Study **Grant Award** 2006

Bringing Archiving to the Desktop

Many libraries have moved to electronic-only journal subscription. This transition is being cheered along by library clients, but the change does come with a few pitfalls. Little attention is directed to the continuity of access to important electronic collections. Established collections can be 'lost' if subscriptions are not renewed, different electronic database suppliers take over, or suppliers become bankrupt or change their business practices. In this context 'Electronic Collection Building' could be considered an oxymoron.

The ALIA 2006 study grant provided the impetus to undertake proof-of-concept research into the design of a 'Smart Client' application for digital archiving of e-journal subscriptions held by special libraries. Research comprised of an initial survey of archiving experience in Australian special libraries, and architectural design and proof-of-concept implementation of an archiving application designed around an open-source, java based approach. Modern approaches to software design can bring considerable capabilities to the desktop, using a combination of centralised metadata and local processing – the 'Smart Client'.

Responses from 164 Australian special libraries indicate that many libraries encounter loss of subscription coverage due for a variety of reasons, and that few have an e-journal archiving strategy. Implementing an archiving application that is suitable for installation in a special library context where information technology support may be minimal is the prime objective. Considerable interest in the ideas was sparked at the IFLA World Library and Information Congress in Durban, due to applicability in developing countries.

E-journal archiving in Australian Special Libraries

As part of the ALIA study grant, a survey of the 263 member libraries of the GratisNet network on current practice in electronic subscriptions and e-journal archiving was undertaken. 164 responses were received with only 7 libraries reporting on an e-journal archiving project. Special libraries still retain a large percentage of print subscriptions, with only 28 respondents (17%) having more than half of their collection in electronic-only form; however 58% of libraries had at least 30% of their collection in both electronic and print form, and 38% of libraries have at least 10% of their subscription in electronic form only.

Unlike traditional print subscriptions, access to e-journals is not guaranteed in the case of extended service outages. Libraries who have cancelled their print subscriptions for an electronic subscription face losing access to the historical and current collection should licensing agreements change. The collection building risk is more than theoretical: 57% of libraries surveyed reported a loss of access to an e-journal subscription (e.g. through supplier changes). A clear correlation between libraries with over 30% electronic subscription only and interest in participating in an archiving trial exists. The 14 libraries indicating that e-journal archiving was a priority were those that have substantial e-journal-only collections, indicating these libraries are conscious of the risks associated with this subscription method.

Many Australian special libraries retain print collections; however those making a transition to e-journal subscription are clearly aware of the issues surrounding archiving and access.

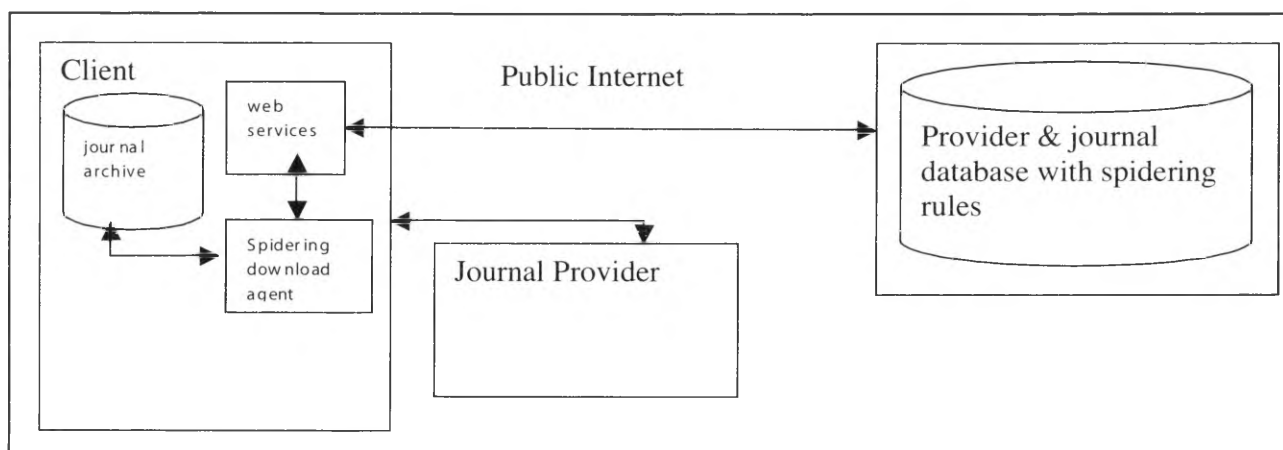## Architectural considerations in Digital archiving

Operation of an e-journal archiving engine can be autonomous, requiring little user intervention. Access to an archive requires minimal technical end-user skills with simple search engine interface. However, the metadata information relating to journal collections, suppliers, crawling rules and locations, and those relating to journal licensing and IP restrictions, is extensive. The 'Inter-Store' application draws on centralised journal metadata repositories that have journal metadata information, allowing application to operate in a mixed online/offline mode. Online operation permits:

- application updates
- journal metadata updates via web services
- digital archive updates using a website spidering procedure.

Offline operation would allow searching and browsing of the digital archive.

Diagram 1: InterStore Client & Metadata Server

Client — Public Internet

web services

journal archive

Spidering download agent

Journal Provider

Provider & journal database with spidering rules

The project aims to merge local and networked operations in environments where technical skills are not universal, and resource and connectivity constraints apply. Considerations framing the application architecture include:

- to provide a single install process, and involve minimal or no configuration

- the application must install and deploy all components within its own framework (that is, it must not rely on other external components such as Apache)

- the user interface must be unambiguous: with the least amount of pages possible and with a common structure across all pages

- the system must be able to run on an average specification PC

- the user interface must display on multiple monitor sizes.

With the software framework for our 'smart client' now complete and the architecture tested against open access online journal resources, further trials will be undertaken in 2008. Technological issues are only part of the equation – complex copyright issues surround e-journal archiving. One role served by the central meta-data repository can be to track copyright restraints for journal providers. (ejb@prosentient.com.au.)

Dr Edmund Balvaves

Dr Edmund Balnaves: has built information retrieval and commercial information systems for 25 years. Over 400 libraries in Australia and New Zealand use his Inter-Search™ service.

Mark Chehade: has worked with Java and Visual Studio DotNet web-based applications on a number of library and networking projects and is focusing on the client-based elements of this application.

ALIA turns green

ALIA Resources Directory 2008

The annual ALIA Resources Directory 2008 is the **WHO**, **WHAT** and **WHERE** of the library and information world, listing everything from public library associations to barcode providers.

For the first time, the ALIA Resources Directory will be available as a downloadable PDF document for the 6000+ ALIA personal and institutional members, and not included as hard copy in *inCite*.

Vendors who list in the ALIA Resources Directory will receive a paper copy free of charge. Print copies will also be available at conferences.

Your first listing is **FREE!** Additional category listings are charged at nominal rates, as listed below. 2–5 categories = $50   6–10 categories = $100   11+ categories = $150

Each month, new listings will be attached to the directory and in July, a revised ALIA Resources Directory will be obtainable on the web.

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