Upgrading GALILEO for the 21st Century
By Merryll Penson, Executive Director for Library Services

When GALILEO was launched on September 21, 1995, it was an early leader in providing centralized access to a specialized collection of full-text resources. Netscape had just offered its first IPO on August 9, 1995. Internet Explorer 1 was launched August 24, 1995, and AOL was merely a bulletin board system with less than 5 million users. Yahoo, Google, Palm Pilots, and the Blackberry didn’t exist. Mobile phones for the average user were for use in cars. However, the Internet has changed a lot in the ten years that GALILEO has been available to users. Today, users’ expectations have increased along with the volume of information available on the Internet. GALILEO users want GALILEO to be simpler to use - this message comes through in user comments, survey results, usability tests, and in feedback from librarians. “Why can’t I search everything in one search?” is a common refrain. The Google experience has shaped user’s expectations for accessibility and convenience.

Libraries are looking for creative ways to ensure that their users have convenient access to needed quality content. In addition, libraries want to leverage existing investments in electronic and print resources. Academic libraries are delivering library services within the context of campus portals, online courseware, and/or faculty and library websites. In addition, public libraries and K12 schools are serving diverse populations that require multiple customized delivery methods and interfaces. Georgia librarians have been involved in a variety of product review, investigation, and discussion activities over the past several years in order to determine how the GALILEO infrastructure should be changed to allow multiple approaches for libraries to position content and access. A successful pilot project using Ex Libris’s SFX (open URL link resolver) [http://www.usg.edu/galileo/about/planning/projects/sfx/] in GALILEO and the Regents Academic Committee on Libraries (RACL) WebCT Library Resource Integration Working Group suggested ways that GALILEO could serve these and other needs [http://www.usg.edu/racl/projects/vista].

Specific goals and technologies were identified along with a method for GALILEO libraries to fund an upgrade to GALILEO’s existing functionality; a proposal was then presented to and approved by RACL in November 2004, followed by additional product review, approval by the

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participating consortial communities, and the approval of a three year implementation and cost proposal by the GALILEO Steering Committee in June 2005. GPLS, DTAE, and DOE will provide funds for their libraries and media centers for this upgrade. USG, AMPALS, and GPALS libraries will pay individually for this upgrade.

The planned GALILEO Upgrade will use four new products:
- EZproxy (http://www.useful-utilities.com/)
- WebFeat (http://webfeat.org/)
- SFX (http://www.exlibris-group.com/sfx.htm)
- MetaLib (http://www.exlibris-group.com/metalib.htm)

The Upgrade will provide the following enhancements:
- A single search box to search across multiple databases simultaneously
- The ability to link from a citation without full text to an article in another database that does provide full text
- Journal lists for all the titles in GALILEO databases
- Interfaces with a customized look and feel for each user community (academics, publics, K-12)
- More customization of menus
- Access to content and features from library websites, online courseware, campus portals, and other environments that better meet user needs
- Enhanced opportunities for user personalization

The GALILEO Upgrade is a complex project that will be implemented in phases over the next three years. Federated searching will be provided first within the existing GALILEO system through the WebFeat federated search service, followed by linking through the SFX product and additional remote access support from the EZproxy product. These initial deployments will be made available first for review and feedback by the GALILEO Reference Committee and then for general review in the GALILEO demonstration system via announcements to the GALILEO listserv prior to being moved into production. Subsequent phases will involve community working groups in the development of customized interfaces, also involving an additional product, MetaLib, for the academic library community infrastructure.

Librarians and media specialists can keep up with the projects and plans for the Upgrade through the GALILEO listserv as well as the project website http://www.usg.edu/galileo/about/planning/projects/upgrade/. As features become available, training sessions will be offered to assist librarians and library staff in understanding and utilizing new tools and techniques. GeorgiA Library LEarning Online was named for GALILEO to evoke the concept of learning and discovery. As this project evolves, we will all learn about targets and sources; users perceptions, expectations, and use; and integration with other technologies. These tools are not perfect, but they will support our efforts to better connect the user with the information needed at the time of need. Because GALILEO represents so many different type and size libraries and user constituencies, vendors will be very interested in GALILEO’s experiences, as they work to improve these tools.

