



We are pleased to welcome delegates to the 1st International Digital Curation Centre Conference being held this September in Bath. The DCC Conference will bring together leading researchers and practitioners in the field from all over the world including the United States, Australia, Germany and the UK. The event focuses particularly on curatorial approaches to research data and includes experience from a range of disciplines such as astronomy, environmental sciences, engineering and the social sciences. The opening keynote address will be given by Graham Cameron, Associate Director of the European Bioinformatics Institute (EBI) and the closing keynote will be delivered by Clifford Lynch, Executive Director of the Coalition for Networked Information (CNI). There will be opportunities to network and debate, in particular during the Symposium What is Digital Curation?, led by DCC Director Chris Rusbridge, where we are hoping for a lively and stimulating discussion of the concepts, challenges, and approaches to digital curation from the perspectives of the participating conference audience.

The UK DCMI Affiliate

In July 2004, JISC and MLA signed a joint agreement to establish a UK Affiliate of the Dublin Core Metadata Initiative. The DCMI Affiliate Programme seeks to enhance and formalise channels of communication between DCMI and its regional constituents, so that: information from DCMI reaches actual and potential implementers of DCMI specifications in those communities; the requirements of implementers in the regional communities are channelled effectively to DCMI; and constituents are encouraged to

participate in DCMI activities. The UK DCMI Affiliate has appointed UKOLN as managing agent to plan and coordinate UK DCMI Affiliate activity jointly with JISC and MLA. UKOLN has participated in DCMI activity since its inception, and has promoted the appropriate use of the Dublin Core metadata standards and specifications within the JISC and MLA communities and beyond. Over the next year, UKOLN is planning to raise the profile of Affiliate activity within the UK, after consultation with the community. This consultation will include a Web-based survey and an open meeting to disseminate information on current DCMI activity, to enable UK implementers to share their own experiences, and to gather information on the requirements for activity by the UK Affiliate.

DCC Hosts Conference on Long-term Preservation

The Digital Curation Centre is also hosting a major research conference over 21-23 November 2005 at the Royal Society of Edinburgh. *Ensuring Long-term Preservation and Adding Value to Scientific and Technical Data* (PV 2005) is the third in a series following events held in Toulouse (2002) and Frascati (2004). This year there are four main themes: ensuring long-term data preservation, adding value to data, looking at lessons learnt and exploring future prospects in this area with a particular focus on eScience and Digital Libraries. The event is being organised by the DCC Outreach team and the Programme Committee Chair is David Giaretta, of CCLRC and DCC Development Director. Some 150 international delegates are anticipated.

UKOLN is a centre of expertise in digital information management. It is funded by MLA: the Museums, Libraries and Archives Council, the Joint Information Systems Committee (JISC) of the Higher and Further Education Funding Councils, as well as by project funding from the JISC and the European Union. UKOLN also receives support from the University of Bath where it is based.







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What Chance Immortal Information?

UKOLN is a partner in the new £5.5 million EPSRC-funded Grand Challenge research project led by the Department of Mechanical Engineering at the University of Bath. There are 10 other university partners with industry collaborators from the aerospace, defence, construction and healthcare sectors. The project will explore through-life knowledge strategies and tools associated with ensuring long-term access, preservation and curation of manufacturing, construction and engineering information as part of the product-to-service business model.

This initiative has synergies with our preservation work and the Digital Curation Centre but sits in the (new for UKOLN) broad domain of engineering. At an initial informationsharing workshop with industry partner representatives, it became very clear that digital preservation and curation is a major challenge for organisations of all sizes and in all sectors.

There are significant opportunities in working across sectors on the development of joint strategies, case studies and sharing of experience. More locally, we are looking forward to working with colleagues in the University on this initiative.

UKOLN Hosts MLA and DCMS Events in Bristol

UKOLN is organising a series of events for MLA and the Department for Culture, Media and Sport in respect of the EU e-Europe (MINERVA) Action Plan which will be celebrating the UK Presidency of the project. The entire series will take place in November 2005 at Watershed, Bristol, UK.

The MICHAEL (Multilingual Inventory of Cultural Heritage in Europe) Project includes partners in France, Italy and the UK. The project is supported by the European Commission through its eTen Programme. The MICHAEL Conference is on 15 November. The Inspiring eLearning Conference (16 November) is a UK Presidency conference to examine the connections between the digitisation of culture and learning. The conference will showcase developments in the UK and mainland Europe and examine issues involved in the provision of e-learning materials. Members of the National Representatives Group (NRG) meeting (17 November) are nominated by each of the 25 Member States under the eEurope Action Plan to co-ordinate national digitisation policies. The NRG has met under successive Presidencies since 2001. The meeting will launch a Digitisation Action Plan, prepared under the successive Netherlands, Luxembourg and now UK Presidencies.

