Notes on developments affecting the Scottish Common Information Environment 2004-2005

Gordon Dunsire briefs WIDWISAWN on recent developments within the Scottish Common Information Environment infrastructure

Introduction

This article is based on a report to a follow-up meeting of the CC-interop project which investigated issues in physical and distributed union catalogues using COPAC (CURL OPAC) and the Z39.50 "clumps" which include CAIRNS. The CC-interop final report (pdf) was published in 2004.

CAIRNS (Cooperative Information Retrieval Service for Scotland)

CAIRNS currently offers 50 Z39.50 catalogues for meta-searching. Due to various issues at the target end, including planned down-time and server connections, around 40-45 of these catalogues are available at any one time.

The main growth of CAIRNS has been the addition of catalogues of some 20 public libraries. This was carried out as part of the Scottish Portals for Education, Information and Research (SPEIR) project funded by the Scottish Library and Information Council (SLIC). Residual resources from the People's Network initiative were used to assist public libraries in implementing Z servers. Most of the remaining 10 or so public library services in Scotland have indicated that they would wish to join CAIRNS when local technical and administrative issues are resolved.

The SCAMP maintenance interface has been augmented to allow CAIRNS targets to be switched on and off with a "control-panel" style of interface. CAIRNS targets can go offline for a variety of reasons, not least because many public libraries find it difficult to ensure that Z servers are kept running. It is also inevitable that some CAIRNS targets remain offline for several weeks during system upgrades and migration. The control panel allows a "national grid" style of overview of the current operating status of the clump.
Several of the public library catalogues do not offer the full set of CAIRNS index options (author, general, subject, and title keywords, and ISBN and ISSN), so the CAIRNS catalogue selection interface has been developed to remove such catalogues from the selection list if the chosen index is not available. The targets are "greyed-out" rather than entirely removed. Full index compliance has therefore been removed as a requirement to join CAIRNS.

Somewhat surprisingly, it was also found that all of the new catalogues supported the standard title keyword search, rather than the general keyword index that had been assumed. The CAIRNS interface has been amended to offer the title keyword search as a default in the "simple" search facility, and is pre-selected in the "advanced" facility; that is, all targets are available for selection with this default.

The SPEIR project also funded the development of work arising from a student placement at CDLR. The student analysed common characteristics of catalogues and other finding aids, and produced a draft taxonomy of attributes which might augment user selection of meta-search targets. For example, the kinds of help available for using catalogues fall into around 10 types (context-sensitive, on-screen, guidance manual, etc.). The SCONE database which drives CAIRNS has been amended to accommodate the attributes and taxonomies, and tested with a small number of real examples, but work to populate SCONE with data and use it to augment CAIRNS and SCONE remains to be done. The idea is to be able to offer dynamic clumping based on catalogue services when CAIRNS is extended beyond Z39.50. For example, "Select catalogues which offer output of search results to a standard citation manager".

The CAIRNS web pages are currently being upgraded to support the full implementation of Cascading Style Sheets
(CSS) to improve machine-readability for the visually-impaired and provide flexibility for different interface styles.

**SCONE (Scottish Collections Network)**

The SCONE database which drives CAIRNS has been amended as noted above.

Other amendments which affect general resource discovery include accommodation for information about access to the Internet via public libraries, in terms of numbers of public-access computers, physical access to buildings, and availability of adaptive and assistive technologies for users requiring them. The information is currently displayed in the SLIR (Scottish Library and Information Resources) online service.

![Screenshot: The SLIR record for Anstruther Library, showing enhanced access details and a link to the appropriate Google map.](image)

There is also a current initiative to add information about electronic services offered by public libraries, including availability of training packages for IT literacy, Web filtering facilities, acceptable use policies, etc. This is likely to be extended to other Scottish libraries during 2006.

Some of this information will be used for display purposes, to help users identify suitable collections for further searching. Some of the data will be used to augment dynamic landscaping of SCONE collections, which is another method of dynamic clumping (selection) of CAIRNS targets. Some of the information is for management purposes, and not intended for public use.

Collection description records in the public SCONE service now link to Google maps via the postcode of the location. Records also contain links to "more collections like this" with respect to location, agent (collector, owner, etc.), and subject.
The SCONE record for a museum collection, showing links to collections located in the same town and collections on the same subject. The record also has a Dewey Decimal Classification number.

Library of Congress Subject Headings (LCSH) and Dewey Decimal Classification (DDC) numbers have been added to many of the SCONE collections, to improve subject-based landscaping.

The Centre for Digital Library Research has been participating in the development of a metadata schema for collection descriptions for the Dublin Core Metadata Initiative (led by Pete Johnston of UKOLN), and is aware of the recently published draft NISO standard for collection description. CDLR hopes to update the SCONE mappings to external schema originally developed for cc-interop.

The SCONE web pages have been upgraded to fully support CSS.

**SDDL (Scottish Distributed Digital Library)**

This is a pilot service funded by SPEIR. Further information can be found in a separate article in this issue of Widwisawn.

**Collecting Scotland**

This is a working group set-up by the National Library of Scotland to develop the Strategy for Scottish materials, originally published in 1999 by the NLS and SLIC, to incorporate digital materials.

The group has representatives of the archives and museums communities in Scotland, and intends to use SCONE as a tool to achieve its aims.
HaIRST (Harvesting Institutional Resources in Scotland Testbed)

HaIRST, a JISC-funded project, ended late in 2005. It investigated issues in developing a union catalogue based on the OAI-PMH for harvesting metadata from institutional repositories.

The project successfully tested the incorporation of such a harvested union catalogue into the CAIRNS distributed union catalogue, and work is ongoing to fully incorporate the HaIRST catalogue into CAIRNS.

HaIRST also investigated the potential for "static repositories" to integrate metadata from digitisation projects into harvested catalogues, using the Springburn Virtual Museum as a case study.

Further research on static repositories is currently underway as part of the JISC-funded STARGATE project.

CDLR is also carrying out technical research and development for the JISC-funded IRI Scotland project which aims to develop an infrastructure for digital repositories supporting research in Scotland.

HILT (High Level Thesaurus)

CDLR has just commenced phase 3 of the JISC-funded HILT project to investigate content interoperability in subject metadata across distributed catalogues, following a feasibility study on the development of a machine-to-machine interface using SOAP/SRW technologies. Development of HILT will allow end-user subject terms to be better matched to subject indexes available via CAIRNS and SCONE, and improve subject-based collection landscaping.

Although many of these developments have been driven by the library domain, they are applicable and useful to archives and museums in the Scottish Common Information Environment. If you would like further information, or have your collection and finding-aids incorporated into the SCIE, please contact me at g.dunsire@strath.ac.uk

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