Electronic information resources: integration – integration – integration

ELIN@Lund – a tool for integration and efficient administration of e-content

This article describes the ELIN@ service (Electronic Library Information Navigator), a system Lund University Libraries have managed to develop to tackle the problem of integration of electronic information resources, increase the use of these resources and make the administration of the e-resources more efficient. The development of the extended version of the Electronic Library Information Navigator – the new ELIN@ service – is an important step towards the one stop shop for library-provided content. ELIN@ allows end-users to perform a variety of time-saving tasks that will be detailed in this article. This service is a crucial strategic asset for the library and also provides the very important branding of the library services within the institution.

Background

Lund University is situated in the medieval city of Lund, just across from Copenhagen. The University, with seven faculties and a number of research centres and specialised institutes, is Scandinavia’s largest institution for education and research.

The main part of the University is situated in Lund, but a number of departments for research and education are located in Malmö and Helsingborg.

At present, more than 38,000 students are enrolled at Lund University and altogether some 6,000 people are employed.

The faculties are: Technology (Lund Institute of Technology, LTH), Science, Law, Social Sciences (including the School of Economics and Management), Medicine, Liberal Arts and Theology, and the Performing Arts (the Academies of Music, Art, and Theatre).

Research and education is carried out in virtually all subjects. As an increasing amount of research is interdisciplinary it is of vital importance for researchers to have access to interdisciplinary search tools. The library structure is highly decentralized. At present, library service is provided by a network of 20 faculty or department libraries co-ordinated by the Library Head Office. The Head Office runs the Electronic Library including electronic publishing initiatives, and is responsible for policies, guidelines, and standards for the library network.

The network libraries are certified by the University Library Board to indicate that they fulfil certain statutory criteria of professional services.

During the last few years significant changes have taken place in general service goals: end-user orientation is one main aim, and increasing the supply of electronic media another.

Libraries have become more student oriented, while at the same time maintaining a high level of service for researchers. A certified network library is required to have special facilities for students.
Two faculties are currently developing learning resource centres for students.

**Why did we develop ELIN@?**

Nowadays academic libraries offer access to thousands of e-journals. These journals are often accessible via a large number of different interfaces, usually at the publisher’s site, thus difficult to find for end-users. Under these circumstances the training of end-users is almost an impossible task for the staff. Interfaces and functionalities differ considerably and they change without due notification to the libraries. One of the problems with the many different user interfaces is that the average end-user has no knowledge of the publishing world, journals change publishers, journal titles change and so forth.

A highly prioritized area for us was the development of a system that integrated all our electronic services, i.e. we aimed to offer the university a complete system. The ELIN@ service (Electronic Library Information Navigator) gives our end-users a single point of access to a wide variety of licensed journals, databases, open archives, open-access journals, and other e-resources. At the same time it offers the library staff easy administration tools for managing electronic content.

Before development started we investigated the market to see if there were products that could live up to our requirements. These were relatively simple: A no-nonsense interface, high performance, integration of open access information, non-proprietary, library branding. Our demands were not accommodated by publishers’ sites, by subscription agents or by independent aggregators. So ELIN@ was created as the starting point for our end-users.

We also wanted to avoid the ‘publisher trap’, i.e. the presentation of e-journals in separate publisher databases; a system very confusing for end-users and significantly restricting their overview over the library’s total collection of e-content.

Another reason was the need for library branding. Probably most librarians are familiar with the question: “Why do we need the library when we can find all information for free on the internet?”. Most users are not aware that probably the majority of the full-text articles they download ‘for free’ come from fee-based journals paid for by the library. Some publishers give libraries the possibility of having their institution name or even a logo somewhere on the publisher home page/user interface, often in minuscule print and easily overlooked. Consistent branding of the library is very important for many reasons. Fund suppliers need to know that they get value for money, and researchers and students must have confidence in the library’s collections.

The traditional pattern of research publishing is changing. Important research is now often published in preprint archives or in open archives. One of the main reasons for creating ELIN@ was the need to integrate this kind of open access information into the electronic library. We consider it our obligation to promote and integrate solid academic research, published in open-access journals, in our main services.

The first ELIN@ service was launched in 2001 and by now ten academic institutions in Sweden are using ELIN@. The new ELIN@ was launched in October 2003.

In the original ELIN@ service end-users can search and retrieve the metadata of +13,000,000 records (September 2003) from a very large number of publishers and other information providers such as open-access journals and archives. The ELIN@ service acquire the metadata and make them available on document level in one single user interface, with cross-searching, merged search results and many more advantages for end-users.

Experiences from the nine other university libraries in Sweden clearly show a significant
increase of the usage of the information resources (journals, databases, open archives etc.) included in the ELIN® service. New content is added continuously, and both librarians and end-users are very happy with the system.

With the new ELIN® service we took an important step towards the integration of all our electronic services. Three separate services have now been joined: ELIN®, DoD (Database of Databases), and MyLibrary (based on the MyLibrary software developed at North Carolina State University).

