I. Technology Standards

After beginning a series of in-house and grant-funded digitization projects in the late 1990's using a host of home-grown and commercial software applications, the Emory libraries have more recently begun establishing shared technology standards and benchmarks for all their current and future digital initiatives.

The libraries have adopted use of Extensible Markup Language (XML), the Text Encoding Initiative (TEI), Dublin Core, the Encoded Archival Description (EAD), and SPSS and Stata statistical analysis software for digital information resources developed on campus. Extant digital collections previously developed on campus gradually are being migrated into XML. All current and future digital initiatives will be developed using the above markup standards.

II. Digital Resources

A. Collections

Most collections are developed to support campus teaching and research initiatives or as larger preservation and access efforts for the scholarly community at large. The main units involved in development of digital initiatives within the Emory libraries are:

- The Beck Center for Electronic Collections and Services - focusing primarily on texts in the humanities
- The Electronic Data Center - focusing primarily on the manipulation and analysis of numeric data sets in the social sciences
- Hugh MacMillan Law Library - serving as the official digitizing and service point Federal Court Finder, the electronic full text archive of decisions handed down by Federal Circuit Court of Appeals
- Health Sciences Center Library - focuses on MedWeb, a widely acclaimed gateway to biomedical Internet sites
- Pitts Theology Library - serving as the digital archive for the SELA Full text journal project (the foundation for the expanded ATLAS full text e-journal collection maintained by the American Theological Library Association)

- Preservation and Conservation - focusing on both print and non-print materials, including audio and video, held in the Emory libraries

- Special Collections and Archives - focusing on print and non-print materials in its collections, notably in Irish and African-American literature

Among the digital collections currently offered or in development are:

**African American Cinema Collection (in development)**

The African American Cinema Collection presents posters, lobby cards, and press books from the 1920s to the 1990s. This collection is unique in the Southeast and illustrates the often-delicte business of selling race-related movies to white and black audiences. The strength of the collection resides in the period from 1920-1980, which can be divided into four chronological and thematic topics: race films (1920-1949), “integration” motion pictures (1950-1959), movies that reconsider the South (1960-1969), and blaxploitation films (1970-1980).

The collection is keyword searchable. Due to copyright constraints on this ephemeral material, no digital representations of collection materials are as yet available.

http://zenodotus.library.emory.edu/AfAmCinema/index.html

**The American South (in development)**

See Metadata Harvesting Initiative, below

http://AmericanSouth.org

**The Belfast Group Sheets**

In 1963 Philip Hobsbaum, a recently-arrived lecturer in English at Queen's University, Belfast, organized a writing workshop made up of students, faculty, and a number of writers from the local community. The Group, as it has come to be known, met regularly during term. When Hobsbaum left Belfast for the University of Glasgow, Seamus Heaney assumed responsibility for organizing the meetings. Later Michael Allen and Arthur Terry, both lecturers at Queen's, played organizational roles as well.

The Belfast Group ceased altogether in 1972 at a time when a remarkable number of the participants had published their first collections and launched promising literary careers. The participation of so many talented writers ensures that the Group will remain of lasting interest to scholars and literary historians.

The original Group sheets, from which these searchable electronic texts have been prepared, are housed in the Special Collections Department of the Robert W. Woodruff Library of Emory University and in the Irish Collection of the Queen's University Library. This digital collection forms one part of Emory's larger Electronic Poetry Project and Poetry Portal (see below).

http://chaucer.library.emory.edu/irishpoet/
The Civil War in America from the Illustrated London News (ILN)

A searchable text base of articles from the ILN documenting the Civil War. The search interface is available for v. 38, and the ILN is now browseable as well both by article title and by illustrations. [http://chaucer.library.emory.edu/iln/](http://chaucer.library.emory.edu/iln/)

Constituent Mail Analysis Project
The Constituent Mail Analysis Project (CMAP) explores the possibilities for studying constituent mail using congressional correspondence management system files generated by the United States Senate Computer Center.

