

JISC



What Universities need to do about Access Management,
and what Britain is doing about it

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GARR_AAI, Roma, 6 Mar 2007

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- We're a world-class university, teaching & researching in a specialised field (Social Sciences)
- Our staff & students frequently work off-campus - but they still want access to all the services & information sources we provide
- Our Library (the world's largest specialising in the Social Sciences) is also used by researchers from many other universities, governments, and other organisations
- ...but what we need to do about Access Management isn't so different from any other university or college.



What do Our Users Want?

- Single Sign-On (as far as possible)
 - to our own services, and to all the resources we subscribe on their behalf
 - no need to remember so many passwords for different services
- Access from Anywhere
 - from home, travelling, or working at other institutions or libraries
- Improved Privacy
 - of personal information, and of research being pursued

(“We” being the people who have to provide institutional information services)

- Improved security for licensed resources, so publishers we deal with are happy (and generous!)
- Good privacy-protection for users, to meet our legal obligations
- Low-hassle support for our on-campus and mobile users
- Opportunity for ‘fine-grain’ authorization control, so we can know (and manage) *Who-Has-Access-to-What*
- Access for visiting users to whatever they are entitled
 - by their home institutions
 - ...which we don’t need to know about!



Costs and Benefits of adopting Shibboleth?

Costs:

- Institution's directory must be in good shape and set up to support a Shibboleth Identity Provider (IdP)
 - (just as it does for “AthensDA”)
- Shibboleth middleware needs installing and maintaining

Benefits:

- Reduced overheads in password support
- No difference in on-campus and off-campus access
- More flexible access control – e.g. different categories of users to different levels of access (or none) to a resource
- Access control maintenance for internal services (most with role-based access) is eliminated!

With Shibboleth, Access Management functions are carried out by appropriate parties:

- **Identity Provider** (typically a university) does Authentication (of it's own registered users)
 - “IdP”

- **Service Provider** (typically a publisher) does Authorization ideally based on a common role (“student”) and affiliation (“lse.ac.uk”)
 - “SP”



The University as Service Provider (too)

- We can share resources in collaborations within the academic community
 - providing controlled access to users from other institutions, without needing to administer usernames/passwords for them
 - as LSE and Columbia (NY) did for a collaborative Anthropology teaching project (DART)
- We can set up our repository, e-learning or any other service as a Service Provider
 - as LSE has done for Exam Papers and other ‘members only’ collections

Electronic Library - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites RSS Print Mail News Groups

Address https://library-2.lse.ac.uk/protected-exam/U/Accounting_and_Finance/2005/ Go

Links Create UHT record Customize Links Free Hotmail Windows Windows Marketplace Windows Media

Google Search 257 blocked Check AutoLink AutoFill Options

Home | Help | Search | Index | LSEforYou



You are here - [Welcome to LSE](#) > [Library](#) > [What's in the Library?](#) > [Electronic Library](#)

Electronic Library

Past Exam Papers : [Exam Papers home page](#)

Undergraduate: Accounting and Finance Papers for 2005

All the following exam papers are in Adobe Portable Document Format (PDF). **Adobe Acrobat Viewer** is required to view these papers. Public room PCs have the viewer already installed and configured. Staff can contact their [IT Cluster support team](#) if they need to install or configure Adobe Acrobat Viewer on their own computers.

Click on a link to view the exam paper. To get back to this page use the 'back' button on the browser toolbar.

- [AC100 Elements of Accounting and Finance](#)
- [AC211 Managerial Accounting](#)
- [AC212&AC492 Principles of Finance](#)
- [AC300 Corporate Finance, Investments and Financial Markets](#)
- [AC310 Advanced Managerial Accounting](#)
- [AC320 Quantitative Finance](#)
- [AC330 Financial Accounting and Analysis](#)
- [AC340 Auditing, Governance and Risk Management](#)

Internet



So... What does Shibboleth access look like, to end-users?

- Totally invisible? (single sign-on across many domains!)

- ⊕ 5. LSE Course Resources 
- ⊕ 6. A-Z List of Electronic Resources 
- ⊖ Collection for Shibboleth access testing 
 -  [Academic Library: Electronic Books \(Gateway\)](#) 
 -  [Adept Scientific - Adept4Education \(Gateway\)](#) 
 -  [Blackwell Synergy Electronic Journals \(Gateway\)](#) 
 -  [Education Media Online via Edina \(Shibboleth\)](#) 
 -  [EIU Country Data \(Gateway\)](#) 
 -  [EIU Marketindicators and Forecasts \(Gateway\)](#) 
 -  [FAME \(Gateway\)](#) 
 -  [Global Market Information Database \(Gateway\)](#) 
 -  [Historical Abstracts from ABC-CLIO \(Gateway\)](#) 
 -  [IBSS via WebSPIRS-SilverPlatter \(Gateway\)](#) 
 -  [Index to The Times \(via Shibboleth, with WAYF - Edina\)](#) 
 -  [International Who's Who \(classic Athens\)](#) 
 -  [LexisNexis](#) 
 -  [Ovid - IBSS, Philosopher's Index & PsycINFO etc. \(Gateway\)](#) 
 -  [Oxford Scholarship Online \(Gateway - new Eduserv URL\)](#) 
 -  [ScienceDirect \(Gateway\)](#) 
 -  [ScienceDirect \(Shibboleth\)](#) 
 -  [Swetswise \(Gateway\)](#) 
 -  [Taylor & Francis e-Books \(Gateway\)](#) 



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Full-text articles in ScienceDirect: **7,699,376**

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So... What does Shibboleth access look like, to end-users?