Resource Discovery Landscape Review

As part of our role to advise JISC about the technical standards that underpin the JISC Information Environment, UKOLN recently completed a study looking at the key issues and challenges in developing the resource discovery landscape more broadly. The study makes a number of recommendations and complements the earlier, more narrowly focused study that considered the relationships between the JISC IE and Google. Both studies are now available through the JISC IE Architecture pages on the UKOLN Web site.

Application Profiles as Context for New DCMI Terms

UKOLN puts quite a lot of effort into Dublin Core Metadata Initiative-related activities, particularly in the form of chairing various DC working groups and membership of the Usage Board and the Advisory Board. The DCMI-related workload always seems to rise steeply at this point in late summer as the annual conference approaches and working group items that have seemed perfectly content to be left alone suddenly raise their heads with the prospect of an upcoming meeting.

At the last Usage Board meeting there was a lot of discussion about how new terms are proposed and evaluated. In the past, we have tended to treat new proposals in isolation. From now on, it seems more likely that we will only consider proposals for new metadata terms in the context of a whole application profile. The application profile helps to provide evidence of the functional requirement being met, and gives useful context against which the proposals for new 'services' within service-oriented approaches such as the JISC eFramework for Education and Research would also benefit from a similar method of evaluation. (See "The UK DCMI Affiliate", front page.)



Watershed and St. Augustine's Reach, Bristol, UK, venue for MLA and DCMS events in November. Photos courtesy of Gary Redfern.

Divided by a Common Language?

There is a significant and growing interest in repositories at the moment. (I doubt many readers will faint with shock from reading that.) This is perfectly appropriate since the community is rightly interested in a better understanding of the technical, policy and operational challenges that repositories produce as well as of their benefits, and of other issues raised by the 'open access' movement more generally. It is, however, interesting to note how the community latches on to buzzwords every so often. It happened with 'portals' and, to a lesser extent, 'portlets' (see "The other 'P' word" elsewhere in this issue) and is happening again now with 'repositories'. This is a good thing in many respects, since it allows the community to focus on a particular set of issues and activities in a way that might otherwise never happen. But there are dangers too. Perhaps most importantly, we need to remember that not all systems capable of delivering repository-like functionality will be called 'repositories'. In particular, a large part of the community will never have heard of repositories or eprint archives but will think instead of 'content management systems'. Our use of terms can sometimes prove problematic.

Workshops for CIE Creative Commons Study

In June and July UKOLN representatives attended a number of 'rights holders' workshops being held around the United Kingdom to inform the Common Information Environment's (CIE) Creative Commons (CC) study.

The UK public sector funds the creation of a significant amount of digital content and much is intended for reuse. Creative Commons licences are a potential means of clarifying the conditions of use of a work and the CIE CC study is considering the applicability of CC licences to public sector organisations in the UK. Issues relating to who owns copyright in the first place are currently out of scope of the study; however as this is clearly an area of concern for those working in academic institutions, it is likely that relevant recommendations will be made to JISC.

The workshops were facilitated by Intrallect and the Arts and Humanities Research Council Research Centre based at the University of Edinburgh. During the day participants worked in breakout groups analysing how rights holders would like chosen resources to be used in the public arena. The report, drawn from the series of workshops, is due for publication in September.

UKOLN in European Partnership on Interoperability

UKOLN is currently working in partnership with the Technical University of Crete and the Ionian University on an aspect of the DELOS Joint Programme of Activities II (JPA II). We are concentrating on the interoperability of audio-visual digital libraries and e-learning applications, in order to support the modular development of personalised learning experiences.

The aim is to develop a robust model that will allow for the use of semantic descriptions of audio-visual content objects and/or segments that reside on a digital library. Our intention is to support the creation of reusable learning objects that may be employed in the assembly of personalised courses. In addition, the model will allow users who participate in e-learning activities to browse and retrieve audio-visual objects from digital libraries which match their interests, and to use them as learning resources.

