

## **SCOLARLY INFORMATION PORTALS – ELAG 2004 Workshop**

This discussion paper is based on Library service strategies of The National Library of Finland. The National Library is a service and development centre for Finnish libraries (university, polytechnic, research and public libraries). It is responsible for acquiring and preserving the national heritage in the form of publications as well as for maintaining its collections of research material.

The National Electronic Library, FinELib negotiates user-rights agreements for electronic resources for its member organisations on a centralised basis. The National Library is responsible for providing access to those resources. It will provide access and information retrieval services by using the technical core of the National Library's services which consists of the portal system, library system and digital document archive. We call it the Triangle.

The scholarly information portal is only one part of our entire service process chain. It is the part that is most visible to end users. In this paper I am going to focus on the most relevant factors in retrieval portals: aims and visions, usability, standards, multiple user interfaces, authentication and some future aspects. There is also a proposed list of topics for the workshop at the end of the paper.

### **Visions and aims: single sign-on, one search - all services.**

We would like to make our library services as easy to use as possible. They should be like Google but much better. Metasearch tools and the use of standard interfaces could make this vision come true.

First and foremost, the most important task is to be aware of our customers needs - the needs of information, knowledge and resources. Thus FinELib acquires Finnish and international resources to support teaching, learning and research. We measure, as all others do, the number of acquisitions and the amount of downloads. And we try to keep in mind that our objective is not to increase the amount of use but to service customers' needs. Measurements are only tools to benchmark and evaluate the quality of digital library services. The Portal is one part of the digital library service process chain. Hence, in development, the focus should be on the whole service system and not just a part of it.

It would be desirable for national electronic library services to be among the free public services available to all citizens in the future. People should continue to have the right of access to impartial, non-fee-paying information services. Of course this is more a political issue than a technical one. Anyway, I would like to integrate that aim some way or another into the Triangle project. Open access politics are shaking publishing world drastically and it is librarians' task to make sure that all citizens have free access to information.

### **Usability**

Metasearch portals should be as easy as Google to use but much more effective. I prefer usability models of the business world to static library world service models. Enterprises have much more experience about usability than we have. People usually like to use commercial search services like Google, but can not easily use

library services. Maybe we should give up some old library systems like UDC and Dewey and substitute more simple and effective tools.

We confirm the usability of user interfaces by frequent usability tests and questionnaires. We intend to provide user interfaces people could work up more suitable for them. It is important that user interfaces could be tailored to individual needs. End users should have the opportunity to work in a personalized environment.

Library services (or any services) should be more dynamic. We have to accept the idea of perpetual change for better services or more suitable services. The best way to serve customers is to provide flexible and variable services. We have to have a deeper understanding of customers needs by collecting feedback, doing customer analysis and using questionnaires – to focus on segmenting customer groups by need.

The ideal is that libraries and customers accept a perpetual cycle of changes. Actually they ought to insist on new services and versions of user interfaces. The needs of customers show the importance of libraries.

### **Easy access and authentication**

One of the aims is to provide easy access to all the documents a customer needs by providing one single user interface: One single authentication gateway to all authorized resources and extended services (context-sensitive linking, in our case SFX).

The authentication method should be easy to use and at the same time it must be secure: secure data transport between client and server. It can be done with the LDAP (Lightweight Directory Access Protocol) and secured it with the openSSL toolkit. But the LDAP authentication does not satisfy the IT-people of our universities. For them it is problematic that we have to send critical information (passwords) to the library system servers, even if we secure it with the SSL-program.

The leaders of IT-departments of Finnish universities prefer the Shibboleth patron authentication technique to the LDAP. Actually they have decided that we have to use the Shibboleth. It is a much more secure authentication method because users authenticate at their home campuses and it then sends information (attributes) about them to the portal site. At the portal the end user will be identified by email address.

The use of the Shibboleth origin site allows a user to login once to access all useful service sites (The portal, library system, campus portals and so on). Customers do not need to remember multiple passwords for each restricted site to which they have access. They don't even need to write their login and password more than once.

In the future we will have the opportunity to use the Shibboleth to improve online authorization control who can gain access to the library's subscription databases. Nowadays we normally use IP authentication by listing a block of IP network addresses as belonging to a particular institution that has paid a licence fee for access to the database. IP authentication is easy to set up but it is also very weak in many ways. In the Shibboleth environment we could replace IP address-range authentication by sending appropriate institution affiliation attributes via OpenURL.