- Totally invisible? (single sign-on across many domains!)
- A user *can* go direct to the URL she knows for a resource
 - then select LSE as her Identity Provider
 - then login to the resource, via Shibboleth



Index to the Times

Main Menu

- » Login
- » Description
- » Access to service
- » Help and Support
- » Terms of Use
- » EDINA Home

You are here: [EDINA](#) > Index to *The Times*

See also »

Login to Index to *The Times*: 1790-1980

Bibliographic references to articles from *The Times* newspaper. For UK HE and FE.

Login → using Shibboleth

Login → using Athens

- » [Does your institution subscribe to Index to the Times, 1790-1980?](#)



[Browse by Subject](#)

Related Links

- » [Statistical Accounts of Scotland](#)
- » [AHDS History](#)
- » [History On-Line](#)

All EDINA services will be subject to a short interruption between 8-9am on Tuesday 18th July due to a network software upgrade. We apologise for any inconvenience.

[Accessibility Statement](#) »

EDINA is hosted by Edinburgh University Data Library »



The Index to The Times, 1790-1980 database is © by ProQuest



Select your home institution

Selection options

The service you are trying to reach requires that you authenticate with your home institution. Please select an institution using one of the methods below.

Choose from list

AHDS, King's College 

Remember for session 

Select

Search by keyword

Search

Need assistance? Visit the [SDSS Federation web site](#).

Select your home institution

Selection options

The service you are trying to reach requires that you authenticate with your home institution. Please select an institution using one of the methods below.

Choose from list

Search by keyword

Need assistance? Visit the [SDSS Federation web site](#).

Select your home

Connect to gate-test.library.lse.ac.uk



Enter LSE network username and password

User name:

Password:

Remember my password

OK Cancel

Selection options

The service you are
Please select an in

Choose from list

LSE

Remember for se

Search by key

home institution.

Select

Search

Need assistance? Visit the SDSS Federation [web site](#).



Address  <https://gate-test.library.lse.ac.uk/shibboleth/HS?target=cookie&shire=https%3A%2F%2Ftarget.sdss.ac.uk%2F>  Go Links >>

Google  Search  17 blocked  Check  AutoLink  AutoFill >>

Shibboleth Handle Request Processed

You are automatically being redirected to the requested site. If the browser appears to be hung up after 15-20 seconds, try reloading the page before contacting the technical support staff in charge of the desired resource or service you are trying to access.

Redirecting to requested site...

Standard search

[clear all](#)

Search term:

Index:

Search for

in

Article Summary / Subject Heading [browse..](#)

limited by year

1790

to

1980 [start search](#)[Back to top](#)



So... What does Shibboleth access look like, to end-users?

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 - then login to the resource, via Shibboleth

Or...

- Our Library can provide links embedding all of this, so that the access process is (almost) transparent
 - (we use Endeavor's Encompass library portal, but links in a static web page of library resources can do this just as well)

- 5. LSE Course Resources
- 6. A-Z List of Electronic Resources
- Collection for
 - [Academ](#)
 - [Adept S](#)
 - [Blackwe](#)
 - [Educatio](#)
 - [EIU Cou](#)
 - [EIU Mar](#)
 - [FAME \(C](#)
 - [Global M](#)
 - [Historica](#)
 - [IBSS via](#)
 - [Index to](#)
 - [Internati](#)
 - [LexisNexis](#)
 - [Ovid - IBSS, Philosopher's Index & PsycINFO etc. \(Gateway\)](#)
 - [Oxford Scholarship Online \(Gateway - new Eduserv URL\)](#)
 - [ScienceDirect \(Gateway\)](#)
 - [ScienceDirect \(Shibboleth\)](#)
 - [Swetswise \(Gateway\)](#)
 - [Taylor & Francis e-Books \(Gateway\)](#)

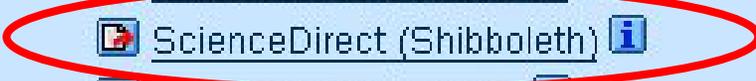
Connect to gate-test.library.lse.ac.uk

Enter LSE network username and password

User name:

Password:

