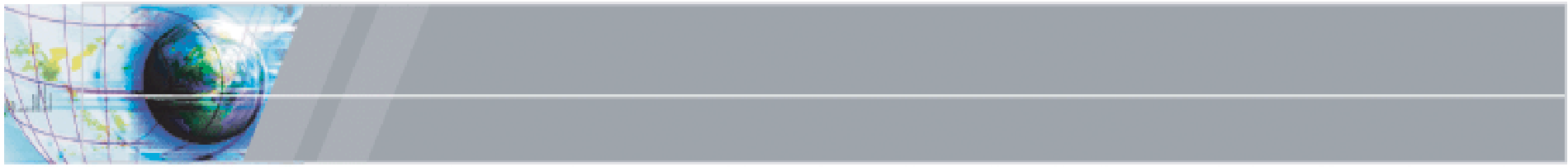
Athens Access Management System



Athens Shibboleth Interoperability

Lyn Norris, Athens Manager

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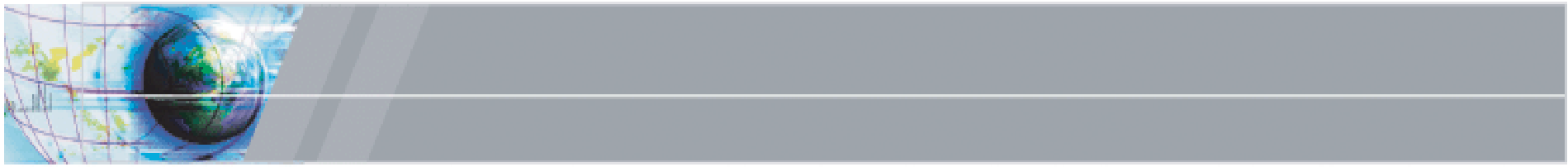

- Overview of Athens
- Overview of Shibboleth
- Interoperability
- Athens in action

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Athens is:

- An Access Management System for web resources
  - Managing access for approved individuals to approved content
    - on behalf of content owner
    - in accordance with licence conditions

- Primarily commercial academic research material ‘sold’ under site licence conditions

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Academic Research Material

- Many information sources
  - metadata, full text, references
- Many content owners
  - primary publishers
  - secondary database owners
- Many ways to subscribe or register
  - publisher, subs agent, consortia deals
- linking systems
    - Portals, VLEs, MetaLib, Encompass

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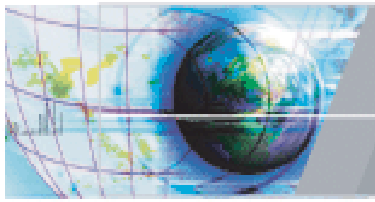

IP Authentication

- Attractive
  - seamless access for users
  - ease of management for organisation & resource-provider
    - one-off registration for whole site
    - infrequent changes
    - user doesn’t have to remember anything

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IP Authentication

- Difficulties
  - relatively easy to fake
  - complicated access for people working off site
  - no personalisation
    - saved searches
    - favourite journals
    - accountability

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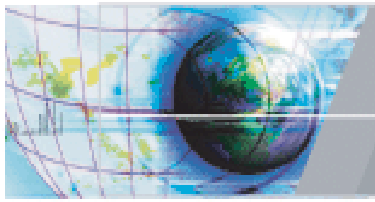

Athens

- for the user
  - provides single credential access to many online resources
- for the subscribing organisation
  - provides a set of tools for managing potentially large number of users
- for the service provider
  - makes service more attractive to users
  - removes task of managing IP addresses or usernames and passwords for customers

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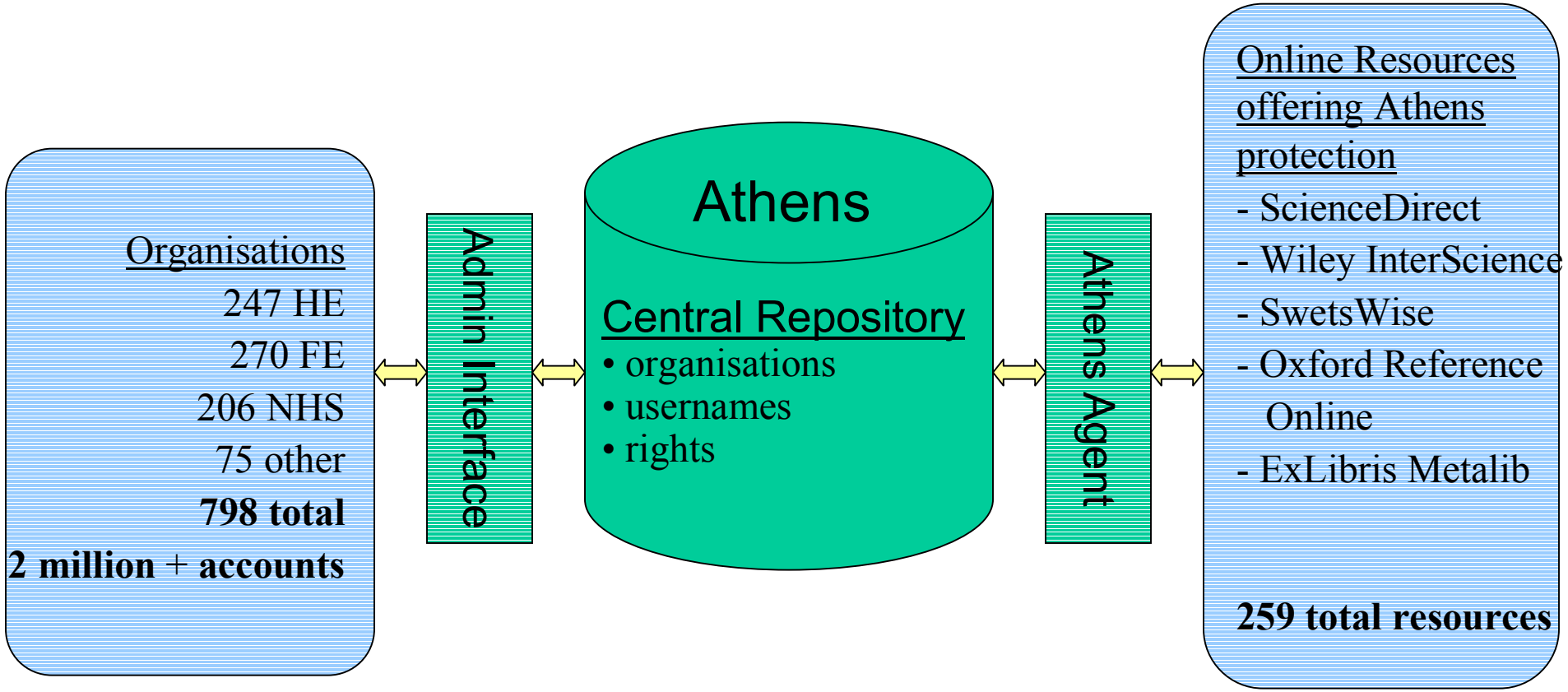

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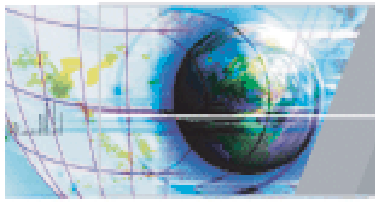

Athens

- Single sign-on across multiple services
- Cookie session maintained inside the Athens Authentication Domain (auth.athensams.net)
- Authentication *transferred* across domains
- Secure
  - Password never leaves the Authentication Domain
  - Tokens are time-limited & cryptographically signed
  - AAP operates over SSL
- Authorisation negotiated between a service provider and Athens
  - Agent technology, C or Java APIs or Apache/IIS modules
  - SOAP web-services interface

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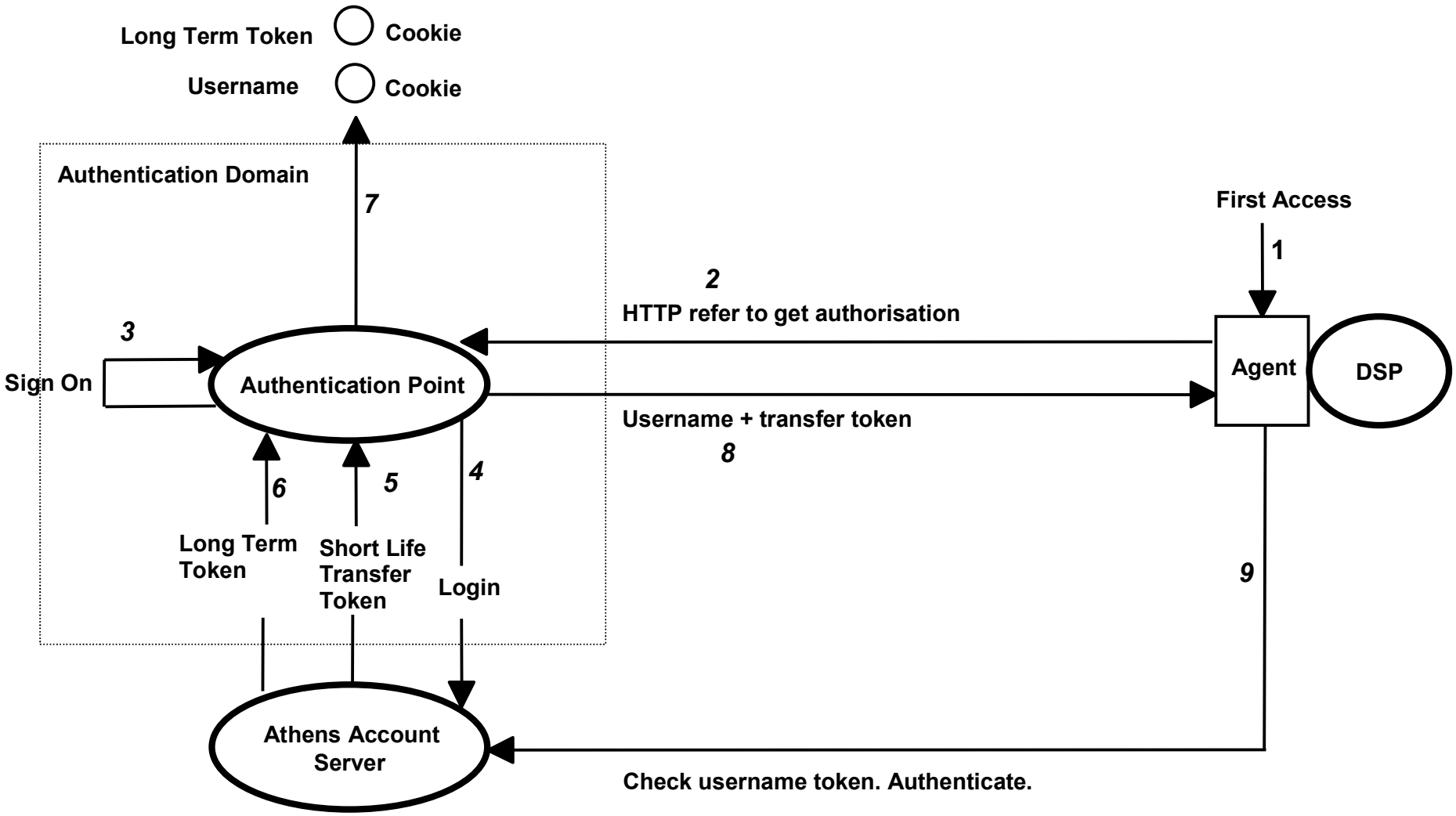
Long Term Token
Cookie
Username
Cookie
Authentication Domain
7
First Access
1
2
HTTP refer to get authorisation
3
Sign On
Authentication Point
Agent
DSP
Username + transfer token
8
6
5
4
Long Term Token
Short Life Transfer Token
Login
9
Athens Account Server
Check username token. Authenticate.

