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Identity Matters

Session Chair

James Farnhill
Programme Manager (e-Research), JISC

- Introduction
- Identity Management Survey
- Identity Management Audit
- Future JISC-funded Work
- Questions



- James Farnhill, JISC e-Research Programme Manager – responsible for identity and access management in the Innovation Group at JISC;



- Rhys Smith, engineering consultant: identity and access management at Cardiff University;



- John Paschoud, leader of the institutional audits for the Identity Project and based at LSE;

- Identity management becoming increasingly important in FE and HE with launch of UK federation and more online applications being used
- Recent personal data losses by government have highlighted importance of protecting personal data – most recent example is MoD loss of 11,000 identity cards
- Identity Project commissioned from one of first calls under the capital programme to examine how identity management is dealt with in HE
- Identity Project carried out a broad survey of UK HE and did 10 detailed institutional audits



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Rhys Smith
Engineering Consultant: Identity & Access Management, Cardiff University

- Looked specifically at:
 - General IDM
 - IDM and institutional membership
 - IDM and the NHS
 - IDM and the Grid
 - Tools for IDM
 - Common problems

- IDM means many things to many people
 - common understanding of account management
- independent, disparate IDM systems are often seen within an institution
 - due in part to the decentralisation and heterogeneity of organisational structure
- IDM practises are very widespread within an institution
 - but people may not realise what they are doing is IDM
 - identifying relevant people and their IDM tasks is a difficult task
- Considerable “fuzziness” of what constitutes a “member” of an institution
- Limited formal procedures and common standards for IDM across institutions.

- Neutral rating of current IDM
 - partly because of concentration of just one aspect of IDM
- IT policy generally between balanced & centralised
 - good for central IDM implementation
- Most have:
 - IDM system partially operational
 - no plan to issue tender for IDM – implementing gradually.
 - used consultants for design; development; implementation; training
- Average of 2-3FTE staff, spend of £50k capital next 3 years
- Majority issue visitor/guest account, require some form of ID proofing

- When implementing IDM, it is very common to use data and processes from existing systems, thus:
 - Data quality issues will be seen
 - Effectiveness and timeliness issues
 - Integrating multiple systems: data definitions, etc
 - Data risks will need to be taken into account:
 - Quality of data in corporate systems
 - Corporate systems change the way they work
- Greatest challenges to IDM adoption:
 - Data integrity
 - Developing IDM policies & procedures
 - Higher current IT priorities

- Institutions rated importance vs ability for IDM related tasks
 - Smallest gaps – related to provisioning of accounts
 - Greatest gaps – accuracy of corporate data, delegation of IDM, graded AuthN
- Vendor technologies in use:
 - Primarily Microsoft, Novell, Oracle
- NHS links?
 - Approx half of institutions with NHS links handle IDM of NHS related staff students, with difficulty
- Grid links?
 - No real direct link between IDM practises and Grid currently

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John Paschoud
Projects Manager, LSE Library

- ...supplemented the Survey with in-depth investigation
- ...within the 10 partner institutions
 - (which represented a fairly diverse assortment)
- Developed and cross-tested methods in the process
- Published a resulting 'IdM Audit Guide'

Why do an Institutional IdM Audit?

- Because you have to sign something that says you know it's all OK, to join the UK Access Management Federation
- Because more internal and external services are personalised (or otherwise 'segmented') and will require it
- Because it will probably identify real cost-savings, where IdM is being duplicated or done inefficiently
- Because it will probably identify unexpected security holes
 - (where people who shouldn't, get in)
- ...or unnecessary security barriers
 - (where people who should, can't get in)

Important Pre-requisites

- A good Key Researcher - with time committed
 - (JISC funding paid for 0.2fte, for 12 months, to conduct The Identity Project audits; 0.4fte, spread unevenly over 4 months, should be enough)
- Institutional awareness
- *Senior* level support



- Prepare your researcher
- Prepare your institution
- Find all the identity managers
- Find all the identity-managed (or access-managed) resources
 - (you'll find some more identity-managers in the process)
- Find out what each identity-manager does
- Collate and analyse what you've found
- ...now, produce summaries of it that people *will read!*
- Prepare your “..only obeying orders..” defence, when nasty things are revealed!