Remember my password





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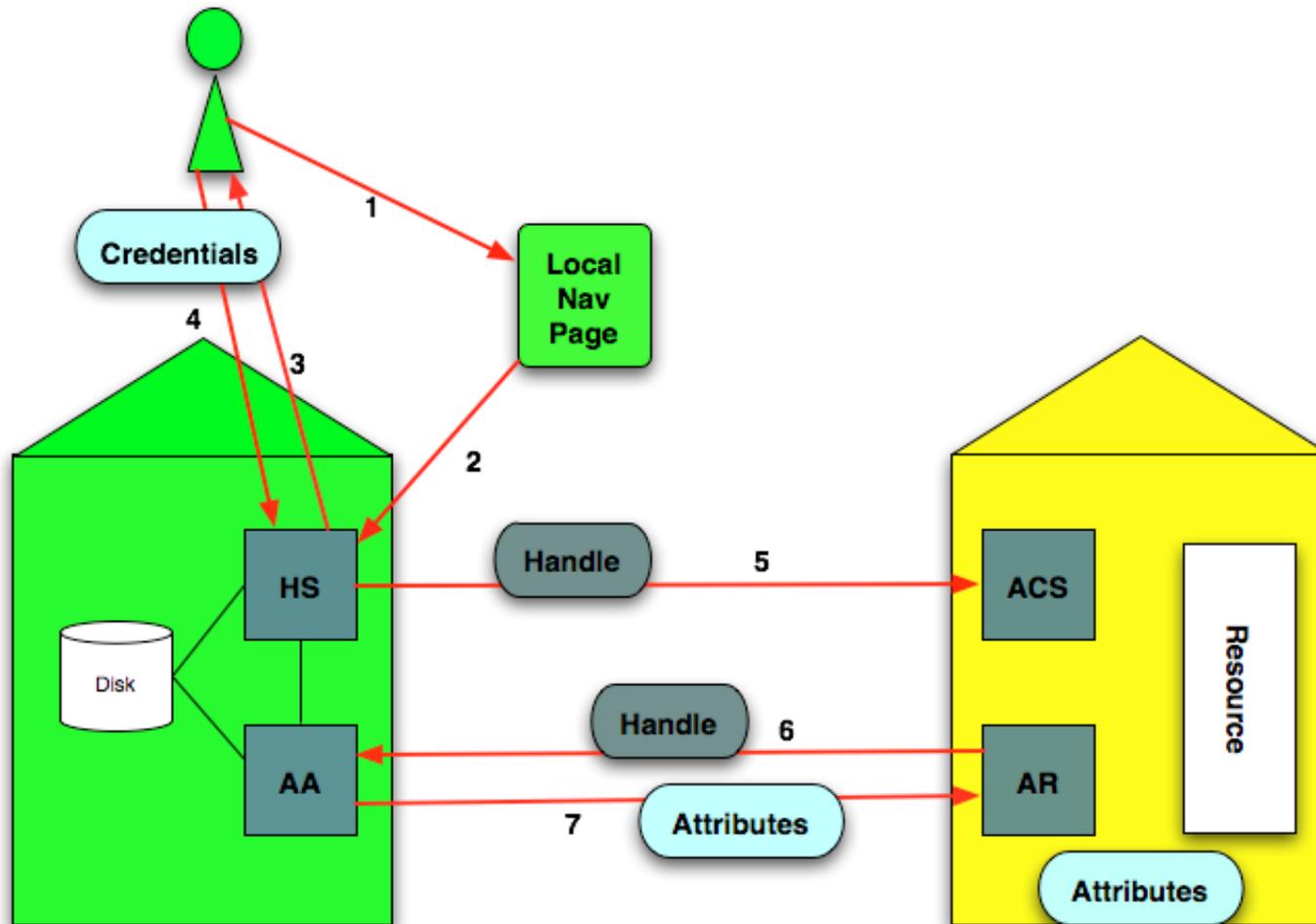
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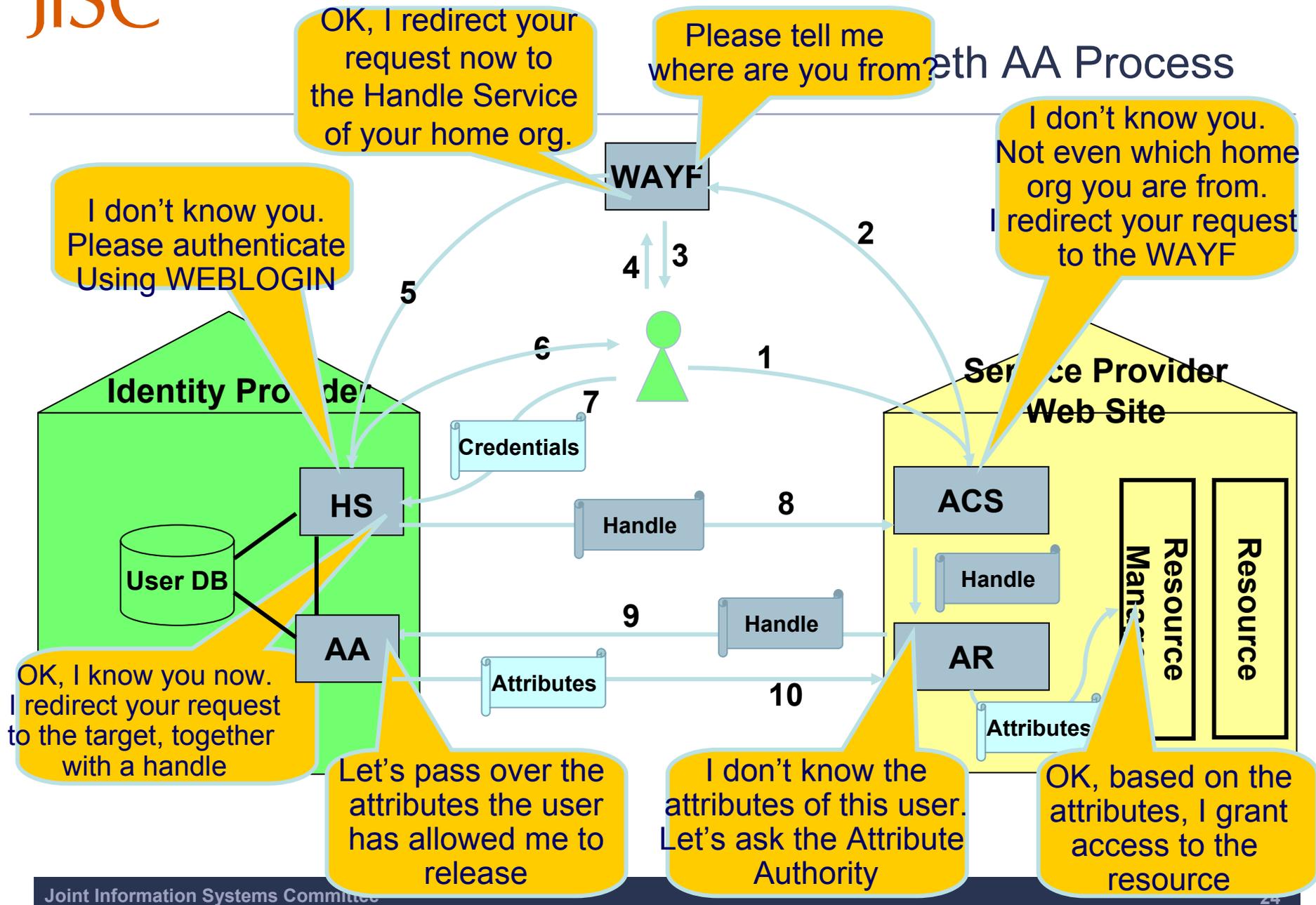


