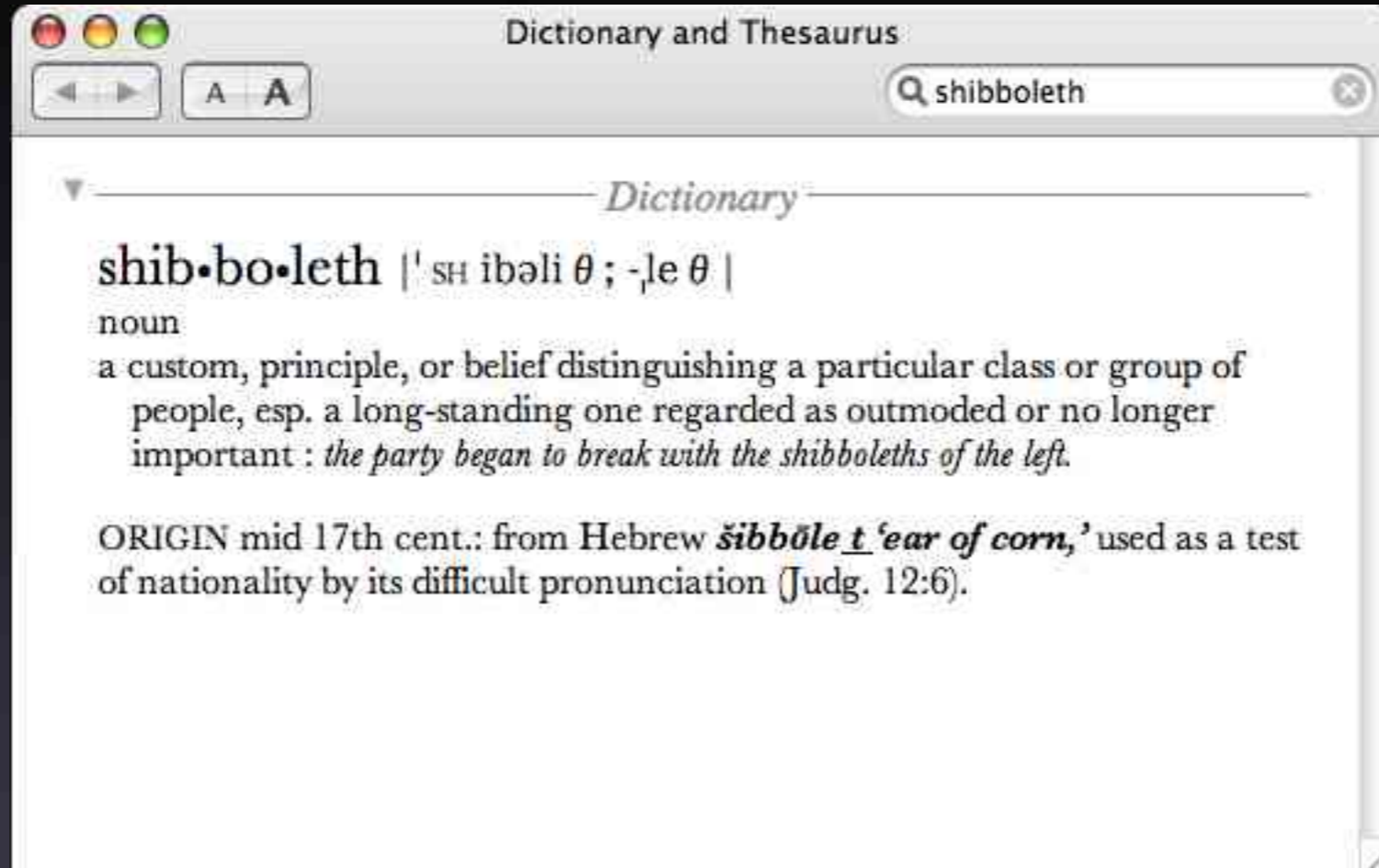


Shibboleth



Shibboleth

More commonly associated with secure authentication and authorisation systems.

(also, believed to be the first password)

Who are we?

- IAMSECT project
 - <http://iamsect.ncl.ac.uk/>
 - Inter-institutional Authorisation Management to Support eLearning with reference to Clinical Teaching
- Collaboration between Durham, Northumbria and Newcastle
- Using BlackBoard and Zope
- JISC 'Core Middleware' (£7 million overall)

What we're doing

- Shibboleth-enabling Blackboard-based VLE
- Shibboleth-enabling Zope-based VLE
- Creating managerial and technical documentation
- Dissemination and awareness events

Shibboleth

- What is it?
- What can I do with it?
- How does it help me?
- What happens next?
 - *What do I need to do?...*

What is Shibboleth?

