NSLA OPEN BORDERS PROJECT

Background

One of the projects that has been identified by the NSLA “Re-imagining Library Services” initiative is the Open Borders Project. The National Library of Australia, jointly with the National Library of New Zealand, will lead this Project.

The Project has been envisaged as a way of removing boundaries between the online services of the NSLA member libraries, by accepting the registered users of one NSLA member library as a registered user of the others, in a manner analogous to the reciprocal borrowing schemes created by some groups of libraries.

The Open Borders Project will attempt to apply this concept to the licensed electronic resources of the NSLA members. Currently, the NSLA Consortium provides for a “shared licensing” arrangement through a consortium price and a common contractual instrument (the “Head Deed”) which each library can opt to take up. However, this shared arrangement does not extend to a common authentication and access mechanism for users.

For example, at present it is not possible for a user who is registered with (say) the Waverley Public Library, the State Library of New South Wales and the National Library of Australia to:

- see a comprehensive view of all the licensed resources that they are entitled to use;
- use a common password or authentication process to access all those resources; or
- undertake a search in any service at the article level and automatically focus that search on the articles which they are entitled to access by virtue of their library memberships.

The Open Borders project brief recognises that the user’s needs in this area have not yet been adequately defined. Consequently, the first stage of the project will articulate and document a set of use cases describing scenarios intended to be realised by the project.

The project will aim to develop a better understanding among NSLA member libraries of how existing identity management solutions could facilitate easier access to licensed resources and online services.

The second stage of the project will identify and implement a proof of concept solution for authentication for access to electronic resources.

Discussion: authentication issues

Australian libraries may subscribe to electronic resources through individual agreements with vendors, and also through participation in consortia such as ERA (Electronic Resources Australia), the NSLA Consortium, and the CAUL Electronic Information Resources Consortium (CEIRC).

The vendors of these resources wish to ensure that access is restricted to the subscribing libraries and their registered end users. For their part, the subscribing libraries want all their users, whether on-site or off-site, to be able to access these resources. At present the access control is managed by vendors based on IP address
or user name and password. IP address is most commonly used, as management of usernames and passwords for large groups of people is both insecure and expensive to administer. Use of the IP address works well for on-site access to resources, but extended solutions are required to support off-site users.

Many libraries support remote authenticated access, with users going to the library's home page and entering their ID and password. In most solutions, the user then inherits the IP address of their library, which then allows access to IP-authenticated electronic resources.

For users that belong to multiple libraries (for example their local public, state/territory and university libraries), multiple logins and sets of credentials need to be maintained. (It is possible that users are not particularly bothered by this).

More generic solutions are theoretically possible. For example, the Shibboleth approach used by many universities allows a user to log-in once at university’s web site, and then gain access to a wide range of services provided by other institutions where access rights have been arranged. Standard protocols are used for the secure exchange of identity information.

Another example is OpenID: an open, decentralized, free framework through which users register on a website with an OpenID "identity provider", and service providers employ OpenID software as a way for users to sign in. However, this approach would represent a change in access management arrangements for electronic resources licensed by libraries, since access to most of these resources is currently managed through IP authentication.

Another potential generic solution would be for an institution such as the National Library to offer a “national proxy service”. Users would log on to the web site of their preferred library (for example, their local public library). For each library, the National Library would create a dedicated IP address that is registered with vendors for access to products subscribed to by that library.

**Enhancing the discovery process**

The above solutions could address the “single sign-on” challenge. However, it is not clear that users are particularly bothered by the need to use multiple passwords, since they already live with this issue for many other aspects of their online activity.

Two potentially more important (and related) questions are:

- How can Australian libraries ensure that the electronic resources which they license are used to the maximum extent possible?
- How can our discovery services be configured to allow users to search for articles, and automatically show the user those articles which they are entitled to access by virtue of their library memberships and their libraries’ licences?

Five things are needed to make the latter scenario work.

First, we need information about the library affiliation of the user. If the discovery service is Google Scholar, it is possible for users to provide this information through the “Scholar Preferences” feature. If the discovery service is a National Library service, the Library already collects such information through the Libraries Australia Search “Personalisation” service. In both cases however, the registration of such information is probably being made by a very small proportion of users.

Second, we need information about the electronic licences of Australian libraries. The National Library has some of this information already through URL links in ANBD records, but it needs this information to be both comprehensive and current. The Library also has some information (at the vendor product level) due to its role in managing the NSLA and ERA consortia.
Third, we need article-level mapping from citation information to publisher URLs, something which can be delivered by OpenURL resolver services. Some libraries will have their own OpenURL resolvers, but smaller libraries are generally unable to afford them. (Currently, the National Library is selecting an OpenURL resolver product, but that product initially will be populated only with electronic resources subscribed to by the National Library). What is needed is some combination of local and national Open URL resolvers which together constitute a large knowledge-base allowing any OpenURL citation to be mapped into a URL for every vendor’s website.

Fourth, we need authentication of users at the OpenURL interface, through any of the methods described above.

Fifth, we need the above information to be accessible by appropriate discovery services, such as Google Scholar and the future Single Business Discovery Service. These services will then be able to preference, in their relevance ranking, the resources which the user concerned is entitled to access by virtue of their library memberships and their libraries’ licences. (In 2007, the National Library worked with Google Scholar and Ebsco to insert such links to Ebsco Full Text from within Google Scholar results for NSLA member libraries).

Currently, we fall a long way short of this ideal scenario. Because most libraries do not purchase OpenURL services, and do not register their licensed holdings with discovery services such as Google Scholar or Libraries Australia, it is very difficult for most Australians to get access to these licensed resources.

A major inhibitor is the ongoing cost of licensing or maintaining a knowledge base. It has been argued that the knowledge base provided by vendors (the information allowing individual articles to be connected to product licenses) is both expensive and inaccurate. Some people have suggested that libraries and publishers could maintain this information themselves through a shared, open, standards-based repository that all libraries can report to and use. An example exists in the CUFTS knowledge base maintained at Simon Fraser University <http://cufts.lib.sfu.ca/>.

**Recommendation**

That the Committee notes the report.

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