Forthcoming Events

1st International Digital Curation Conference 29-30 September, Bath, UK http://www.dcc.ac.uk/training/dcc-2005/

IADIS International Conference WWW/Internet 2005 19-22 October, Lisbon, Portugal http://www.iadis.org/icwi2005/

CERN Workshop: Innovations in Scholarly Communications (OAI4)

20-22 October, CERN, Geneva, Switzerland http://oai4.web.cern.ch/OAl4/



15 November, Bristol, UK http://www.ukoln.ac.uk/events/michael-2005/

Inspiring eLearning Conference

16 November, Bristol, UK http://www.ukoln.ac.uk/events/nrgc-2005/

PV 2005

Ensuring Long-term Preservation and Adding Value to Scientific and Technical Data 21-23 November, Edinburgh, UK http://www.ukoln.ac.uk/events/pv-2005/

Please note that the names of authors of all items in **focus**, together with references and URLs are available at **http://www.ukoln.ac.uk/focus/**



ISBN-13 Standard Published

The new ISBN-13 standard is now published and implementation is on schedule for 1 January 2007. Some publishers have already started to print ISBN-13s as well as ISBN-10s on titles they issue; more will do so as the changeover date approaches. Library management system vendors are currently working on the changes needed for systems to deal with both forms of ISBN in the future. Book trade organisation BIC has issued guidelines on its Web site for the use and implementation of the new standard. Readers are referred to issue 41 of *Ariadne* Web Magazine for an article on the new standard.

Praise for Revealweb

Revealweb has received a Commendation of Widening Access to Information in the 2005 Jodi Mattes Awards, and was praised in the House of Commons Select Committee report on public libraries, which described it as 'the cornerstone of an integrated network of services for visually disabled people'. The database now has 112,528 titles, with 107 organisations on the register of suppliers. New contributors include 3 school support services, a special school and Bookdata. Ann Chapman of UKOLN, who developed the bibliographic standard for Revealweb, continues to provide advice to the Revealweb Database Management Group and is a member of the Policy Advisory Group.

Subject Indexing Review for Cornucopia

UKOLN's Policy and Advice team are currently carrying out a strategic review of subject indexing in Cornucopia for MLA. Cornucopia is an online database of information about collections in the UK, currently containing mainly museums data. UKOLN was asked to review the subject indexing in Cornucopia in the light of its planned expansion to cover collections in the library domain. An interim report was provided during August, with the final report to be submitted in September 2005.

Since the current Cornucopia subject term set was designed to cover museum collections, it was found to be unsuitable for indexing the subject coverage of library collections. The review has included an examination of a number of other term sets as well as sample mappings from the current terms. During consultation with potential contributors several issues about the searching process were highlighted; these are also addressed in the report.

Phase 2 of the review will cover Cornucopia current practice on the form of names, time periods and the provision of collection strength information. This is due to be completed in October.

Staff News

UKOLN welcomed Traugott Koch to its R&D Team in May where he began work on, among other things, eBank UK and the JISC Information Environment Service Registry. In July we said goodbye to Cora Eley who had been working as Assistant Resource Co-ordinator. Cora's work was to assist Jenny Taylor who headed the operations of the Resources Team during Sally Criddle's maternity leave. So we welcome Sally back to her desk, congratulate her on the safe arrival of baby Martha and also record our gratitude to Jenny for her sound coverage of Sally's duties. We also congratulate Monica Duke, Software Developer in Distributed Systems and Services, on the safe delivery of baby Portia and wish her well on her maternity leave. Finally, at the end of August, we welcomed Mahendra Mahey to UKOLN in his role as Digital Repositories Programme Support Officer.

Prize-Winning Paper at Alt-C Conference

A paper Implementing a Holistic Approach for E-Learning Accessibility has been awarded a prize for the best research paper at the Alt-C 2005 Conference held in Manchester over 6-8 September 2005. The paper, which builds on previous work carried out by UKOLN in conjunction with the fellow JISC-funded advisory service, TechDis, critiques the simplistic approach normally taken to Web accessibility and argues the need for a contextual approach which focuses on the needs of the users. Within the context of e-learning, the paper argues for the importance of accessible learning outcomes, rather than mandating that all e-learning resources must necessarily comply with Web accessibility guidelines. This approach does not reject conventional approaches, but provides a framework to allow decisions to be made within the area of student needs, the local environment and wider contextual factors.

The Other 'P' Word

As part of our work on the GroupLog Project, funded under the JISC 03/04 call for projects to develop e-learning tools for learners and teachers, UKOLN recently announced a Portlet Feasibility Study which looks at the feasibility of developing applications using the WSRP (Web Services for Remote Portlets) standard. GroupLog is a tool for supporting collaborative group work and facilitating tutor feedback in large cohorts developed by the Centre for the Development of New Technologies in Learning (CDNTL) at the University of Bath.

