

**State University Library Council**  
**Thursday March 6, 2003 – 12 noon to 5pm**  
**Florida Atlantic University**  
**University Center, Royal Palm Room**  
**Minutes (Approved at the June 16, 2003 meeting)**

Present: Dale Canelas, [chair]; Barry Baker, Jim Corey, Andy Farkas, Kathy Hoeth, Maryhelen Jones [for Althea Jenkins], Bill Miller, Larry Miller, Joan Pelland, Derrie Perez, Lauren Sapp.

1. The **agenda** was approved with the addition of 14. i – 14. m.
  - Reminder: **Technology Issues** will become a standing agenda item in June.
2. The **minutes** of December 5, 2002 were approved with minor corrections in numbers 3, 8, and 12.
3. **Scheduled meetings:** March 4, 2004 in Gainesville at UF was accepted.
4. **Report of the CMC** was accepted. The CMC is considering dropping all but one copy of print on some titles.
5. **Report of the DPPC** was accepted and the following items were approved:
  - Approved recommendation that selected PALMM collections will be contributed to RLG cultural materials alliance.
  - Approved recommendation that royalties, if any, will be sent to FCLA to offset PALMM storage costs.
6. **Report of the ECC** was accepted.
7. **Report of the PSPC** was accepted.
8. **Report of the TSPC** was accepted.
9. **Report of the Rosetta Committee** was accepted. USF will participate with UF once USF position is filled.
10. **Virtual Reference LSTA Grant held by CCLA/TBLC** was discussed. Funding will be provided for both organizations to perform a pilot program. Currently they are writing a grant to get software for phase 2 library participants. Participating libraries will pay \$1,000 per year after the grant. Initial funding was \$330 K. A coordinator has been hired.
11. **Florida Mental Health Institute Library concerns** regarding mandated services was discussed and will be handled through the ECC/USF representative. The SULC will ask the ECC to find ways to accommodate these kinds of special requests or needs; the simplest way is for each institution to alert the ECC of these circumstances. The SULC believes that Klyuer should be asked to make a

modification although they may not accept it. There is no reason not to do this as long as it does not cost the other institutions additional funds if the specific library wants to go beyond the basic contract; this means that if we negotiate on the behalf of FMHI and it costs additional money outside of the basic contract, then FMHI would be responsible for paying the extra; so the negotiation would have to separate that piece. Recent negotiations are trying to get ILL into all contracts and if that happens, then we can do ILL for anyone. UF has cut off service to state agencies' access to databases.

12. **Five Year Plan of 12/1998** was discussed. It was noted that that plan still reads well, as much of it is unchanged. Dale and Derrie will draft the vision statement and Larry will re-draft the Library Environment section to be redistributed electronically.
13. **SUL Description**. This was rewritten by Bill Miller and was discussed. It was suggested that some statistical profile information be added to show "Significant Service Outcomes." Maryhelen Jones will send us the link for information regarding ICOLC work to establish e-resource usage statistics standards. Otherwise, the document was approved and will be placed on the web page.
14. The following issues were discussed during "Director's Discussion" time:
  - a. **Class codes for librarian ranks**. The state descriptions appear to be outdated and very limited to traditional paper functions. Most reported these are ignored and that the library writes evaluation and promotion criteria. UF is working on new classes for LTAs and will have four to six levels when completed; Dale will share. UF has eliminated instructor in favor of "lecturer;" there will be whole series of levels for "teaching only" which will be eligible for continuing contracts. "Instructor" can no longer be used in the library; everyone will start at "Assistant University Librarian" at \$40K with no experience. There will be a 7-year review after University Librarian, which could provide another 9% if they have kept up. Another issue discussed was where department heads should fit into a collective bargaining agreement.
  - b. **Contingency plans for inadequate funding of FCLA for SUS databases and equipment**. Options for determining how to respond to potential cuts were discussed. Kathy shared an example of how budget cuts were handled at a library where she previously worked. The methodology involved staff input. Another idea was to make a note on the webpage, "We can no longer bring you this database because of budget cuts." Other libraries may reduce hours. It was suggested we look at the "cost per search" charges.
  - c. **Potential necessity to cancel free ILL agreement**. The SULC believes that administrative costs would be contrary to our collaborative efforts.
  - d. **Library Portals**. USF uses Blackboard to create a campus portal with a single authentication. It offers real-time user statistics and broadcast capabilities. There was discussion of possible linkages and/or relationships between campus portals and library portals (metalib). This will be discussed further at the next meeting.
  - e. **Contingency plans for lower budgets**. This was discussed as part of 14b.

- f. **Library Fines.** Do we want uniform fees across SULC? The .25¢ was established in 1967. What are lost book replacement and processing costs? This will be sent to the PSPC for discussion and a recommendation to the SULC.
- g. **D-Space.** Some discussion of ETDs and institutional repositories ensued. Jim believes there are two issues related to the management of institutional repositories: 1.) The value, which has to be decided by the university; and 2.) The technical ways to implement.
- h. **Impact of state library changes on SUS Libraries.** There was discussion of the impact of the state library changes proposed by governor. A major concern is the FLIN protocols and possible increased ILL for the SULs. Dale will ask Althea to raise the FLIN protocols at the FLA legislative committee. The SULC would also support Florida Virtual Library funding for databases, which might relieve the ILL load on the SULs.
- i. **Way funds allocated.** Universities will receive fund allocations from the state in two-week increments. This could jeopardize the way libraries need to expend funds.
- j. **Tracking library resources.** Each of us will have to work within our institutions for materials budget allocation; all funds now come from our institutions, not the state.
- k. **Jim Servies update.** Andy reported that a deal could not be made for the Florida bibliography by Jim Servies; he is unwilling to sell.
- l. **LOCKSS project.** Jim discussed the project; it would provide a backup copy of titles to which we subscribe. We could use the copy if vendor or Internet is down or if a vendor goes out of business. FCLA will be involved in a beta test. Some society and other small publishers are involved so far.
- m. **FIU Excellence in Librarianship Award.** The FIU Provost has established this award since librarians are not eligible for the teaching awards (\$3,000 stipend).