- The Key Researcher
 - Recruitment, cross-training
- Governance
 - Authority, publication, resulting actions
- Tools
 - Interview support
 - Collation of results
- Scoping the Audit
 - Paper-based IdM?
 - Physical campus security?
 - Anything off-limits for 'political' reasons?

- Internal 'literature search' - existing policies and other documentation
- Feedback from awareness campaign
- Global requests (but don't ask "Who manages identity?")
- 'Obvious' places in the institutional structure
- The 'spy-hunter method' (find one, and they'll reveal their contacts!)



- Structured interviews
 - Identity life-cycles
 - Access rules
- Collection of existing documentation that's not 'institutionally public'
- Assurance of confidentiality and anonymity



■ Methodology

- Could include references for the interviewees and respondents who have been anonymised in the report.

■ General Description of the Institution

- Including an overview of the institution's record and management systems, and a description which places the institution within the context of its' peers.

■ Credential management

- Examines the use, issue and expiry of credentials along with their misuse.

■ Certificate management

- The extent to which X.509 certificate management in the institution may be used (as personal authentication tokens).

■ Attribute stores and usage

- How user attributes are stored, used and disclosed.

■ Handling of identity for individuals not classed as staff/student

- (e.g. academic and library visitors, contractors, etc)
- Variations that exist between external users, their processing, levels of access and particular problems faced.

■ Handling of prior ID discovery for new users

- (e.g. postgraduate students who were prior undergraduate applicants)
- ...and of potentially competing ID generation by different parts of the institution (such as the Library and MIS).
- Examine the extent to which previous ID is used by the institution, the extent to which it is done comprehensively and accurately, the mechanisms used to do this and the amount of information released to the user.

IdM Analysis (a suggested structure) #2

■ Identity security and privacy issues

- Mechanisms used to transport attribute information, how decisions are made about what attribute to release to whom.
- Attitudes of service users regarding the transfer of such information.

■ Requirements for use of credentials

- Including resource access, technological requirements (e.g. single sign on, stability and scalability), accounting and statistics, etc.
- Consider how the requirements and procedures for the use of IDM technology are determined.

■ Single institution and cross institution Virtual Organisations and tools

- Considers the different communities and cross-institutional work that interacts with the institution and how they are supported.

■ Collaborative learning

- Examine the collaborative learning schemes within the institutional.

■ Integrating identity management with other communities

- Other communities (e.g. health) with which the institution works and their impact on identity management.

■ Conclusions and Recommendations.

- Main themes drawn from the report and suggested further investigations or actions to be considered.

Where do I find the Identity Project Audit Guide?