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- ▶ [Agricultural and Biological](#)
- ▶ [Arts and Humanities](#)
- ▶ [Biochemistry, Genetics and](#)
- ▶ [Business, Management and](#)
- ▶ [Chemical Engineering](#)
- ▶ [Chemistry](#)
- ▶ [Computer Science](#)



- 1. User goes to local Navigation Page
 - <http://dl.lib.brown.edu/eresources/subject.php?id=22>
- 2. User selects Resource, is redirected to local IdP
 - Parameters carry url of eventual destination
- 3. IdP authenticates user
- 4. IdP POSTs form to Attribute Consumer Service url (ACS) at the SP (javascript clicks SUBMIT)
 - Form contains Response with Authentication Assertion (Name = Shibboleth “handle”)
- 5. ACS validates Response and Assertion
- 6. SP calls back to IdP, Queries for Attributes
- 7. IdP
 - Validates identity of SP
 - Determines which attributes to release
- 8. IdP returns Attributes to SP; SP makes Access Control Decision





What to tell the Users?

- **As little as possible!**
- There are no new usernames and passwords to distribute (and remind of when forgotten or lost)
- One strand of the change management will be to remove references to former (Athens) passwords from user guides etc
- The changeover can't be done instantly, so...
- **LSE now tells users that “your LSE Login” is the default access for everything**

You are here - [Welcome to LSE](#) > [Library](#) > Passwords: frequently asked questions

Passwords: Frequently Asked Questions

Page contents > [What resources require passwords?](#) | [How do I get the passwords?](#) | [Can I change my username or password?](#) | [What do I do if my password doesn't work?](#) | [Can visitors get passwords to access electronic resources?](#) | [Can alumni access electronic resources?](#)

- [What resources require passwords?](#)
- [How do I get the passwords?](#)

Many LSE electronic resources can also be accessed off-campus via your LSE login (network username and password).

- [Can alumni access electronic resources?](#)

What resources require passwords?

LSE staff and students can access the majority of our electronic collection on campus without a password. Many LSE electronic resources can also be accessed off-campus via your LSE login (network username and password). However, some electronic resources require other usernames and passwords, such as Athens. A full list of accessible resources is available from the [LSE Electronic Library](#). Search for the database you need. Then consult the information file  to find out which password you need to use.