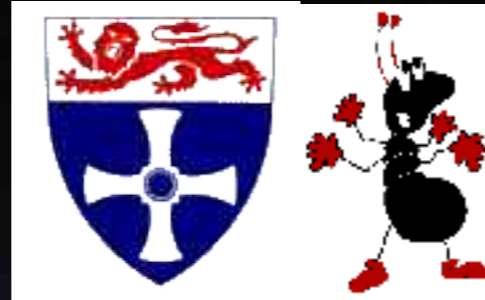
- Distributed Authentication and Authorisation
 - *authentication - identifies who you are*
 - *authorisation - what you are allowed to do*
 - *(in the past, these have usually been combined)*
- Standards-based (SAML)
- *Should save time and effort*

Core Concepts

- A user is authenticated at “home”
- Home knows *who* and *what* a user is
- Service providers make access decision based on what a user is
- Service providers should only know the *minimum* about a user

Example

external
resource



Welcome to Bruno

IAMSECT Project Info

Links



You are looking at Bruno - one of the University of Durham's Blackboard™ servers. Blackboard is the software which Durham uses to deliver the University's e-Learning environment. Bruno is a development server as such access is restricted and there's not much for guests to see. If you are interested in Durham's use of Blackboard, try the *production* server [duo](#) - Durham University Online.

Welcome to Bruno

Login Here

Have an account? Enter login information here and click the Login button below.

USERNAME

PASSWORD:

Login

Acceptable Usage

Please note that by using this service, you are agreeing to the University of Durham's [Regulations for the use of IT Facilities](#)

Who's Online Module

Usage for Mar-10-2005 15:52:51.935

Total users in last minute 1

Weather across Campus

Durham



Live image of Durham Cathedral from the Physics Asst Lab Webcam.
[Five-day weather forecast for Durham from the BBC](#)

Queen's Campus, Stockton



Live image of the Transporter Bridge (from the BBC Tees Webcam)
[Five-day weather forecast for Stockton from the BBC](#)

External resource - 'bruno' at Durham

Example

external
resource



where are
you from?



Select an identity provider

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

Choose from a list:

AMIE	Select	<input checked="" type="checkbox"/> Remember my selection on this computer.
AMIE		
AMIE_AUTHZ		
iaj.org.uk		
LSE		
Newcastle		
Oxford University Computing Services (Test)		
SDSS		
SDSS Nevis		

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

'WAYF' Server

Example

external resource



where are you from?



user selects identity provider



The screenshot shows a web page with a header image of a building and navigation links for Home, Contact, and Search. The main heading is "Information Systems & Services". Below this, a message states: "The resource you requested requires you to login." There are two input fields: "User ID" with the value "Jon Dowland" and "Password" with an empty field. A "Log in" button is positioned below the fields. A "WARNING" section at the bottom advises closing the browser when finished. The footer contains the copyright notice: "Copyright © 2004 University of Newcastle upon Tyne".

Authenticated at
Newcastle (for a service at Durham)

Example

external resource



where are you from?



user selects identity provider



Authentication
(LDAP, Active Directory, etc.)
happens at Newcastle



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...

The screenshot displays the Bruno LMS interface. At the top left is the 'bruno' logo. Navigation links include 'Home', 'Help', and 'Logout'. A 'Developer Copy' button is visible. The main navigation bar contains 'Welcome', 'Courses', 'Community', and 'Services'. The 'Courses' tab is highlighted with a red circle. On the left, a 'Tools' sidebar lists: Announcements, Calendar, Tasks, View Grades, Send E-mail, User Directory, Address Book, and Personal Information. The main content area shows a 'Welcome, Jon' message. Below it are three panels: 'My Announcements' (no announcements today), 'Who's Online Module' (usage for Mar-14-2005 12:23:27.673, 1 user in last minute, 2 in last hour), and 'My Courses' (not enrolled in any). A 'Your Source Institution' panel shows the University of Newcastle Upon Tyne logo and text: 'This user is from Newcastle'. 'Contents' and 'Layout' buttons are in the top right.

Success!

What happened there?

- The Newcastle user wanted to view a resource at an external site (Durham)
- The external site is using Shibboleth, and is in a *Federation* that Newcastle is also in
- Due to prior arrangements, Durham can trust Newcastle users at their site
- Newcastle knows who their students are
 - Durham does *not* need to know

Whole process simplified

1

User
accesses
protected
resource

2

User directed
to *their*
institution for
authentication

3

Credentials
and *agreed*
information
passed back

Rather a lot of work?