Sam Nunn represented Georgia in the U.S. Senate from 1972 to 1996 and his papers, now at Emory University, provide an example of the types of benefits and challenges offered by correspondence management systems. CMAP has used the Nunn databases in its pilot project to demonstrate the kinds of studies that might be done using such data. CMAP focuses in particular on constituent interest in and opinions on legislative issues as expressed in their correspondence with Senator Nunn. In the future, Emory's Electronic Data Center hopes to include data from other U.S. Senators to allow researchers to compare the mail received in different offices. [http://sal.library.emory.edu/cmap/index.html](http://sal.library.emory.edu/cmap/index.html)

Electronic Data Sets
The General Libraries Electronic Data Center mounts popular data sets in a variety of subject areas. These sets, searchable using an HTML template format which allows novice data users to identify, can be used to analyze and extract numeric data from files that are relevant, reliable and useful for research in the social sciences and other disciplines. In addition to data sets, users also have access to a limited number of geographic information systems (see GIS below).

During the 2003-04 academic year access to this collection of data sets will be migrated to a new XML Server, ensuring more efficient searching capabilities, storage, maintenance, publishing and exchange of XML documents.


Electronic Poetry Project
An indexed, keyword searchable collection of several commercially available electronic poetry collections and a compilation of manuscript poems of the Belfast Group owned by the Emory libraries. New commercial and unique manuscript works are being continually added to this digital collection, mounted and maintained by Emory's Beck Center for Electronic Collections and Services. See Poetry Portal, below. [http://chaucer.library.emory.edu/irishpoet/](http://chaucer.library.emory.edu/irishpoet/)

Emory Women Writers Resource Project
Working with faculty and graduate students for Emory's English Department, the Beck Center is creating both HTML and SGML versions of selected works by American and British women. Spanning
the 17th - 20th centuries, many of these digital versions include have been edited and annotated for in-depth analysis and scholarly research.

http://chaucer.library.emory.edu/wwrp/index.html

**Federal Court Finder**

An electronic full text collection of decisions handed down by the eleven Federal Circuit Courts of Appeal. This site serves as a full-text archive for decisions handed down in the Federal Circuit Courts back to 1994. Current decisions are encoded and added within 24 hours of their public release.

http://www.law.emory.edu/FEDCTS/

**French Revolution Pamphlets Collection**

The result of an ongoing partnership between the Beck Center and Special Collections. Of the 3000 pamphlets held by Special Collections, we are in the process of publishing 89 literary and satirical works which are not available in electronic form at any other digital repository. This site serves both as a digital archive and a research portal to these materials.

http://chaucer.library.emory.edu/frenchrevo/

**Geographic Information Systems**

Focusing exclusively on Atlanta and regional geographic information, our Electronic Data Center provides links to numerous external GIS map providers using ArcGIS software.

http://einstein.library.emory.edu/contact.shtml

**Holocaust Denial on Trial: David Irving vs. Penguin Books and Deborah Lipstadt (in development)**

In 2000 British Holocaust denier David Irving sued Emory University professor Deborah Lipstadt and her British publisher, Penguin Books, for libel. Their London trial made headlines around the world. Despite England's draconian libel laws, Lipstadt and Penguin not only won resoundingly but also exposed the inner workings of the deniers, who distort 20th century history in order to promote 21st century anti-Semitism and white supremacy.

This site is built around the defense's groundbreaking research, the riveting trial-room testimony, and the judge's historic opinion which found Irving to be a "right-wing pro-Nazi polemicist" who "deliberately misrepresented and manipulated historical evidence."

Phase 1 of this project has been completed with the mounting of HTML versions of the trial transcripts, evidence, and related reports. Phase 2 will involve TEI encoding of these materials. Phase 3 (as yet unfunded) proposes enhanced semantic Web searching and the development of educational modules for use in grades 6-12 and college courses.

http://www.hdot.org/ieindex.html

**Irish Literary Collections Portal**

Provides access to a fully searchable array of finding aids for the Irish literary manuscript collections held by Emory University's Robert W. Woodruff Library Special Collections and Boston College's John J. Burns Library of Rare Books and Special Collections. By electronically bringing together two of North America's finest collections of Irish literary manuscripts and rare books, this site enhances public access to these important and complementary collections.
Emory's Irish Literary Collections focus on two main areas: the correspondence, manuscripts and related papers of W.B. Yeats and his circle, as well as the literary archives of many of Ireland's finest contemporary poets. Boston College's Irish Literary Collections also concentrate on the major Irish literary renaissance figures and the contemporary poets.