[Back to the top](#)



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- **...and provides online help with the diminishing number of exceptions**



You are here - [Welcome to LSE](#) > [LSE for You](#) > Library passwords

Library passwords

[Library Passwords Help](#)

LSE staff and students can access the majority of our electronic collection on campus without a password. Many electronic resources can also be accessed off-campus using your LSE login (network username and password). However, a small number of resources require other usernames and passwords, such as Athens.

A full list of accessible resources is available from the [LSE Electronic Library](#). Search for the database you need. Then consult the information file  to find out which password you need to use.

Your Library Passwords

All passwords are for your personal use only and should never be divulged to other users.

Service	Username	Password	Info
Self Service PIN	0220986515		Self-service
Athens	LSE0220986515		
Casetrack	CONTEXTCS1740		Casetrack
RUDI	lse		RUDI
Statewatch	jha		Statewatch

More information on Library passwords can be found on the [Library password FAQs](#) page.



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- There are no new usernames and passwords to distribute (and remind of when forgotten or lost)
- One strand of the change management will be to remove references to former (Athens) passwords from user guides etc
- The changeover can't be done instantly, so...
- LSE now tells users that “your LSE Login” is the default access for everything
- ...and provides help with the diminishing number of exceptions
- **There's no reason to explain Shibboleth or how it works (and most users don't care)**
- **...but links to information are provided for the curious (or we'd just be answering lots of Freedom of Information requests from conspiracy theorists!)**

Shibboleth at LSE

>> Shibbolisation progress at LSE Library

[details](#)

[Home / Introduction](#)

[Brief history](#)

[Benefits for LSE](#)

[Technical implementation](#)

[Shibbolising e-resources for LSE Library](#)

[Table of Status of LSE e-Resources](#)

[Communicating with users](#)

[Internal information for LSE users](#)

Related LSE projects

[Index of related LSE Access Management projects \(Angel\)](#)

Introduction

This website summarises and links to all the work done with Shibboleth at LSE, from the early work we did to develop access management principles in various e-library projects and the first investigation of [Shibboleth](#) and [MACE-Dir](#) work at [Internet2](#) that we undertook for [JISC](#) in 2000.

It is also intended to collect together public information about the current use of Shibboleth at LSE to provide simpler and better access control for LSE students, staff and researchers to as many as e-resources and applications they use as possible.

This includes:

- [A brief history](#) - how we got involved in Shibboleth, what we have done so far plus references to relevant work in other projects that was going on at the same time.
- [Benefits for LSE](#) - the business benefits we foresee for LSE.
- [Technical implementation](#) - the technical details of our experimental and production implementations of Shibboleth, and the Enterprise Directory infrastructure that we're building to support Identity & Access Management (IAM).
- [Shibbolising e-resources for LSE Library](#) - updated progress on how the LSE Library is implementing Shibboleth, the list of LSE Shibboleth resources, our work at encouraging content vendors to adopt Shibboleth etc.
- [Communicating with users](#) - the way we're explaining access management to LSE and users.



What Universities need to do about Access Management,
and what Britain is doing about it

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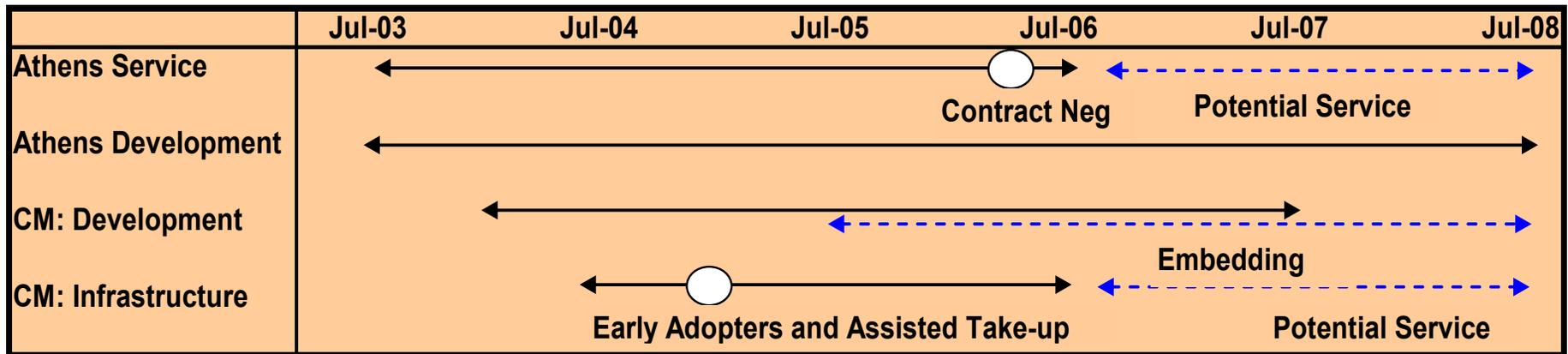
Copyright John Paschoud 2007. This work is the intellectual property of the author. Permission is granted for this material to be shared for non-commercial, educational purposes, provided that this copyright statement appears on the reproduced materials and notice is given that the copying is by permission of the author. To disseminate otherwise or to republish requires written permission from the author.

Why Is this Strategically Important for UK Education?