The report covers a review of the WSRP standard, includes several links to related resources, and reports on practical implementation experience using RDN Include as a case study. It is interesting to note that the development of 'portlet' standards, which primarily focus on the integration of complex server-side portal applications, is somewhat divorced from the growing interest in enhancing client-side functionality in the form of browser extensions - as seen in the Mozilla Firefox community for example. There seems to be potential scope for bringing these two approaches together.



Scenes from IWMW 2005, originals courtesy of Patrick Lauke, University of Salford, collage by *Ariadne* 44

IWMW 2005: Whose Web Is It Anyway?

UKOLN's annual Institutional Web Managers Workshop took place in early July in Manchester. The theme was *Whose Web Is It Anyway*? and plenary talks and parallel sessions covered many diverse areas relating to issues of management, control, users and ownership. The most popular session topics were: university blogging and what happens when everyone can publish; the Web management community present and future; dealing with external agencies; usability from the perspective of different user groups; and developing SMS interfaces. One interesting aspect of the workshop was the use of new technologies including wireless network and workshop chat rooms.

The Workshop's social agenda allowed ample time for networking. This year's highlight was a reception at the Manchester Museum of Science and Industry with a guided tour of 'The Baby', a rebuild of the world's first computer, developed in 1948.

The Tenth Workshop will be held over 14-16 June 2006 at the University of Bath. The workshop Web site is already live and the news section, providing details of the call for speakers and workshop facilitators, is available as an RSS file.

Do I DOI?

Not exactly the question on everybody's lips, but it is a question that has come up on a number of projects in which UKOLN has recently been involved. The eBank UK Project is currently considering the use of various 'persistent identifier' schemes for research data held in institutional repositories, including the Digital Object Identifier (DOI). Coincidentally, the Digital Curation Centre (DCC) recently ran a workshop looking at the highly complex and emotive issues around the persistent identification of digital objects. The presentations for the workshop are available from the DCC Web site, and a report is available in Ariadne, issue 44. Finally, UKOLN has recently become a member of CrossRef with the intention of assigning DOIs to all the articles published in the new DCC-sponsored International Journal of Digital Curation. However, as part of our agreement with CrossRef, we will also begin assigning DOIs to Ariadne articles as well.



The Success Story of Stories from the Web

Way back in 1996 Sarah Ormes of UKOLN experimented with creating a possible service model for a children's activity-oriented library Web site based on Stevenson's *Treasure Island*. The aim was to encourage children to develop both traditional and electronic literacy skills. The Treasure Island site proved very popular and won a number of 'site of the week' awards. Still retained as an archive, the site continues to register a significant number of accesses.

Encouraged by this success, UKOLN became partners with Birmingham, Bristol and Leeds Library Services in the development of a full-scale service model. *Stories from the Web* was developed out of this partnership and was headed by Birmingham Libraries. In 2002, with the site enjoying continued popularity, Birmingham Libraries secured funding for a transfer from UKOLN's UNIX Web server to a dedicated Windows 2000 server here, with its own domain name. UKOLN has provided technical support and advice on this project since its inception and continues to host the *Stories from the Web* server itself.

The site has gone from strength to strength, thanks to the dedication of its editors at Birmingham Libraries and their contributors. In 2004, for example, *Stories from the Web* won the e-Well Being Award, e-Government section, sponsored by the *Guardian* newspaper and others.

Metadata for the People's Network Discovery Service

MLA is co-ordinating the development of the People's Network Service (PNS), a suite of 'public-facing' digital services to deliver public library functions and resources online. One of the first of these services is the People's Network Discovery Service (PNDS) which facilitates access to cultural sector resources, community and government information and learning and reference resources.

UKOLN has contributed to this initiative by working with MLA to develop a metadata schema to support the functions planned for the PNDS. The schema is intended for use primarily by the cultural sector data providers, several of whom are providing a machine-oriented interface to their metadata databases for the first time, using the Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH). The metadata schema is specified as a Dublin Core application profile, the PNDS DCAP, describing how metadata terms from the vocabularies provided by DCMI and other sources are used in DC metadata descriptions supplied to the PNDS. An XML binding for descriptions conforming to the profile is also provided. UKOLN has collaborated with the developers of the PNDS to support data providers working with the schema.

IE Schema Registry Project Extended

JISC has granted funding under its Shared Services Programme for a second phase of work on the development of the Information Environment Metadata Schema Registry. The IEMSR provides services based on information about 'metadata terms' deployed in resource description within the UK learning, teaching and research communities.

In the first phase, data models were developed for metadata application profiles of the two principal metadata standards in use in this context, Dublin Core and the IEEE Learning Object Metadata standard. An initial set of tools has also been developed: a registry data server which provides a persistent data store and supports queries on that data; a data creation tool which supports the creation of data for submission to the server; and a Web site which allows human users to browse and query data made available by the registry server.

