

Connecting People to Resources

Federated Access Management: JISC Guide for Institutions

Briefing Paper

February 2006

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 September 2006, JISC will launch its UK Access Management Federation for UK higher (HE) and further (FE) education institutions. Educational institutions throughout the UK will be 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.

- 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.

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)

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 Middleware Assisted Take-Up Service (MATU).

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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
- Funding a Middleware Assisted Take-Up Service (MATU) 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
- New Nesli2 and other JISC contracts with suppliers will specify Shibboleth compliance
- **September 2006:** formal launch of the UK Federation
- **July 2008:** end of current JISC contract for Athens

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| 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 | |
| | COSTS Subscription costs to external supplier (from July 2008) and internal administration role | BENEFITS Minimum institutional effort to achieve access to external resources only |

Further information and contacts

Federation information

www.jisc.ac.uk/federation.html

JISC Core Middleware programmes

www.jisc.ac.uk/programme_middleware.html

Athens

www.athensams.net

MATU support service

www.matu.ac.uk

JISCmail lists:

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