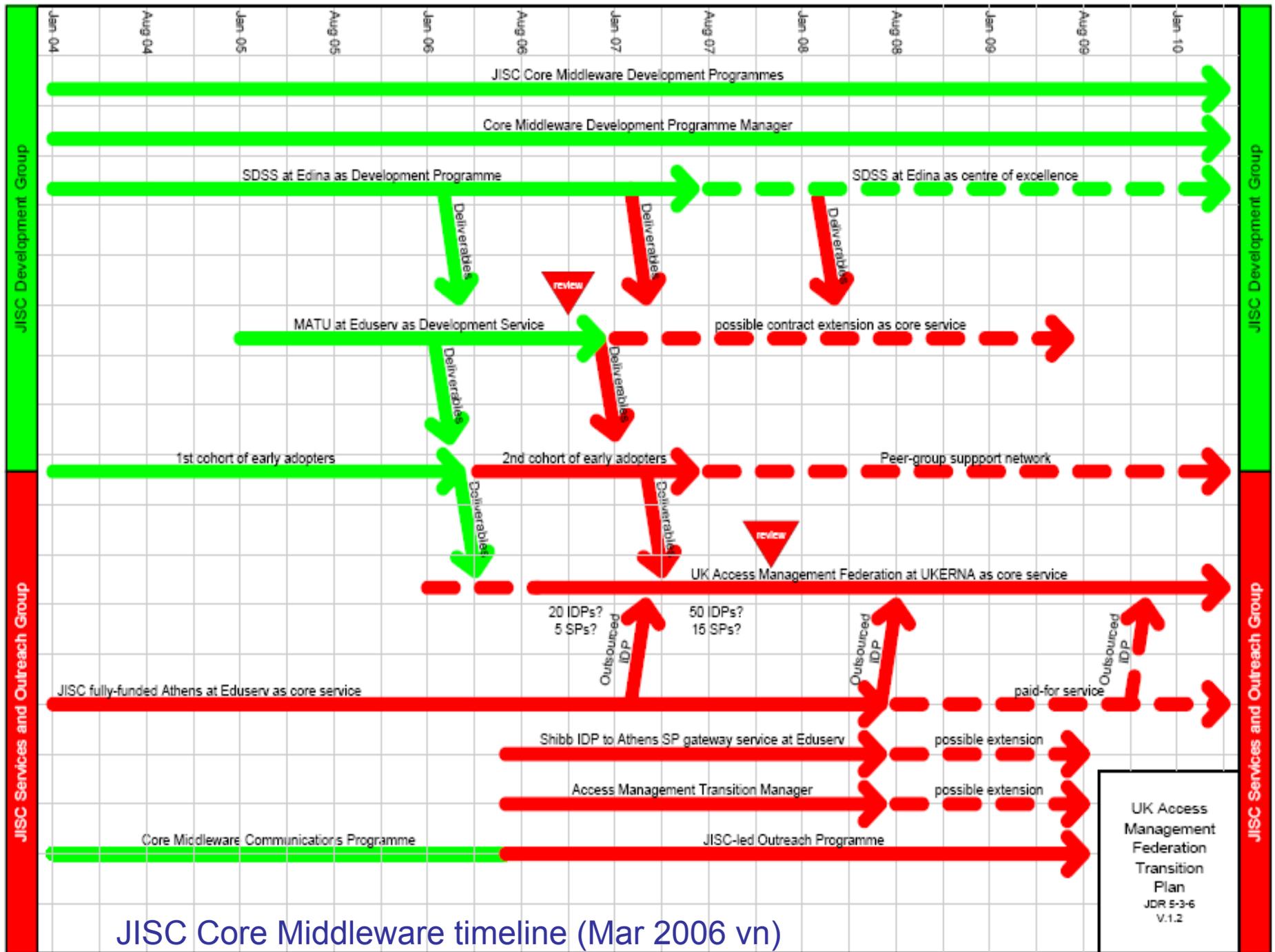
- Federated access management infrastructure is a key deliverable within the current JISC strategy
- Implementation will require institutional effort, and should be recognised within institutional IT strategies
- Federated access management is needed to meet other strategic requirements:
 - DfES e-Strategy and e-Learning goals (such as e-Portfolios and e-Learning collaborations)
 - HEFCE e-Learning Strategies
 - Science and Innovation Investment Framework
- National take-up: interaction with BECTA and the schools sector, and increasingly with NHS
- International take-up: importance of cross-working with Europe, US and Australia

- The need to move from our existing system: Athens
 - Shibboleth=Athens Gateways designed by Eduserv
 - Intensive outreach programme to coordinate transition by institutions & publishers
- The size:
 - 641 Higher and Further Education Institutions
 - Joint initiative with schools through BECTA (British Educational Communications and Technology Agency). Aprox 30,000 schools, but served through virtual regional identity providers
- Recognition of other parallel issues:
 - UK Certification Authority (National Grid Service)
 - Janet Roaming Service (eduRoam)
 - National Health Service
 - Government initiatives (Unique Learner Number, Gov't portals & systems etc)