Athens Client Base I

- Communities
  - UK Higher & Further Education
  - NHS National Health Service (NHS)
  - British Council
- Organisations
  - 250 Universities
  - 250 Further Education Colleges
  - 200 NHS organisations
  - 100 assorted organisations world-wide

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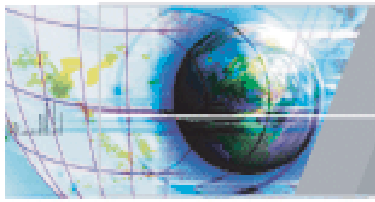
Athens Access Management System



Full list of services authenticated by Athens

AMADEUS on the Internet
AMICO library
APU Library Proxy
BANKSCOPE on the Internet
BIDS Education Service
BIDS IBSS Service
BIDS Silver Platter INSPEC service
BIDS SilverPlatter PsycINFO Service
BMJ Journals
BioMed Central
Blackwell-Synergy.com
British Standards Online
Butterworths Accountancy Direct
Butterworths All England Direct
Butterworths Banking Law Direct
Butterworths Businesscompliancedirect.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 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 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 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 US Banking Editions Online
CSA Aqualine
CSA Artbibliographies Modern
CSA Internet Database Service
CSA Linguistics & Language Behaviour
CSA e-psyche
Cartalinx
Cavendish Publishing eLibrary
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
City University Virtual Library
Cochrane Library
CrossFire Service (AUTONOM)
CrossFire Service (PLUSABGM)
CrossFire self-teach modules (MIMAS-XFT)
Dialog DataStar
Dialog@Site
EBSCO EJS
EBSCO databases
EDINA AGDEX
EDINA Art Abstracts
EDINA Art Index Retrospective
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 Palmer's Index
EDINA UPDATE
EEBO
EIU City Data on the Internet
EIU Country Data on the Internet
EIU Country Indicators on the Internet
ESDU Data
ESRI NTF Converters
Education Media OnLine
Education Media OnLine medical-restrict
Electronic Surgeons in Training Educatio
Emerald Computer Abstracts
Emerald Fulltext
Emerald Int. Civ. Eng. Abstracts
Emerald Management Reviews
Extenza e-Publishing Service
FAME on the Internet
Gale Group InfoTrac
HEFCE Review
ISI JCR Science Edition
ISI JCR Social Sciences Edition
ISI Web of Science Service for UK Educn.
Idrisi
Ingenta Select
IngentaJournals Full Text Service
Isle of Man GIS data
JASPER
JUSTIS CELEX
JUSTIS Celex and OJC
JUSTIS Daily Cases
JUSTIS ECJ Proceedings
JUSTIS European References
JUSTIS Family Law
JUSTIS Hermes
JUSTIS Human Rights
JUSTIS Industrial Cases
JUSTIS Law Reports (eLR)
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
JustCite
Keynote
LexisNexis
MD Consult
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 TimeWeb OECD Main Economic Indicat
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 on the Internet
Ovid Online
Oxford English Dictionary Online
Oxford Reference Online
Papyrus software for DOS
Papyrus software for the Mac
Parlianet
Primal Pictures Basic Anatomy (NHS)
Primal Pictures anatomy.tv
ProQuest
ProQuest Reference Asia
RCS Discussion Fora
RCS Library Electronic Journals
RCS Members Area
RefWorks
SCRAN Web Site
ScienceDirect
SilverPlatter ARC Service
SilverPlatter Arc2
SwetsWise
Synsoft HYDRA and HYDRA ONLINE
TRILT
Technical Indexes Info4Education
Technical Indexes Info4HealthEstates
The Times Law Reports
UK JSTOR Mirror Service
Westlaw UK
Wiley InterScience
XpertHR
ZETOC - BL Electronic Table of Contents
eSTEP administration service
xreferplus

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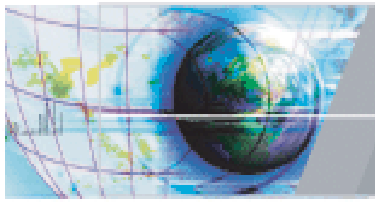

Athens Devolved Authentication

- Authentication is devolved to an institutional authentication system
- Authentication is *asserted* to Athens by means of cryptographic trust
- Users are assigned a *virtual account*
  - Permission set (role)
  - Unique id
- Authorisation is still performed within Athens, but is *role-based*

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Authentication System

- It could be
  - LDAP Directory
  - Kerberos
  - Library OPAC, or ILS
  - Portal authentication system
  - VLE
  - X.509 certificates

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What Athens needs to know

- Permission set
  - Created and held within Athens
  - Must be at least one per organisation
  - Defines role for user (eg. Staff, student)
- Unique identifier
  - Must be numeric (32 bits)
  - Must be persistently bound to an individual
  - Eg. Student/staff number

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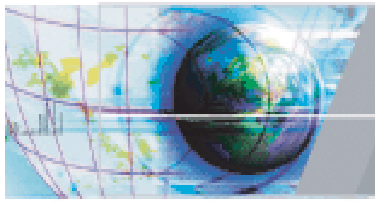

What you need to do

- Run an XAP (login point)
  - Perl and ActiveX/COM versions provided by Athens
- Develop a UAS (User Authority Service)
  - UAS provides an abstract interface between the XAP and authentication service
  - Authenticates user against local service
  - Assigns user a permission set and unique identifier based on attributes

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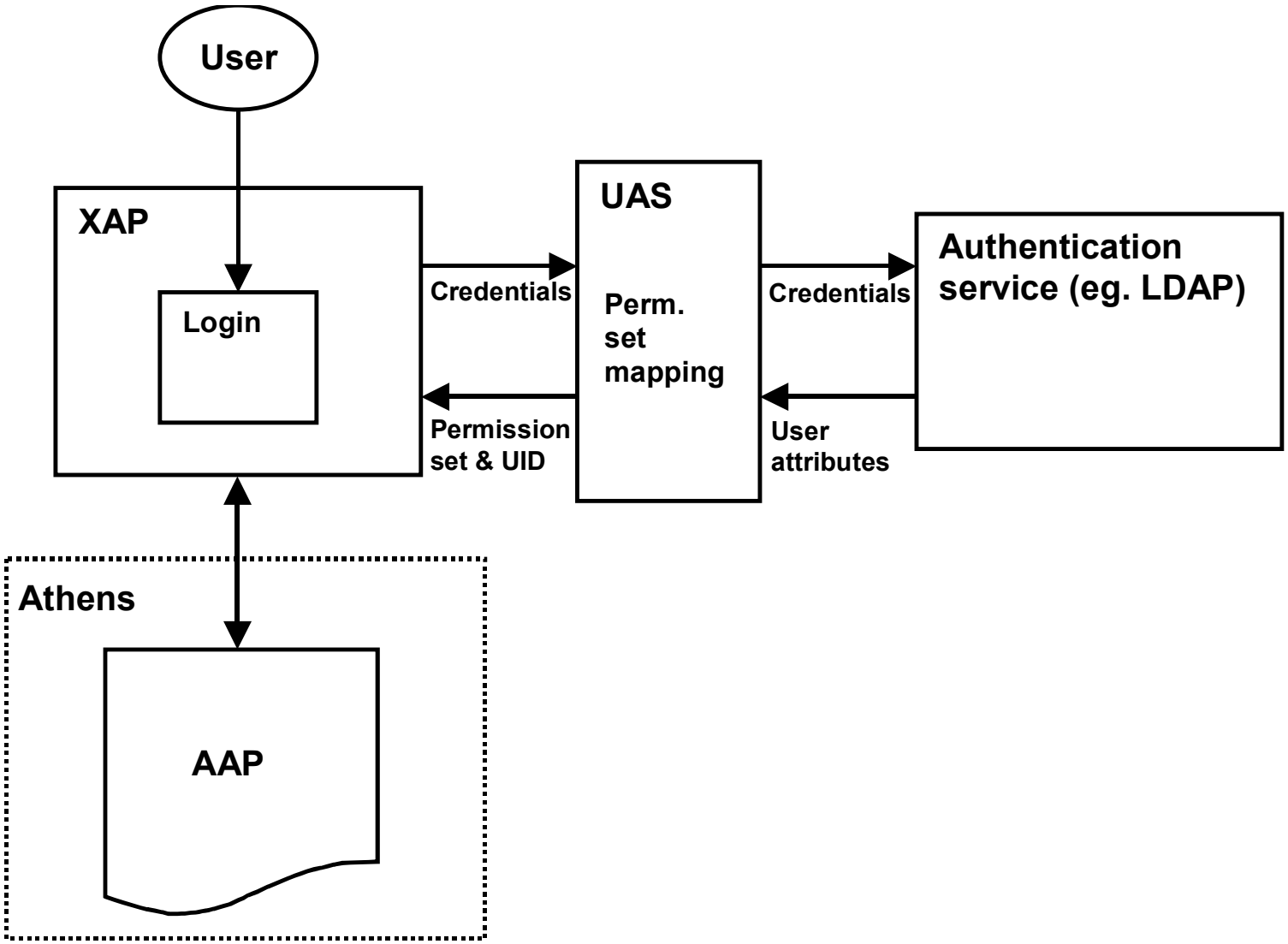
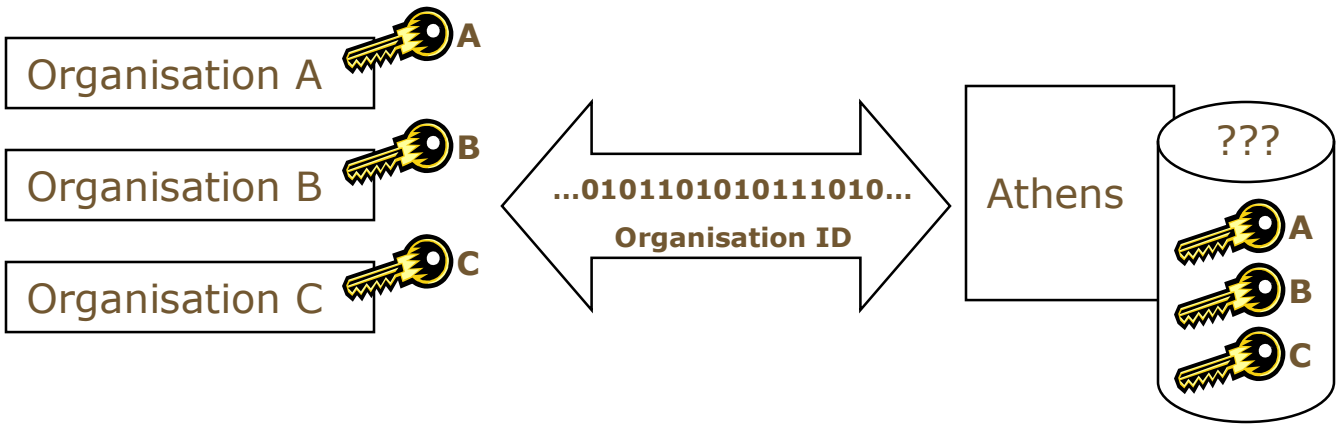

