrate specialist advisory groups into a single advisory structure to help us take strategic input from customers of all our AIM services. This will enable us to establish synergies and strategic priorities for development activity and the evolution of services, including their associated policies.

Technologies are continually developing to give customers and their users control of their identities so we will remain engaged both within Europe and globally to understand how these technologies impact upon them. As well as engaging with education and research colleagues we will continue to pursue industry liaisons, strengthen engagement with the UK Government and develop wider public sector identity management activities, supported through an open governance structure. This will ensure the views and experiences of the research and education sector are well represented, and also allow us to benefit from the expertise of others – both domestically and internationally.

Industry engagement is gaining increasing importance, especially within e-Infrastructure, and we have a role for our work in securing access to HPC and reassuring industry concerns about information security.

Good access and identity management is relied on by many other Jisc products and programmes so its importance cannot be overstated. Jisc will continue to support other programmes in solving access and identity issues and look to exploit opportunities across all services and the network. Janet's DNSSEC Registration Service is an example of the underlying capability that the network provides that might be exploited by the AIM area.

Marketing and communication will be undertaken to convey a broader understanding of the value to the sector of taking a federated approach to the development and delivery of AIM services. In particular we will focus activity on engaging with institution and research librarians to ensure we meet their specific needs.

Objective	Target	Date
Maintain a customer focus	Establish single point of contact (telephone).	~~31/08/2013~~ DONE
Maintain a customer focus	Develop and disseminate AIM products and services "map" showing how all the Jisc AIM services fit together and the main areas addressed by each of those services.	31/12/2013
Maintain a customer focus	Revise AIM stakeholder engagement structures.	31/12/2013

Widen usage of the UK federation to have a coherent solution for education and research	Develop a plan to assist partner organisations in developing AIM access to their services (for example, UCISA, SCONUL, UCAS etc.).	31/3/2014