Light at the end of the tunnel: transitioning from one interlending system to another

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Abstract
Purpose – This paper aims to outline the transition of two libraries from one automated interlending system (OCLC VDX) to another (Relais ILL).
Design/methodology/approach – The paper provides historical background and context for the change, the transition planning, processes undertaken to ensure success, and the challenges and lessons learned along the way.
Findings – The authors report that, although the transition process went fairly smoothly, libraries planning for a similar transition should build some flexibility into their overall planning process and be prepared to pay close attention to their communication processes.
Originality/value – Libraries planning a transition from one interlending system to another will find this paper quite useful. Any library using either the VDX or Relais interlibrary systems will find the appendix of comparable ISO ILL terminology helpful as well.

Keywords Interlending, Australia, VDX, LADD, Relais ILL, Change management

Paper type Case study

In 2010, two Australian libraries made the unusual decision to move from one successfully operating interlending system to another equally successful interlending system. Why? How? What was involved?

This paper will examine the circumstances that led to this decision and outline the progression from review and analysis of interlending systems available in the Australian marketplace, to the detailed project management and the transition to and implementation of the new system. Issues discussed will include the preparation, planning, anticipated and real impact on the library user experience, consultations and collaborations required to achieve a successful transition, as well as some of the trials and tribulations experienced along the way.

An overview of the Australian interlending and resource sharing environment, a complex mixture of local systems that use the ISO 10160/10161 ILL protocol run by individual libraries and library consortia alongside a nationwide network of libraries that use the Libraries Australia Document Delivery System (LADD) and the sophisticated interoperability gateway that manages transactions and payments between libraries, will be included.

Background

Australian librarians first formally explored the possibilities for automating interlending systems through the Coordinated Interlibrary Loan Administration (CILLA) Project Feasibility Study in 1996. The CAVAL Information Delivery and Electronic Requesting (CIDER) Project, from 1997 to 2000, enabled participating libraries to exchange requests using an automated system for the first time (Tucker et al., 1998). In 1999, the CIDER Group became part of the larger national Local Interlending and Document Delivery Administration System (LIDDAS) Project, a joint initiative of the Australian Vice-Chancellor’s Committee and the National Library of Australia (Pearson, 2000). The LIDDAS Project was completed in 2003 with the launch of the Virtual Document eXchange (VDX) software in the production environment (Missingham, 2006).

In 2000 several of the libraries that participated in the CIDER project agreed to implement LIDDAS as a consortium. This consortium, initially called the CIDER-2 Consortium, was renamed the CAVAL LIDDAS Consortium (CLIC), later the CAVAL VDX Consortium, and later again the CAVAL Interlibrary Consortium, but always retained the CLIC name (Jilovsky et al., 2006). On the other side of the country, 4000 kilometres away, Western Australian Group of University Libraries (WAGUL), also participants in the LIDDAS Project, was the first to implement the VDX software successfully in a production setting (Burrows et al., 2004). WAGUL’s success gave CLIC the confidence to make the move from a test to a production environment and initiated the era of ISO ILL compliant requesting in Australia.

After almost a decade of operational interlibrary loan (ILL) systems there has been considerable evolution in the Australian interlending environment. There are now a
number of automated ILL systems on the market which have been successfully implemented both in Australia and internationally.

The Australian environment

Australian libraries adhere to the Australian Interlibrary Resource Sharing (ILRS) Code[1]. The ILRS Code is designed to support a multi-faceted approach to resource sharing based on cooperation and fairness between libraries and respect for the moral and intellectual rights of creators and publishers. It contains a list of agreed expectations, principles, standards, and recommended prices for service. This code underpins all resource sharing in Australia.

Most Australian libraries use the Libraries Australia Document Delivery (LADD) system to request and supply resources. LADD incorporates an automated Interlibrary Loan Payments Gateway service. All ISO ILL transactions between Australian libraries are recorded on the Gateway, which acts as an aggregator of these transactions, providing a single invoice/payment for libraries. Library staff value this service, as it means that individual libraries do not have to process multiple invoices/payments from transaction partners. The Payments Gateway also provides invoices and payments in Australian dollars, so individual locations do not have to concern themselves with foreign currency exchange rates for overseas transactions (Panagiotidis and Ong, 2007; Moreno and Xu, 2010; Hannington, 2010).