Tuesday, March 06, 2007

**Background #2**  
**State University Library Council**  
**Thursday December 5, 2002 – 9am to 2:00 pm**  
**Broward Community College, Central Campus**  
**3501 SW Davie Road, Davie, FL 33314**  
**Building 17, Room 315**  
**Minutes (Not yet approved by SULC)**

**Present:** Dale Canales [chair], Barry Baker, Jim Corey, Andy Farkas, Kathy Hoeth, Althea Jenkins, Richard Madaus, Bill Miller, Larry Miller, Grady Morein, Joan Pelland, Derrie Perez, Lauren Sapp

1. The **agenda** was approved with the addition of two discussion items:
  - 15. e Committees: discussion of charges, possible overlap in charges; adding a Health Sciences subcommittee
  - 15. f Virtual Reference
2. The **minutes of September 5, 2002** were approved with one correction: Item 11, the spelling of Kornblau will be corrected. The SULC agreed that they will formally adopt the minutes at the following meeting and not do so via email. “Not yet approved by SULC” will be added to the minutes until the minutes are approved. Attendance will be added. Andy distributed the SULC salary survey; he was thanked for the work he did to pull it all together.
3. **Schedule of next meetings.** December 4-5, 2003 in Miami at FIU was accepted. This includes the joint meeting with Community Colleges; Larry Miller will investigate arrangements (possibly at Wilsonian Museum on Miami Beach). Larry was applauded for setting up the tour for the December 2002 meeting.
4. The **Report of the CMC** was discussed and accepted with one action item: The SULC will ask the CMC to look at the SUL collections as a whole. From the perspective of a “single library,” the CMC will make recommendations for sharing, will identify issues, and will report to the SULC implications of their discussions. The SULC also decided that should a Special Collections group be needed it will be a sub-committee or task force of the CMC.
5. **Report of the DSPC.** With discussion, the report was accepted and actions taken.
  - a. The SULC approved the recommendation that all public access computers support IE 5.0+, Netscape 6.0+, or Mozilla 1.0+.
  - b. The SULC approved Richard Bernardy, Erich Kesse, and Selma Jaskowski as members of a Subcommittee on Standards to draft quality standard guidelines for PALMM collections.
  - c. The SULC approved the name change to “Digital Projects Planning Committee.”
  - d. The SULC did not approve reconvening the Special Collections Task Force as a sub-unit of the CMC. The SULC prefers that the DPPC work with the CMC in determining collection priorities.
  - e. The SULC approved a new charge for the DPPC.

- f. It was noted that the DPPC's draft of "guidelines for developing partnership agreements" will be presented to the SULC in March 2003.
6. **Report of the ETDS.** After discussion the SULC accepted the report with the following changes: Instead of a committee, the group will be a task force that will end upon completion of its charge. The charge was amended to include, "to recommend statewide guidelines for each area" and to strike the need for a chair-elect or the delineation of terms. ETD TF recommendations will be presented to the SULC through the DPPC. Rita Pellen from FAU will be added to the Task Force and UWF will also add a member.
  7. **Report of the PSPC.** The report was withdrawn.
  8. **Report of the TSPC.** After discussion the report was accepted and the appointments and charges of an SFX/Metalib Task Force and an Aleph Indexing Task Force were approved. Directors were to notify Jim of membership on these two task forces.
  9. **Report of the Rosetta Committee.** The SULC recommended changes to the draft sketches and requested that the Committee design an FCLA/SUL logo for Rosetta. Dale will ask Barbara to blend the FCLA and SUL logos. Jim requested to look at downloading issues; graphics may be a problem for dial-up.
  10. **SULC Logo** was approved as presented. FCLA will populate the site with it and then the SULC will work on content.
  11. **Access to SUS and FCLA Committee Information.** Discussion was held regarding committee archives of discussion lists. The reasons for limited access were discussed; no changes are required at this time.
  12. **Report on the Joint Meeting.** The emphasis of the Joint Meeting was Aleph, with sessions on SFX and Metalib as well. Staff returned excited about the product demos.
  13. **SUL "Measurements."** Each library should send Dale its 2001/2002 ACRL stats on a spreadsheet for Dale to compile; she will send out a template with SUL ACRL statistics from last year. There will be additional stats that will need to be added. Jim will consider what to report for FCLA. Once the latest stats are compiled, the SULC will discuss them. The SULC needs to consider how to frame what the SU libraries do in ways that will be meaningful. The SUL probably needs a "fact sheet" and an "issues sheet." Some of the discussion included:
    - a. Database searches
    - b. Web site hits
    - c. Focusing on services
    - d. Identifying points to make
    - e. Putting info on the new SULC website
    - f. Answer "so what" type questions
    - g. Anecdotes can be effective
    - h. Digital collections
    - i. Remote access

- j. **Accountability measures**
- k. **Impact we have on quality of life, student learning, teaching, research**
- l. **Making comparisons of library use v. use of other university services**

14. **SUL Description.** Bill volunteered to rewrite the 5-year old description of the state university libraries; he will send it to SULC members for input.

15. **Directors' Discussion**

a. **Archiving e-journals.** Derrie asked FCLA about their role in archiving e-journals, especially when publishers/aggregators/vendors go out of business. Some contracts continue fees to use resources even if vendor fails (i.e., Adonis). Jim indicated that FCLA would be willing to work with the libraries to address this issue.

b. **ACRL @ your library public relations campaign.** Bill reported that ACRL is the first to use @ your library for ALA division specific purposes. There will be some training sessions in Florida. A 50-page manual will be available. The training kick-off, with the manual, will be held at the ACRL National Conference in Charlotte in April.

c. **Digital Library Issues: State of the Art, Future Directions, etc.**

Larry stated that this is a good forum for maintaining knowledge of emerging technologies as they impact libraries. A suggestion was that Jim is in a good position to provide SULC with issues updates as a regular agenda item. General remarks by Jim were made regarding trends toward cheaper hardware; evolving video is a high-interest area for some institutions, as is audio; FCLA will get into both. Jim noted that storage cost has gone down. He indicated that a big problem is that there is no single digital library architecture. A standing agenda item will be added for these technology issues discussions.

d. **SPARC White Paper on Institutional Repositories / Dspace.** Deferred

e. **Committees.** Althea led a general discussion, some of which had taken place earlier in the meeting.

f. **Virtual Reference.** There was discussion of the number of initiatives already in the works. In Florida, TBLC has an LSTA grant with CCLA for a statewide project. Derrie and Barry can report on that at later meetings as they both have some involvement. FSU has made a commitment to work with the ASERL initiative and is not sure what that might or might not fit into the state work. FIU is in the "24/7 Group," which is worldwide and an LSTA grant. Larry believes it is too early to make any assessment. UCF, UF, FAU all noted that institutional and statewide policy would affect decisions; for instance, scheduling is hard already, just at the institution level. There is also concern about sharing licensed databases, as well as the impact of changes occurring in the state for a statewide Virtual Library.

**From:** John Ingram  
**Sent:** Monday, February 17, 2003 8:30 AM  
**To:** Dale Canelas  
**Subject:** cmc report

Dale: The Collection Management Committee has not met since the November face-to-face in Gainesville, and hence I do not have a progress report for your and the other directors of the SUL.