- However, user is now *logged-in* to other Shibboleth services serviced by the same federation
- Many of the redirects will be transparent to the user

Some definitions

- ***Federations*** are used to group together service providers and institutes who can agree to the same rules
- more a social construct than a technical one
- Examples: SDSS, Athens, inQueue, inCommon

Some definitions 2

Credentials
and *agreed*
information
passed back

- *Agreed Information* = **Attributes**
 - descriptive information about a user
 - can technically be *anything*
 - likely to be *heavily* influenced by privacy policies

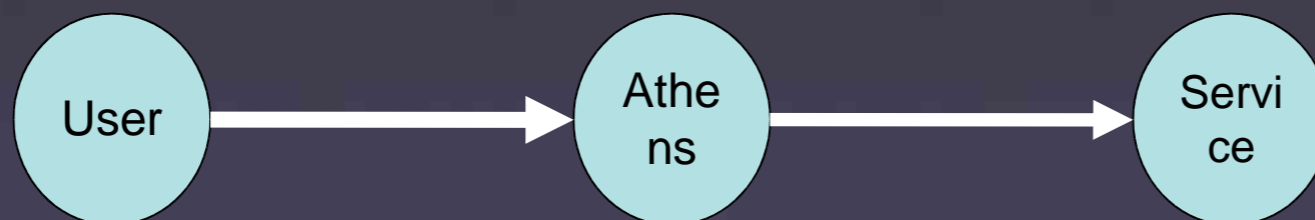
What can I do with it?

Electronic Journal Access

- Access to MetaLIB portals
- Finer-grained access & personalisation
 - e.g. just final year engineers have access
- e.g. EDINA BIOSIS e-journal service

Athens (1996)

- Admired Internationally
- Single identifier, multiple sign-on
- UK Education and Health
- Secure
- *Centralised*



Athens (2005)

- Migrating to Shibboleth
- Shibboleth-Athens gateway
- Middleware Assisted Take Up service (MATU)
 - for early adopters of Shibboleth

Athens Services

ADITUS
AMADEUS
AMICO library
APU Library Proxy
Axiom
BANKSCOPE
BIDS CAB Abstracts
BIDS IBSS Service
BIDS Silver Platter INSPEC service
BIDS SilverPlatter PsycINFO Service
BLISS
BMJ Journals
BioMed Central
Blackwell-Synergy.com
British Standards Online
Business Ratio Reports
Butterworths Accountancy Direct
Butterworths All England Direct
Butterworths Banking Law Direct
Butterworths Businesscompliance.direct.co
Butterworths CaseSearch
Butterworths Civil Procedure Online
Butterworths Commercial Property Law
Butterworths Corporate Finance
Butterworths Corporate Law Direct
Butterworths Crime Online
Butterworths EBL Direct Essentials
Butterworths EBL Direct Premium
Butterworths EOR Direct
Butterworths EU Direct
Butterworths Employment Online
Butterworths Family and Child Direct
Butterworths Financial Regulations Servi
Butterworths Forms and Precedents Direct
Butterworths HSE Direct
Butterworths Halsbury's Laws of ...
Butterworths Human Rights Direct
Butterworths IRS Employment Review
Butterworths Immigration and Asylum Law
Butterworths Insolvency Law Direct
Butterworths Intellectual Property ...
Butterworths International Tax
Butterworths Law Direct
Butterworths Law Reports Direct
Butterworths Legal Updater
Butterworths Legislation Direct
Butterworths Licensing Direct
Butterworths Local Government Direct
Butterworths PI Online
Butterworths PensionsPro
Butterworths Property Tax Direct
Butterworths Scotland Direct
Butterworths Scots Law Direct
Butterworths Sergeant Sims Stamp Duty

Butterworths Stair Memorial
Butterworths Stone's Justices Manual
Butterworths Tax Direct
Butterworths Tax Planning Service
Butterworths Trusts and Estates Direct
Butterworths UK & International GAAPplus
Butterworths US Banking Editions Online
CHEST Associated Site Contacts
CHEST Further Education Site Contacts
CHEST Higher Education Site Contacts
CHEST Ireland Site Contacts
CSA Aqualine
CSA Artbibliographies Modern
CSA Internet Database Service
CSA Linguistics & Language Behaviour
CSA e-psyche
Cartalinx
Census Dissemination Unit
Census Geography Data Unit (UKBORDERS)
Census Interaction Data Service
Census Learning Resources
Census Microdata Unit at the CCSR
Census Registration Service
Chadwyck-Healey KnowEurope
Chadwyck-Healey KnowUK Database
Chadwyck-Healey LION for colleges
Chadwyck-Healey Literature Online
Chadwyck-Healey PCI Full Text Database
Childlink.co.uk
City University Virtual Library
Cochrane Library
Computer Abstracts
Creative Club
CrossFire Service (PLUSABGM)
CrossFire self-teach modules (MIMAS-XFT)
Dialog DataStar
Dialog Education@Site
Dialog@Site
EBSCOhost EJS
EBSCOhost databases
EDINA AGDEX
EDINA BIOSIS
EDINA BIOSIS Previews 1969 - 1984
EDINA CAB Abstracts
EDINA Compendex
EDINA Digimap
EDINA EconLit
EDINA INSPEC
EDINA Index to The Times, 1790 - 1980
EDINA MLA
EDINA PAIS
EDINA UPDATE
EEBO
EIU Citydata