The findings aids for this project have been encoded using the EAD.DTD, Version 2002, an XML-compliant data structure developed and maintained jointly by the Society of American Archivists and the Library of Congress. At present this collection remains separate from Emory's Electronic Poetry Portal, but plans are being developed not only to incorporate this collaborative collection, but also add records from other academic repositories in the future.

http://irishliterature.library.emory.edu

The Martyred President: Sermons Given on the Occasion of the Assassination of Abraham Lincoln

A browseable and searchable database of 57 sermons on the assassination of Abraham Lincoln based on collections held in Emory's Pitts Theology Library.

http://chaucer.library.emory.edu/lincoln/html/

MedWeb

MedWeb, is a catalog of health related web sites, maintained and updated by the Emory Health Sciences Center Library. Searchable by more than 100 broad subject headings, focusing primarily on biomedical information. Each Internet site is regularly reviewed and audited by HSCL staff for content and reliability.

http://www.medweb.emory.edu/Medweb/

Medieval Cartularies

Working with faculty and graduate students from Emory's Medieval Studies program we plan to publish a series of digital editions of cartularies. To date we have digitized St. Aubin (abbey, Angers, France) Cartulaire de l'abbaye de Saint-Aubin d'Angers. (Paris: A. Picard, 1903). Searchable versions of both Tome I and Tome II are available.

http://chaucer.library.emory.edu/charters/html/index.htm

Merton Diaries Project

As part of a larger project to digitize the personal papers of Thomas Merton, Emory's Pitts Theology Library and the General Libraries Beck Center have mounted a browseable HTML version and a searchable SMGL version of Merton's Red Diary.

http://chaucer.library.emory.edu/merton/Red_Diary_Home.html

MetaArchive Project

See Metadata Harvesting Initiative below.

http://MetaArchive.org

The Metadata Harvesting Initiative

Funded by The Andrew W. Mellon Foundation, this collaborative project is exploring applications of metadata harvesting using the Open Archives Protocol for Metadata Harvesting. Seven institutions are participating in this project, including Emory University.
Emory’s project, the MetaScholar Initiative, seeks to explore how information about targeted subject collections could be most effectively be disseminated through OAI-PMH. Two study projects currently are underway. The first, the MetaArchive Project, focuses on multiple archival collections including college library archives, church record repositories, university data centers, and a museum. Archives are selected based on two subject areas: Southern political figures and religious institutions.

A second project, the American South, has been undertaken in collaboration with the Association of Research Libraries and focuses on archival holdings of nine large ASERL libraries. The main criteria for harvesting are scholarly value and subject domain relevance as judged by a team of scholars representing different disciplines and backgrounds.

http://AmericanSouth.org
http://MetaArchive.org
http://MetaScholar.org

OCKHAM Library Network (in development)

Emory University, the University of Arizona, Virginia Tech, and the University of Notre Dame are involved in a two-year project with the National Science Foundation and the Digital Library Federation to improve usage and access to the growing resources of the National Science Digital Library (NSDL).

The project will establish a reference model and functioning network of test bed services enabling traditional libraries to provide access to the NSDL through their local service programs. The project will analyze the ways that modular, component-based digital library architectures, reference models of services, lightweight protocols such as OAI-PMH, and open standards for data exchange can be used to enable better interoperability and affordability of digital library services. For more information contact Martin Halbert, Library Systems (mhalber@emory.edu).

Oxford College Class Photo Project (in development)

A group effort of Emory’s junior college campus, Oxford College, the Emory University Archives, and Preservation Division to physically treat deteriorating photographs. Photographs are cleaned and rehouse, while digital surrogates are being created for public use via a web site (in development). The master file format is .TIF while the derivatives are rendered as .JPGs. To date 1,226 photographs have been treated.

