

SRU Implementation for Aleph Libraries

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ABSTRACT: Search/Retrieve via URL (SRU) uses a structured search command language to retrieve library materials via URL. It is a handy technique to create special catalogs for a specific type of library materials (e.g., Chinese videos), a specific subject (e.g., Chinese Americans), or even a specific author (e.g., Jin Yong). Faculty can put such URLs or "special catalogs" on their own webpage or course pages.

I. What is SRU?

SRU stands for "Search/Retrieve via URL". According to the Library of Congress, "SRU (Search/Retrieve via URL) is a standard search protocol for Internet search queries, utilizing CQL(Common Query Language) [1], a standard query syntax for representing queries." [2] In other words, it is a URL that includes search and retrieval commands. As a matter of fact, CQL is still under development while CCL (Common Command Language)[3] has a longer history in the library profession and is thus by far more popular.

II. What can SRU benefit library users?

SRU is a handy technique to aggregate different types of library materials and display them in a library's subject guides, or "special catalogs". Or, such URLs can be sent to faculty to put on their own webpage or course pages.

With SRU, one can easily assemble library materials by language, format, time period, subject, author, title, publisher, etc. from the live data of the library's catalog.

For example, one can display all Asian language materials in the library catalog, which could be a virtual "Asian Library". Or, just display all Chinese audiovisual materials, which could be a virtual "Chinese Audio and Visual library".

III. How to use SRU?

Although the concept of SRU is not difficult to understand, not all integrated library systems have adopted this technique. Aleph, an integrated library system by Ex Libris,

does support SRU, and is used in this article to demonstrate how SRU works. And the University of Minnesota Library's catalog will be used for illustration.

To search and retrieve only the Chinese materials at the University of Minnesota Library systems, a URL can be constructed with CCL as follows:

http://umnlb.oit.umn.edu/F/?func=find-c&ccl_term=wlg%3Dchi

In the above URL,

1. "<http://umnlb.oit.umn.edu/F/>" is the URL address of the Aleph server at the University of Minnesota;
2. "func= find-c&" starts the function of search;
3. "ccl_term=" specifies that this is a Common Command Language (ccl) search with the search term as:
4. "wlg%3Dchi" in which "wlg" specifies that this is a language search; "%3D"[\[4\]](#) represents the equal sign (=); "chi"[\[5\]](#) is the language code for "Chinese".

The above URL can be modified and narrowed down to Chinese videos only by adding a Boolean operator[\[6\]](#) "and" as a qualifier or filter:

http://umnlb.oit.umn.edu/F/?func=find-c&ccl_term=wlg%3Dchi+and+wft%3Dvm

OR

http://umnlb.oit.umn.edu/F/?func=find-c&ccl_term=wlg%3Dchi+and+wgm%3Dv

5. Here, "+and+" is the syntactic structure for the Boolean operator "and"; "wft" specifies that this is a "Bib Format" search; "%3D" is the equal sign; "vm" is the bib format code for "visual materials"; "wgm" specifies that this is a "General Material Designator" search and "v" is the coding for "videorecording".

If one wants to expand the search to include audio materials as well, the above URL can be modified as follows:

http://umnlb.oit.umn.edu/F/?func=find-c&ccl_term=wlg%3Dchi+and+wft%3Dvm+or+wlg%3Dchi+and+wft%3Dmu

OR

http://umnlb.oit.umn.edu/F/?func=find-c&ccl_term=wlg%3Dchi+and+wgm%3Dv+or+wlg%3Dchi+and+wgm%3Ds

6. Here, "+or+" is the syntactic structure for the Boolean operator "or"; "mu" is the bib format code for "music scores and sound recordings"; "s" is the material format code for "sound recording". Please note that the language search portion needs to be repeated. Otherwise, the Boolean operator "or" will result in retrieving sound recording materials in all languages.

Likewise, one can build a "special catalog" of a particular author, say "Jin Yong".

http://umnlb.oit.umn.edu/F/?func=find-c&ccl_term=aut%3Djin%20yong

- In the above URL, "aut" specifies an author search; "%3D" is the equal sign; "jin" is the author's last name; "%20" indicates a blank space; "yong" is the author's first name.

Unfortunately, it seems that the current Aleph server does not support SRU with Chinese characters or Unicode. So if you put "金庸" or the Unicode equivalent as the author search term, it will just return you to the general search screen.

Likewise, one can build a special "catalog" on a particular subject, say, "Chinese Americans".

http://umnlb.oit.umn.edu/F/?func=find-c&ccl_term=wlc%3Dchinese%20americans

- In the above URL, "wlc" specifies that this is a Library of Congress subject keyword search.

Likewise, one can build a special "catalog" on a particular genre, say, "Biography".

http://umnlb.oit.umn.edu/F/?func=find-c&ccl_term=w55%3Dbiography

- In the above URL, "w55" specifies that this is a keyword search in the 655 field.

Again, it can be narrowed down to biographies in Chinese only:

http://umnlb.oit.umn.edu/F/?func=find-c&ccl_term=w55%3Dbiography+and+wlg%3Dchi

IV. How does SRU work in other Aleph libraries?

Here are some examples, using the Chinese language as the search term. One can easily adapt it to different types of search, as illustrated in the above section.

- City University of New York
http://apps.appl.cuny.edu:83/F/?func=find-c&ccl_term=wln%3Dchi
Note: It uses "wln" for the language search. See their ccl code list for more information
(http://apps.appl.cuny.edu:83/F/?func=file&file_name=help-1#ccl)
- Florida International University
http://fi.aleph.fcla.edu/F?func=find-c&ccl_term=wln%3Dchi

Note: It uses "wln" for the language search. See their ccl code list for more information (http://fi.aleph.fcla.edu/tips_command.html)

- Harvard University

http://lms01.harvard.edu/F/?func=find-c&ccl_term=wlg%3Dchi

Note: it uses "wlg" for the language search. See their ccl code list for more information (http://lms01.harvard.edu/F/?func=file&file_name=index-code)

- University of Michigan

http://mirlyn.lib.umich.edu/F/?func=find-c&ccl_term=wln%3Dchi

Note: It uses "wln" for the language search. See their ccl code list for more information

(http://mirlyn.lib.umich.edu/F/?func=file&file_name=find-c-code-popup).

IV. Closing Words

Search/Retrieve via URL (SRU) is a handy technique to create special catalogs. Librarians can create "special catalogs" with SRU either to put on the library webpages, such as Study Guides, or send them to faculty so the latter can mount such "special catalogs" on their own webpages or course pages. As SRU pulls the live data from the library's catalog, there will be no need for manual updates or other maintenance once it is set up. On the other hand, it is flexible to be adjusted for different needs.

Hope this technique of SRU will help aggregate library resources for classes or faculty.

Reference Notes

[1] CQL: See <http://www.loc.gov/standards/sru/cql/index.html>

[2] SRU: See <http://www.loc.gov/standards/sru/>

[3] CCL (Common Command Language): Used to be ANSI/NISO Z39.58 Standard "Common Command Language for Online Interactive Information Retrieval? It was withdrawn in 1992 in favor of ISO 8777 Standard.

[4] %3D: "Percent-encoding, also known as URL encoding, is a mechanism for encoding information in a Uniform Resource Identifier (URI) under certain circumstances. -- Wikipedia (<http://en.wikipedia.org/wiki/Percent-encoding>).

[5] MARC Language Codes (<http://www.loc.gov/marc/languages/langascii.html>).

[6] Boolean Operators:

http://www.csa.com/help/Search_Tools/boolean_operators.html

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<http://www.iclc.us/cliej/cl24wen.pdf>