JISC Core Middleware Timescale (Jan 2005 vn)



Timescales of Athens contract, development and Core Middleware Development & Infrastructure



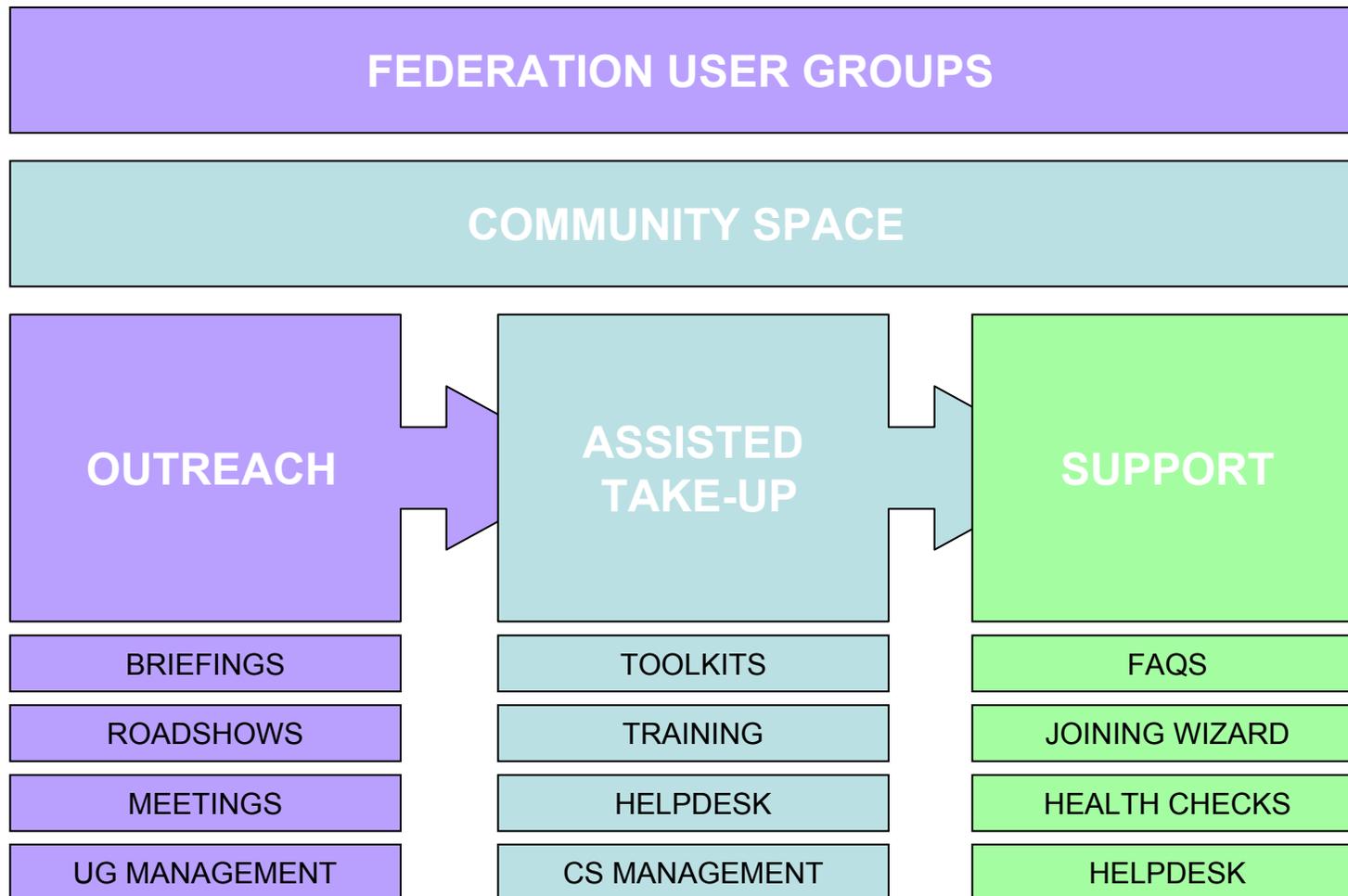
JISC Core Middleware timeline (Mar 2006 vn)

- Launched **30th November 2006**, building on the successful UK pilot federation that has been available since March 2004 (SDSS)
- **Operated by UKERNA**, and governed by an independent body
- The federation manages the trust relationships between Identity Providers and Service Providers
- Members sign up to federation policy forming a ‘fabric of trust’
- The federation service also:
 - Checks new members (password management, etc)
 - Maintains a list of members
 - Provides a discovery service (“Where Are You From”, or WAYF)
 - Agrees technical standards
 - Provides policy control
 - Provides support and advice