The Poetry Portal (in development)

The Beck Center for Electronic Collections and services is developing an electronic gateway which will support cross-database searching of multiple commercial and in-house digital collections of poetry by author, subject, keyword, and time period. Local programming efforts will support easy access to extensive digital poetry collections held in the Emory libraries, providing easier and more direct access to these works by students and scholars.

http://tamino.library.emory.edu/cocoon/epoet/

SAGE: Selected Archives at Georgia Tech and Emory (concluded in 2000)

A collaborative digital project initially undertaken by the Georgia Institute of Technology and Emory University, the SAGE Project shared their expertise in various areas to digitize selected texts, photographs, and audio/video recordings from several collections held at Emory University. Among the collections covered are the Sam Nunn Papers, the Ralph McGill papers, the Witness to the Holocaust project files, and the records of the Young Women's Christian Association (YWCA) of greater Atlanta. Emory chose to use only open source software in its implementation.

http://sage.library.emory.edu/
Sermon at the Funeral of Dr. Martin Luther

This English translation of the first edition of Johann Bugenhagen's funeral sermon for Martin Luther was digitized in commemoration of the 450th anniversary of Martin Luther's death. The funeral sermon is reproduced in facsimile, with the introduction and English translation of Prof. Kurt K. Hendel. http://chaucer.library.emory.edu/luther/luther_site/luther_frame.html

Sound Recordings Project (in development)

Emory’s Preservation and Conservation Division is in the process of digitizing sound recordings, primarily from the General Libraries’ William Dawson Collection. A major African-American composer, arranger, and member of the Chicago Symphony Orchestra, Dawson joined the Tuskegee Institute in 1930 as director of its School of Music. Dawson’s collection includes numerous deteriorating analog acetate discs and reel-to-reel recordings of African-American music. To date more than 150 of these recordings have been digitized as master files in .WAV format, with public-use files available for use on compact disc. There are no current plans for online delivery of these recordings.

Southern Changes

Published by the Southern Regional Council, Southern Changes is the major house organ of the SRC, a leading force in the Civil Rights Movement. The archive spans from 1978 to 2000. To date vols. 4-14 have been converted into a searchable database; we are in the process of digitizing vols. 1-3 and 15-20. http://chaucer.library.emory.edu/schanges/southernchanges.html

B. Services

Cox Computing Center

The Cox Computing Center is Emory's state of the art collaboration lab for Emory faculty and students. Outfitted with specially designed furniture and equipped with leading edge hardware and software, the facility is the perfect location to practice PowerPoint with fellow presenters, review online material as a group, complete iMovie assignments, or just relax with a cup of coffee while using the rental laptops and wireless network. http://it.emory.edu/showdoc.cfm?docid=1179

ECIT - Emory Center for Interactive Teaching

Emory's Center for Interactive Teaching (ECIT) provides support personnel and facilities to assist Emory faculty with incorporating interactive multimedia technologies into the teaching experience. Since its inception in 1996, a wide array of primarily Web-based technologies have been explored, including: Web site authoring, digital audio and video editing, electronic bulletin boards, virtual collaboration spaces, Web-based testing/student tracking and various video-conferencing and teleconferencing systems. The Center's combination of technology-based learning systems and support from its knowledgeable staff continue to enhance the teaching experience in new and exciting ways. http://www.ecit.emory.edu/

Beck Center for Electronic Collections and Services

The Lewis H. Beck Center for Electronic Collections and Services promotes and supports the use of scholarly electronic collections by Emory University faculty, students and staff. To this end, the Beck Center actively acquires and makes available for research and instructional purposes the rapidly
expanding corpus of full-text databases and multimedia titles which comprise electronic collections. The Beck Center also seeks to provide leadership in the realm of electronic collections by identifying new technologies in support of the scholarly research process and by serving as an advocate for the Emory community's needs.

http://chaucer.library.emory.edu/

Database Locator

An attempt to provide more streamlined access to the numerous electronic and print information sources available to Emory students, the Database Locator brings together key resources by broad category (e.g. encyclopedias), by subject (e.g. resources in Anthropology), as well as general guides to effectively searching the Web and online lists of instructional sessions and workshops.