The service allows end-users to:
- list all journal titles available electronically
- list all databases
- cross-search bibliographic data
- get messages from subject librarians
- order document delivery of articles
- get access to alert services, both TOC alerts and SDI-alerts
- integrate with reference management tools
- get access to selected community links
- get access to a virtual Reference Shelf
- add own web links.

All this is done in their own private collection, MyCollection, to which they log in with their user identifications from the central LDAP (Lightweight Directory Access Protocol) university staff and student database.

**The user interface and functionalities of ELIN®**

We had two main objectives when we developed ELIN®, which were to keep the user interface simple and to present the results fast.

**What did we want from the interface?**

Cross-searching different article types: see Figure 1.

Three search options, simple, basic (Figure 1) and advanced with CCL search. In the basic search you can do word and phrase searches combined with Boolean operators and truncation. You can search specific collections and publication years and limit the search to documents available in full text. If the search result exceeds 20 hits the ‘refine’ option appears.

The search fields are ‘All fields, Article title, Author name, Journal title, ISSN, Abstract, and Keywords’. The search results are presented as a list with basic bibliographic information and links to abstracts with full’ Document info’ and links to the full text and an ‘Add to collection’ button.

On the full document info page is a link to the TOC of the issue the article is part of, an option to export the reference to a reference management program, a link to the full text of the article and an ‘Add to collection’ button.

The e-mail alert options for both SDIs and TOCs are highly used, and have been from the launch of the first ELIN® service. The new ELIN® service has introduced more functionality in the personalised MyCollection, e.g. links to reference works, messages from Subject Librarians and a link collection, all based on subject areas.

As we wanted to avoid password administration we are using the central LDAP university staff database for access control for the personalised functions and for remote access.
Articles not available in full text can be ordered through a central ordering system. If the user has chosen the personal login version My Collection, the necessary personal information about the user is automatically filled in on the order form as well as the bibliographic article information.

Figure 2

Journals, databases, reference works, community links, and library services can all be listed based on search, browsed alphabetically, and browsed by subject, i.e. you can find a title based on a reference, or starting with a specific letter, or get an overview of titles within a specific subject area. Further development will make it possible to guide journal users to databases within the same subjects.

Figure 3

The administrative tool

The administrative tool reflects that Lund University Libraries is a decentralized organization. The administrative tool has two levels of access. The Head Office is responsible for system maintenance, journals and databases and subject librarians from the rest of the library network maintain ‘message from librarians’, reference shelves, community and library links. All this is possible using the administrative tool.

Through the administrative tool, library staff can add and remove titles and browse titles based on metadata provider, publisher, title and ISSN. It is possible to import and export files.

Figure 4

Figure 5
The statistics function gives the library firsthand knowledge of journal title usage. Thus we are not depending on undocumented data from publishers or unavailable data. Usage statistics are sorted on institutional and faculty levels. At present we get the number of full texts and the number of TOCs per journal title. We are currently developing a more sophisticated statistics tool.

Logging tells us how various functions are used and this is important information for training sessions. Through the administrative tool, institutions using ELIN@ can customize and change the layout of their ELIN@ interface.

**Advantages of ELIN@**

Significant savings in staff time and indeed end-user time!

End-users need to use only one interface to search all e-content independent of publisher or provider platform. The ELIN@ service gives a product neutral presentation. Material from all publishers is cross-searched simultaneously. Libraries do not have to spend time training their end-users in different user interfaces. The librarian just says: 'Check in ELIN@'.

End-users do not need to know the publisher of a journal title or which library has a subscription to it. All titles are presented in one list and it is possible to register for alerts in one place.

The integration of the DoD and MyLibrary has considerably added to end-user value.

The feedback function gives the librarians immediate information about problems. Because we control ELIN@ we can act upon problems fast, for example by directly adding information to the help text. Suggestions from users can be implemented at once and so forth.

Our main goal is to further the visibility of all material bought or licensed by the library and thus to promote usage. We have succeeded. Usage statistics show increased usage as soon as a publisher is added to ELIN@. This means that it is in a publisher’s interest to include their titles in ELIN@ as this will increase the visibility of their portfolio and thereby reduce the risk of cancellations.

It is a very definite advantage that the library controls ELIN@. We decide how it looks, we decide what is included and what is not, and we decide which functionalities we want to develop. If the system is slowing down because of high usage we are the ones who solve the problem. We do not depend on others to make decisions. That makes it easier for us to serve our users, both libraries and end-users, in a much more flexible and cost-effective way than if we had depended on either the services provided by publishers, subscription agents or any other external provider. All Swedish libraries using this service are members of our ELIN@ community network where developments are discussed. In this way all members can influence the outcome.

**Notes**

Lund Universities Libraries:
http://www.lub.lu.se/
About ELIN@ http://pluto.lub.lu.se/about/one.html