The National Library of New Zealand Te Puna interloan system also interoperates with the LADD Payments gateway, providing a seamless service for library users accessing resources across the Tasman Sea (Reid and Hannington, 2010; Reid, 2011).

The seamless and successful operation of the Australian and New Zealand ISO ILL environment is underpinned by the stringent requirements for each library to set up, install, and comprehensively test the interoperability of their system with Libraries Australia and with the LADD Payments Gateway before commencing live operations. In addition each library is required to sign a Memorandum of Understanding with the National Library, which clearly defines the responsibilities of all parties. Details of the current requirements and processes are on the Libraries Australia ISO ILL Interoperability web site[2].

Along with the development and implementation of automated systems, the broader interlibrary loans and document delivery environment in Australia has been reviewed by several consultative groups including the National Resource Sharing Working Group, the National Resource Sharing Policy Committee, and the Australian Library and Information Association (ALIA) Interlibrary Lending Advisory Committee (ILAC).

These groups identified and achieved considerable change including conducting a major benchmarking study in 2001 and implementation of consequent best practice initiatives (Missingham and Moreno, 2005).

The CLIC Consortium

CLIC was established in 2000 to provide configuration and support to member libraries, to share expertise, and to assist libraries in managing a complex automation product. A key component of the consortium was the provision of system management, software configuration, operational support, and training by a centralised support team run by and located at CAVAL. The CLIC VDX system was delivered via a shared hosted system managed and maintained by OCLC. The system consisted of a single database with individual institutional views and a separate, institutionally branded web interface for each institution.

Each CLIC member paid CAVAL an annual fee which enabled CAVAL to employ specialist staff to configure, support, implement and enhance the VDX services provided to customers. As a result of this value-added service, CLIC member libraries did not need to employ their own specialist staff and could instead concentrate on operational matters and customer service.

The review

In 2008 the six academic libraries making up the CLIC Consortium agreed that the time was right to review their operations and CLIC’s place within the broader Australian interlibrary environment. Several of these libraries had been using the LIDDAS/VDX software for almost ten years. One of the strengths of VDX is its flexibility and configurability and hence each individual library had implemented it to meet the specific needs of their own user community. This included functionality such as managing cross campus services and services to external, remote and offshore students as well as the efficient management of busy interlibrary loan and document delivery operations.

The CLIC Review began with a scan of the current interlending environment. The group quickly recognised that the environment was significantly different to that in which the original opportunity was developed. CLIC members identified an additional need to review the functionality and pricing of alternative ISO ILL systems, to be incorporated in the overall review.

The review was completed in September 2009 and, following analysis of the results, members began planning for 2010 as a transition year. RMIT, La Trobe, Macquarie, and Victoria Universities decided to continue using VDX and to move as a group to the OCLC hosted service in Dublin, Ohio. This migration was successfully completed in November 2010 and these four libraries now operate as Eastern Australian Group of University Libraries (EAGUL).

The University of Newcastle and CAVAL’s CARM Centre made the decision to migrate their ILL operations to the Relais ILL system developed by a Canadian company, Relais International.

The University of Newcastle

The University of Newcastle (UoN) is located on the east coast of Australia, two hours drive north of Sydney. It is a comprehensive, international university ranked in the top ten of Australia’s research institutions. It has a student body of over 35,000, including over 7,000 international students from more than 80 countries, studying both on and off-shore in business, engineering, medicine, nursing, science, teaching, and technology.

The UoN Library provides services at six campuses and other affiliate locations. Staff and students have access to more than 1.5 million physical items and over 323,000 online books and journals.
Interlibrary Services process approximately 32,000 requests per year, with outgoing request processing centralised at the main campus and decentralised supply from each library.

UoN Library commenced automated end-user requesting in 2001 with the launch of Get It, the UoN online requesting service. Get It is used for requesting not only interlibrary loans, but intercampus copies and distance or remote student requests for copies or loans (see Figure 1).

**CAVAL CARM Centre**

CAVAL Ltd is a not-for-profit company established in Melbourne, Australia in 1978 and jointly owned by 11 Australian universities. CAVAL provides a comprehensive range of specialised services to libraries on a collaborative and commercial basis including consultancy, executive leadership development, shared cataloguing services, interlibrary loan and document delivery services and systems, digitisation services, copyright permission services, and off-site storage for library and archive materials.

