University of Washington Libraries
Report to the Digital Library Federation
October, 2005

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I. Collections, services, and systems

A. Collections

Mount St. Helens Post-Eruption Chemistry Database

Over 100 slides taken by Professor William Zoller, Professor of Chemistry, University of Washington, over a period of three years during research trips with his team to study the chemistry and impacts of the 1980 eruption of Mount Saint Helens.
http://content.lib.washington.edu/mshchemweb/index.html.

Seattle Water and Power Supply

Historical photographs and pamphlets documenting the construction of hydroelectric power and water supply facilities built in Washington State from the late 1890s to the 1950s including the Snoqualmie Falls Power Plant, the Electron Plant, the Skagit River Hydroelectric Project, and the Cedar River water supply system.
http://content.lib.washington.edu/ww-spwsweb/index.html

Western Waters Texts

Scanned texts supporting the Western Waters Digital Library project. Contains two types of content: a) articles, proceedings, and research on cloud-seeding and weather modification efforts in the mid-20th century; and b) surveys, congressional reports, and maps relating to the Columbia River in the early 20th century.
http://content.lib.washington.edu/ww-text/index.html

Pacific Northwest Sheet Music Collection - audio component

The Pacific Northwest Sheet Music Collection contains music from and about Washington State, the Pacific Northwest and the University. Image collection has been on-going, and this year several contemporary audio recordings of these score were added. The user can listen to the recording while viewing the musical scores.
http://content.lib.washington.edu/smweb/index.html

B. Services

Q&A Live Chat Reference Service

At the beginning of the 2005 Fall Quarter, UW went live with the new 24/7 consortium chat reference service and UW is now officially part of the 24/7 cooperative. By joining the cooperative we now have access to contract librarians who will monitor chat reference during the hours we don't provide it, and give users a true "24/7" chat reference service.   The UW provides a total of 51 chat hours per week to the cooperative. There are 28 people trained for Q&A Live.
http://www.lib.washington.edu/services/qnalive/

Digital Dialogs

Digital Dialogs is a series of presentations offered to staff of the UW Libraries on a regular basis regarding applications and issues of new technologies in an academic environment. Other members of campus are welcome to attend. Topics cover a range of interests, including: Encoded Archival Description Schema, Google and Libraries, JPEG2000, and Creating Digital Projects for Teaching and Research.
http://digital.lib.washington.edu/sv/dialogues.html

Public Site Search

A single-stop Internet search site that provides users of all ages and interests with organized access to rich and diverse assets of: public media, libraries, museums, and other not-for-profit entities in western Washington. Partners include KCTS Television, King County Library System, KUOW 94.9, KPLU 88.5, Seattle Public Library, and the University of Washington Libraries.
http://search3.webfeat.org/ConvergBasic.asp

HealthLinks

The HealthLinks "family" of web resources and tools continued to be extremely popular with over 500,000 hits/month and is especially heavily

used for clinical decision support and bioresearch information. Healthlinks provides quick access to Tookits and PubMed, a premier database to journal articles in the health sciences.
http://healthlinks.washington.edu/

C. Systems

Support for CONTENTdm's JPEG 2000 extension

Began supporting the scanning of large and detailed photographs, maps and drawings with the purchase of JPEG2000 extension for CONTENTdm. JPEG2000 is the latest in a series of standards from the JPEG committee. JPEG2000 provides exceptionally high quality images at low bit rates, overcoming many of the limitations of the original JPEG standard. The CONTENTdm JPEG2000 Server supports dynamic decompression and display of JPEG2000 images for efficient viewing of large files without the need for browser plug-ins. Images are presented to users in a standard Web browser with zoom and pan toolbar features. Users benefit from higher quality, detailed images without the delays normally experienced waiting for large images to be transmitted.
CONTENTdm's JPEG2000 Extension
Example

OAI

Enabled OAI harvesting of metadata from UW Digital's Collections which are served via CONTENTdm. This step was essential for participation in the Western Waters Digital Library project and the American West Digital Library Project. See below for more details on Western Waters Digital Library.

