

IMPETUS 

**Infrastructure for
Multi-Professional Education and
Training Using Shibboleth**

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IMPETUS Project

- Infrastructure for Multi-Professional Education and Training Using Shibboleth
- Funded by JISC (Core Middleware Programme)
- Partners: DMU, Leicester University, University Hospitals of Leicester NHS Trust (Pathway Project)
- IMPETUS tasks:
 - Investigate user requirements for multi-professional education and training
 - Investigate organisational and legal issues
 - Build Shibboleth demonstration system

Call for a Multi-Professional approach

Department of Health, 2000. *A health service for all talents: developing the NHS workforce.*

- access to high quality services when needed, seamless care between primary, secondary and tertiary settings
- “It is about looking at the workforce in a different way, as teams of people rather than as different professional tribes. For too long we have planned and trained staff in a uni-professional/uni-disciplinary way without a clear and comprehensive look at the future.”
- “. . . it is important that the NHS should work together with the higher education providers and accreditation bodies to develop education and training arrangements which are genuinely multi professional.”

Multi-Professional Training

- shared learning - in clinical settings as well as the classroom
- common learning objects
- credit transfer – between disciplines and between Institutions
- HEI's are being asked to work collaboratively, with awareness of their particular specialisms, rather than competitively

User Needs Analysis

Method: interviews with stakeholders

Findings:

- Wide range of users, with diverse roles: students, teaching staff, clinical staff, administrators, researchers, visiting lecturers, etc
- Wide range of systems and resources - in the Centre, the partner organisations, and national and international sources
- e-Learning integration – 3 VLEs: Blackboard, Fretwell-Downing, Kallidus

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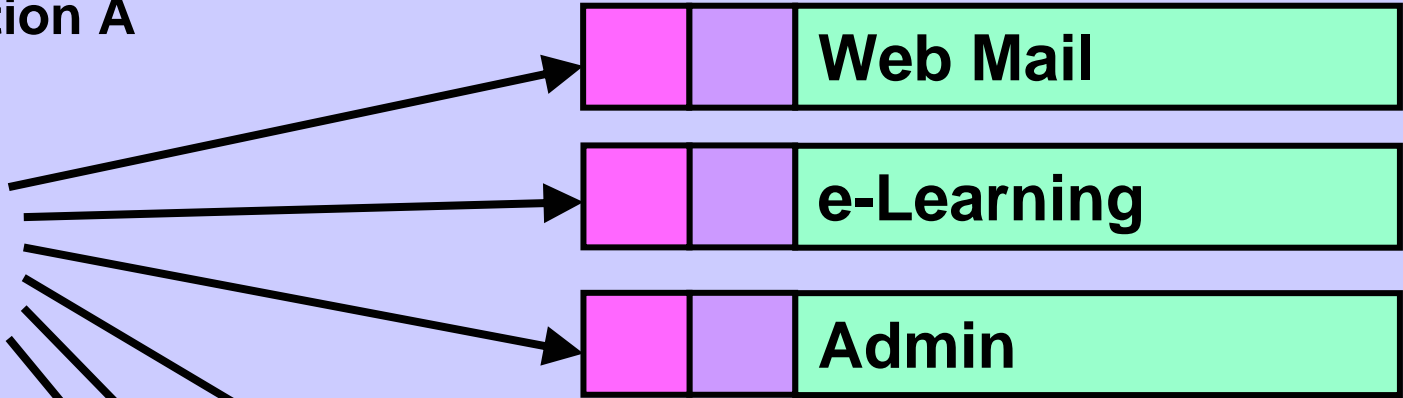
User Needs Analysis (2)

- Any time, any place access - Support for “Roaming”
- Users want access to their desktop environment
- Hardware
 - Fixed location and Wireless
 - PDAs
- Different access management initiatives –
Institutional / Enterprise-wide Single Sign On,
Smartcards

Shibboleth

- Supports Federated Access Management
- Developed by Internet2
- Open source
- Flexible, extensible
- growing international acceptance in FE/HE sectors (USA, UK, Australia, Switzerland, Netherlands, Spain, France etc.)