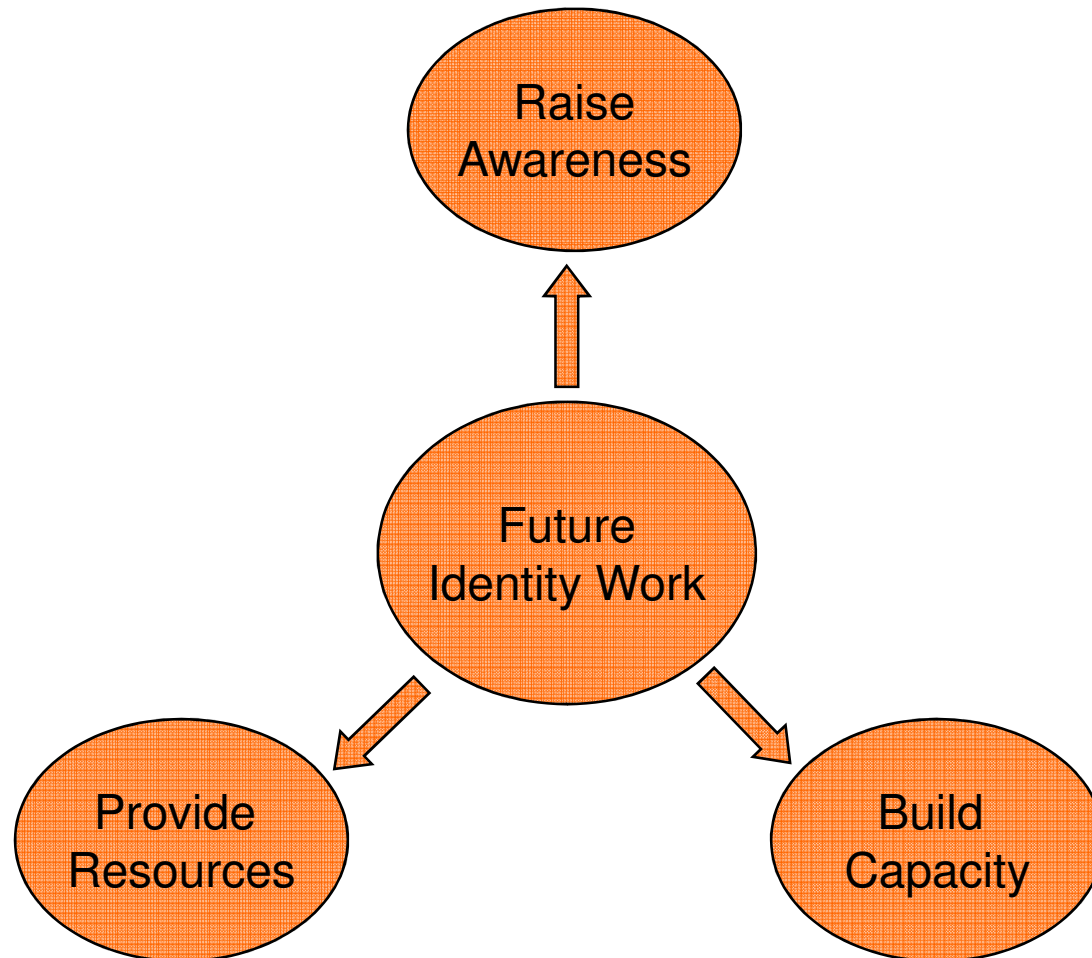
- <https://gabriel.lse.ac.uk/twiki/bin/view/Restricted/TidpCsResearchGuide>
- www.identity-project.info (for this and all the Project's publications)

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- Raise awareness through:
 - JISC Conference session
 - Events focusing on identity
 - Press articles, such as the Inform article
 - Briefing papers and items such as the Identity Project bookmarks
 - Materials on the JISC website such as the identity podcast
- Also looking to get feedback on where institutions feel we ought to be focusing efforts

- Build capacity in the sector through:
 - Funding new work within the field of identity –new call being put together on an identity toolkit
 - Bringing together networks of institutions and building communities of users to share experience such as with the Identity Project mailing list
 - Embedding identity into what is being done in FE and HE institutions such as:
 - The IdM for Lifelong Learning ITT
 - Future workshops in the repositories area
 - Personalisation work in the information environment

- Survey and audit already provide useful resources for HE and FE to understand what they ought to be doing around identity
- Identity toolkit call will provide a suite of resources to help HE institutions roll out IdM solutions
- Studies such as the OpenID study due to report in early summer help to inform key issues
- Future projects will be embedded within areas such as e-learning and the information environment to contextualise identity
- Working with European groups such as TF-EMC2 helps to bring different perspectives to the UK
- Future work on levels of assurance demonstrator

- Questions for the team or comments on the presentations

- Identity Project web site – contains the reports and the audit – www.identity-project.info
- Identity Project mailing list – join at <http://www.jiscmail.ac.uk/cgi-bin/webadmin?SUBED1=identity-project-public&A=1>
- JISC Announce mailing list for announcements of future work – join at <http://www.jiscmail.ac.uk/cgi-bin/webadmin?SUBED1=jisc-announce&A=1>

Related resources from JISC Services

MIMAS

- JISC Information Governance Gateway (JIGG) – www.jigg.ac.uk
- JIGG is a resource with the primary aim of supporting practitioners in the HE sector who work in the area of data protection and records management (and other areas of information governance) – identity management is a key part of that.

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JISC Conference 2008: Enabling Innovation

15 April 2008, ICC Birmingham



Joint Information Systems Committee

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