User
XAP
Login
Credentials
Permission
set & UID
UAS
Perm.
set
mapping
Credentials
User
attributes
Authentication
service (eg. LDAP)
Athens
AAP

Trust/Encryption

- Athens does not know about user
  - Athens must trust organisation to only assert valid users (licence obligation)
  - Athens must trust that it really *is* the organisation asserting user (cryptographic trust)
  - Shared symmetric keys enforce trust relationship



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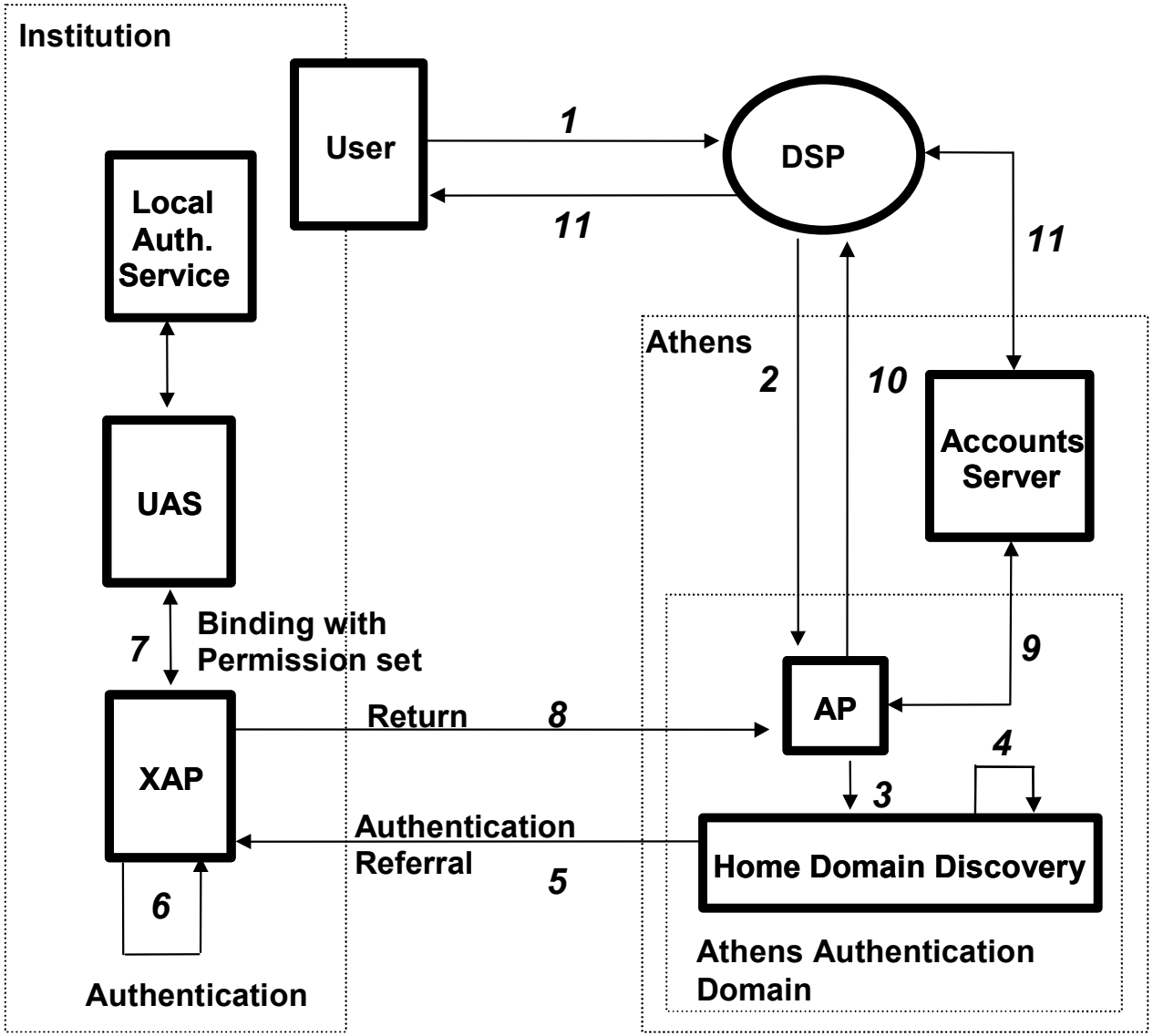
Institution
User
1
11
DSP
11
Local
Auth.
Service
Athens
2
10
Accounts
Server
UAS
7
Binding with
Permission set
9
AP
Return
8
4
XAP
3
Authentication
Referral
5
Home Domain Discovery
6
Athens Authentication
Domain
Authentication

Modes of operation

- HDD (Home Domain Discovery)
  - A user goes direct to a service provider
  - We have to find out their institution
- LAA (Local Authentication Assertion)
  - A user starts locally at their institution
  - VLE, library portal, desktop login etc.
  - AthensDA used to establish Athens session pre-emptively

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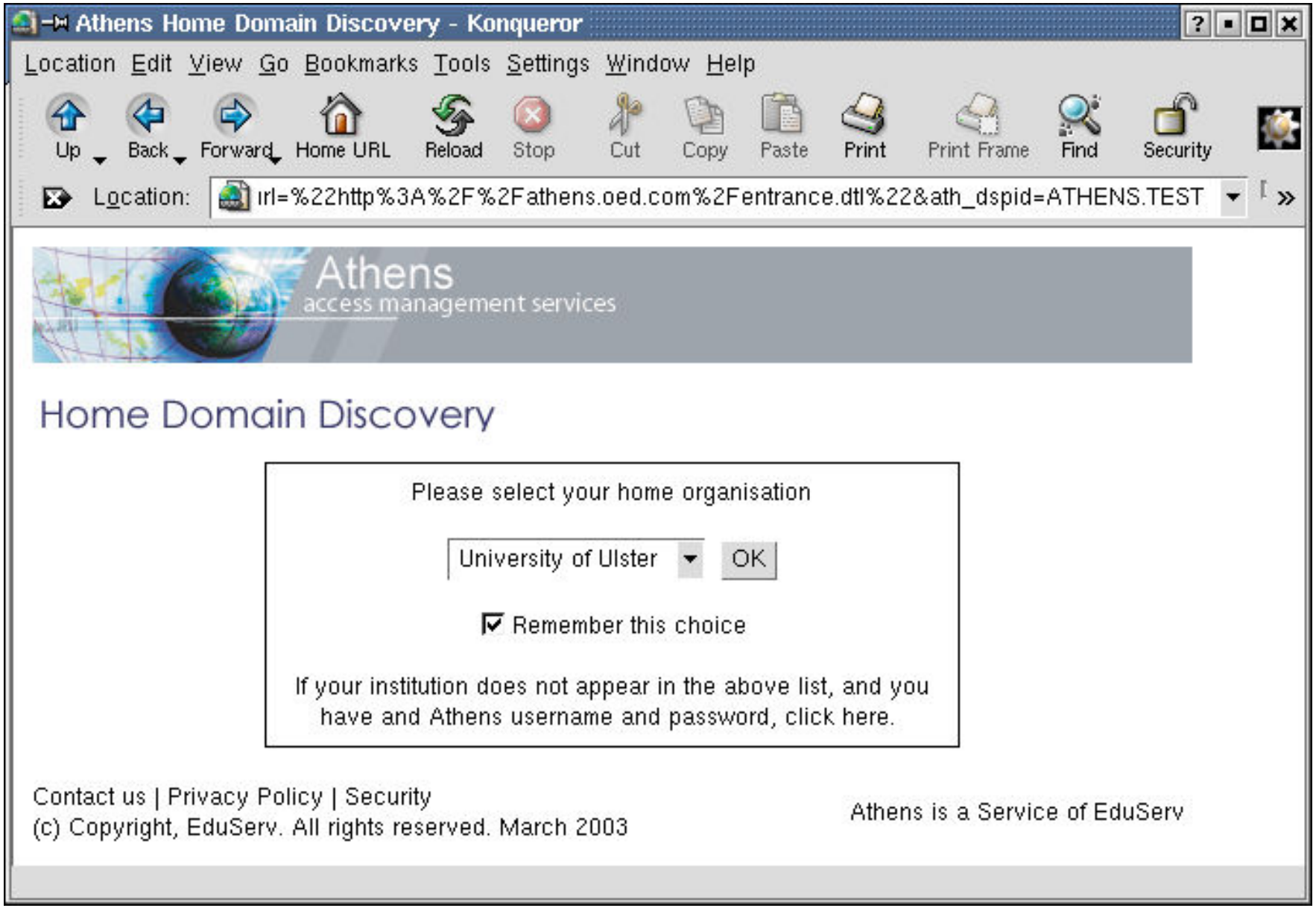
Athens Home Domain Discovery - Konqueror
Location Edit View Go Bookmarks Tools Settings Window Help
Up Back Forward Home URL Reload Stop Cut Copy Paste Print Print Frame Find Security
Location: irl=%22http%3A%2F%2Fathens.oed.com%2Fentrance.dtl%22&ath_dspid=ATHENS.TEST
Athens
access management services
Home Domain Discovery
Please select your home organisation
University of Ulster
OK
Remember this choice
If your institution does not appear in the above list, and you have and Athens username and password, click here.
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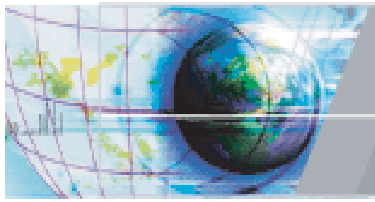

