



## iCONN – Key Elements of Next Generation System

### Reasons for Building – Efficiency, Effectiveness and Usability

With the recent awarding of a contract to Gale, encompassing nearly all of the content licensed by iCONN for all libraries (public, school and academic), there was an opportunity to improve the *efficiency, effectiveness* and *usability* of iCONN. In iCONN, efficiency means performance – how long it takes to receive search results; effectiveness refers to the relevancy of search results; and usability refers to how easy iCONN is to use. How we decided to take advantage of this opportunity is described below:

### Strategic Elements of New Contract with Gale

*Gale and the Agency [CT State Library] agree to work together on the development and deployment of a **unified search experience** that realizes the full potential of a Gale-hosted master index to all iCONN content in order to improve usability, search performance, and the relevance of search results, all at no additional cost to the Agency.*

*Gale and the Agency agree to work together for the duration of the contract to improve the relevancy of search results for all users.*

### PowerSearch - Towards A “Unified Search Experience”

Gale agreed to build and host a “master index” of all content licensed to iCONN, beginning with all Gale content. The index – called “PowerSearch” in iCONN - was implemented on July 1, 2009 and encompassed nearly all Gale content. Subsequently, it encompassed three Connecticut Digital Collections (<http://www.iconn.org/digitalcollections.aspx>): *Connecticut History Online* (16K+ records), *Treasures of Connecticut Libraries* (182 records), and the *CT State Library’s Digital Collections* (2,700+ records).

Our long-term goal is for PowerSearch to allow users to search all content (both Gale and non-Gale) that has been previously indexed at both the metadata and full content levels, and return all results in a single, consolidated results list sorted by relevancy. PowerSearch eliminates the need to perform “federated searching” across a range of databases. More specifically, our goal is to add the following non-Gale content as soon as it becomes available:

- *Hartford Courant* (ProQuest) – pending approval from ProQuest\*
- *Historical Hartford Courant* (ProQuest) – pending approval from ProQuest\*

\* PowerSearch already includes the following full-text newspapers:

- *The Christian Science Monitor* (1996 – present)

- *The New York Times* (1985 – present)
- *The Times* (London) (7/1985 – present)

We have encouraged Gale to *expand* their newspaper coverage, and will keep you informed of any new developments in this area.

As noted above, when performing a search, PowerSearch returns a *single*, consolidated list of articles sorted by relevancy (with the ability to re-sort by date). When clicking on the article title, the system goes out to the target system to retrieve the article (with one important exception: all Gale content – which now constitutes the vast majority of content in iCONN - is already resident on the host system). This approach improves search performance (as compared with federated searching) by eliminating the need to search multiple targets in order to get search results – there is only one target (PowerSearch), and that target is directly coupled to the search widget. As such, this approach approximates what happens when you search Google—*except* that in iCONN’s case, you are searching quality, licensed content that is not available in Google.

## **New Landing Page and New Search Widgets (October 27, 2009)**

Previously, when you visited iconn.org, you arrived at a starting page with a single (federated) search widget that was preset to search specific resources. A year ago, we had to limit the number of resources searched for usability reasons because the search results page was becoming too unwieldy and confusing to many users, given the number of resources. Based on the online survey we conducted over the past year, however, it was clear that too many users were still confused over the organization of the site and the search results page, and were also dissatisfied with the relevancy of search results.

To address these issues, we replaced the starting page with a new starting page that we can control (look/feel) and that contains *two separate search widgets*:

The image shows a search widget titled "Find Articles" with a green header. Below the header is a search input field, a "Search Articles" button, and a link to "Advanced Search". Below the input field is a checked checkbox labeled "Limit results to full-text articles" and a "Help" link in the bottom right corner.

**Find Articles** launches searches into PowerSearch (as described above) and returns search results in the PowerSearch search engine, which is optimized for searching and sorting by relevance full-text databases; it defaults to searching keywords in the full document and limits search results to full-text articles sorted by relevancy. Because it is optimized for full-text databases, Gale’s search engine should improve the usability, functionality and relevancy of the search results page. The Find Articles widget also appears on all school classic menu pages (elementary, middle and high schools), and it is further customized to index, search and return results for only materials relevant to those audiences.

One notable exception here is that for academic libraries only, Find Articles continues to launch searches and return results in the Auto-Graphics’ federated search system. This was decided by the academic representatives on the iCONN Database Committee. The reason is that Cengage Gale is unable to include in PowerSearch two resources especially important to academic libraries: CINAHL and PsycINFO. It should be noted in this regard that most academic libraries

do not use iCONN's federated search engine but choose instead to use direct links to each database, often interfiling by subject direct links to iCONN databases along with direct links to other databases they license outside of iCONN.



**Find Books, DVDs and more in CT Libraries** launches searches against only the statewide library catalog (reQuest) using Auto-Graphics' search engine, which is optimized for searching library catalogs. To address current usability concerns related specifically to finding library materials, many of which concerns related to finding materials in specific formats, the search widget was modified to make the process of format selection clearer by using familiar tabs. The "Request Tracking" link appears only to users affiliated with libraries that offer the interlibrary loan request service through the statewide library catalog. Users affiliated with libraries using Verso as their local integrated library system are automatically presented with a Verso login screen in lieu of the Find Books widget above.

*(Note: We are indebted to Wesleyan University Library whose own search screen led us to imagine how a search widget with tabs could be used to improve the usability of the reQuest statewide library catalog.)*

Both search widgets are also available as downloadable widgets for placement on any library's website. When downloaded, the Find Articles widget is dynamically customized to search only the resources designated most appropriate for that library type: public, school (three levels), and academic. The academic search widget launches searches into the Auto-Graphics' federated search system.

There are separate starting pages customized for each library type: public; academic; elementary, middle and high schools; Verso users; and a reQuest-only landing page for guests.

## Implementation Timeframe

### July 1, 2009

- Implement all new Gale databases in the *current* Agent user interface
- Implement PowerSearch (master index) including all Gale content

### October 27, 2009

- Implementation of the new starting pages and search widgets customized for all library types, and re-direct searches in existing downloaded search widgets to PowerSearch for public and school libraries

### November 2009

- Implement new downloadable widgets for Find Articles and Find Books

**November 2009 – March 2010**

- Make Connecticut's digital collections indexed in and searchable through PowerSearch

**Beyond March 2010**

- Add other non-Gale content as soon as it becomes available

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