Information sessions are being scheduled that are open to anyone in the GALILEO communities who wants to learn more about this exciting new project to “Upgrade GALILEO for the 21st Century.” These sessions may be offered via webconferencing and conference calls given the desire to limit travel because of the high cost and potential shortage of gasoline. Stay tuned!
What is a Metasearch?
By Karen Minton, GALILEO Virtual Services Librarian

The ability to search multiple databases simultaneously from a single search box has long been a desire of GALILEO users. In fact, the world library community has been watching and waiting for the technology that would make such a federated search possible. A federated search—or metasearch, or cross-database search—has to search across a number of databases from different vendors that are using different search protocols, various verification and authentication methods, and different descriptors for data and content tags or fields. Several products that make such searching a reality are now available.

The Technology

Some GALILEO users remember the early days of GALILEO when there was a single interface, although separate searches were still required. The search protocol used then was Z39.50, a pre-Web standard for searching and retrieving information from databases, potentially multiple databases at the same time. Z39.50 is still in use for searching library catalogs and databases and is utilized as a key method in some federated search products; however, all databases are not Z39.50 compliant. A less common access mode implemented by many database vendors is a proprietary XML gateway, a web application that enables a federated search using XML tags. Both of these methods are standards-based, relying on structured data and established syntaxes. A third method used by some federated search vendors is HTML parsing, or “screen-scraping,” which is a way of translating data found on non-structured HTML pages through the use of special mappings called HTTP connectors or translators.

All federated search products offer a knowledge base of information about how to search different resources. Their differences lie in which methods they use, the number and types of resources they can search, their service models, their features, and interface flexibility.

While the single search box appears to be a “Googlization” of the library search interface, the federated search tool goes beyond the open Internet to find data considered to be buried on the “deep” web, beneath layers of verification and authentication. Each resource in a federated search must be configured correctly for authentication to work seamlessly. Standards have not been established for this young technology, but a group called the NISO Metasearch Initiative (http://www.niso.org/committees/MetaSearch-info.html) is at work on standardizing access protocols, record formats, and semantics of data.

Benefits

Federated searching simplifies navigation and search for novice users. Users often are overwhelmed by the number of databases presented to them and are not aware of the breadth of resources available. Federated

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Recent EBSCOHost Changes May Affect Access

On August 1st, EBSCO deployed a new version of EBSCOhost. Though no visible changes occurred with the update, a new security feature was put into production. By incorporating an IP and cookie checking mechanism into EBSCOhost, EBSCO hopes to prevent unauthorized sharing of EBSCOhost sessions.

The security feature works by checking the IP address associated with each page of a user’s EBSCOhost session. If EBSCO detects a change in the user’s IP address, they will try to locate a valid EBSCO session cookie. If they cannot locate a valid session cookie, a user will receive the following error message:

We have detected a change to your IP Address for the current session and we are unable to locate a valid EBSCO cookie. As a result we are unable to identify you as a legitimate user. Please log in again.

This error message will also be displayed upon login to EBSCO by users who have their browsers set to block all cookies. To correct the problem, users must set their browser either to accept all cookies or create an exception within their browser for the EBSCO cookie. Troubleshooting tips and directions for accepting cookies can be found within the following GALILEO FAQ: http://www.usg.edu/galileo/help/index.phtml?question=1125325083

Further browser and computer configurations can be found within the Computer Configuration Instructions for GALILEO Users at http://www.usg.edu/galileo/help/tech/config.phtml.
By 1942, German U-boats had already destroyed more than 500 million tons of Allied shipping. In that year, the U. S. Maritime Commission chose 16 sites—including Brunswick, Georgia—to build the aptly named Liberty ships. J. A. Jones Construction Company completed 85 Liberty ships (as well as 14 Knot ships) at the Brunswick shipyard in support of the Allied effort during World War II. Now Internet users can explore this remarkable story online through GALILEO’s Digital Library of Georgia in Ships for Victory: J. A. Jones Company and Liberty Ships in Brunswick, Georgia, at http://www.galileo.usg.edu/express-?link=vsb, which incorporates digitized versions of original historical photography housed at the Three Rivers Regional Library System. Georgia HomePLACE encouraged this collaborative digitization project, which is supported with Federal LSTA funds administered by the Institute of Museum and Library Services through the Georgia Public Library Service, a unit of the Board of Regents of the University System of Georgia.