We plan our next meeting of the CMC via conference call in early March. Our chief topic for discussion will be the recommendations for shifting to electronic subscriptions as the base for Elsevier and Kluwer and Wiley for calendar year 2004. The discussion will entail recommendations for maintenance of paper copies of all titles, number of duplications, and venues for retention of these 'dark' SUL archives.

john

**TO:** Dale Canelas, Director, University of Florida Libraries  
**FROM:** Lucy Patrick, Chair, Digital Projects Planning Committee  
**DATE:** February 17, 2003  
**RE:** DPPC QUARTERLY REPORT, March 2003

**General news**

A new version of the MXF client is available for download. Version 2.8.1 supports new metadata elements required for describing photographs and maps. The "Editing Guide to Map & Photo Metadata" covers the use of the MXF for describing maps and photos. It includes descriptions and examples of the data elements, how they are mapped to MARC, and how they are used in the Visual Collections server. The Guide is available from the PALMM pages under PALMM Guidelines and Procedures/Project Specific Guidelines. (See [http://palmm.fcla.edu/strucmeta/MXF\\_Metadata\\_Photo.pdf](http://palmm.fcla.edu/strucmeta/MXF_Metadata_Photo.pdf))

Counts for selected PALMM (or in-the-PALMM-pipeline) projects as of 1/1/2003

FL Heritage	990 titles	147,766 pages
FL Environments Online	717 titles	50,209 pages
Everglades	354 titles	6,950 pages
Literature for Children	397 titles	58,441 pages
FL Arch & Landscape Design	215 titles	9,417 pages
Miami City Archives	6 titles	812 pages
Eric Eustace Williams	9 titles	779 pages
World Map Collections	371 maps	

This is an increase of **270 titles** and **28,785 pages** over last month.

Report on our first monthly telephone conference, Friday, January 10.

- Florida Heritage Project requests were submitted to FCLA for payment early in January. We hope to get the money in early February.
- Erich Kesse (UF) will soon be putting up guidelines and a checklist of items to be considered when developing partnership agreements with non-SUL institutions.
- Priscilla Caplan (FCLA) reported on progress with the grant funded archives repository and the ETD project. FCLA is now ready to accept digital photo collections; FIU and Monroe County will be providing the first collection. FCLA is also beginning to work towards migration of the PALMM collections to Aleph.
- Erich Kesse (UF) has done an experiment using the Microsoft ebook format (.lis). He will be sharing the details of how it is done and some examples with the group. This format provides portability not currently available for PALMM etexts.
- Prior to the telephone conference, Erich distributed information about a suggested joint project called Great Floridians. The University of Florida is interested in raising funds to support related digitization projects at all the SUL institutions as a consortium. While the project was initially focused on

biographical collections, it was suggested that the content be broadened to be more like Florida Heritage (including social, cultural, political, and historical topics as well). This suggestion was favorably received, and the directors will be contacted to see if they are interested in supporting such an effort.

- Erich reported that the Florida newspaper project is still under discussion. It is hoped that after ALA more details can be announced.
- The next telephone conference will be Friday, February 7, 2003.

#### **Report on monthly telephone conference, Friday, February 7.**

- Funds are being transferred to all institutions. Money not being spent for Florida Heritage and PALMM publicity will be requested for digitization of city directories by UF, USF, and FIU. Information from the directories will be linked to the Sanborn maps to increase the usefulness of this important project. FSU and UWF are interested in participating in this project in the future.
- As far as we know, the Collection Management Committee has taken no action on our request for assistance with cooperative collection development. Larry Heilos (USF) is a member of that group and will follow up on this.
- We discussed the creation of a Transportation collection in PALMM based on collections from FIU-Wolfsonian (cruise industry) and USF (CUTR).
- We discussed a general plan for handling PALMM during the transition to Aleph. QF will remain in NOTIS throughout the transition period and NOTIS will continue to be the location for new records and updating of old records. There will be periodic batch loads from NOTIS into Aleph of new and updated records. When all institutions are on Aleph, QF will move to Aleph.
- UF is a member of the RLG Cultural Materials Initiative and wants to contribute its digitized materials to that project. Since their materials cannot be separated out, UF is asking that we all contribute our materials to the project and have any royalties returned to FCLA to help cover storage and maintenance costs. See recommendation below.
- There was extended discussion on the Florida Heritage themes. Mark Greenberg of the Florida Online Encyclopedia (FOE) project asked us to consider changing our themes to match their section headings. In addition, we discussed CAGER concerns about 650/690 tagging. We are still interested in making our collections easily accessible to K-12 students through the web page (the genesis of the theme idea), and we are still interested in having someone develop educational modules based on the Florida Heritage materials. In the end we decided not to replace the current themes with the FOE section headings; to change the themes from 650 to 690 tags in bibliographic records; and to recommend to the CAGERS that catalogers select at least one theme heading for each record, retag it as a 650, and used it as the basis for a good, fully subdivided LCSH heading. Priscilla Caplan will follow up with the CAGERS on this. We will reconsider funding proposals for K-12 educational module development next year.

**RECOMMENDATION:** The Digital Projects Planning Committee supports the idea of contributing some of the PALMM collections to the RLG Cultural Materials Initiative program with any royalties to be returned to FCLA to help cover storage and

maintenance costs. Only those collections which might reasonably be expected to generate revenue (e.g., maps, theatre images, children's literature) will be contributed. The CMI agreement allows materials to be made available in other ways so they don't have to be removed from PALMM. Use based royalties are returned to contributing institutions. Currently only UF is a member of the Cultural Materials Initiative; FSU is in the process of joining. There is no easy way to create subset catalogs from the current PALMM collective catalog, but single collections can be separated into OAI-compliant catalogs for harvesting by RLG.

**Elements of the Proposal:**

- Selected PALMM collections will be contributed to RLG's Cultural Materials Initiative (CMI) through the publication of OAI-compliant catalogs by FCLA on behalf of the owning institutions.
  - Royalties, if any, will be returned to FCLA under a CMI agreement and will be used to recover PALMM operating costs.
  - By the time FCLA begins to assess archiving fees (approx. 2.5 years) , it will have in place an equitable means of applying CMI royalties to the archiving fees it will assess individual SUL institutions. We hope this will encourage participation in the PALMM collections.
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**From:** Priscilla Caplan [mailto:pcaplan@ufl.edu]

**Sent:** Friday, February 21, 2003 10:41 AM

**To:** fcllist@LISTS.UFL.EDU

**Cc:** richard.stevens@fldcu.org; Dale Canelas; gmorein@uwf.edu;  
ajenkins@mailers.fsu.edu; pellant@ncf.edu; mflynn@mail.dos.state.fl.us

**Subject:** PALMM Update -- February 2003

*One in a series of short monthly updates on items of interest to those involved in digital imaging projects.*

**FCLA DIGITAL ARCHIVE NEWS**

We're pleased to announce that Andrea Goethals started in January as the Formats Specialist for the FCLA Digital Archive. Andrea has an MS in Computer Science from UF and has previously worked as Applications Developer for both IFAS and the UF GeoPlan Center. She is working on archive architecture, migration strategies, and action plans for digital formats.

