The Digital Curation Centre

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The Joint Information Systems Committee and the e-Science Core Programme established a Digital Curation Centre (DCC) in March 2004. This article will briefly outline the centre's objectives and main activities to date.

Background

The Digital Curation Centre was set up to support those UK institutions responsible for the management, preservation and curation of digital information of all types, whether research data, publications or institutional records. Specifically, the purpose of the centre is to provide a national focus for research and development into digital curation issues and promote expertise and good practice, wherever it exists, for the continued stewardship of research outputs in digital form.

The centre's stated mission is "to support and promote continuing improvement in the quality of data curation and of associated digital preservation." Specific aims include conducting innovative research, engaging with the curators and scientists that generate and use data, and building two-way links between research and practical curation activities.

The DCC is a coalition of four main partner institutions: the universities of Edinburgh and Glasgow, the Council for the Central Laboratory of the Research Councils (CCLRC), and UKOLN, University of Bath. The Director (Chris Rusbridge) is based at the University of Edinburgh, co-ordinating a distributed team through a management group made up of associate directors responsible for each of the centre's main activity areas: research, development, service definition and delivery, outreach and community support.

Research

Current DCC research work is focused on a range of different subject areas. These include studies of data provenance, the role of annotation in databases, the automatic capture of semantic metadata, and the development of repository environments where data can be analysed safely. The DCC research team is also investigating a number of non-technical issues, including the legal and socio-economic contexts of curation. The DCC also hosts a regular seminar programme, with presentations by researchers invited through a visitors' programme.

Development

Allied with the research programme are a series of more practical development activities, concentrating on the transformation of research products into services. To date, the work of the development team has mainly been focused on developing tools to

support the distributed management of 'representation information,' as defined by the influential Reference Model for an Open Archival Information System (OAIS). Representation information is a rich concept in the OAIS model, referring to all of the additional information (metadata) required to convert bit sequences into more meaningful information. Because the same representation information will, in many cases, be applicable to a large number of data objects, it is a prime candidate for the development of shared services like registries. The DCC development team has developed a model and prototype of a distributed registry and repository of representation information.

Services

The DCC provides a range of services and resources to support creators, curators and re-users of digital information. In addition to briefing papers, case studies, and the DCC Digital Curation Manual, the DCC also offers an on-demand helpdesk system to answer queries relating to digital curation issues. The DCC carries out regional information days, which provide information on the DCC and provide a forum for participants to discuss curation requirements with DCC staff. The DCC also runs a series of events on digital curation topics such as persistent identifiers, digital repositories, and future-proofing Websites.

The DCC services team is currently working with the Center for Research Libraries (CRL) to assess the viability of the Audit Checklist for Certifying Digital Repositories created by the RLG/NARA Certification Taskforce. Following an initial pilot audit of the digital repository at the Koninklijke Bibliotheek in April, the DCC will carry out additional pilots across the UK in 2006.

As part of the JISC/CURL LOCKSS Pilot Programme, the DCC is providing a LOCKSS Technical Support Service (LTSS). In addition to gathering valuable community feedback on the usability and functionality of the LOCKSS preservation system (http://www.lockss.org/), this service will also provide both technical and non-technical support to the UK LOCKSS community, including first line support and development of publisher specific plug-ins, as well as training and awareness raising events.

Outreach

The centre's outreach activity domain is responsible for promotion of the DCC, and dissemination of its main outputs to its stakeholder communities. It is, for example, responsible for the main DCC Web portal, which is rapidly becoming a major information resource on digital curation and preservation topics. The DCC also organises an annual international conference, the first of which was held in Bath last September. The next conference in this series will take place in Glasgow on 21-22 November 2006.

From a very early stage, the DCC recognised the value of structured collaboration with all of its stakeholder communities. In order to facilitate this, it has set up an Associates' Network that all interested institutions, organisations and individuals are invited to join. Membership is open to all higher and further education institutions and to all individuals who are engaged with the creation, curation or use of digital information. Membership is free and benefits include reduced fees for some DCC events and the ability to participate in the online discussion forum (http://forum.dcc.ac.uk/). Please consider joining our Network and sharing your digital curation experiences and concerns with the DCC.

More detailed information on all DCC activities can be found on the centre's Web site: http://www.dcc.ac.uk/