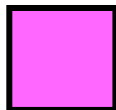
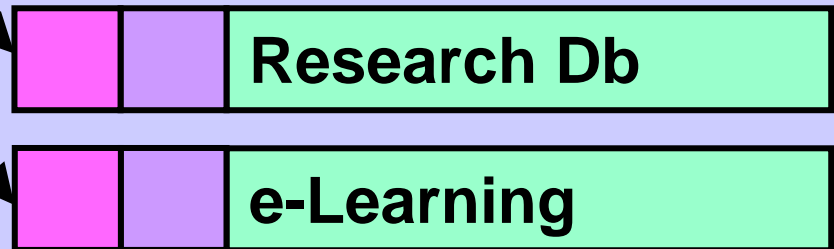
Organisation A



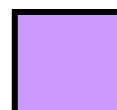
Organisation B



Organisation C



Authentication



Authorisation

Organisation A



ID + PWD

ID + WD

ID + PWD

ID + PWD



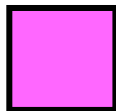
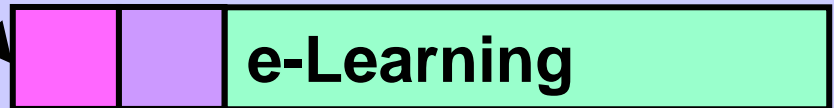
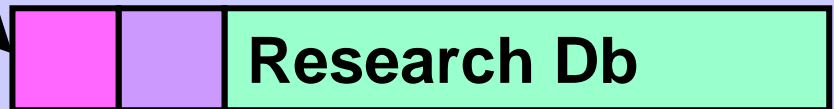
Organisation B