II. Projects and programs

A. Projects

Western Waters Digital Library

The WWDL is a two-year pilot project of the Greater Western Libraries Alliance, funded by IMLS. The project will establish a solid foundation for the continued development of a comprehensive digital information resource about water in the western United States. In this phase, twelve academic libraries in eight western states developed and host digital collections covering four major river basins: the Platte, Rio Grande, Colorado, and Columbia. Selected materials include a variety of

government reports, legal transcripts, water project records, photographs, and personal papers, representing a variety of formats. The index of the metadata from the geographically dispersed collections is harvested by a central server using OAI technology at the University of Utah to enable virtual, seamless searching of all the collections from a single web site. The intent is to increase geographic coverage and participation as the project develops.
http://westernwater.org

UW Image Bank

The UW Image Bank is a digital image project aiming to provide University-wide access to digital images of works of art, architecture, and cultural and historical materials. The UW Image Bank will include images of cultural production from diverse time periods and world cultures, as well as major monuments of world art and architectural history. Images will be available for use by all faculty, students, staff, and others associated with the University of Washington, for all purposes related to teaching and learning at the University of Washington. The UW Image Bank will be available beginning Autumn Quarter 2005. The UW Image Bank is a three-campus collaboration between the University Libraries and the UW's department and campus visual resources collections. The goal is to take advantage of the benefits of the digital medium to provide broader and easier access to images.
http://depts.washington.edu/imagbank/

Telemakus

The goal of the Telemakus Project is to enhance the knowledge discovery process by developing retrieval, visual and interaction tools to mine and map research findings from the research literature. The objective of the research is to create, test and validate an infrastructure to permit the automation of the creation and maintenance of a searchable database that generates knowledge maps via query tools and concept mapping algorithms. Applying natural language processing models and information analysis methods will ultimately speed up the scientific discovery process.
http://www.dbhi.washington.edu/telemakus/

METS Pilot

UW Libraries hosted a presentation by and discussions with Corey Keith of the Library of Congress about the Metadata Encoding Transmission Standard or METS. The Libraries' Digital Initiatives team, in collaboration with the Metadata Implementation Group (MIG), will be building a pilot project to demonstrate the feasibility of creating and disseminating METS records as part of the Libraries' digital repository architecture. Using

display tools available from the Digital Library program at New York University, UW Libraries has started developing prototypes of how an architectural image collection might look in METS. Promising aspects of the METS structure include the ability to link various levels of image formats to one content-based record, which reduces redundancies in cataloging, and the ability to hierarchically structure content-based and technical metadata.
http://www.loc.gov/standards/mets/METSOverview.html

Moving Image Collection

The moving image collection contains film and video of a wide variety of formats. The film collection contains films dating back to 1914 and includes 35mm, 16mm, 8mm and Super 8mm formats. The collection contains a variety of film types, including home movies, industrial and educational films, and films produced on the UW campus during the 1940s - 1970s. The films cover a wide variety of topics including travel and family life, activities and research related to the UW, industries such as plywood manufacturing, logging, fishing, whaling, and construction, political figures, civil rights and labor, and other documentation of the Pacific Northwest and Alaska. Streaming video clips from some of the films in the collection will be available for viewing on our Digital Collections site. Selected finding aids for films will be available online. They have written an instruction manual for film preservation, Washington State Film Preservation Manual: Low-Cost and No-Cost Suggestions To Care For Your Film, which is available online.
http://www.lib.washington.edu/specialcoll/collections/graphic/

ERMI

UW Libraries had a leading role in the Digital Library Federation Electronic Resources Management Initiative ("ERMI"), which resulted in publication of the "ERMI Report" that has been adopted as the basis for ILS and Serials vendors' new E-resource Management systems and software. A partnership with Innovative Interfaces created the Electronic Resources Management system to track licensed content. Background: when libraries aquire electronic resources from publishers or vendors, they must understand, record, transmit, and inform others about the many financial, legal, interrelational, and access aspects of these arrangements. The acquisitions and licensing processes are complex, publishers transmit this information to libraries in a variety of paper and electronic formats, and the number of licensed electronic products libraries are collecting is increasing rapidly. Such situations tend to spawn local, ad hoc fixes; what is needed, by contrast, is an industry-wide, standardized solution. The Electronic Resources Management Initiative (ERMI), an ongoing project

of the Digital Library Federation (DLF), is creating such a solution.
http://www.diglib.org/pubs/dlfermi0408/

CEIR

The Central Eurasian Interactive Atlas provides access to geographic data with more than 700 attributes on demography, social infrastructure, economics and elections for 2,463 administrative units of the Russian Federation in annual progressions from 1996 through 2000. The Central Eurasian Interactive Atlas provides access to geographic data on population and labor, social services, business, industry and agriculture, investments, transportation and communication, trade, finances and prices for the Russian Federation and other countries of Central Eurasia. As of 2003, over 700 variables for the Russian Federation can be mapped at the rayon and city level for 1996, 1997 and 1998.