The FCLA Digital Archive also has a new website at <http://www.fcla.edu/digitalArchive/index.htm>. The text of the National Leadership Grant proposal to IMLS is available from this site. In future we plan to post all documents relating to the digital archive, including operational information (archive guidelines, format action plans), reports and statistics. Thanks to FCLA's new webmaster, Tennille Herron, for the website design.

**FLORIDA ENVIRONMENTS ONLINE**

5,500 records pertaining to Florida from the Aquatic, Wetland and Invasive Plant Information Retrieval System (APIRS) have been added to Florida Environments Online

(<http://palmm.fcla.edu/feol/>). APIRS records are annotated citations to the literature of aquatic plants, including grey literature such as proceedings and government reports.

### **PALMM PROJECTS**

Counts for selected PALMM (or in-the-PALMM-pipeline) projects as of February 1, 2003:

Florida Heritage	1024 titles	155,043 pages
Florida Environments Online	731 titles	50,990 pages
Reclaiming the Everglades	354 titles	6,950 pages
Literature for Children	443 titles	67,585 pages
FALD (Florida Architecture & Landscape Design)	228 titles	9,417 pages
Miami City Archives	6 titles	812 pages
Eric Eustace Williams	9 titles	779 pages
World Map Collections	430 maps	

**Electronic Collections Committee Report to the Directors**

14 February 2003

*Submitted by Athena Hoepfner, Chair, ECC*

**Action Items**

1. The ECC has no action items.

**Budget Issues**

1. The ECC applied the remaining database funds, \$8752, towards two new CSA databases: Mechanical and Transportation Engineering Abstracts (MTEA) and a six-month trial of Civil Engineering Abstracts (CE). See Database Issues for details.
2. FCLA has calculated the amount owed by each institution to cover sub-consortial subscriptions handled by FCLA, Serials Solutions, and the remaining cost for CSA CE. Each Director should have received a letter requesting the amount owed by their institution. See the attached spreadsheet for details.

**Database Issues**

1. *MTEA*. As of January 2003, CSA discontinued Mechanical Engineering Abstracts, which had been part of the base-package licensed to FCLA. MTEA serves as a replacement and enhancement to MEA. Therefore, the ECC and CSA agreed to consider MTEA as part of the base-package, for an additional charge of \$5000.
2. *CSA Civil Engineering Abstracts*. The ECC accepted a six-month trial to CSA's new Civil Engineering database for a fee of \$6650. FCLA used the last of the database monies to partially fund the trial. FAMU, FAU, FIU, UNF, and UWF each pay \$250, and UF, USF, and UCF, which have large Engineering programs, will each pay \$416. FSU opted out of the trial and requested to have access blocked.
3. *Bowker*. The ECC and Ken Wells have organized a work group in response to complaints about problems with Bowker online products. The group is gathering information and will discuss the problems with Bowker near the end of February. Bowker is scheduling training for librarians at several universities.
4. *EBSCO*. EBSCOhost is new to many of the SULs, and is visiting each university that requests training. Because EBSCOhost provides a relatively complicated administration module that lets each library control their interface, EBSCO is scheduling separate training for database administrators.

**Electronic Journals Issues**

1. *Elsevier*. John Ingram negotiated a new license for Science Direct, IDEAL, and Harcourt Health Sciences. Elsevier agreed to continue to allow the SUL to access the full Elsevier Science Direct collection through 2003. Starting in 2004, the SUL will only have access to titles subscribed to by one or more of the SULs. The SULs should coordinate their subscriptions during 2003 in order to maximize our coverage of Science Direct offerings.

We can swap titles, drop duplications, and otherwise alter our subscriptions so long as we do not drop more than 1% of our subscription value. As Science Direct adds new content, we can add it to the shared collection for the subscription price plus 9%. IDEAL and HHS titles are not part of a shared collection. Each institution pays for and has access to their individual IDEAL/HHS subscriptions.

- Subscription price: \$5,536,001 for SD/AP/HHS, including \$463,349 for the electronic access fee
  - Percent increase from last year: 5 % for print
2. *Kluwer*. John Ingram negotiated a new contract with Kluwer, giving the SULs access to all Kluwer electronic journals. As Kluwer adds new content, we can add it to the shared collection for the subscription price plus 5%.
    - Subscription price: \$783,426.97 with additional fees of \$57,947.25 for dual access and new titles.
    - Percent increase from last year: 7 %
  3. *Oxford University Press*. Monica Metz-Wiseman coordinated the OUP renewal for 2003 - negotiating the percent increase and overseeing subscription lists and cancellation fees. Each university pays for their OUP subscriptions and OUP charges an additional premium for electronic access. The premium for consortia-wide access to all electronic versions of OUP is calculated based on current holdings. There is an additional fee for cancelled titles that amounted to \$390.60 in 2003 paid by UNF. OUP expects to send invoices soon. We will need to negotiate a new agreement for 2004, and we may consider an electronic only pricing model.
    - SUL premium price: \$59,831.00 (not including print costs).
    - Percent increase from last year: 10%
    - 5% increase in content from 2002
  4. *Wiley*. Monica Metz-Wiseman coordinated the Wiley renewal. Eight of the SULs participate in the Wiley contract (all but UWF and FGCU), and the University of Miami and Nova Southeastern participate as SUL affiliates for the purposes of shared access. We have access to shared collection of titles held by participating SULs, and also have tokens that enable us to access the entire Wiley InterScience collection of over 300 titles. We will negotiate a new contract for 2004, at which time Wiley will limit our access to titles held within the SUL. During the remainder of 2003 we can coordinate subscriptions to maximize our access to Wiley InterScience content.
    - Subscription price:
 

\$1,136,767.83 (Content Fee)
\$186,228.42 (Electronic Access Fee)
+ <u>\$111,444.23</u> (Print Fee)
=\$1,434,440.48 *
    - \* There are 3 components to the fees:
      - Content Fee = 90% of capped subscription price
      - E-Access Fee = 10% of capped subscription price (1 site), 18% for 2 sites, etc.
      - Print Fee = 10% of capped subscription list price
    - Percent increase from last year: 6% increase

Currently, Wiley would like to interest us in the backfiles of ten polymer journals from their inception for a one-time fee. There is a 20% discount available until April 10, 2003.