Shibboleth is:

- Emerging web authorisation architecture
- Internet2/MACE project
- Reference implementation software
  - V0.8 released 8th March 2003
  - V1.0 due end of May
- Key concepts
  - Authentication federated to institution
  - Pseudonymity for individuals
  - Attribute Authority at institution
  - Authorisation decision made by resource provider based on user attributes

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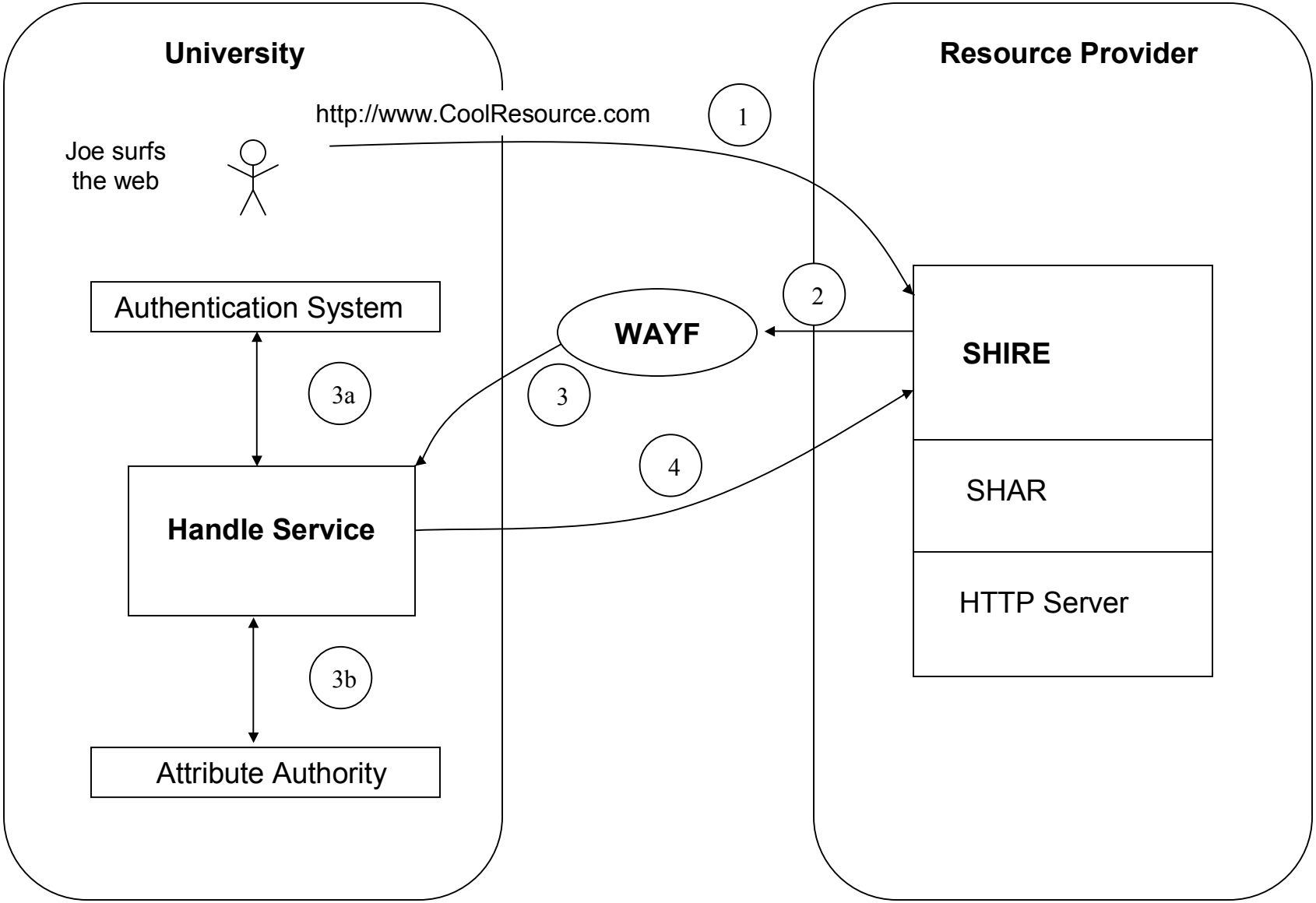
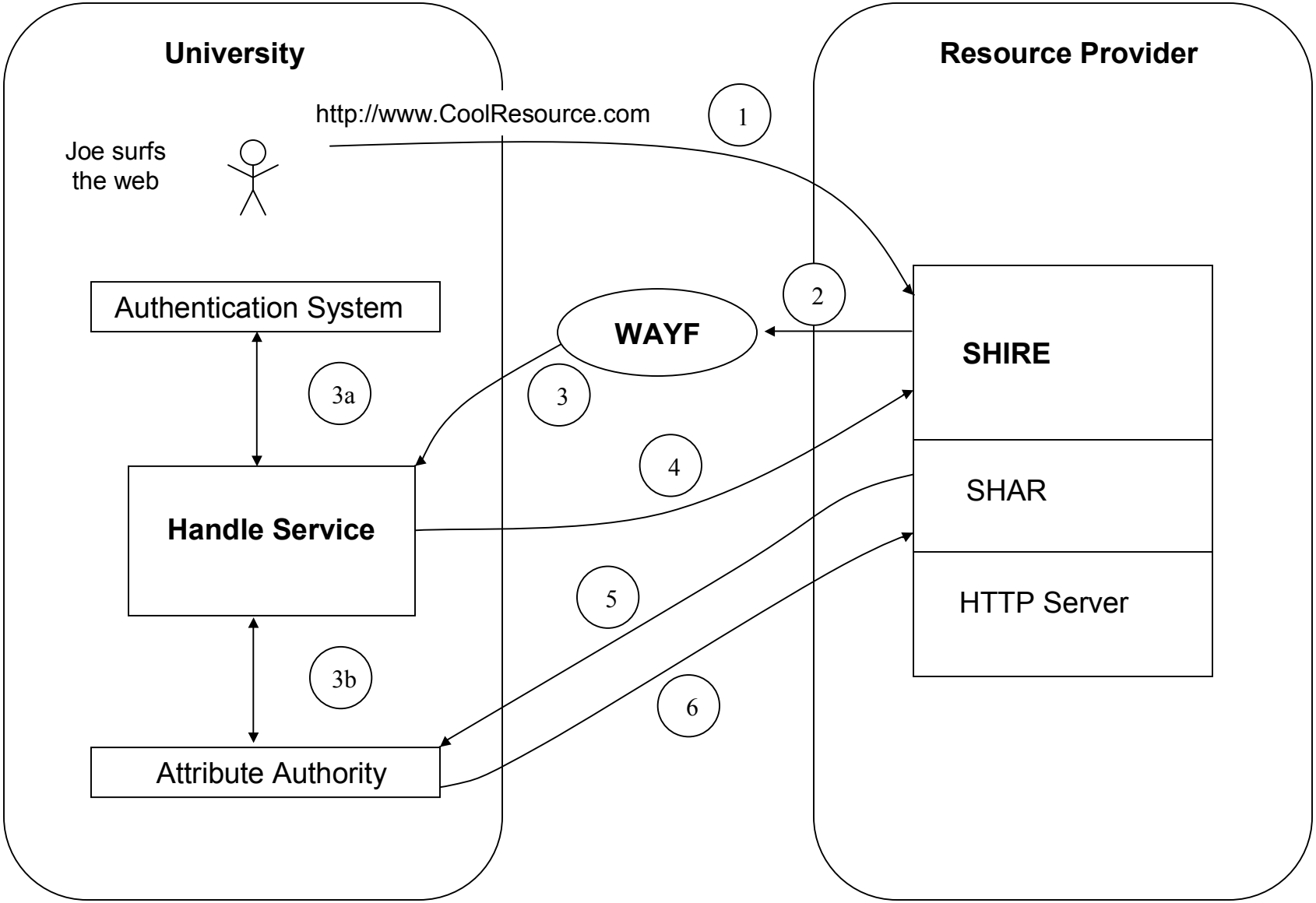
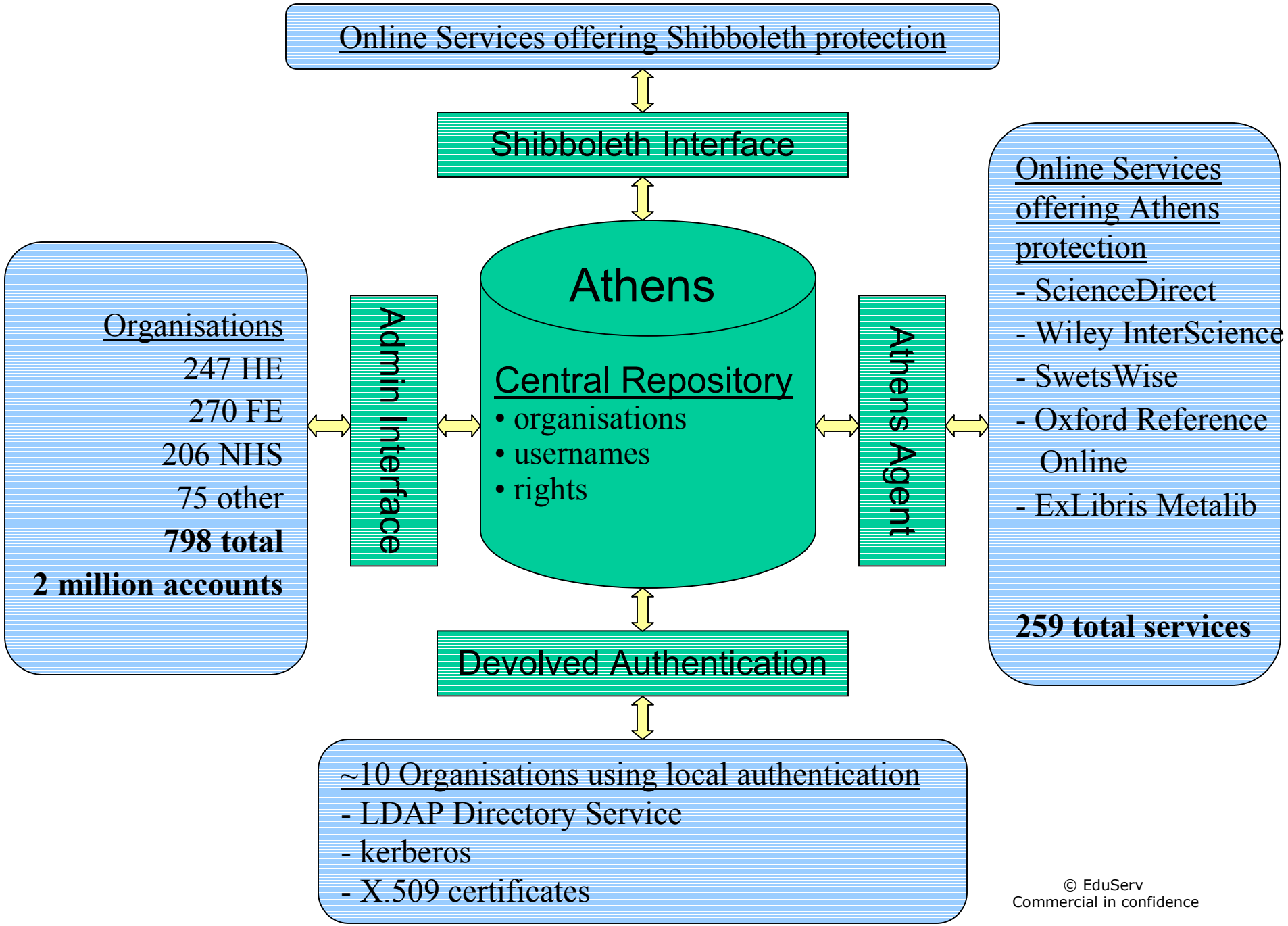