Ships for Victory speaks to the truly massive effort of 16,000 workers in constructing a total of 99 cargo ships at the Brunswick shipyard between 1943 and 1945. Of these, 85 were ocean-crossing Liberty ships, while 14 were smaller coastal freighters called Knot ships. The massive Brunswick shipyard could build six separate ships simultaneously. Most of the Brunswick Liberty ships served the needs of the American Merchant Marine, although 12 were loaned to Great Britain. While a few Brunswick-built ships were lost to torpedoes, mines, and wrecks during World War II, many survived to serve the maritime needs of the postwar world. Today all the Brunswick Liberty ships are gone, and a few Knot ships continue in new roles; but Brunswick’s significant contribution to America’s war effort is not forgotten!

The new Ships for Victory web site allows visitors to search or browse the collection of online photographic images, and there is an extensive online finding aid that provides a detailed inventory of the collection. The web site also provides extensive orientation and contextual materials to help visitors better understand the significance and meaning of those historical artifacts. The “Building Liberty Ships in Brunswick” essay provides overall orientation to the shipyard operations, the shipyard workers, and the ships they produced. The “Ships Constructed in Brunswick” table provides details about each of the Liberty and Knot ships built in Brunswick. Additional sections describe related archival materials, related links, and suggested readings.
Ok all you academic closet genealogists, you can now use Ancestry Library Edition (ALE) without having to go to the public library (sorry media specialists you still need to go, but it is worth it!). Because of some collaborative purchasing, ALE has been made available at no cost for academic libraries. ALE is the library version of Ancestry.com. Ancestry.com had a relationship with GALE to produce AncestryPlus, but that agreement ended and they established a relationship with ProQuest to produce and market Ancestry data for the library community. For those of you who thought you might want to do some genealogy, but haven’t gotten around to it, ProQuest has provided an easy opportunity to explore. ALE includes the U.S. Federal Censuses from 1790 through 1930. In addition, it includes the Social Security Death Index, collection of U.S. Immigration records, and a number of databases of marriage, death, military, land, and will and probate records. Just recently, UK Census information was added. It also includes some Gazetteers and other directories. There are pedigree, family grouping, and research charts; reference sources; and a new Ancestry Map Center with many historical maps.

With the Federal Census, the user will find name, age, and in some cases, approximate birth year already calculated, and a link to nearby neighbors or to members of the household as well as an easy link to the actual image. For any of you that have done genealogy using microfilm readers and reader printers that barely worked (yes I remember the dark dreary archives that were at East Point), trying to understand those Soundex guides, etc. and swore you’d never let them talk you into doing more family history, this resource could make you change your mind. It is absolutely wonderful!!! You can easily search using multiple fields and across multiple databases which help you narrow your chances of finding that ancestor. The images of the actual documents are easy to read, print, or save. The zoom function also works well. The images could make nice background or additions for family scrapbooks. You still have to determine if the “William H. Price” on the screen is really your ancestor and if the census taker recorded the correct information!

In addition to family fun, this database has potential for history and sociology researchers and students. The National Archives does not make federal census data available online unless you are in one of their facilities. Students can take a particular location at a particular time and learn the demographics of a community and then see how it has changed. Students can learn about migration trends from more rural Southern areas to Northern areas by following various families. Slave narratives are also included. The collection of U.S. immigration records can be mined for all kinds of information about the United States.

WARNING – Using this database can become addictive. Sharing this information with family members can lead to them asking you for more information.
Back a few years when I began my career, a library could be described as a big box of books facilitated with tables and chairs for use by individuals. With a few discipline skilled reference librarians added to help out when finding the right article or book was difficult, the user had everything needed to synthesize a report or answer a complex question. Individuals worked alone, outcomes were limited to text (reports), and expectations were modest. Not anymore.