EIU Countrydata
EIU Marketindicators & Forecasts
ESDS International
ESDU Data
ESRI NTF Converters
Education Image Gallery
Education Media OnLine
Education Media OnLine medical-restrict
Electronic Surveys in Training Educatio
Emerald Fulltext
Emerald Management Reviews
Encyclopaedia Britannica
Engineering Village 2
Extenza e-Publishing Service
FAME
Gale Group InfoTrac
ISI JCR Science Edition
ISI JCR Social Sciences Edition
ISI Web of Knowledge
Idrisi
Ingenta Full Text Journals
Ingenta Select
Int. Civil Engineering Abstracts
Irish Reports and Digest
Isle of Man GIS data
JASPER
JUSTIS Celex and OJC
JUSTIS Daily Cases
JUSTIS ECJ Proceedings
JUSTIS Family Law
JUSTIS Hermes
JUSTIS Human Rights
JUSTIS Industrial Cases
JUSTIS Law Reports (eLR)
JUSTIS Law Reports Digest
JUSTIS Lloyd's Law Reports
JUSTIS Mental Health Law Reports
JUSTIS Official Journal C
JUSTIS Prison Law Reports
JUSTIS UK Statutes and SIs
JUSTIS Weekly Law
Jobs admin stuff
JustCite
Keynote
KumarandClark.com
LexisNexis
MD Consult
METAPRESS
MIMAS ISI BIOSIS Previews
MIMAS ISI Chemistry Server
MIMAS ISI Current Contents Connect
MIMAS ISI Derwent Innovations Index
MIMAS Infoterra
MIMAS Landmap

MIMAS Landmap Mediterranean
MIMAS LitLink
MIRA Virtual Automotive Info Centre
Martindale & Stockleys Drug Interactions
Mintel Reports
Mulberry
NeLH Evidence-Based on Call
NeLH Journal of Medical Screening
NetLibrary
NewsBank InfoWeb
OCLC FirstSearch Service
OSIRIS
Ovid Online
Oxford English Dictionary Online
Oxford Reference Online
Papyrus software for DOS
Papyrus software for the Mac
Parliamet
Perfect Analysis
Primal Pictures Basic Anatomy (NHS)
Primal Pictures anatomy.tv
ProQuest
ProQuest Reference Asia
RCS Affiliates Area
RCS Discussion Fora
RCS Library Electronic Journals
RCS Members Area
RefWorks
Reuters Business Insight Unlimited
SCOTBIS: Members Area
SCRAN Web Site
ScienceDirect
Sentient DISCOVER
SilverPlatter Arc2
Snapshots International: Market Research
Statistical Accounts of Scotland
SwetsWise
Synsoft HYDRA and HYDRA ONLINE
TRILT
Taylor and Francis eBook Subscriptions
Technical Indexes Info4Education
Technical Indexes Info4HealthEstates
The Academic Library
The Times Law Reports
UK JSTOR Mirror Service
WILSONWEB
Westlaw UK
Wiley InterScience
WriteNote
XpertHR
ZETOC - BL Electronic Table of Contents
eSTEP administrators resource
images.MD
xreferplus

How does it help me?

Username management

- Should be greatly reduced
 - should be done by institutional IT services
- Access to wider variety of resources
 - Athens are 'Shibboleth-enabling' services, using their gateway
 - JISC - doing same thing with EDINA, MIMAS and other services

What happens next?

Shibboleth Futures

- Shibboleth is a disruptive technology
- Authentication, privacy barrier removed
- Online “reputation based” systems could kill journals?
- Services bought in from outside e.g. webmail for students
- Niche services flourish

Summary

- Shibboleth will help service providers and service users
- Lots of momentum
- Standards-based, *open*
- eduserv (Athens) and JISC committed to process

Recap...

- What is it?
- What can I do with it?
- How does it help me?
- What happens next?
 - *What do I need to do?...*

Shopping List

- WebISO service (single sign on)
 - preferably institutional
- Identify Attributes
 - easy ones; affiliation, course,
 - where to find these attributes?
 - hard ones; *EduPerson principle name*