Shibboleth Handle Acquisition



Shibboleth Attribute Acquisition



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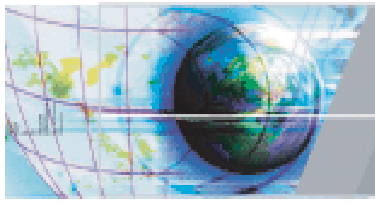

Inter-operability

- Allow Shibboleth institutions (origins) access to Athens-protected resources
- Allow Athens institutions access to Shibboleth protected resources (targets)
  - Demonstrated Athens as origin on v0.7
- Allow any trusted authentication system access to Athens protected resources
- Establish peer-to-peer relationships

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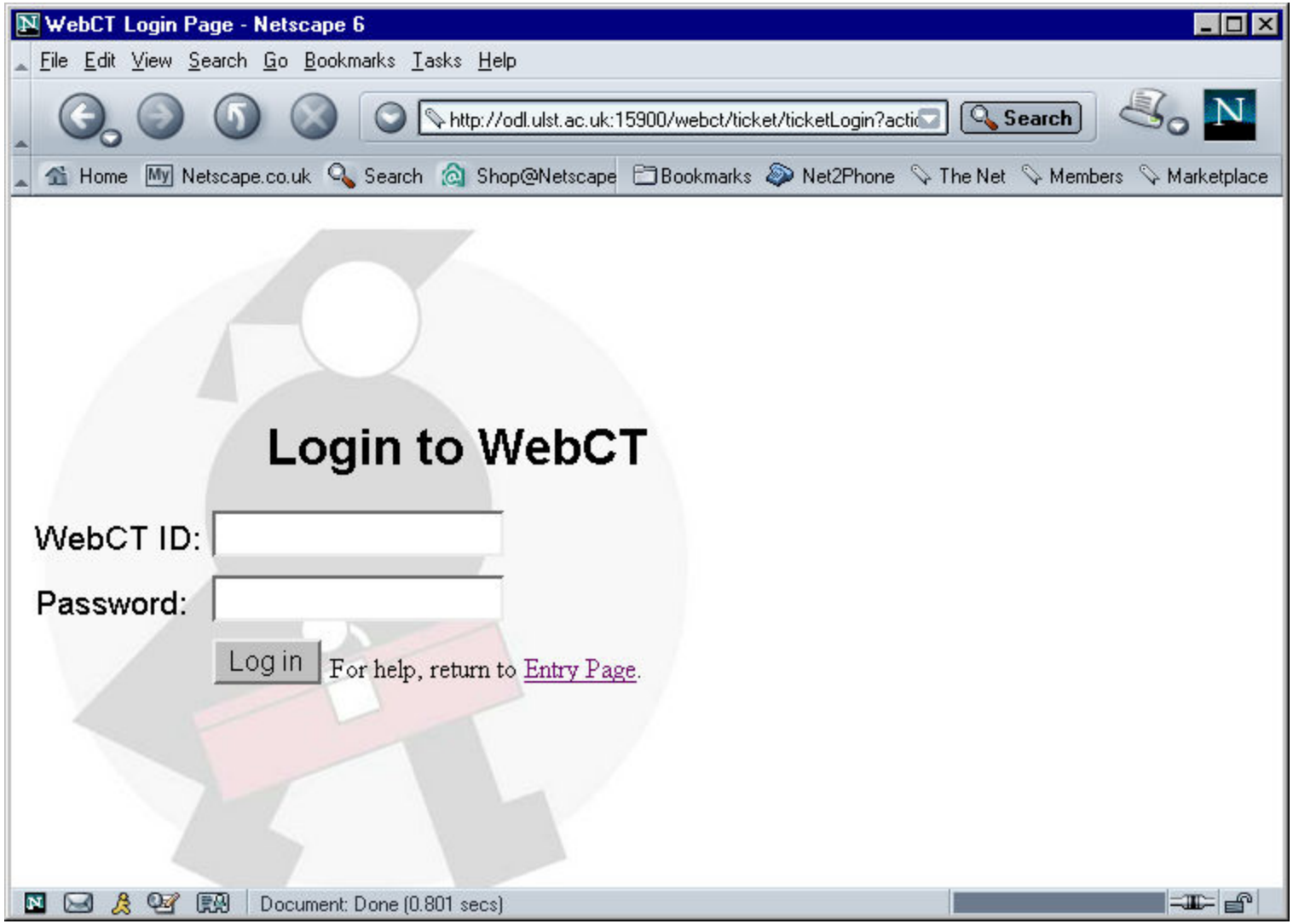

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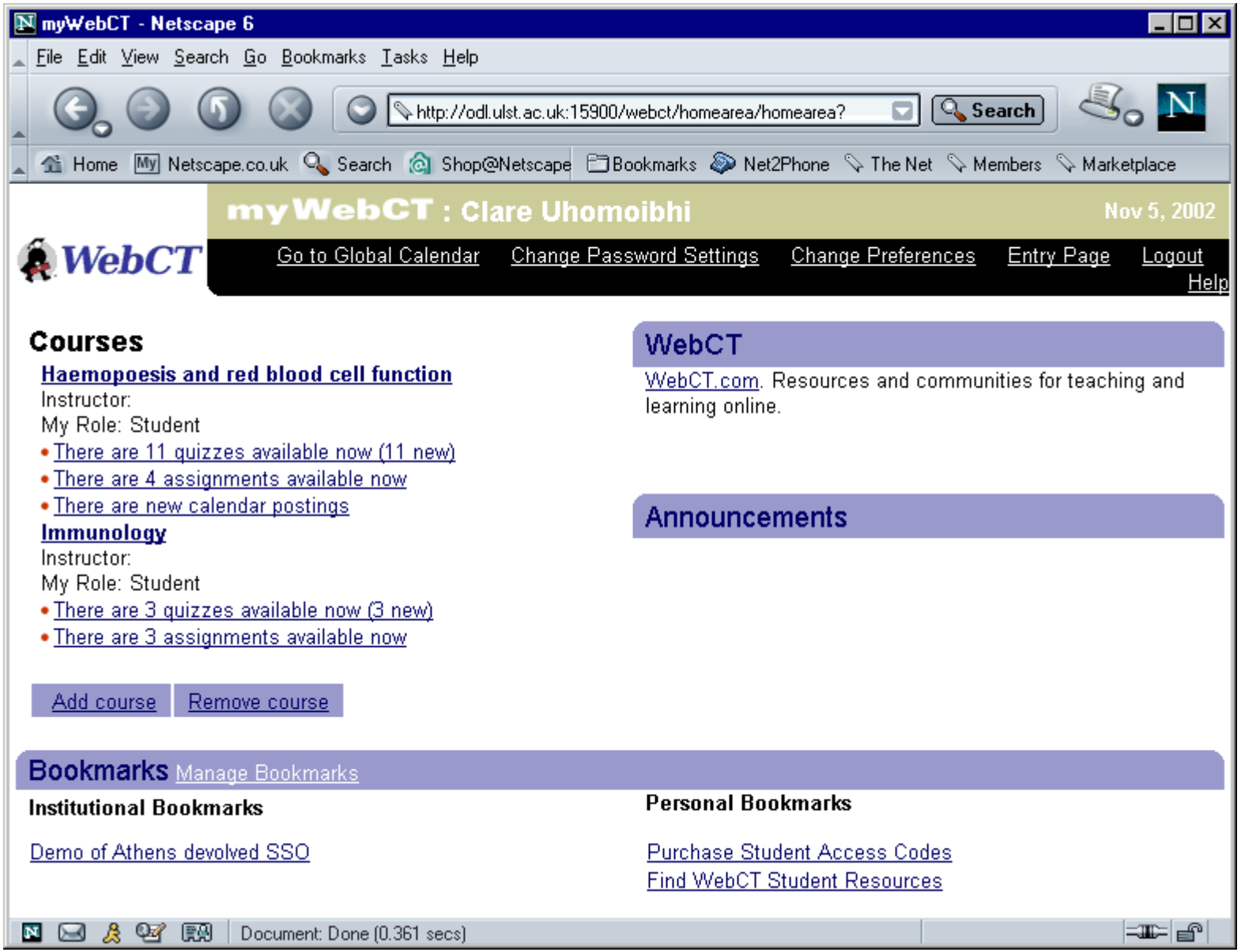