#### Other Items

1. *ICOLC*. Michele Newberry and Athena Hoepner will attend the International Coalition of Library Consortia meeting in Las Vegas, NV in March.
2. *Meetings*. ECC continues to have monthly conference calls.
3. *Committee Membership*.

Brenda Wright (FAMU)	Catherine Paunov (FAMU -Law)
Rita Pellen (FAU)	Michele Newberry (FCLA)
Daniel Liestman (FGCU)	Valerie Edwards (FIU)
Sarah Hooke Lee (FIU –Law)	Roy Ziegler (FSU)
Anne Bardolph (FSU-Law)	Barbara Shearer (FSU-Med)
Caroline Reed (NCF)	Athena Hoepner (UCF)
John Ingram (UF)	Peggy Hsu (UF-Health)
Christopher Vallandingham (UF-Law)	Sarah M. Philips (UNF)
Monica Metz-Wiseman (USF)	Danny O’Neal (USF-Health)
Peggy Toifel (UWF)	

**Public Services Planning Committee  
Report to the SUL Directors  
February, 2003**

The Public Services Planning Committee is undergoing a period of transition. The Committee has not held regular meetings since the last report, there have been several changes in committee members, and a new chair has been appointed. A conference call is scheduled for Monday, February 24. As we look forward to implementation of ALEPH, SFX/MetaLib, and Rosetta and to other potential changes and developments that derive from a new governance structure, it is time to assess continuing user needs and new opportunities for cooperation. Since the last report, the primary activity of the PSPC has been approval via an email vote of the new OPAC Interface Subcommittee Charge (<http://www.uflib.ufl.edu/sulopac/changeprocess.html>).

Current membership is: FAMU, Brenda Wright; FAU, Rita Pellen; FCLA, Michele Newberry; FGCU, Daniel Liestman; UCF, Meg Scharf; UF, Carol Turner; UF-HSC, Rae Jesano; UF-Law, Pam Williams; FIU, Sherry Carrillo; FIU-Law, Mon Yin Lung; FSU, David Clendinning; FSU-Law Mary McCormick; NCF, Caroline Reed; UNF, Bob Jones; USF, Phyllis Ruscella; USF-Shimberg HSC, Beverly A. Shattuck; and UWF, Kymberly Goodson.

Subcommittee Chairs are: Circulation Services, Marilyn Burke, USF; Distance Learning Services, Geraldine Collins, formerly UNF and now FGCU; Florida Digital Reference, Jana Ronan, UF; Interlibrary Loan, Douglas Hasty, FIU; and OPAC, Rich Bennett, UF.

Respectfully submitted,  
Carol A. Turner, Chair



**Rosetta Public Relations and Marketing committee  
Quarterly Report  
February 2003**

Submitted by: Barbara Hood, Chair

Advisory Members:

Carol Turner, Chair of the PSSC and the committee members

With the directors' approval of the Rosetta web pages, the pages are now under construction by Barbara Hood. Further input from the PSSC will be requested to write/approve text for certain pages. The SULC logo will be added to the FCLA logo at the top of the pages. Tennille Herron, FCLA's Webmaster, and Barbara will each work on possibilities for combining the logos. These Rosetta pages will be accessed through the portal Metalib's page when it is up. The committee and advisers are anticipating the Public Services committee will soon provide input as to what public relations tools are needed with the introduction of Rosetta and we will design and produce for all of the libraries.

## Background #11

**From:** Perez, Derrie [mailto:dperez@lib.usf.edu]  
**Sent:** Thursday, February 13, 2003 9:08 AM  
**To:** Dale Canelas  
**Cc:** Hanson, Ardis  
**Subject:** SULC And FCLA Agenda item  
**Importance:** High

We have a library here at USF, the Florida Mental Health Institute Library which has statewide mandates to share material. We probably have a few others in the state. When we negotiate licenses, their special legislative mandates need to be presented to the vendors for special consideration. Vendors have indicated to us that they would be willing to hear "arguments" on the behalf of these special libraries and would give the needs consideration. Can we discuss how we might systematically get this issue addressed at the state level? Thanks. derrie

**Date:** 14 February 2003  
**To:** Derrie Perez, Dean, USF Library System  
**From:** Ardis Hanson, Director, the de la Parte Institute Research Library  
**RE:** Request for information concerning mandated services

The Louis de la Parte Florida Mental Health Institute (FMHI) was originally founded by the Florida Legislature in 1969 as a regional facility to complement Florida state hospitals and the comprehensive community mental health centers. (Chapter 67-334, Laws of Florida). Four years later, its mission was expanded to serve as the State's principal facility to train behavioural health services personnel and to conduct research on prevention and treatment of behavioural health problems. It was designed to be both a resource for, and an active partner with, Florida's primary behavioural health service delivery system consisting of community mental health centers and clinics, receiving facilities, state agencies working with persons with serious mental illnesses and substance abuse disorders, and state hospitals. From the Institute's inception, the Library was integral to its service mission and maintained a significant collection for statewide and walk-in use.

In 1983, HB 1153 established FMHI within the University of South Florida. The bill defined, as its purpose, the strengthening of behavioural health services throughout the state of Florida by providing technical assistance and support services to mental health/substance abuse treatment agencies, mental health/substance abuse treatment professionals, and advocacy and consumer groups, with a focus on developing and informing behavioural health policy to the Legislature.

Since then, the mission of the Institute is: "To be a statewide resource on mental health, with a particular emphasis on research, legislative and policy issues" (240.514, Florida Statutes). The statute was recently amended to include substance abuse disorders.

The Library's user group spans all populations within the state of Florida. Outside of the academic constituency, it also serves a larger public venue. It serves researchers of all ages, private and public sector professionals in a variety of fields working with persons with mental illness, legislative staff and legislators, family members of persons with mental illness, advocacy groups, and consumers themselves. A secondary user group is other state agencies and governments, which request benchmarking or services data. A breakout of these registered users include:

1. 635 legislative/agency personnel (DCF, MH/SA, DOC, DJJ, DOEA, Advocacy Center),
2. 102 private sector professionals,
3. 64 judicial personnel, and
4. 36 non-Florida agency/legislative registered users

The two common factors are 1) all of these individuals have some investment in working with or for persons with mental illnesses and/or substance abuse disorders, and 2) their requests come from the individual within the agency or organisation. These individuals do not have internal libraries and they often do not have the luxury of mediating these requests through an external (academic or public) library. The Institute Library is expected to provide, upon request, their information needs, which range from literature reviews, syntheses, and document delivery. We have provided service literally within hours of a request. For example, we have faxed articles to district attorneys before they return to court or to psychiatrists for clinical consults in forensic settings. My mandate from my Dean is simple: the main focus of the de la Parte Institute Library is to support the Institute's mission, as defined in the statute.