ID + PWD

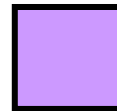
ID + PWD



Organisation C



Authentication



Authorisation

Organisation A



ID+PWD

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ID + PWD

ID + PWD

ID + PWD

Web Mail

e-Learning

Admin

Organisation B

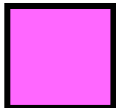
e-Journals

Organisation C



Research Db

e-Learning



Authentication

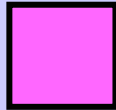


Authorisation

Organisation A

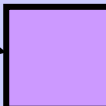


ID + PWD




 Web Mail

 e-Learning

 Admin

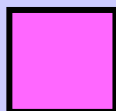
Organisation B


 e-Journals

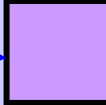
Organisation C

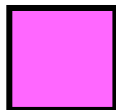


ID + PWD

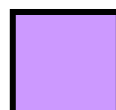


 Research Db

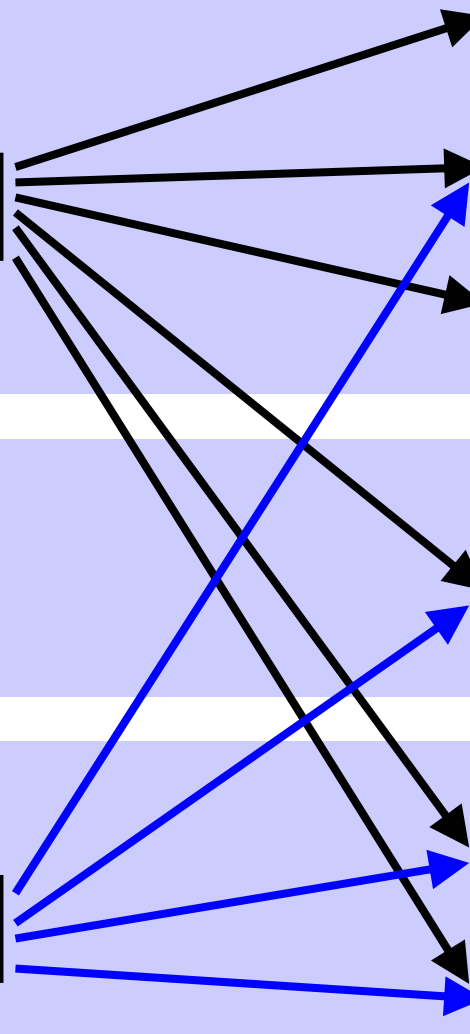
 e-Learning



Authentication



Authorisation

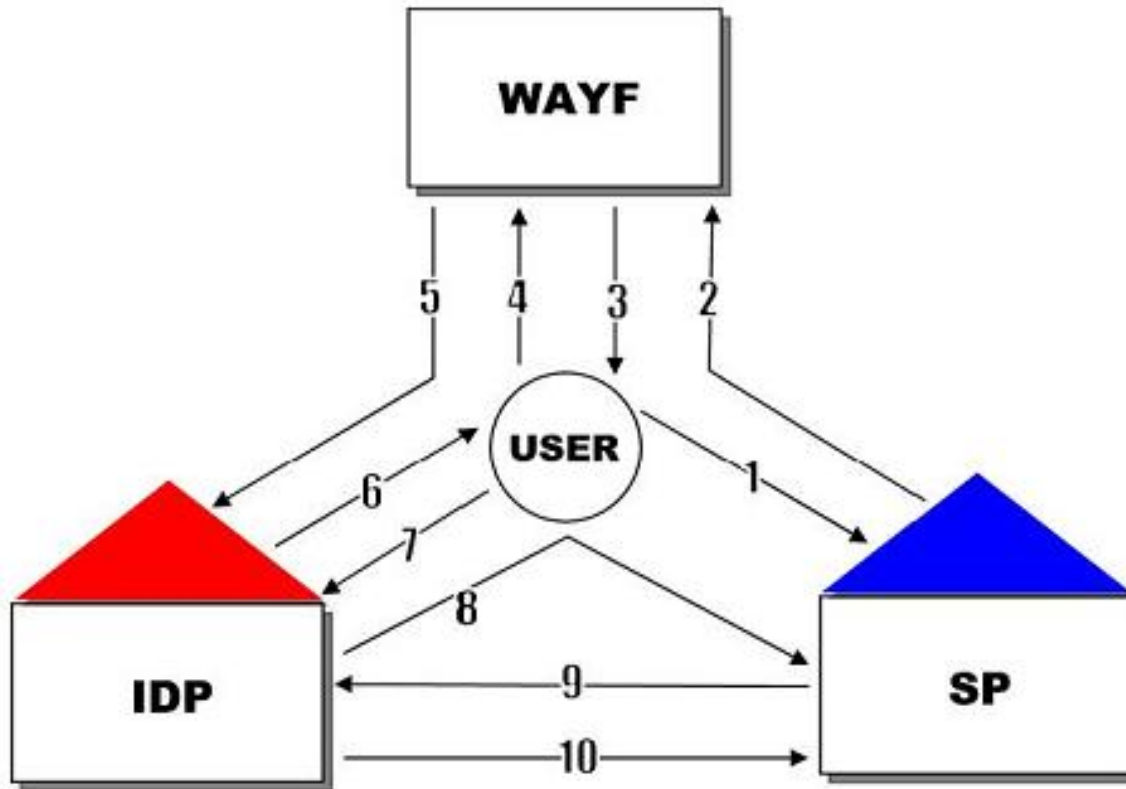


Shibboleth Components

- WAYF : Where Are You From server
- IdP : Identity Provider (Authentication)
- SP : Service Provider (Authorisation)

- SAML (Security Assertion Markup Language)

- Federation



<http://ribble.dmu.ac.uk/impetus/demo.html>

SEGINUS

In order to fulfill the request for a web resource you have just attempted to access, information must be obtained from your identify provider. Please select the provider with which you are affiliated.

Choose from a list:

Desktop IDP Remember for session

or

Search by keyword:

Need assistance? Send mail to [Technical Support](#) with description.