In a recent issue of the comic strip *Foxtrot* by Bill Amend, the genius little brother portrays a modern version of Paul Revere.* His update on the famous warning system should the British invade involves glow-sticks instead of lanterns. More importantly, his instructions reflect the dilemma of our modern era compared to that of Mr. Revere.

Four comic strip panels portray the dilemma nicely. In panel one, little Paul hands his big brother a package of glow-sticks with instructions “use these glow-sticks if you see the British troop’s arriving.” In panel two, he elaborates the instructions, “one if by land, two if by sea.” Unfortunately, our modern era requires little brother to extend the instructions in panel three with “three if by air. Four if by land and sea. Five if by air and sea. Six if by land and air. Seven if by land, sea and air. Eight if by underground tunnel. Nine if by teleporter. Ten if by other.” Finally in panel four, big brother responds with “you know, Paul Revere kept it a lot simpler.” To which our hero replies, “please, the man banged metal for a living.”

That may characterize the issue as well as any frantic description by the typical reference librarian today. Maybe we never banged metal, but we answered every query from a book or printed index. Sometimes those still work, although many reference collections now reside physically remote from the point of interaction with our patrons. Instead, we query online databases and collaborate with Information Technology specialists (computer specialists) to jointly serve our users.

Today, key words for our focus are digital and synergy. Most vigorous research institutions characterize their agendas with those words, to which many of us would add the concept: collaboration. Students are expected to work in teams. Observations on the pedagogical side offer substantive evidence that students working in groups learn faster and better. Apparently, this comes about because discussion and interaction multiply the opportunity for sophisticated ideas to emerge. In fact, in a digital environment where synergy is important, collaboration becomes essential.

The old assignment to write a paper on a given subject gave way sometime recently to expectations that students offer alternatives to written assignments. Often, collaborative research by students results in a series of online web pages or a digital presentation involving full-motion video, sound, and manipulable datasets. Faculty—at colleges and high schools both—appear more readily impressed when students show signs of imagination expressed by alternative media. This has led to the important issue for librarians, which is the tendency for student collaborators to bypass traditional venues in favor of a search on “the web” through Google or one of its counterparts.

Fortunately today, rather than being just a source of stress for librarians, Google offers great opportunities for additional synergies. Right now, librarians are struggling to keep up. However, important advances such as accessibility by means of OCLC records added to the Google search process are accompanied by improvements to campus search engines with tools that bring results back to students in the form of full text articles rather than index records. These are now being enhanced

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Meet the Staff: Weather or Not It’s Karen Minton
By Lauren Fancher, GALILEO Support Services Director

Let’s set the record straight: although Karen Minton hails from Georgia, she has no involvement with hail in Georgia, or any other weather phenomenon. While frequently confused with the weatherperson and WSB-TV anchor of the same name, Karen is actually a long-time member of the GALILEO staff, known to many in her own right for her work with GALILEO, currently as Virtual Services Librarian in GALILEO Support Services. However, even those familiar with her may be surprised to learn that Karen herself once worked in radio and television, both as an on-air personality at the FOX97 oldies station in her native city of Gainesville, Georgia and as an assistant program director at a public television station in Alaska. These experiences were separated by her undergraduate years at the erstwhile Tift College in Forsyth, where she played basketball and majored in English Literature and Journalism, and her stint with the U.S. Air Force as a jet airplane mechanic at Luke Air Force Base in Glendale, Arizona, where she spent hours out on the 115 degree tarmac twisting wrenches.

In this unusual setting, she met her husband Jeff Truh, with whom she was transferred to Elmendorf Air Force Base in Anchorage, Alaska for the remainder of their service. Enchanted with the natural beauty and unique community they found in Alaska, they continued to live there for several years before moving to Georgia. Karen retains an affinity for outdoors activities today, enjoying hiking and kayaking in the Georgia mountains. She also enjoys writing in the mountains, completing an MFA in creative writing from Warren Wilson College in Asheville, North Carolina when she returned to Georgia. It was also around that time that she began to work in libraries as a staff person in several Gainesville-area library systems. She has since added an MLS from the University of Alabama, rounding out her credentials as a lover of books and libraries.