http://web.library.emory.edu/services/ressvcs/dblocator/

Electronic Data Center

Emory's Electronic Data Center provides researchers and students with access to over 5000 data sets covering diverse subjects such as Criminal Justice, Urban Renewal, Health Policy, International Relations, Political Behavior and Economic Development. Interested Emory Researchers may access our online collection anytime or request that EDC acquire data from ICPSR, the US Government, and many other data providers. In some instances users can even analyze the data online using applications developed in partnership with Emory's Information Technology Division. A cluster of high-end workstations equipped with the latest software applications is located in the EDC to facilitate research.

http://einstein.library.emory.edu/EDC/

Electronic Document Delivery

EDD provides digital copies of journal articles or tables of contents from materials in the Emory libraries off-site storage facility, the Materiel Center. Digital copies are made available to users on a library web server in the Adobe PDF format. The hardware component consists of a Xerox Document Center utilizing Adobe Acrobat for converting files from various image formats to PDF.

Electronic Reserves (Reserves Direct)

The General Libraries' Electronic Reserves Project seeks to expand the scope of the traditional reserve reading list to include both print and electronic formats, and provide a single, comprehensive list for all materials needed for a particular course. Electronic reserve materials can include class Web sites, Web-based conferences, electronic journal articles, or scanned images of course-related documents. These electronic materials can be accessed directly through WebCat, the web based version of the library catalog, EUCLID. Students search for their reserve list in the library catalog, and when an electronic version of the material is available, can click on a hyperlink within the reserve record to access that material. Electronic access to reserve material offers greater convenience in that students can access this material at any hour using the Internet.

Using open source programming that is made available free of charge to other libraries worldwide, Emory's Reserves Direct system makes placing materials on reserve in the library for each class as simple as can be. Faculty have the option not only of adding their own photocopies by fax, but also of sorting reserve items by author, title or syllabus. They also can easily carry over items repeated from earlier semesters, annotate items with comments or instructions right online, or add URLs themselves, all of which become available to the user instantly.

http://ereserves.library.emory.edu/documentation/faculty/
Ejournals@Emory University Libraries

The eJournals @ Emory University Libraries database includes links to online, full text journals to which Emory's libraries have paid subscriptions, either directly through the publisher or through licensed databases and other resources to which Emory has access. The eJournals @ Emory University Libraries database does not yet represent a complete and comprehensive listing of such journals, but its coverage will expand rapidly over the coming year.

http://ejournals.emory.edu/resources/ejmdb/

InfoCommons

The InfoCommons is both a desktop and a service environment supporting users in locating, collecting, and manipulating information. The space and service supports collaborative learning and research and are adaptable and expandable to accommodate changes in technology. The InfoCommons currently provides 24-x access to more than 200 workstations, both PC and Mac, incorporating both dedicated lines and wireless technology utilizing DHCP and Macintosh Airport Bases. The InfoCommons software suite provides access to library catalog, email, WWW and GALILEO, conferencing systems such as BlackBoard and FirstClass, and host of MS Office applications. In addition, several "special use" workstations have been further equipped with a range of high-end Web authoring and development applications ranging from Adobe PhotoShop and DreamWeaver to SPSS and Sigma Plot.

http://infocommons.emory.edu/

Language Lab and Classrooms

Managed on behalf of the Emory College Language Center but open to the campus, the Language Lab offers Emory students a state of the art facility for reviewing online audio and video language instruction in Woodruff Library. Additionally, Emory's sixteen language programs are supported in browsing and word processing, with special functionality available to non-roman language character sets like Arabic, Chinese, Hebrew, Hindi, Korean, Japanese, Persian, Russian, and Sanskrit.

In addition to the main language lab, several state-of-the-art multimedia language classrooms have been designed and installed in renovated seminar rooms located in the stacks of the Woodruff Library. These new facilities offer a wide range of hardware and software systems in support both in-class language courses and student practice and study outside of class.

http://it.emory.edu/showdoc.cfm?docid=1191

Marian K. Heilbrun Music and Media Library

Located on the fourth floor of the Center for Library and Information Resources of the General Libraries, the Heilbrun Library offers facilities and environments conducive to studying, listening and viewing, computing, and conducting research in music and media study. The Library provides access to both print and electronic information resources, audio and video streaming, language labs, and research and classroom facilities.

http://web.library.emory.edu/libraries/music/

Web-Based Reference and Circulation (WoodChat) - to be implemented in 2003-04

When launched, WoodChat will allow current Emory University students, faculty, and staff to ask circulation and reference questions in real-time chat and also collaboratively browse databases and web sites with library staff.
Reference staff will answer questions about our library's collection and services, help you use EUCLID, suggest print and electronic resources for research as well as identify appropriate databases for article searching. Questions which require intensive research or extensive answers may be better answered in person or via email or referred to a subject specialist.