Desktop IDP

Please login:

UID

Password

Login

The resource that you have attempted to access requires that you log in with your Desktop IDP UID.



DMU Test Resource 1

[Index home](#)

This page is protected by the Shibboleth system using an unscoped attribute "eduUnscoped-affiliation"/

This is protected using the attribute "MEMBER"

Here are some pieces of information I can tell about you using the information Shibboleth gives me:

- accept is: **image/gif, image/x-bitmap, image/jpeg, image/pjpeg, application/x-shockwave-flash, application/vnd.ms-excel, application/vnd.ms-powerpoint, application/msword, */***
- referer is: **https://idp.shibboleth.dmu.ac.uk/shibboleth-idp/SSO?target=cookie&shire=https%3A%2F%2Fshibboleth.dmu.ac.uk%2FShibboleth.sso%2FSAML%2FPOST&providerId=urn%3Apace%3Afed%3Admu%3Aasp&time=1158312306**
- accept-language is: **en-gb**
- connection is: **Keep-Alive**
- user-agent is: **Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR 2.0.50727; .NET CLR 1.1.4322)**
- host is: **shibboleth.dmu.ac.uk**
- cache-control is: **no-cache**
- cookie is: **JSESSIONID=79F585AC17EBD5B00F9FFAA5EBA70D29; _shibstate_bb8fe2790679efee04bec6b97ca19a69db0e5e1a=https%3A%2F%2Fshibboleth.dmu.ac.uk%2Ftest_resource%2Fresource1.jsp; _saml_idp=dXJuOm1hY2U6ZmVkOmRtdTpkZXNrOmlkcA%3D%3D; _shibsession_bb8fe2790679efee04bec6b97ca19a69db0e5e1a=_49e19c2c810c50876ff4d289c3a9677f**
- shib-attributes is:
PFJlc3Bvb3N1IHh0bG5zPSJ1cm46b2FzaXM6bmFtZXM6dGM6U0FNTDoxLjA6cHJvdG9jb2wllEluUmVzcG9uc2VUbz0iX2UzMmJJzmlYjZTUwNDNhNWY0ND
- shib-origin-site is: **urn:mace:fed:dmu:desk:idp**
- shib-identity-provider is: **urn:mace:fed:dmu:desk:idp**
- shib-authentication-method is: **urn:oasis:names:tc:SAML:1.0:am:unspecified**
- shib-application-id is: **default**
- shib-ep-unscopedaffiliation is: **MEMBER**
- shib-person-surname is: **Desktop Test User 1**
- shib-person-commonname is: **dtu1**
- content-length is: **0**
- REMOTE_USER is: **null**

IMPETUS Technical Work

- Installed Shibboleth components
 - Version 1.2, then 1.3
- Configured separate IdPs to work with DMU e-Directory and Active Directory
- Created test resources, test users

Currently:

- Working on integrating with 3rd Party Applications: uPortal, Blackboard
- Moving DMU-hosted components to project partners
- Setting up Shibboleth-Athens option with DMU Library

Shibboleth Documentation

Internet2 Shibboleth pages

<http://shibboleth.internet2.edu/>

<http://shibboleth.internet2.edu/support.html>

Support documentation (Wiki)

Email Lists: SHIBBOLETH-USERS, SHIBBOLETH-DEV

<http://www.jisc.ac.uk>

JISC Briefing Papers, Core Middleware Project Pages

Middleware Assisted Take-Up project

<http://www.matu.ac.uk/>

Issues

Technical

- Multiple components, multiple versions
- Sensitive to local environment, e.g. firewalls
- Reasonable level of knowledge/expertise required
- Integration with 3rd-party apps can be complicated
- Over-lapping technologies: Novell Identity Manager, WS-*, etc.?
- Moving targets: Shibboleth 2.0 due next year
- Non-Web resources?

Legal

- UK Access Management Federation – need to extend?

More Information

- IMPETUS Project
<http://ribble.dmu.ac.uk/impetus>
- Ian Bloor ipb@dmu.ac.uk