In another important credential, Karen is a Braves fan, often listening to the previous day’s game on her computer. She is also an avid listener of recorded books, most recently of NetLibrary’s audio books. Downloaded through her local public library’s subscription onto her personal MP3 player, these new audio books enhance her daily commute and exercise routines. Not that this service diminishes her gate counts—as a devoted patron of public libraries, she continues to read several print titles a week.

Karen has been involved with many different aspects of GALILEO, including working with the GALILEO Reference Committee to gather feedback about interfaces, services, and databases; managing the annual survey; participating in development efforts; working with database presentation, content, and features; providing support to users and librarians; and coordinating training efforts. She especially enjoys having helped more than 1200 people receive training this year: “Having worked in public libraries, I know how challenging it can be to keep up with all of the resources that are available today, especially as new products become available and vendors introduce enhancements to features and content. It’s always fun to see how training offers people a chance to explore the neat things they get through GALILEO and connect with others in their field. It’s one of the most gratifying things we get to do for the GALILEO libraries.”
Librarians today need to keep banging metal, but they’ve added lots of other actions to their agenda. In fact, online web pages and licensed databases offer many opportunities to overwhelm our users with a multiplicity of options. While we’ve not finalized technologies to completely link results of web searches with intellectual content from licensed databases, progress appears. Students at several Georgia colleges can add a module to their web browser to look for content in the licensed venues. The results combine to point students not only to manifold content in web pages, but also to numerous pre-paid articles in publisher databases. As yet, many users haven’t gotten the message. This might mean that GALILEO engineers will have to look for ways to point our users to the opportunities we’ve made available.

That is, users will get the message only when we deliver it. Georgia, because of GALILEO, is well known nationally for pushing a collaborative agenda. A new opportunity now emerges for us to continue that tradition. Recently, members of the GALILEO steering committee visited with Board of Regents staff to plug the concept of institutional repositories of intellectual output. That venue offered a second opportunity for the Committee to remind the Board of the power of digital resources. We’ll look for signs of progress in the next GALILEO budget. Meanwhile, it remains important for all of us to continue pressing for opportunities to collaborate in ways that bring better digital synergies.

* Atlanta Journal Constitution, section E, page 5 (Thursday, 7 July 2005).

What Do I Do ’Til The Next Harry Potter Comes Out?

By Karen Minton, GALILEO Virtual Services Librarian

NoveList, a readers’ advisory tool long available through GALILEO public libraries, is now available to all GALILEO communities. A subset, NoveList K-8 is available to the K-12 and public library communities. With NoveList, you and your patrons or students can

- find fiction titles based on a favorite author, title, or description.
- access Author Read-alikes with suggested titles and authors that are similar to your favorites.
- find books in a series.
- browse lists based on genre or awards (over 1000 pre-made lists).
- search by subject heading, reviews, publishers—basically every field in the title record.
- read and use feature articles, book discussion guides, and book talks (children and YA); and
- explore materials developed to increase your skills when working with a reader (found at the “Readers’ Advisory” tab).

NoveList also makes it easy to create topical bibliographies. To create a reading list for students studying a particular subject, simply choose “Describe a Plot Search,” enter the subject (e.g., holocaust or summer camp), and choose an age range. You will retrieve a list of books relating to your topic. Alternatively, you can retrieve a record for a book you know you want to highlight (e.g., Extremely Loud and Incredibly Close by Jonathan Safran Foer) and click on “Find Similar Books.” You can then choose from a pick list to include subjects relating to the book (Gifted Children, Locks and Keys, Quests, September 11 Terrorist Attacks).

What is a Metasearch?
(Continued from Page 3)

searching will mean users do not need to guess at the content available in databases with names that don’t provide clues to the content (MASUltra or ABI INFORM, for example), nor will they need to make the first, sometimes difficult, step of choosing a database. They will simply execute a search in a predefined subject set or quick set of databases. Here are some other benefits:

-Users will not need to re-execute a search in multiple databases. Usability research confirms over and over that most users will select articles that are good enough among the first ten or so they scan.

-Resource discovery will result when users of the federated search find in their results set databases that they didn’t know they could access or of which they had never heard.