Since the Institute Library has a special constituency, these needs must be considered in any contract negotiation at the USF/SUS levels. As director I must know about any contractual restrictions before I can make a decision that could possibly affect service to these mandated external patron groups. A recent example of the Wiley and Kluwer contract negotiations. I was told that both contracts allow us to provide the electronic journal content only to libraries (print or fax) or to USF/SUS individuals. Therefore neither contract allows FMHI to serve its statutorily mandated constituency. My only choice was to continue the print versions of these journals that are core to our research and pay a dual access fee. After comparing the list of our core titles to this list, we made the painful decision to cut two cognitive psychology titles. This decision allowed us to retain core titles, retain the unique titles we carry within the USF Libraries, and simultaneously meet our budget constraints.

I spoke with Adam Chesler of Kluwer. When Adam asked why I was keeping my print titles, I explained to him that FMHI had a state-wide service mandate by statute, and the contract, as negotiated, did not address my service constituency. He then said that if he had known about this, then we could have possibly negotiated the inclusion of FMHI's external patron groups in the contract. However, it is now too late to do so. The latest negotiation with Elsevier has the same problem.

As these contracts are negotiated with no regard to FMHI's mandated constituency, I will be forced to cut those titles not determined to be core titles; those same titles that the USF/SUS may depend upon our owning to provide statewide access for Florida's universities and colleges.

I would appreciate a discussion of this at the SUL to see what can be done at the statewide negotiating level to accommodate FMHI's special needs.

## State University System Library Strategic Plan<sup>1</sup>

### **SUS Library Vision**

*The SUS Libraries continue to build traditional library collections and services, while capitalizing on the versatility of emerging technologies to both create an SUS Digital Library and leverage inter-library activities. Utilizing FCLA as a major partner in such efforts, these complementary thrusts enhance the delivery of information resources in support of teaching, learning, and research for all students and scholars throughout the State University System of Florida.*

### **SUS Library Mission.**

The mission of the State University Library System of Florida (SULS) is to:

1. Select, acquire, organize, and provide access to recorded knowledge, information, and data to support the teaching, research, and service mission of the SUS.
2. Provide knowledgeable assistance, instruction as well as the space and equipment required to make information available.
3. Archive materials (library holdings) and preserve for the use of future generations.

### **Institutional Strengths**

This plan builds on three pillars of strength:

1. The SUS University Libraries, whose collection strengths serve as:
  - Vital centers of University life
  - Florida's largest information system providing a wealth of information resources for the entire state of Florida
  - Resources for independent and curriculum based learning
  - Archives of the record of the past
2. SUS Integrated Services which are building an interactive statewide system transparent to the user
  - Reciprocal privileges allowing any SUS student the use of any library
  - Interlibrary courier facilitating movement of physical collections
  - Development of student information literacy programs
3. The SUS Digital Library, an integrated approach to electronic resources developed by the directors and staff of each institution working with each other in sub-groups or with the staff of the Florida Center for Library Automation (FCLA) as appropriate. The SUS Libraries are actively collaborating in purchasing and sharing resources. The major components of the SUS Digital Library are:
  - Joint management of library catalogs, indexes, image and full text databases.
  - Shared acquisition of electronic resources which saves money for all partners

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<sup>1</sup> Given the rapidity of change in information technologies and the impossibility of foreseeing all potential developments (and therefore, of planning for five years in advance) this plan will be updated annually by the SUS library directors working with FCLA staff and the SUS standing committees.

- Coordinated distance education programs including reference, referral, and instruction/training services for distance students
- Digitized unique collections
- Internet access to selected resources

### Library Environment

The library environment is, and has been, one of extraordinary change for the past 25 years. The major **external** factors with which libraries must contend include:

- Huge increase in the amount of scholarly publication
- Inflationary increases in the cost of publications
- Rapidly changing information technologies
- Shift in traditional educational techniques and patterns (electronic courses, distance education)
- Changing Copyright law in the electronic environment
- A shifting balance of power between publishers and libraries and changes in methods of information acquisition (negotiated license agreements)
- Users' changing expectations (everything electronic, library can produce results immediately)
- A broadening user base (many more than those who attend local classes and pay tuition)
- Electronic publications increasing at a rapid rate, especially in the sciences, technology, medicine, and business
- Costs of electronic information resources outpacing costs of printed resources
- Rapidly evolving technology requiring frequent equipment upgrades to access information
- Preservation of deteriorating print materials
- Archiving/preservation of electronic information resources (migration to updated and accessible formats)

### Strategic Goals

To achieve our vision of an integrated SUS Digital Library, the SUS Libraries will work to enhance and develop information resources, library services, human resources, physical and technological infrastructure, and the funding base, thus providing better and easier access to traditional services and resources. The following goals are directed toward creating and integrating the SUS Digital Library.

- 1. Purchase organize, and provide access to digital information resources that complement traditional resources in the SUS campus libraries to serve the needs of SUS students and faculty.**
  - 1.1. Implement collaborative collection development and acquisition projects to leverage state resources for both digital and print materials.
  - 1.2. Develop strategies and protocols to ensure long-term access to resources in electronic formats.**
  - 1.3. Integrate diverse formats into effective and useful collection that support student/scholarly needs.**
  - 1.4. Provide students, faculty, and other valid users appropriate access to information resources in support of their learning and intellectual needs, regardless of location, learning style, or economic circumstances.**

- 2. Enhance SUS Library Services in support of teaching and learning**
  - 2.1. Develop state guidelines for information literacy competency.
  - 2.2. Develop, refine, and implement an interlibrary loan/document delivery system that provides delivery of materials to SUS faculty and students within two to three days of receipt of request.
  - 2.3. Develop electronic paths that guide students to locate the most useful resources such as improved catalog records for electronic materials, specialized web pages, and online tutorials.
  - 2.4. Develop and implement a cooperative cataloging pilot project to demonstrate the feasibility of reducing duplication of effort within the SUS system.
  
- 3. Convert unique SUS collections into digital formats to serve the citizens of Florida.**
  - 3.1. Develop core and /or unique collections to benefit users and a wider constituency (K-12, community colleges, distance learners, and the public).
  - 3.2. Capture, preserve, and disseminate Florida's heritage.
  - 3.3. Make readily available university publications such as theses and dissertations.
  
