Expanding your OPAC while waiting for the Next Gen Catalog

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The web is rapidly becoming a platform consisting of services and APIs. Machine 2 machine communication stands at its centre.

Some examples:

Why work with APIs and webservices?
- By exploring web services and new technology we gain first hand experience, making us stronger customers and development partners.
- By introducing other services into our OPAC the local collection is displayed in a broader context.
- The OPAC turns into a small federated search service, rich in functionality and content, seamlessly integrated with the library webpage.

Strategy is to present library resources in a single thought through structure and presentation BUT ALSO to identify key services and make them available outside the library website

This presentation will focus on bringing services together, but we should not forget the importance of making our data available outside of the catalog. Decoupling of front-end from back-end in practice means enabling your data for:
- OAI-Harvesting
- External Indexing
- Offering APIs (or alternative methods and formats to access your data)
- URL Syntax
- Persistent URLs

Forwarding queries
A quick search forwarding service (in our case a PHP script) can be a focal point for several search services offered by the library: toolbar, html-template engine, search widgets, embedded html forms …

We forwarded 78116 queries using this service during 2008.
Above: Sample forms that target the forwarding service.
Expanding the OPAC

Using webservices or external content for your OPAC does not have to be difficult. Most OPAC:s allow JavaScript. With JavaScript libraries like JQuery or Prototype it is easier to manipulate the DOM and handle AJAX calls. With proper CSS you can identify elements in your OPAC, store them in variables and add/remove content.

A sample is the Zeitgeist functions in our OPAC – JULIA. On the OPAC start page we show random lists and news. A div id defines where the lists are to appear. A Prototype function requests data from a back end PHP script that randomly selects different content. One of these is the XML – parsing of a RSS feed for new books within a subject.

Above: Parsing New books RSS feeds to include lists in the OPAC.
Expanding the Search

There are several APIs and services available for handling search queries. Both commercial vendors, repositories and libraries are offering these, usually without any additional costs. Today when you query our OPAC you also get results from the national Union catalog LIBRIS, Ebsco Host databases, Google Scholar and Science Direct via MetaLib X-server and the national repository for master- and undergraduate theses. Calls are being handled by AJAX and do not interfere with the presentation of the local results. The response time from these services are fast and some doesn’t require activity indicators.

Above: Local search results are presented alongside results from external sources.
Above: More results and services are displayed along with local search result. Queries going through the MetaLib X-server requires a activity indicator due to response time.

Spellchecking

We couldn't find anything. Please check your spelling, try more general words or with different words that mean the same thing.

Did you mean america?
There are several option for spellchecking. Either installing spelling software on your server (like Aspell) or using a webservice for spelling suggestions. In the image above a example of using the Yahoo! Spelling suggestion service. It is limited to 5000 requests/day.

Expanding the Bibliographic view

Most services require a ISBN. After extracting it by DOM manipulation you can pass it on to services that supply you with additional data like reviews, images and other editions. You should also make sure that there is support on this level for passing OpenURL data to a link resolver.

Above: In the bibliographic view we include cover images from a Swedish bookstore, Google Books information, editorial reviews/cover from Amazon.com and reviews written by librarians. This service will evolve into a national open folksonomy with tags, reviews and more.
Next step
Explore linked data (semantic web) provided by LIBRIS – Swedish national union catalog. Link local data with national data with ?

Explore Google Translate for subject headings and search terms.

Resources
- Jönköping University Library website, http://www.bibl.hj.se
- OPAC, http://julia.hj.se
- Library lab, http://www.bibl.hj.se/doc/6433
- Making a library Catalogue Part of the Semantic web,
http://librishelp.libris.kb.se/help/xsearch_eng.jsp?open=tech
- Search Web Services: Spelling suggestion,
http://developer.yahoo.com/search/web/V1/spellingSuggestion.html
- Amazon Web services, http://aws.amazon.com/

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