

Connecting People to Resources Federated Access Management: JISC Guide for Institutions

Briefing Paper

Version 2: May 2007

This document is addressed to institutional decision-makers, IT managers and Librarians who are involved in planning institutional IT strategies. It describes the new federated access management infrastructure being implemented within the UK, the reason for its introduction and the actions required of institutions to benefit from the new system.

Introduction

In November 2006, the UK Access Management Federation for UK higher (HE) and further (FE) education institutions was launched. Educational institutions throughout the UK have been invited to join the UK Federation and adopt new technology such as Shibboleth. This will provide institutions with a route to single sign-on to resources for users through the implementation of federated, devolved authentication.

What is a Federation?

A federation is a group of institutions and organisations that sign up to an agreed set of policies for exchanging information about users and resources to enable access and use of resources and services. The federation combined with identity management software within institutions and organisations can be referred to as federated access management.

Why Change?

There are a number of advantages for institutions and users in adopting a federated access management system based on Shibboleth technology:

- There is a proven need for a single access management system that supports a range of authentication scenarios, including access to internal resources, external resources and collaborative requirements within e-learning and e-research
- It is based on international standards and can be implemented using freely available open source software
- It is achieving wide support in HE in other countries. The USA, Switzerland and Finland already have national schemes in place, while the Netherlands, Spain, Germany, Norway,

Belgium, Denmark and Australia are actively investigating Shibboleth and related technologies

- It separates authentication from authorisation. Authentication is controlled by the user's home institution; authorisation is based on user-attributes and controlled by the resource provider
- Users don't have to acquire and remember a separate identity for accessing protected services – they simply use their local institutional username and password. This should increase use of subscribed services
- It facilitates finely-controlled access to services or resources, allowing for subscriptions by department and group or courseware targeted at individual classes

Benefits

The use of federated access management and the software available to support its implementation provides significant benefits to several user-groups:

For the user: single sign-on using an institutional ID and password, and assurance that personal data will not be disclosed to third parties.

For the librarian: freedom from the burden of username/password administration and new tools for managing licences and service subscriptions.

For the IT manager: more control of access management process through enhancements to enterprise directories, although this will require additional institutional effort in the short term.

For the institution: a single service to meet the requirements of e-learning, e-research and library-managed resources.

Choice for Institutions

It is important to emphasise that institutions will have choices, and that these choices should be supported by informed decisions. The potential models for adoption by institutions are described in the table below and institutions should consider how well each of these models fits with their IT Strategy. Case studies, reports and advice are all available from the JISC website.

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JISC Support

JISC is committed to supporting institutions in this changing environment. As well as implementing the UK Federation, JISC is:

- Funding the provision of the Athens service until July 2008
- Developing the JISC federation access management website to provide support for institutions
- Providing case studies, reports, toolkits and advice from the work carried out in its 'early adopter' programmes
- Making the services hosted by MIMAS, EDINA and other JISC services Shibboleth compliant
- Funding the development of the Athens Gateways to support inter-working between Shibboleth and Athens sites and service providers. These allow institutions that adopt Shibboleth to access resources protected by Athens. Sites continuing to use Athens will also be able to access Shibboleth-protected resources.

Timescales

Key milestones are:

- **July 2006:** renewal of Athens contract and launch of the Athens Gateways
- **August 2006:** first early adopters to join UK Federation
- Shibboleth compliance specified in new Nesli2 and other JISC contracts
- **November 2006:** formal launch of the UK Federation
- **July 2008:** end of current JISC contract for Athens

1	Become a full member of the UK Access Management Federation, using community-supported tools	
	COSTS Institutional effort to implement software, join federation and enhance institutional directories	BENEFITS Full institutional control, skilled staff and access management solution for internal, external and collaborative resources
2	Become a full member of the UK Access Management Federation, using tools with paid-for support	
	COSTS Cost of support from supplier and institutional effort in liaison with supplier and Federation	BENEFITS Full support in implementation and access management solution for internal, external and collaborative resources
3	Subscribe to an 'outsourced Identity Provider' to work through the Federation on your behalf, such as continued use of Athens with the gateways. Institutions will however be required to join the Federation if they wish to access JISC funded resources	
	COSTS Subscription costs to external supplier (from July 2008) and internal administration role	BENEFITS Minimum institutional effort to achieve access to external resources only

This is the second version of Federated Access Management: JISC Guide for Institutions which was first published in February 2006. Alternative formats of this briefing paper can be found at: www.jisc.ac.uk/publications

Further information and resources

UK Federation information and support

www.jisc.ac.uk/federation.html

Joining the UK Federation

www.ukfederation.org.uk

JISCmail lists (join at www.jiscmail.ac.uk):

UKFederation-announce@jiscmail.ac.uk
UKFederation-discuss@jiscmail.ac.uk

Contact the UK Federation Helpdesk, tel: 0870 850 2212, email: helpdesk@ukfederation.org.uk