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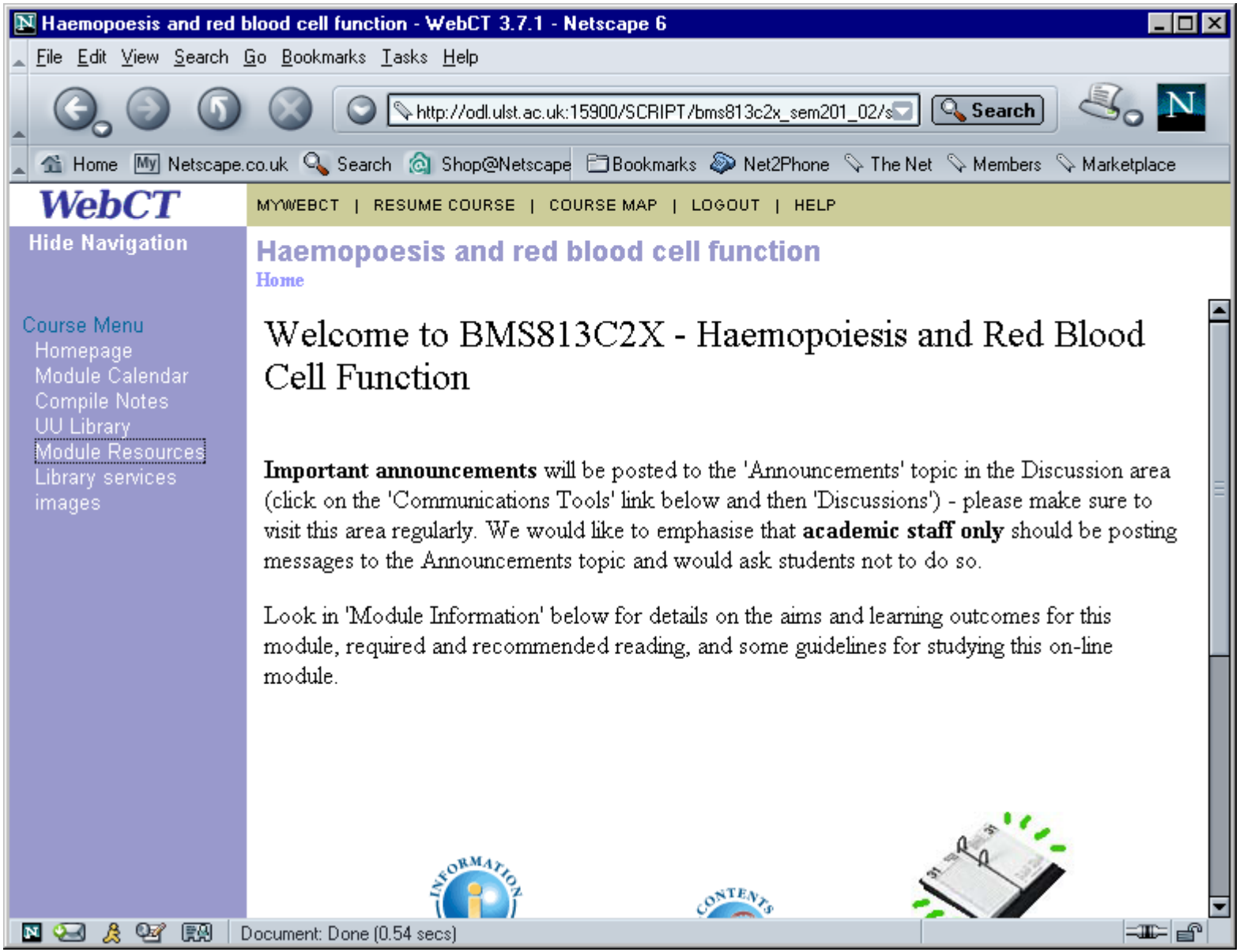

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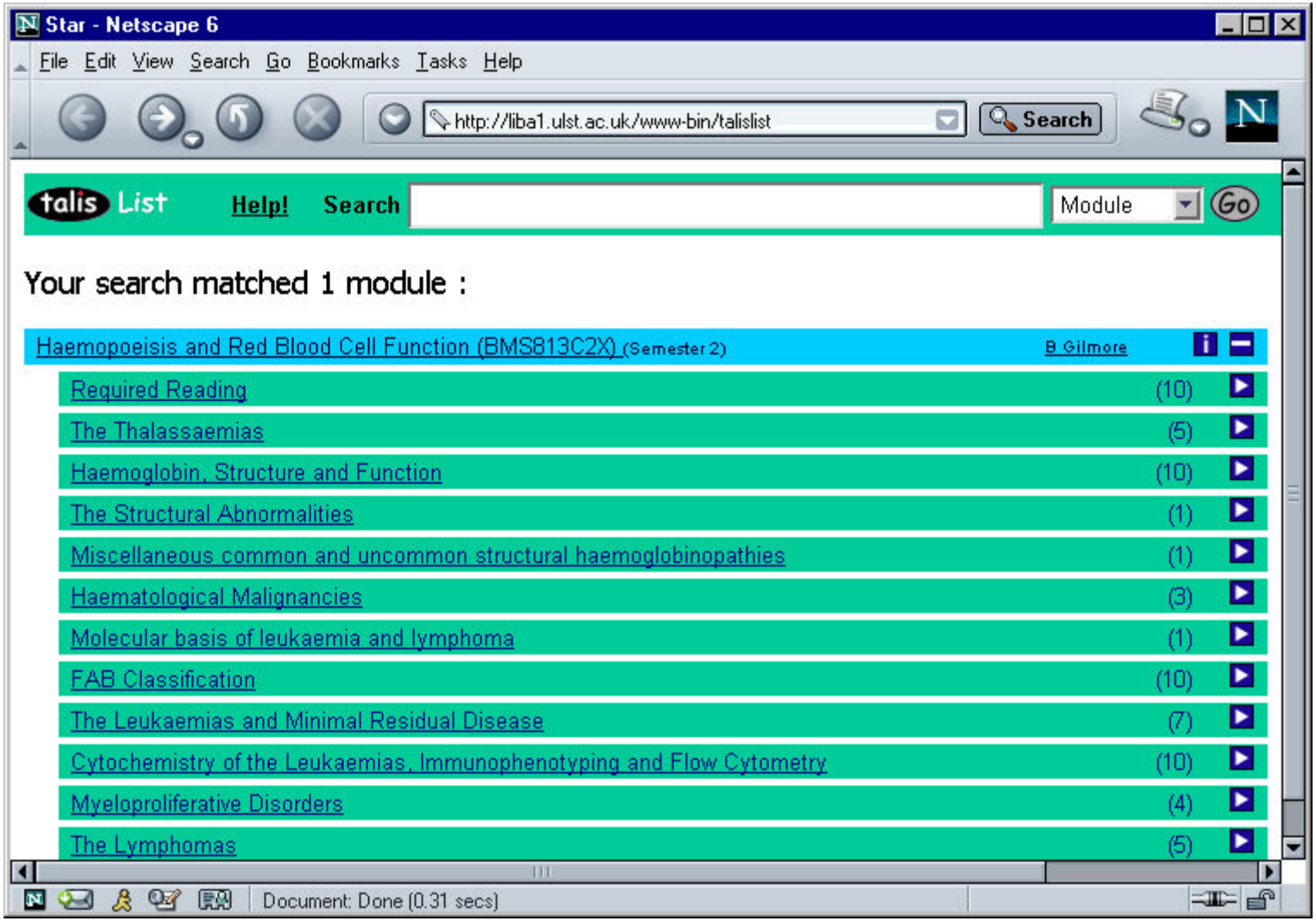

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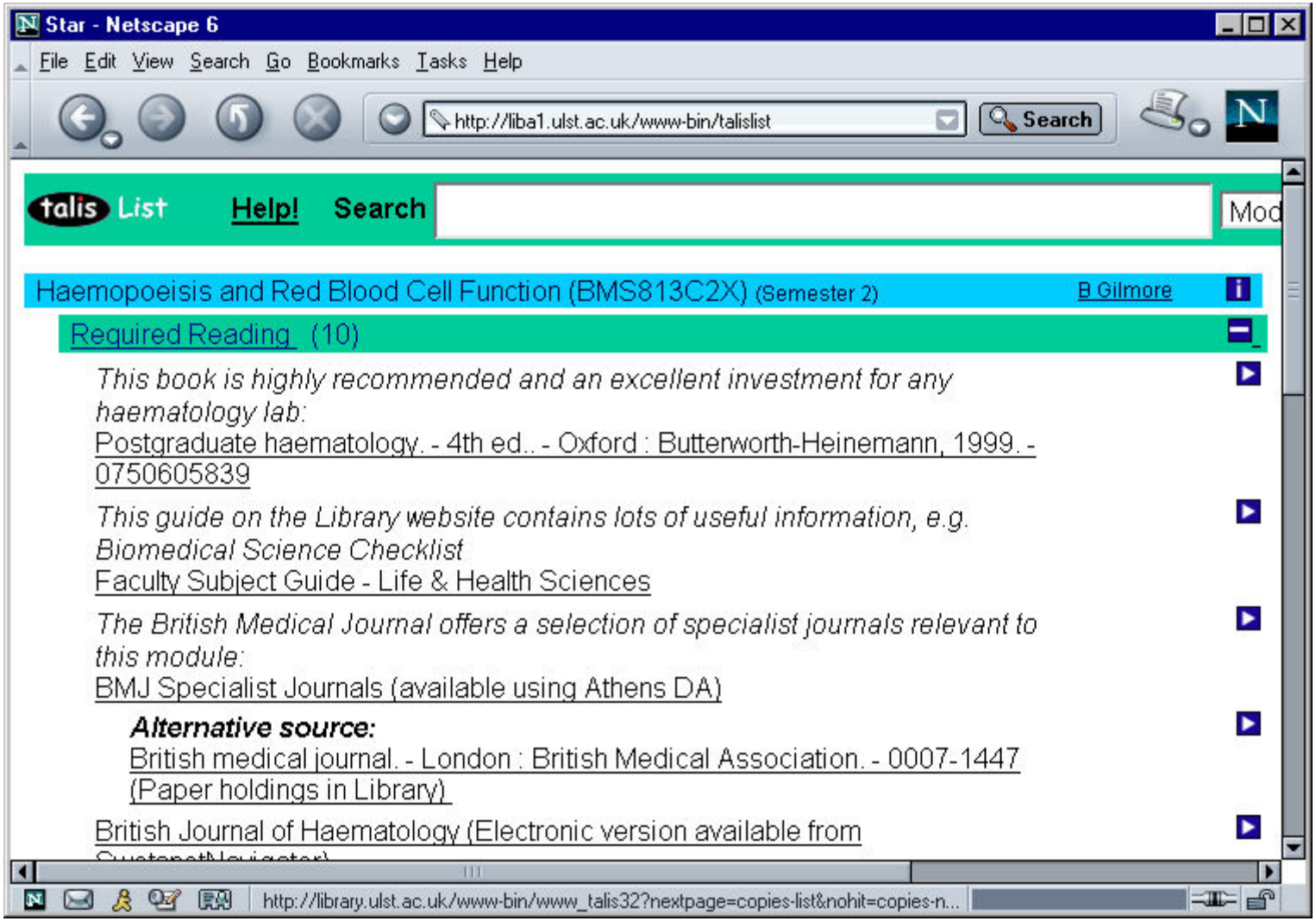