- 4. Obtain an increase in the number and strengthen the effectiveness of staff in SUS libraries.**
  - 4.1. Obtain additional staff to serve the increasing enrollments and meet the increased demand for sophisticated and time-consuming electronic instruction and support.
  - 4.2. Obtain additional staff to support the interlibrary sharing of resources.
  - 4.3. Increase the number and expertise of staff with technological skills by hiring new staff with high technology competence and
  - 4.4. Establish a system-wide training and professional development program for current library staff to develop the skills required to function successfully in a changing library/higher education environment.
  - 4.5. Enhance human resource funding to ensure competitive salaries within the SUS, with peer institutions, and with the local market to retain skilled staff.
  - 4.6. Create library organizations that maximize the contributions of all staff.
  
- 5. Obtain the physical and virtual space infrastructure needed in the SUS Libraries to support teaching and learning.**
  - 5.1. Obtain support to replace NOTIS, the SUS catalog and automated library operations system.
  - 5.2. Develop and provide inter-operable library services and resources.
  - 5.3. Obtain support for facilities which house up-to-date workstations for information access and research; as well as space and equipment to support full utilization of print, recordings, graphic, and other electronic resources—including reference collections, audio-visual materials, and journals in multimedia formats.
  - 5.4. Support distance and other distributed learners with increased bandwidth and improved networking capacity; training for staff and patrons; and refinement of the Reference Referral Center.

- 5.5. Establish complete connectivity among campus library facilities and all users—on campus or at remote sites—provided through integrated, high-speed, reliable telecommunication networks that facilitate electronic information sharing and retrieval for students, faculty, and staff and defines the SUS as a member of the global electronic community.
  - 5.6. Develop the capacity for digitization of unique library resources through the use of scanning equipment, server support, networking capacity, storage, metadata/access standards, integrated access and the creation of an administrative support structure.
- 6. Obtain appropriate funding for the SUS Libraries to ensure the needs of students and faculty are met.**
- 6.1. In collaboration with the CAVP, suggest funding priorities among the many identified needs.
  - 6.2. In collaboration with BOR staff, develop an effective “generation formula” which will identify adequate funds for meeting continuing library needs in the areas of collections, technology, staff resources, and facilities.
  - 6.3. Identify and actively pursue alternative sources of funding to leverage state resources on collaborative SUS projects.

12.1998

## Background #13

**From:** William Miller [mailto:miller@fau.edu]  
**Sent:** Friday, December 20, 2002 3:32 PM  
**To:** afarkas@unf.edu; bbaker@mail.ucf.edu; khoeth@fgcu.edu; dperez@lib.usf.edu; gmorein@uwf.edu; Jim Corey - FCLA; lauren.sapp@mail.famu.edu; millerl@fiu.edu; miller@fau.edu; ajenkins@mail.fsu.edu; Dale Canelas; pelland@ncf.edu  
**Subject:** latest draft of document

Here is the latest draft of the short rationale, based on comments from Jim and Larry:

### Functions of the State University Libraries and FCLA

For the general public, the need for information can normally be met by chain bookstores, television, and free material on the Internet. For the students and faculty of Florida's state universities, however, a much broader and deeper access to information is necessary, both in print and electronically. People doing academic research generally need some combination of printed material, much of it out of print and not available digitally, and electronic information such as journal articles or scientific databases produced by the private sector which are copyrighted, are not free, and in fact are very expensive..

In order to meet the needs of our students and faculty, the libraries of Florida's state universities provide the following kinds of things:

- millions of books, many of them out of print and never to be digitized
- millions of journal articles, many of them out of print and never to be digitized
- electronic databases of full-text books, journal articles, and factual compendia (such as economic and scientific information) which are available via the Internet, but only for a substantial price
- access to the holdings of the entire nation's libraries through electronic interlibrary loan
- extensive hours of service, including evenings and weekends, and 24-hour access to the electronic resources

The libraries are also digitizing items which faculty wish to place on special access ("reserve") for classes, and thousands of pages of full-text books, journal articles, maps, and other research materials which are out of copyright and hard to find, making such information, much of it about Florida, available without charge to our users and to the general public in our PALMM digitized collections (<http://www.susdl/fcla.edu/>

In order to make research-level materials, both traditional and electronic, widely available, the libraries work with the Florida Center for Library Automation (<http://www.fcla.edu>) to maintain an extensive online catalog which leads both to our book and journal holdings, and to full-text electronic books, articles, and databases of information.

It costs millions of dollars each year to acquire the information resources our users need. To support these students and faculty and make the most of our materials expenditures, the libraries not only catalog and process millions of physical and electronic items each year, but also provide individual reference help and instruction sessions for classes in the use of research tools.

New initiatives will include FCLA's archiving of electronic theses and dissertations for all of the universities. As electronic information proliferates and changes, the libraries and FCLA will be there to make it easily accessible for all, selecting, organizing, accessing, and archiving the resources that form the foundation of teaching and research in Florida. Florida's citizens who are not associated with our universities also benefit by having access to the services and collections, both traditional and electronic, of the libraries.

D-Lib Magazine  
January 2003

Volume 9  
Number 1

ISSN 1082-9873

DSpace  
An Open Source  
Dynamic  
Digital  
Repository

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## Abstract

For the past two years the Massachusetts Institute of Technology (MIT) Libraries and Hewlett-Packard Labs have been collaborating on the development of an open source system called DSpace™ that functions as a repository for the digital research and educational material produced by members of a research university or organization. Running such an institutionally-based, multidisciplinary repository is increasingly seen as a natural role for the libraries and archives of research and teaching organizations. As their constituents produce increasing amounts of original material in digital formats—much of which is never published by traditional means—the repository becomes vital to protect the significant assets of the institution and its faculty. The first

part of this article describes the DSpace system including its functionality and design, and its approach to various problems in digital library and archives design. The second part discusses the implementation of DSpace at MIT, plans for federating the system, and issues of sustainability.