An initial evaluation indicated a need to explain more clearly the role of the registry and the functions it supports, and to provide a clearer indication of the benefits it offers. With this in mind, phase 2 of the project will include the development of more detailed use scenarios to reinforce the business case for a registry service within the JISC IE.

Progress on AACR3

Feedback on the draft revision of Part 1 of the Anglo-American Cataloguing Rules has resulted in a change in direction for the revision. This will now re-assess the principles behind the rules and their application to a wider set of resources than traditional library materials. It will also aim to use language that is more widely understood outside the library community. To reflect these changes, the current working title is now Resource Description and Access (RDA). The primary format will be an online resource, with derived print versions. Completion is planned for early 2008. Ann Chapman of UKOLN Policy and Advice Team is a member of the CILIP/BL Committee on AACR.



Accessible Content on a Shoestring?

An EEMLAC workshop entitled Work That Website! Delivering accessible content to users was held in Cambridge in mid-July and aimed to help delegates become more effective contractors of their own site. The event was co-facilitated by Matt Lindop from WebProjects and Emma Tonkin of UKOLN, a combination that afforded a valuable opportunity to mesh commercial, academic and practical viewpoints. Issues discussed included accessibility and usability concerns; interaction; and also the ways in which a Web site can be adapted to maximise the benefits to all stakeholders. Feedback on the event was very positive.

However, the various organisations represented at the workshop varied considerably in their needs. Finances frequently prohibit an outsourcing approach, requiring other solutions such as a slightly customised off-the-shelf Open Source-based strategy. Flexibility is key. Other points to consider include awareness of available services and initiatives, support of existing infrastructure and the difficulties sometimes encountered in coping with the learning curve of technology.

DCC Information Days Triangulate the Land

The Digital Curation Centre is committed to a programme of outreach and practical services to assist those who face digital curation challenges. It also seeks to learn from the experiences of those already curating their own data. To facilitate this process, the DCC is organising a series of regional information days. There have already been three events to date in London, Glasgow and at the University of Bath. These events offer an opportunity to meet representatives of institutions with real curation concerns and encourage collaboration and sharing of ideas. In addition to the regional information days the DCC is seeking to learn from those who already have welldeveloped curation practices. On 16 June a number of DCC staff spent the day at the National Institute for Environmental e-Science (NIEeS) in Cambridge. The aim was to discuss the long-term curation of environmental data. Following this meeting the DCC was invited to sit on the Natural Environment Research Council (NERC) Data Advisory Board.

DCC Web Site Offers Users New Features

The Digital Curation Centre Web site was re-launched on 31 May and now offers new features including:

Events calendar

News page for both DCC and external news DCC events pages for all types of DCC events RSS feeds of news and events Online submission form for helpdesk queries

The above developments represent stage one of the redevelopment of the DCC Web site carried out by staff at EDINA, NeSC and UKOLN. The priorities of stage one were to improve the navigation and design of the site and to implement as many new features as possible in the two months that were available before the re-launch. The second stage of the redevelopment will focus on the DCC intranet, while work continues on developing and extending the functionality and content of the new Web site.

UKOLN Co-authors Digital Repositories Review

The JISC is funding over 20 projects in a new programme relating to digital repositories across learning and research in HE and FE. The programme will bring together repository development across various domains: research, learning, information services, institutional policy, and management administration and records management. Projects will be investigating repository services for learning objects and scientific research datasets as well as textual publications.

The Arts and Humanities Data Service (AHDS) and UKOLN produced a Digital Repositories Review to provide background information for participants in the call. The review gives a snapshot of current activity and by means of a gap analysis identifies issues both technical and organisational that need to be addressed within the programme.

Two Digital Repositories Programme support posts have been appointed at UKOLN to synthesise the outputs of the programme and to build reference models to support the repository infrastructure. UKOLN will be working closely with CETIS in this support role, as well as with the projects and the JISC programme manager, Neil Jacobs.

Message from the Editor

Welcome to the latest issue of **focus** with its mixture of news and comment from across all teams here at UKOLN. All authors and references, including sometimes lengthy URLs, are available at http://www.ukoln.ac.uk/focus/ the Web version.



UKOLN also publishes Ariadne, a Web magazine for information professionals in archives, libraries and museums in all sectors. The current Summer issue, no. 44, contains a series of articles on accessibility from a variety of well-placed commentators including one on how Mozilla Firefox can be used to carry out a preliminary accessibility review.