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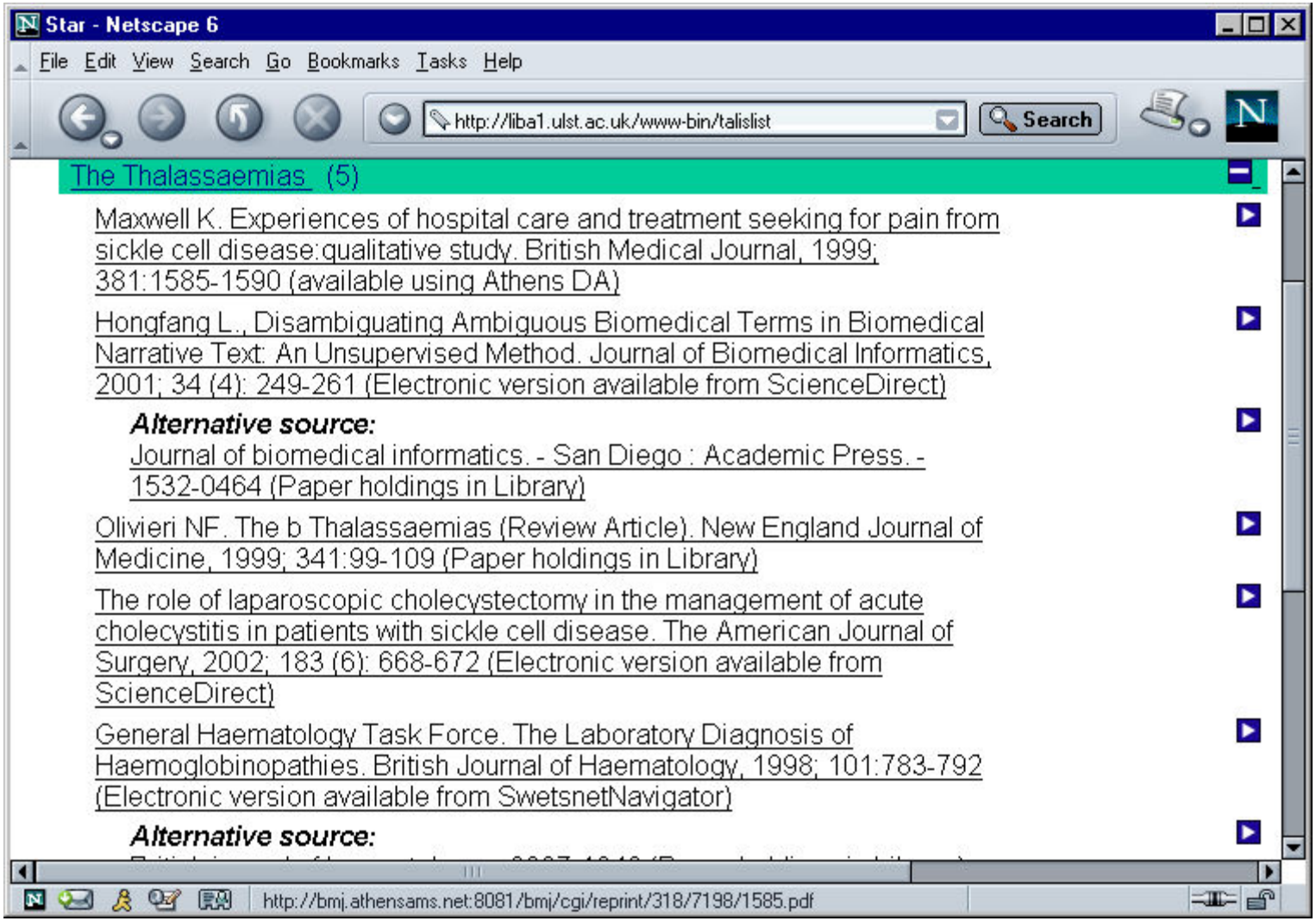

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File Edit Document View Window Help

Experiences of hospital care and treatment seeking for pain from sickle cell disease: qualitative study

Krista Maxwell, Allison Streetly, David Bevan

Abstract

Objective To investigate how sociocultural factors influence management of pain from sickle cell disease by comparing the experiences of those who usually manage their pain at home with those who are more frequently admitted to hospital for management of their pain.

Design Qualitative analysis of semistructured individual interviews and focus group discussions.

Participants 57 participants with genotype SS or S/β-thal (44 subjects) or SC (9) (4 were unknown). 40 participants took part in focus groups, six took part in both focus groups and interviews, and nine were interviewed only. Participants were allocated to focus groups according to number of hospital admissions for painful crisis management during the previous year, ethnic origin, and sex.

Results The relation between patients with sickle cell disease and hospital services is one of several major non-clinical dimensions shaping experiences of pain management and behaviour for seeking health care. Experiences of hospital care show a range of interrelated themes, which are common to most participants across variables of sex, ethnicity, and hospital attended: mistrust of patients with sickle cell disease; stigmatisation; excessive control (including both over- and undertreatment of pain); and neglect

about the affected population.[4] Ongoing analysis of data of hospital admissions and estimated population figures, however, suggest a similar pattern of service use to that in the United States, with a small percentage of the affected population consuming a disproportionate amount of resources. Most previous research has systematically excluded individuals with infrequent hospital contact[5] assuming they experience little or no severe pain. Those who manage their pain at home have been similarly neglected by the organisation of health services, which have focused on acute management rather than primary and community care. Published research tends to ignore both the experiences of individuals who manage their pain in the community and the influence of non-clinical factors on treatment seeking behaviour.

Biomedical approaches to pain have traditionally conceptualised experiences of pain as fundamentally individual and purely biological.[6] Our investigation draws upon the anthropological understanding that sociocultural factors influence the perception, response to, and communication of pain.[7] Similarly, treatment seeking is a social action influenced by social context and individual meanings and experience, and not simply a straightforward individual response to the experience of physiological symptoms. We aimed to compare the experiences of pain and its management by patients

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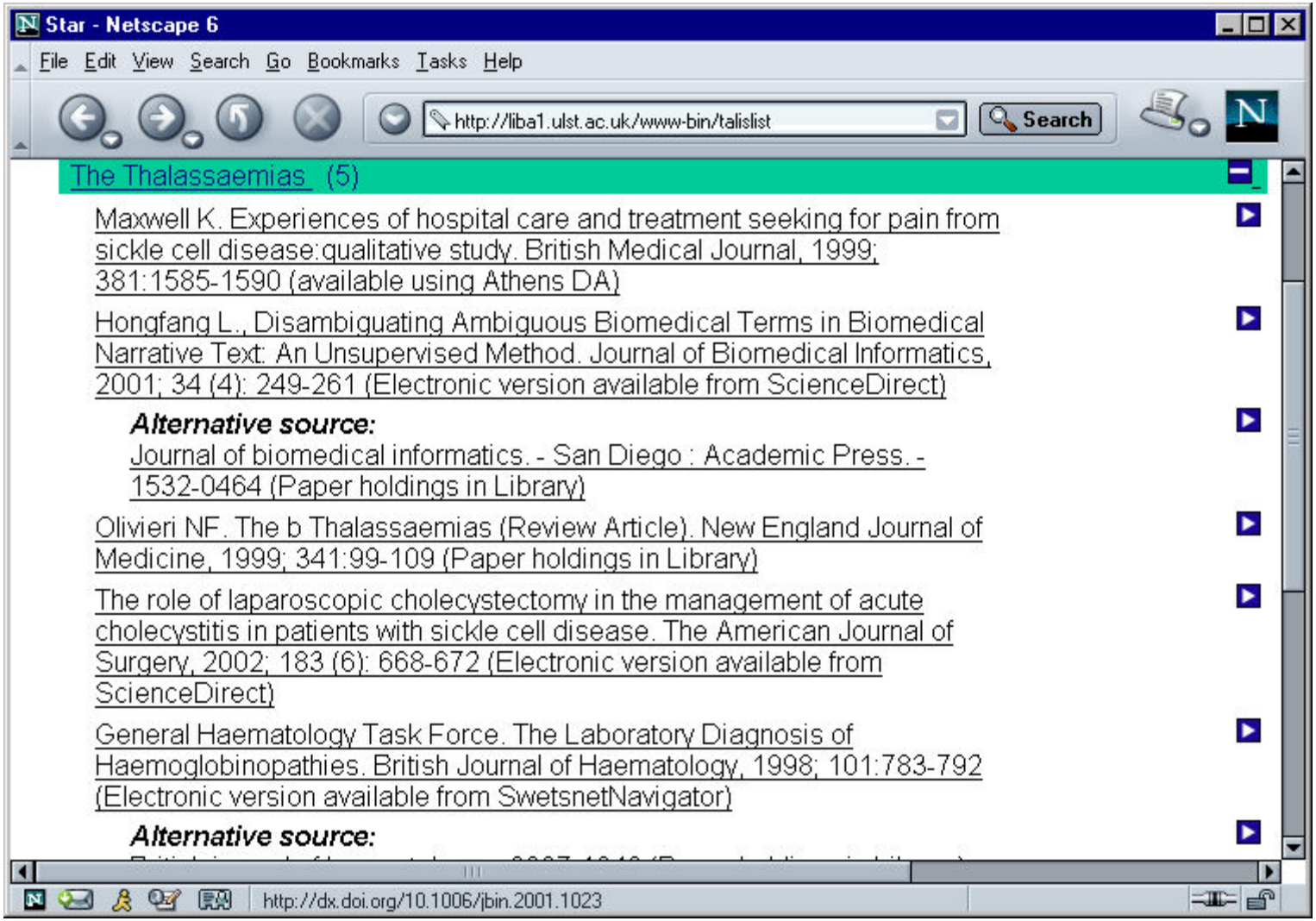
Department of Haematology, St George's Hospital Medical School, London SW17 0QT