The CARM Centre in Melbourne was initially established in 1996 for the CAVAL member libraries as a purpose-built, print repository for last-copy research publications and artefacts. The construction and implementation of the second stage of the CARM Centre print storage facility, known as CARM2, was completed in October 2010. The facility is Australia’s largest collaborative storage facility for university libraries and provides secure, environmentally controlled long-term storage for up to 7 million volumes at maximum capacity. Further details are available from the CAVAL web site[3].

The CARM Shared Collection, stored and managed by CAVAL, is made accessible to both member and non-member libraries through the interlibrary loans network. As most of this collection is older research material, usage is low, for example only 1,200 requests were supplied in 2010.

**How did we do it?**

Although both CARM and the UoN Library are both transitioned to Relais ILL, we will primarily outline the UoN experience as the more typical library operation.

**Configuration, data and interoperability**

The transition process was managed by the CAVAL Support team. Several team members had long experience with the ISO ILL protocol in the Australian environment through VDX Support for the CLIC Consortium. In addition, CAVAL became the Australian partner of Relais International in July 2009 and began offering local support and hosting to Australian users of Relais ILL.

The UoN also contracted CAVAL to provide a “value-added” or “managed service” for the Relais ILL implementation, similar to that previously provided as part of the CLIC Consortium and VDX, resulting in all configuration and IT issues being handled by CAVAL on behalf of UoN.

**The planning process**

The National Library of Australia and OCLC provided valuable assistance to CAVAL in the transition of the University of Newcastle and the CARM Centre from the CLIC VDX system to the Australian Relais Hosted Service. In particular an early brainstorming session identified that the LADD gateway would not support a single library with two sets of ISO ILL requests still being processed. Consequently the transition would need to be undertaken in several steps, and that for each step involving ISO requests, the requests would need to be allowed to go through the full lifecycle. Figure 2 illustrates the process.

It was decided early on in the planning process that, while not impossible, it was impractical to migrate any data or transactions from the OCLC VDX ILL system to the Relais ILL system. Instead an archived dataset was exported from VDX, which can be queried directly if any historical data is required in the future, e.g. for copyright auditing processes. The documented configuration of VDX was used as a specification for the configuration of Relais ILL with the aim of providing equivalent functionality. However, as this provided an ideal opportunity to review and re-design workflows, the outcome also incorporated more efficient operations.

The full transition from the last request placed on the old system (Step 1 in the Figure 2 above) to the first successful request being placed on the new system (Step 4) took approximately eight weeks, with the new system going live on 8 December 2010.

**Workflows, processing, and the staff perspective**

The transition from one system to another presented the opportunity to review and rethink workflows and practices. Although to some extent dictated by the nature of system, the new workflows were assessed to ensure efficiency and best practice, with all processing staff involved in the development of procedures (see Figure 3).

As mentioned previously the transition required a stepped process, with both incoming and outgoing requests continuing to be processed. UoN remained active participants in the resource sharing network throughout the entire transition process. LADD was used as the transition platform, with the effect that processing staff were responding to and managing requests in both LADD and an ISO ILL system at the same time during the entire transition process, firstly with VDX/LADD and then with LADD/Relais ILL.

As UoN and CARM participate in the Australian resource sharing network, it was also essential to ensure that the transition did not impact adversely on other libraries. Our resource sharing partners were notified of the impending transition and kept informed of any changes that might have affected interactions.

**Figure 1** University of Newcastle “Get It” logo
It should be mentioned at this point that LADD uses a less enhanced version of the VDX system; therefore, little training was required for processing staff, as they were familiar with the terminology and workflow, having used the enhanced version as the original Get It.

Two days of face-to-face training for Relais ILL was provided on site at the University of Newcastle, prior to system delivery and final configuration, with all processing staff attending. This proved invaluable as a starting point for planning of workflows and procedures.

To further assist staff in the transition from VDX to Relais ILL, a table of equivalent VDX and Relais ILL terminology was created (see the Appendix, Table AI). This is a more detailed version of the ISO ILL Thesaurus[4], which appears on the Libraries Australia website for ISO ILL partners.

Feedback from processing staff has been very positive. All are delighted with the new system and the transition process, despite the difficulties of operating with dual systems during the process. They now feel they are part of a more efficient operation.