Using GIS maps, the user selects and displays geographic data. Besides visualizing geographic information, the user can dynamically interact with the map to see and understand the relationships between the objects and networks displayed. Quantile classifications of the data allow for the graphic display of geographic information changes over time, and provide the user a method for analyzing the geography of these changes across the Russian Federation.

Russian Federation data for 1999 and 2000, together with electoral data for elections from 1993 through 2000, is currently being processed and will be added to the atlas in March 2005. Additional modules covering Central Asia (Kazakhstan, Kyrgyzstan, and Uzbekistan) and Ukraine are planned for release in 2005.

Support for this project has been provided by grants from the U.S. Department of Education's Title VI Program for Technological Innovation and Cooperation in Foreign Information Access (TICFIA) and from the University of Washington Libraries' 21st Century Fund.
http://green.lib.washington.edu/website/ceir

Update on Existing Projects

GLOPAD

is a consortia effort between Cornell University, the Gertrude Stein theater, University of Washington Libraries, and others to create a multimedia database of materials related to the performing arts including scripts, playbills, and VRML representations of space. GloPAD (Global Performing Arts Database) records include authoritative, detailed, multilingual descriptions of digital images, texts, video clips, sound

recordings, and complex media objects related to the performing arts around the world, plus information about related pieces, productions, performers, and creators. GloPAD is in a continual process of development. Approximately 4,500 objects are currently available, with new records added and older records revised on a daily basis. Much of this work was made possible by a major three-year grant (October 2002-September 2005) received from the Institute of Museum and Library Services (IMLS) through the Cornell University Library.
http://libdev.library.cornell.edu/glopad_pi/index.php

Community Museum Project

Northwestern Olympic Peninsula communities and The University of Washington are working together to create a Web-based museum to showcase aspects of the rich history and culture of the region. This project is made possible by a 2003 National Leadership Grant for Library and Museum Collaboration from the Institute of Museum and Library Services (IMLS). The virtual museum will be organized as a series of exhibits, each representing a different aspect of the culture and history of the region. A variety of different formats (text, photographs, video, and audio) will be used as appropriate for each specific exhibition being developed. Community Museum online exhibits will include: the Makah, Hoh, and Quileute tribal cultures; the National Park System's photographs, the timber history; the lives of early settlers in the region; and the culture of the growing Hispanic population. To date over 5,000 images are ready for online display; another 7,000 digital objects (including video and audio objects) are in process. Look for a March, 2006 launch.
http://www.communitymuseum.org/

B. Programs

Digital Futures Alliance

Initiated by the UW Libraries, the Digital Futures Alliance brings together dynamic and forward-thinking Pacific Northwest companies, institutions, and organizations under a common goal: to advance the long-term preservation and accessibility of digitally-created information and research. What digital information must we preserve now and how will future generations access these historical documents? Through this unique consortium, organizations will have the opportunity to participate in research and develop cutting-edge innovations essential to safeguarding today's digital records and research for tomorrow's users – in the Pacific Northwest and around the world.

Activities of the Alliance:

Conduct a research study to clarify the digital preservation needs of industry and academia.
Contribute to the creation of new tools and technologies to preserve digital information.
Participate with a team of experts from the UW and a wide range of industries – all nationally and internationally recognized.
Establish practices and standards within various industries to facilitate digital preservation.
http://digitalfuturesalliance.org

IV. Digital library publications, policies, working papers, and other documents

- Fuller SS, Revere D, Bugni PF, Martin GM. "A knowledgebase system to enhance scientific discovery: Telemakus." *BioMedCentral Digital Libraries*, (1):2-15 (21 September 2004).
- Lally, Ann M. and Ogburn, Joyce O. "Libraries and the Changing Nature of Scholarship." LITA Guide to E-Scholarship. In Press, to be published in 2005.
- Lally, Ann M. "Digital Institutional Repositories and Your Library." Against the Grain. (2005) vol. 16 no. 6, pp 58, 60.
- Llona, E., Yokota-Carter, K., Craft, E., Pham, D. "Providing access to foreign language electronic resources." Information Technology and Libraries, 23:3 p. 119-123, September 2004.