David Bevan, *senior lecturer*

Correspondence to: Dr Streetly

a.streetly@umds.ac.uk

BMJ 1999;318:1585–90



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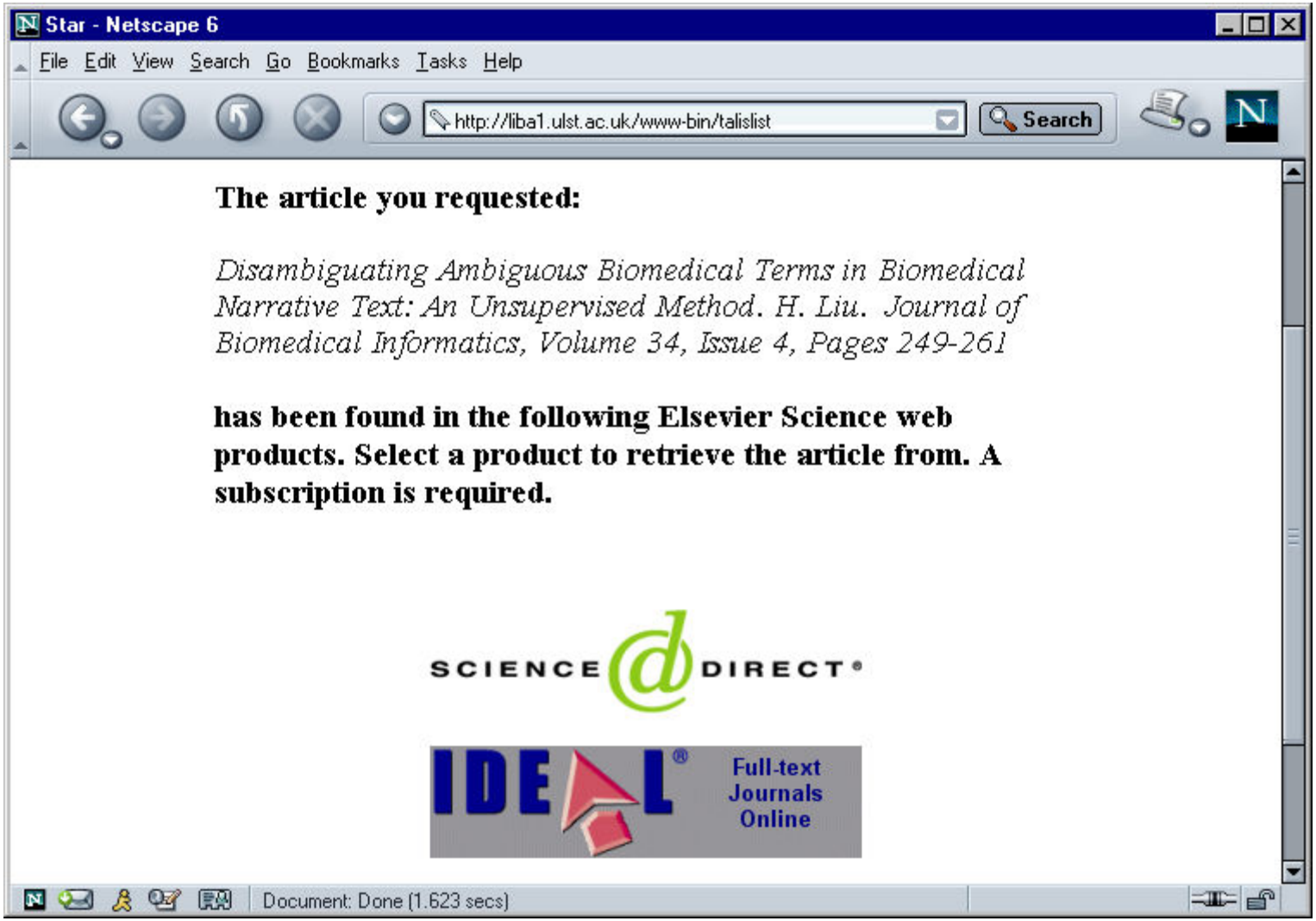

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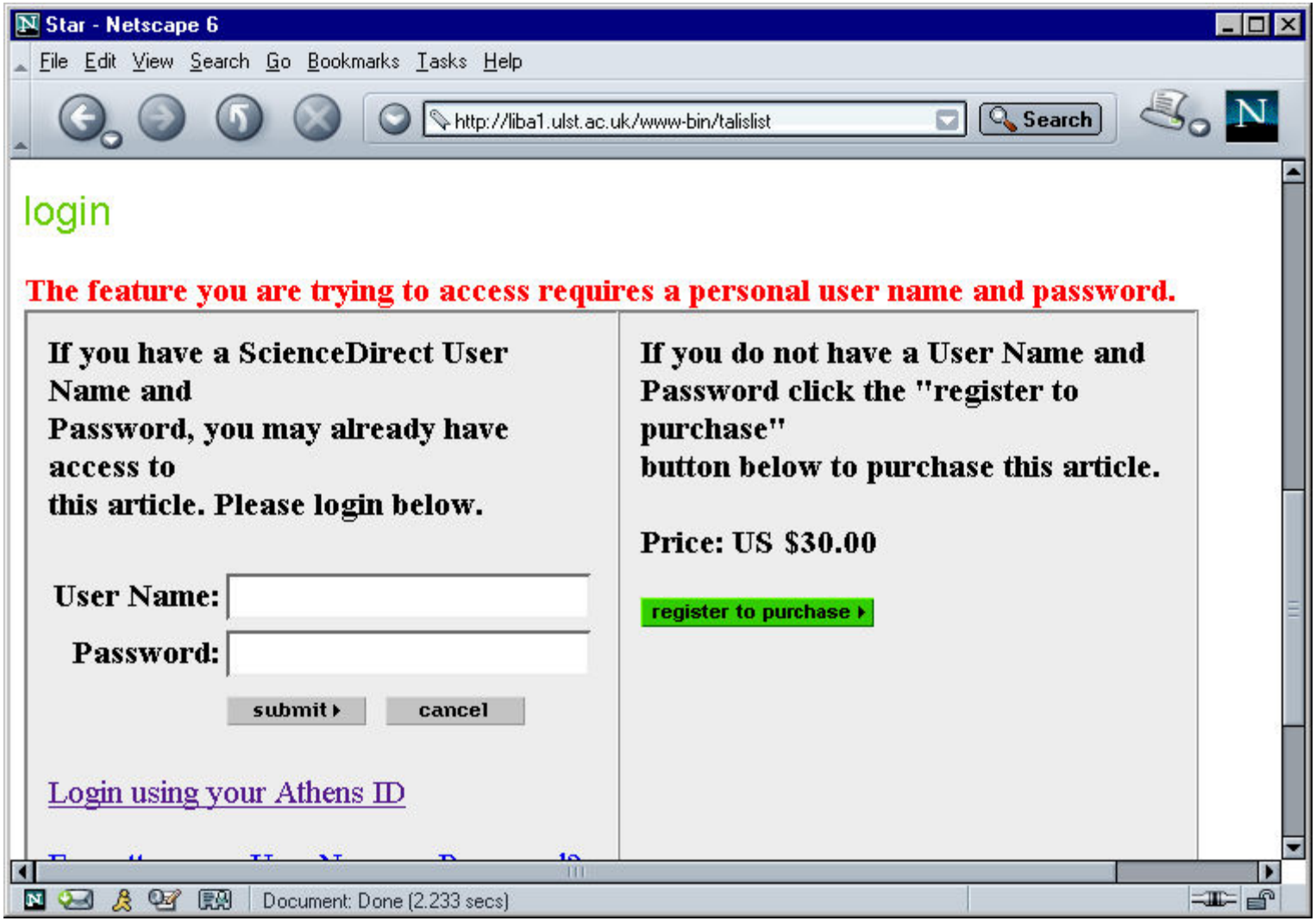

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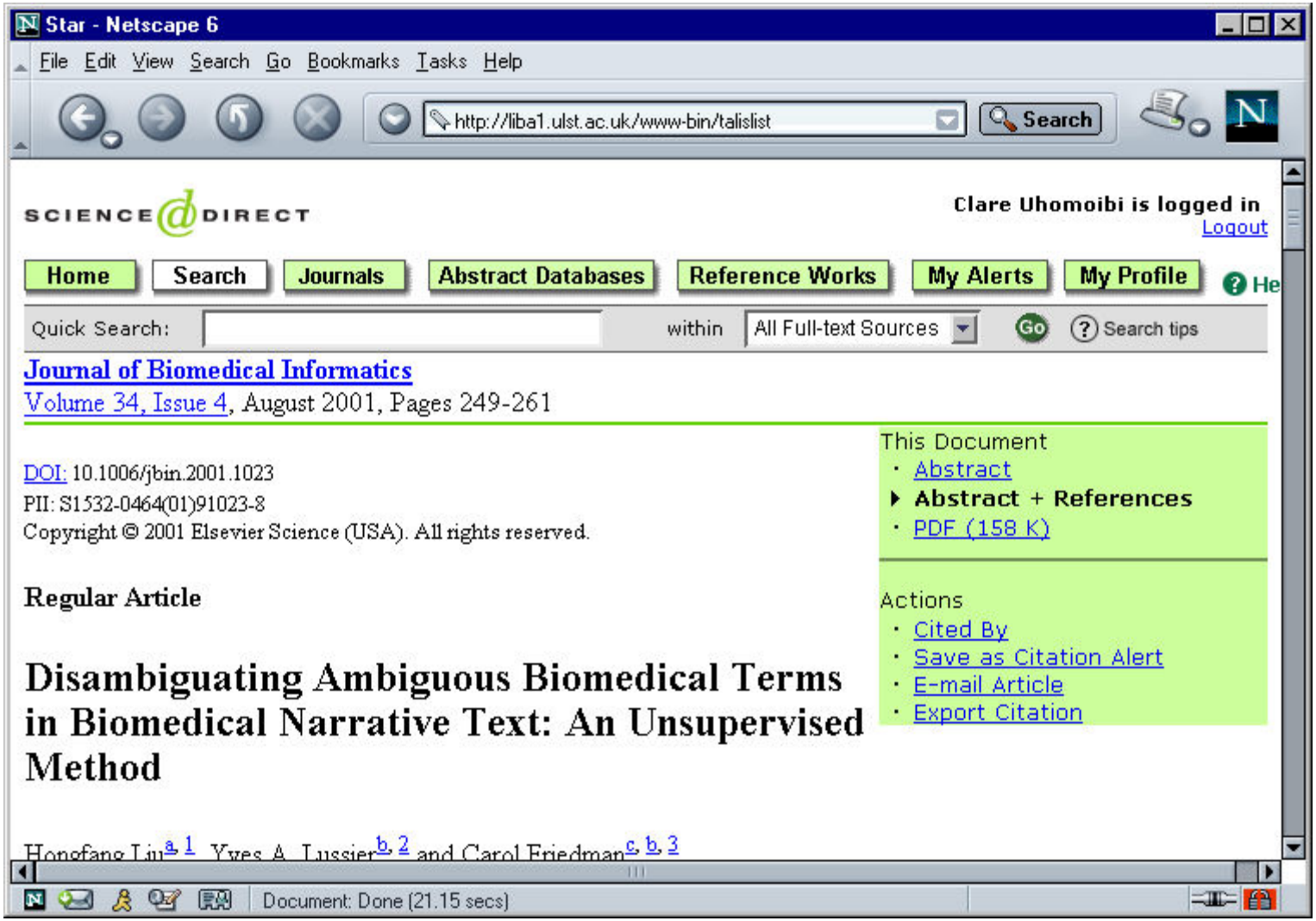

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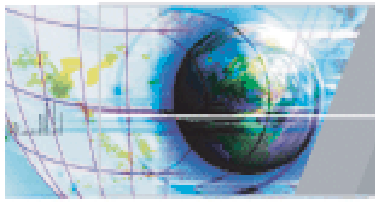

To Summarise

- Athens is a mature and evolving Access Management System
- Single Sign On access to many services
- Significant customer base of library resources
- Opportunities to inter-operate to mutual benefit
  - with Shibboleth
  - With other established authentication systems

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