- Builds on previous JISC-funded programmes:
 - Technology Development, Infrastructure Building, Early Adopters
- Moving from a ‘working’ infrastructure (running in the UK since March 2004) to a full production federation (with critical mass of users)
- Main workpackages:
 - Funding the current UK service (Athens) until July 2008
 - Funding for the Shibboleth=Athens Gateways
 - Allowing Athens authenticated users to access Shibboleth protected resources (Athens as “super Identity Provider”)
 - Allowing institutionally authenticated (via Shibboleth) users to access Athens protected resources (Athens as “super Service Provider”)
 - Funding for the Federation operator
 - Communications and outreach
 - Assisted Take-Up: Support for institutions and publishers
 - National and International liaison

- **BECOME A FULL MEMBER OF THE 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
- **BECOME A FULL MEMBER OF THE 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
- **SUBSCRIBE TO AN 'OUTSOURCED IDENTITY PROVIDER' TO WORK THROUGH THE FEDERATION ON YOUR BEHALF (SUCH AS USE OF CLASSIC 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



- JISC website http://www.jisc.ac.uk/whatwedo/themes/access_management.aspx
 - General information
 - Links to relevant documentation (including Federation Roadmap documents) and events
- UK Access Management Federation website <http://www.ukfederation.org.uk/>
 - General information (including project milestones)
 - Advice and guidance on joining the pilot (SDSS) Federation (no need to re-register when the production Federation goes live!)
 - Links to relevant documentation and events
 - Helpdesk support (provided by JANET customer service)
- Mailing lists
 - jisc-shibboleth-announce@jiscmail.ac.uk
 - jisc-shibboleth@jiscmail.ac.uk

■ Outreach

- Programme Manager, plus 2 Outreach Coordinators with specific outreach responsibilities for Institutions and Service Providers
- Additional support commissioned from pioneer adopters, such as the PERSEUS Project at LSE
- Continued communication with other national federation initiatives

■ Whole-sector Assisted Take-up Service

- Website (part of the Federation website)
- Practical training on all aspects of implementation of the new federated mgmt system (covering the three possible routes and a range of institutional scenarios)
- Onsite support
- Helpdesk and mailing list support
- Repository of project outputs
- Documentation and toolkits to support decision making, training, project mgmt, software implementation etc

- Recognising gaps in support for institutions, as experience is gained
 - Better presentation of practical guides
 - Identity Management by institutions
 - Levels of Assurance for different resources
- The Identity Project
 - Undertaking a national survey of (all 641) institutions
 - Producing a model for institutional IdM audits
 - Reporting on issues for Health, National Grid Service and others
- The ES-LoA Project
 - Analysing levels of AuthN and AuthZ required for different services
 - Recommending how these can be expressed in Federation-approved attributes

Summary: Why Has JISC Chosen this Route?

- Extensive research proved this to be the most appropriate technology
- Meets the requirements for access management system within the UK:
 - Internal (intra-institutional) applications (mostly through SSO system)
 - Management of access to third-party digital library-type resources (as now)
 - Inter-institutional use – stable, long-term resource sharing between defined groups (e.g. shared e-learning materials & courses)
 - Inter-institutional use – ad hoc collaborations, potentially dynamic in nature (virtual organisations or VOs)
- International take-up secures future of development and support
- International take-up provides economies of scale through work in partnership

■ CHANGE

- JISC support for Athens will not be available after July 2008

■ INSTITUTIONAL EFFORT

- To put in place the relevant parts of the system to allow devolved authentication

■ CHOICE

- Of technologies. The federated access management system will not dictate the choice of single sign-on, directory system or environment in which you work

■ JOIN-UP

- Across domains (e-Learning, e-Research and Information Environments) and across systems (for internal, external and collaborative access management)

■ IMPROVEMENTS

- Real single sign-on, improved directory systems, foundation blocks for secure collaboration

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JISC Middleware programmes: http://www.jisc.ac.uk/programme_middleware.html

JISC Middleware documents: http://www.jisc.ac.uk/middleware_documents.html

UK Federation: <http://www.ukfederation.org.uk/>

LSE Library: <http://library.lse.ac.uk>

Shibboleth@LSE: <http://www.angel.ac.uk/ShibbolethAtLSE/>

ShibboLEAP Project: <http://www.angel.ac.uk/ShibboLEAP/>

The Identity Project: <http://www.identity-project.info/>

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

What is (a) shibboleth? (Biblical)

- *A word which was made the criterion by which to distinguish the Ephraimites from the Gileadites. The Ephraimites, not being able to pronounce "sh", called the word sibboleth. See --Judges xii.*
- *Hence, the criterion, test, or watchword of a party; a party cry or pet phrase.*

[*Webster's Revised Unabridged Dictionary \(1913\)*](#)

[Judges, ch12, v5-6 (New American Standard)]
The Gileadites captured the fords of the Jordan opposite Ephraim. And it happened when {any of} the fugitives of Ephraim said, "Let me cross over," the men of Gilead would say to him, "Are you an Ephraimite?" If he said, "No," then they would say to him, "Say now, 'Shibboleth.' " But he said, "Sibboleth," for he could not pronounce it correctly. Then they seized him and slew him at the fords of the Jordan. Thus there fell at that time 42,000 of Ephraim.