Publicity, promotion, and the end-user perspective

An earlier decision to brand the UoN online requesting system as Get It proved to be invaluable when it came to promotion and communication to the end-users of the changes about to take place. This allowed for any number of alterations or system changes to take place behind the scenes as long as the interface and primary functionality remained familiar and consistent with the service that they had come to recognise.

Put simply, the introduction of the new system was promoted as an enhancement or improvement to the service rather than a change of system. To facilitate this, CAVAL worked on ensuring the colour scheme, layout, logo, and structure of the web interface closely resembled the previous customised interface.

All current users of the service (Honours students, postgraduate students, and staff) received personal notification advising of the improvements to the service and inviting feedback once the changes were implemented. As the new system also addressed some previously negative issues highlighted in feedback from users, these were also promoted as improvements, e.g. preference for delivery of.pdf articles as a link in the notification e-mail rather than having to log in to the system to retrieve. All publicity and support material including the web site, user guide, and FAQs required only minor alterations to reflect the improvements.

A decision to offer the Get It service to all UoN staff and students coincided with the launch of the improvements, which further enhanced the appeal of the service.

As a consequence of the decision to not migrate data from VDX to Relais ILL, all previous citation data or request history was not readily accessible to end-users via the new system. Instead users were provided with a file of their past citation and request history. Upon implementation of the new
Challenges

As with any project, there are always challenges. Here are the main issues encountered during this project and briefly how they were addressed.

Communication and understanding
The need to transition to a new system and the benefits this would bring were clearly communicated and understood by processing staff and most library staff very early in the project. What was not immediately clear was the necessity for processing staff to be trained and capable of requesting and responding to requests in two systems in tandem and three different systems over a period of approximately 16 weeks. To assist with developing capability, intensive training was provided and specific processing instructions developed for different scenarios/workflows for each system, as well as the previously mentioned list of equivalent terminology (see the Appendix, Table AI).

Although every effort was made to communicate all changes to operations to our national resource sharing network partners with announcements via web pages, formal and informal e-mail lists and mail outs, inevitably some libraries remained unaware of the impending changes and were confused, e.g. as to why our request identification numbers were varied or whether we were suspended from supply or not. Often these misunderstandings were simply addressed with a quick phone call and explanation.

Timing and timeframes
The deadline for implementation of no later than mid-December 2010 was based on the contractually negotiated
date for decommission of the old CLIC system. This date effectively dictated the timeline for transition planning.

Initial planning and discussion with the two vendors, CAVAL, and both libraries for the transition commenced in May 2010; however, it was not until mid-September 2010 that we were able to orchestrate a meeting of all parties including representatives of LADD. At this meeting it became apparent that our previously scheduled timeline and process plan would need to be radically altered to accommodate the need for a staged implementation via the LADD system and therefore a requirement for additional and more stringent testing on the national system. Effectively, this meant launching into the second stage of transition within three weeks of that meeting.

Aligning availability of all contributing parties to ensure appropriate testing and configuration changes proved to be a complex task and at times required some urgent negotiations. The September meeting of stakeholders was a pivotal point in the process, and it was through the shared vision and commitment established there that we were able to move so swiftly towards the goal. The two system vendors, CAVAL, and the LADD staff were very accommodating in their efforts to assist in the process, not the least because of the fact that this was the first transition of its type in the world. All were keen to create a template for future transitions and achieve success as seamlessly as possible.

Several other issues impacted on timing, e.g. completion of the request life cycles to fit into the different stages of transition, determining peak periods of ILL use at UoN to avoid disruption, and availability of vendor support staff for scheduling configuration and testing.

Authorisation
The pending implementation of an identity management system (IDM), with a single sign on for UoN staff and students, did cause some initial concern with regard to impact on end-users and a choice of patron loading options. Initially, end-users were confused as to which username or password to use as the IDM had not been fully implemented; however, this was addressed with explicit instructions and reminders provided at the point of requesting.

Lessons learned
The transition of the interlending operations at the UoN and the CARM Centre from VDX to Relais ILL was successfully achieved. However, in spite of our careful planning which incorporated regular monitoring and communication with our stakeholders, along with regular discussion and review of issues as they arose, there were some stressful moments. We recommend that anyone else contemplating a similar transition project incorporate the lessons we learned into the planning. In particular:

- As with all planning: make no assumptions, establish the facts, ask the questions, and … clarify, clarify, clarify.
- Build in some flexibility.
- Branding your service helps to hide alterations behind the scenes.
- Make sure you have everyone on board and heading in the same direction.
- Communicate everything … it is never too much.
- Keep your sense of humour.