Circulation staff will assist patrons with accessing and managing their library account, borrowing library materials, finding out about overdue fines, recalling books that are checked out or located at other libraries, as well as assisting patrons with Interlibrary Loan procedures. In addition, circulation staff will answer questions regarding the Reserves desk, such as placing materials on reserve, how to access those materials, and how to use the carryover system.

**Wireless Networks in the Library**

As part of our continuing effort to provide easy access to information resources, the General Libraries, in collaboration with Emory's Information Technology Division, has installed a wireless DHCP network in the General Libraries. This is the first and largest wireless installation on campus, supporting the use of student laptop connectivity anywhere in the facility.

**C. Systems**

**EUCLID Integrated Library System (SIRSI)**

EUCLID is our complete system for automating and administering the Emory libraries technical and public services functions, using the SIRSI integrated library system.  
[http://www.library.emory.edu](http://www.library.emory.edu)

**ILLiad Interlibrary Loan System**

Emory has implemented OCLC's ILLiad as a comprehensive ILL management system that automates routine borrowing and lending activities. ILLiad seamlessly integrates borrowing, lending, and electronic document delivery in one interface.  
[http://www.library.emory.edu/uhtbin/nph-illiad](http://www.library.emory.edu/uhtbin/nph-illiad)

**LIBNET Remote Access to Databases**

LIBNET represents a way of remotely accessing a set of core library electronic resources from anywhere on the Internet. It is a software application with minimal requirements for hardware and network/modem speed, which means that the software can run on many older, less powerful workstations. LIBNET runs at no cost to the user and the LIBNET software is free. LIBNET utilizes CITRIX server software and is maintained by the General Libraries in collaboration with Emory's Information Technology Division, for the use of the Emory campus.  
[http://info.library.emory.edu/libnet/](http://info.library.emory.edu/libnet/)

**SFX and Open URL**

In FY 2003-04 the Emory Libraries are implementing SFX *ex libris* software with their integrated library system. SFX will allow us to dynamically create links that fully integrate their information resources regardless of who hosts them -- the library itself or external information providers. The user will be presented with context-sensitive links that are dynamically configured on the basis of our institution's electronic collections, both locally produced and commercially licensed.
Emory is undertaking this installation in collaboration with many other academic libraries in the statewide GALILEO database consortium.

II. Future Challenges

Digital Repositories and the Preservation of Digital Information

In the coming year we expect to begin a more extensive study of the preservation and access issues surrounding the possible development of digital repositories. The Emory libraries are at a very early stage of discussion on this topic.

Digital Image Files

In the coming year the Emory libraries will implement Luna Imaging's InSight software and develop both guidelines and protocols for the campus-wide development of various image files for research and teaching. This project will be undertaken in conjunction with the anticipated release of JSTOR's ArtSTOR collection. Emory hopes to be a beta tester and early adopter of this proposed digital art collection.

Open Proxy Servers and Database Security

Delivering online services outside of library buildings and off-campus at universities and colleges is quickly becoming a major and essential part of what we do in libraries. The method that has become standard to support remote access to online services from users' homes and offices is the proxy server, which acts as an intermediary between the remote users and the database servers that the library makes available.

Properly configured, proxy servers can act as "doormen" ensuring that only authenticated users are allowed to pass. Properly configuring proxy servers is becoming a campus-wide security issue, however, and will definitely require much more institutional focus in the coming year.

The expanding user demand for wireless access to library systems and services also presents related database security issues, not the least of which is authentication for valid Emory affiliates.

In the coming year we expect to collaborate closely with our campus information technology division to identify support and security issues and develop guidelines and protocols which will equitably balance our users' desires for easy access, any time and any where, with security and commercial licensing requirements.

For More Information…

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