The OpenURL resolver works as the target of Shibboleth and it receives users' attributes from the home campus origin site. After that the resolver checks the attributes, and determines the appropriate services. Finally, the resolver passes attributes to the service, for example, to an ejournal database. At least Exlibris has tested this with the SFX OpenURL resolver but it also means that publishers have to make their online database services Shibboleth compliant.

The Shibboleth authentication method uses universities' LDAP-directories. In Finland only four of our 20 universities have LDAP enabled personnel directories. The Shibboleth technique provides safety and better authentication services and perhaps that will encourage the rest of the universities to develop LDAP-directories.

### **User interface fetishism – no sense at all?**

#### *Local user interfaces*

Each of the Finnish university libraries has its own portal interface. The multiple sites model is the best way to provide user-oriented library services. In addition with local user interfaces libraries can show images of their organizations and this also gives opportunities to build a strong and personal image.

#### *Geographical area user interfaces*

In addition to the local portal user interfaces we are going to have divided interfaces: The universities, polytechnic schools and public libraries of the Lapland area are planning a common portal site (*The gate of Lapland*) based on geography. The idea of The Gate of Lapland is that in a cultural region people have the same kinds of needs.

#### *National user interfaces*

Besides local and regional sites we will set up some national user interfaces. The free access national interface is a gateway to all Finnish OPACs and all other open access materials like Open Access Journal databases. We are also planning one national interface for electronic legal deposit copies and another gateway for the Resource map of Finnish Academic Libraries (more about the resource map project in the next chapter).

This sounds like user interface fetishism, but actually it is very customer-oriented way to provide modern library services and I like it. So we are providing local, regional and national user interfaces - should we need yet international portal sites?

### **Development projects and future services**

The portal solution is only a part of the broader new Finnish technical library infrastructure - "The Triangle". The Triangle consists of the portal software (Metalib/SFX), the library system (Voyager) and the digital document archive (Encompass). These three independent modules give us multiple opportunities to develop our services. Here is for instance one of our scenarios - The Finnish national digital music collection (legal deposit copies): The description metadata will be in the library system and technical metadata will be put in the document archive. The document archive serves at the same time as the repository for digitized documents. Customers retrieve documents via the portal or they can use native user interfaces (Voyager). In special situations (for example the picture collection) the user could use the document archive's own user interface. SFX makes openURL links to the

documents and access to the documents is restricted by the SFX resolver. Access could also be restricted by arranging different logical collections in the document archive.

Furthermore, these applications function as independent modules so that they may be changed as required or new applications added to the core, very much like building with Lego-blocks.

One aim of the Resource Map of Finnish Academic Libraries Project is to collect and describe with *the Dublin Core Collection Description* application profile our academic library collections. Another aim of the project is to evaluate the collections by using the Conspectus method. This is the same kind of project as *Australian Libraries Gateway* and *SCONE, Scottish Collections Network*. We are going to use the portal as a gateway to those described collections. In any case, we cannot put DC Collection description metadata into Metalib so we will put the descriptions into the document archive and make links from the portal to those description files.

Standards are key points in our future development plans. The ideas of the modular-based Triangle and The Resource Map are premised very strongly to on the use of standard interfaces: Z39.50 search protocol and OpenURL. Actually we could not even dream of these kinds of services without proper standards and the strong support of software houses. In addition, we will buy more and more services from third party vendors.

Portals and other library systems are just tools. The staff and their intellectual capacity are much more important resources. Library services can also be dynamic in the future if our staff (not just bosses) are creative and innovative enough. The staff ought to have enough courage to create brave visions and the ability to look at and evaluate our services from different viewpoints.

The only realistic alternatives for disseminating information (documents) in the future are open access and open source models. Thus librarians should support free information – and thereby a better world.

### **More issues for discussion**

#### Usability

- Customer's needs
- Customer segmentation
- Questionnaires
- User interface fetishism
- Usability tests

#### Evaluation and benchmarking

- Best practices
- Use of reports and statistics

#### New services

What kind of new services we should add to the portals

- Open Access Journals

- Databases not yet provide any kind of ways of search access through portals
- Authorization by Shibboleth
- Search online courses from e-learning systems (WebCT, BSCW)
- Multi-language support

#### Information literacy teaching and portals

- Training materials
- Creating web courses

#### Portals in consortium environment

- Centralized versus localized management
- Shared server
- Shared instances

#### International collaboration

- Dissemination of configuration records
- Dissemination of OpenURL parsers
- and so on