Notes
1 The full Australian Interlibrary Resource Sharing Code can be found at: www.nla.gov.au/initiatives/ilrscode/ilrscode.html
2 The Libraries Australia ISO ILL Interoperability web site can be found at: www.nla.gov.au/librariesaustralia/services/docdel/iso-ill/
3 For more information on CAVAL, see their web site at: www.caval.edu.au/carm
4 See www.nla.gov.au/librariesaustralia/services/docdel/iso-ill/ for detailed information on ISO ILL interoperability with LADD.

References

Further reading
Appendix

Table A1  Equivalent system terminology

<table>
<thead>
<tr>
<th>OCLC VDX</th>
<th>Relais ILL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zportal</td>
<td>Patron web form</td>
</tr>
<tr>
<td>Web admin client</td>
<td>Staff web form</td>
</tr>
<tr>
<td>Windows admin client</td>
<td>Window client</td>
</tr>
<tr>
<td>Work queues</td>
<td>Monitor queues</td>
</tr>
<tr>
<td>Location</td>
<td>Supplier record</td>
</tr>
<tr>
<td>Naming authority</td>
<td>Registration source</td>
</tr>
<tr>
<td>NUC</td>
<td>Supplier Code/Library symbol</td>
</tr>
<tr>
<td>Long description</td>
<td>Supplier name</td>
</tr>
<tr>
<td>Item format</td>
<td>Publication type</td>
</tr>
<tr>
<td>Rota</td>
<td>Routing list</td>
</tr>
<tr>
<td>Requester/borrower</td>
<td>Library</td>
</tr>
<tr>
<td>Responder/lender</td>
<td>Supplier</td>
</tr>
<tr>
<td>Incoming</td>
<td>Supplying – internal (COR, RUS and XPR request numbers)</td>
</tr>
<tr>
<td>Outgoing</td>
<td>Requesting – external (PAC, PAR &lt; PAE request numbers)</td>
</tr>
<tr>
<td>Suspension (suspended – no or suspended – yes)</td>
<td>Supplier (active or inactive)</td>
</tr>
<tr>
<td>ILL no/our number</td>
<td>Request number</td>
</tr>
<tr>
<td>TGQ/their number</td>
<td>External number</td>
</tr>
<tr>
<td>Drag and drop</td>
<td>Request processing – add document</td>
</tr>
<tr>
<td>Create request (in Zportal)</td>
<td>Request book/request article</td>
</tr>
<tr>
<td>Non-supplied</td>
<td>List exhausted</td>
</tr>
<tr>
<td>Messages and answers</td>
<td>Alerts</td>
</tr>
<tr>
<td>User alerts</td>
<td>Patron notifications</td>
</tr>
<tr>
<td>Copy non-returnable (service type)</td>
<td>Copy</td>
</tr>
<tr>
<td>To be authorised</td>
<td>Initial evaluation and search</td>
</tr>
<tr>
<td>Idle/Check Manual</td>
<td>Initial evaluation and search</td>
</tr>
<tr>
<td>Authorised</td>
<td>Distribute requests</td>
</tr>
<tr>
<td>Pending – outgoing</td>
<td>Process requests (S/U – scan or update queue)</td>
</tr>
<tr>
<td>Shipped – outgoing</td>
<td>Process requests (S/U – scan or update queue)</td>
</tr>
<tr>
<td>Received – outgoing</td>
<td>Process requests – deliver requests</td>
</tr>
<tr>
<td>Returned – outgoing</td>
<td>Process complete</td>
</tr>
<tr>
<td>Pending – incoming</td>
<td>Process requests (search auto/search manual)</td>
</tr>
<tr>
<td>In process – incoming</td>
<td>Process requests (search auto/search manual)</td>
</tr>
<tr>
<td>Shipped – incoming</td>
<td>Processing complete (no longer appears in queues)</td>
</tr>
<tr>
<td>Returned – incoming</td>
<td>Processing complete (no longer appears in queues)</td>
</tr>
</tbody>
</table>

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