-The library catalog can be searched simultaneously with appropriate databases.

-A search box can be integrated into library web sites, online courseware, campus portals, and other environments to meet the users where they are.

-Customization of interfaces helps meet the needs of users in different communities (K-12, academic, public libraries) and even in different individual institutions.

-Customization of resources and menus allows tailoring search sets to individual communities.

**Drawbacks**

-Significantly and advanced researchers will need to go to individual databases for deep and precise searching.

-De-duplicating of results is a feature of most federated search vendors, but it is not absolutely possible. Variations in indexing and field names by different vendors can mask duplicates.

-The native interfaces of databases offer options for thesaurus-guided searching and refining or expanding searches that are not available through the federated search interface. For example, Business Source Premier allows searching by product name, NAICS code, or ticker symbol in the advanced search interface, but none of these limiters is available through a federated search interface.

-Perhaps the biggest drawback to federated searching is that it encourages users to expect Google-like results and to search with Google-like indifference to quality or exactitude. As federated searching evolves, it will become more important to provide tools to help users analyze their results and make quick decisions about relevance in order to guide them to the most appropriate resources.

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GALILEO Conference Appearances For 2005

Look for GALILEO presentations and the GALILEO Exhibit Booth at these 2005 conferences.

**Council of Media Organizations (COMO),**
Columbus, GA,
October 12-14, 2005

**Georgia Council for Social Studies (GCSS),**
Athens, GA,
October 20-21, 2005

**USG Annual Computing Conference**
Rock Eagle, October 26-28, 2005

**Georgia Educational Technology Consortium Conference (GAETC),**
College Park, GA, November 9-11, 2005

**DTAE Division Chair’s Conference,**
Dublin, GA, November 14, 2005

**GPLS Children’s Services Conference,**
Macon, GA, February 10, 2006
A New Book Index for GALILEO
By Karen Minton, GALILEO Virtual Services Librarian

Book Index with Reviews (BIR), a new offering for all GALILEO communities, contains information about nearly four million fiction and nonfiction books across the subject spectrum, reader age categories (preschool to juvenile to adult/scholarly), and formats (from hardcover to CD to E-book). The database includes more than 3.8 million titles with over 800,000 fully searchable full-text reviews from publications such as Library Journal, Booklist, School Library Journal, Kirkus Reviews, and CHOICE.

BIR was created by the NoveList team, so many of the options available in NoveList are seen here. For instance, search limiters available in both databases include grade level, publication date, and number of pages. BIR also allows you to limit by publication status (in or out of print or forthcoming), fiction or nonfiction, and price range.

Like NoveList, BIR also includes some readers’ advisory tools. For example, from the search interface, readers can browse “New Releases,” “Forthcoming,” and other lists. BIR uses a four-star popularity rating system that can be seen in the results list or in individual title records. Popularity in this system is based on ordering patterns by librarians and booksellers nationwide and derived from an eight-year analysis of ordering information from Baker & Taylor, a BIR partner.

Other features of Book Index with Reviews include the following:

- Create alerts to receive an e-mail message whenever new books that meet your criteria (subject, author, etc.) are added to the database.
- Create bibliographies that can be e-mailed, printed, or saved.
- Link to articles in EBSCOhost databases, thereby increasing full-text reviews exponentially.
- Use the “All Editions” feature to find ISBNs for all available formats and editions.
- Search the full text of book reviews from the advanced search screen to widen a subject search. For example, searches for “protein electrophoresis,” “large print,” or “watercolor illustrator” (“and” is automatic) will retrieve titles that include these terms in book reviews even though they don’t appear as subject terms.
- Browse by LC, BISAC, or general (assigned by Baker and Taylor) subject headings.


You are Cordially Invited to a Reception
Celebrating the Tenth Anniversary of
GeorgiA LIbrary LEarning Online

GALILEO
Georgia’s Virtual Library

September 21, 2005
10:30 a.m. to 12:00 noon
Program Begins at 11:00 am

The Floyd Room
James H. Sloppy Floyd Building
20th Floor, West Tower
200 Piedmont Avenue
Atlanta, Georgia

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or
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