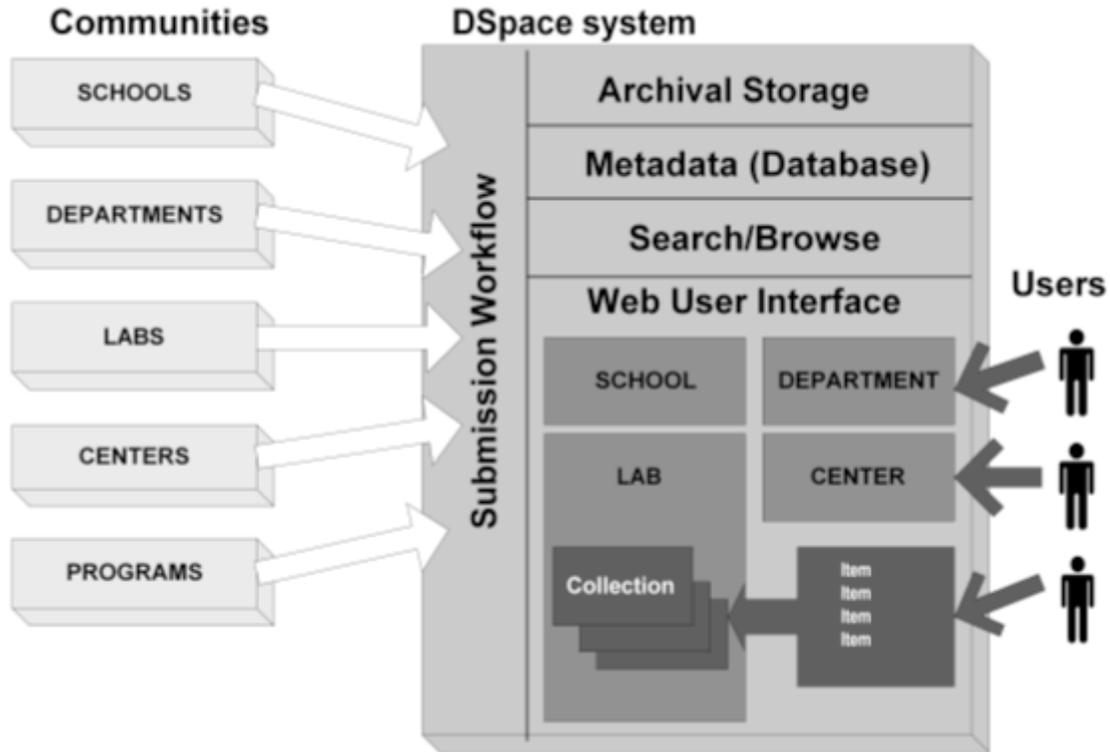
### **DSpace Definition, Features and Functionality**

In March 2000, Hewlett-Packard Company (HP) awarded \$1.8 million to the MIT Libraries for an 18-month collaboration to build DSpace™, a dynamic repository for the intellectual output in digital formats of multi-disciplinary research organizations. HP Labs and MIT Libraries released the system worldwide on November 4, 2002, under the terms of the BSD open source license [1], one month after its introduction as a new service of the MIT Libraries. As an open source system, DSpace is now freely available to other institutions to run as-is, or to modify and extend as they require to meet local needs. From the outset, HP and MIT designed the system to be run by institutions other than MIT, and to support federation among its adopters, in both the technical and the social sense. The DSpace Federation will be explored in a later section.

So what is DSpace? It is an attempt to address a problem that MIT faculty have been expressing to the Libraries for the past few years. As faculty and other researchers develop research materials and scholarly publications in increasingly complex digital formats, there is a need to collect, preserve, index and distribute them: a time-consuming and expensive chore for individual faculty and their departments, labs, and centers to manage themselves. The DSpace system provides a way to manage these research materials and publications in a professionally maintained repository to give them greater visibility and accessibility over time.

DSpace was built breadth-first: it supports every function that a research organization needs to run a production digital repository service, but as simply as possible. The project focus was on building a production quality system. It complements and was influenced by previous research in computer science and digital library architectures [2]. Our goals were to build a system that: would be immediately useful at MIT, and hopefully at other institutions; could be expanded and improved over time; and could serve as a platform for future research. With the help of developers at other institutions that adopt DSpace under its open source license, we will work to add features and improve the different functions of the system as we learn what users actually want, and how to best support such complex requirements as digital preservation and digital rights management.

DSpace is designed to make participation by depositors easy. The system's information model is built around the idea of organizational "Communities"—natural sub-units of an institution that have distinctive information management needs. In the case of MIT (a large research university) "Communities" are defined to be the schools, departments, labs, and centers of the Institute. Each Community can adapt the system to meet its particular needs and manage the submission process itself.



**Figure 1: DSpace information model**

### *Metadata*

DSpace uses a qualified Dublin Core metadata standard for describing items intellectually (specifically, the Libraries Working Group Application Profile). Only three fields are required: title, language, and submission date, all other fields are optional. There are additional fields for document abstracts, keywords, technical metadata and rights metadata, among others. This metadata is displayed in the item record in DSpace, and is indexed for browsing and searching the system (within a collection, across collections, or across Communities). For the Dissemination Information Packages (DIPs) of the OAIS framework, the system currently exports metadata and digital material in a custom XML schema while we work with the METS [3] community to develop the necessary extension schemas for the technical and rights metadata about arbitrary digital formats.

### *User Interface*

DSpace's current user interface is web-based. There are several interfaces: one for submitters and others involved in the submission process, one for end-users looking for information, and one for system administrators.

The end-user or public interface supports search and retrieval of items by browsing or searching the metadata (all fields for now, and specific fields in the near future). Once

an item is located in the system, retrieval is accomplished by clicking a link that causes the archived material to be downloaded to the user's web browser. "Web-native" formats (those which will display directly in a web browser or with a plug-in) can be viewed immediately; others must be saved to the user's local computer and viewed with a separate program that can interpret the file (e.g., a Microsoft Excel spreadsheet, an SAS dataset, or a CAD/CAM file).

### *Workflow*

DSpace is the first open source digital repository system to tackle the complex problem of how to accommodate the differing submission workflows needed for a multidisciplinary system. In other words, different DSpace Communities, representing different schools, departments, research labs and centers, have very different ideas of how material should be submitted to DSpace, by whom, and with what restrictions. Who is allowed to deposit items? What type of items will they deposit? Who else needs to review, enhance, or approve the submission? To what collections can they deposit material? Who can see the items once deposited? All of these issues are addressed by the Community representatives, working together with the Libraries' DSpace user support staff, and are then modeled in a workflow for each collection to enforce their decisions. The system models "e-people" who have "roles" in the workflow of a particular Community in the context of a given collection. Individuals from the Community are registered with DSpace, then assigned to appropriate roles.

For example, a department may choose to have two collections: one for working papers and another for datasets. They may then decide that any member of the faculty can deposit items to either collection directly, and that any member of the general public can have access to these collections. In this example the workflow is very simple, and the only "role" is that of submitter.

In a more complex example, the same department may have a working paper collection that requires tight editorial control by the head of the department. In this case, they may choose to again designate all faculty as "submitters", but also designate a small group of people as "reviewers", an administrative staff person as a "metadata editor", and the head of the department as the final "coordinator". An item deposited by a faculty member would then go through a process of review, cleanup and approval before finally being deposited to the relevant DSpace collection. Each person with a role to play in this process is notified of the new submission, and goes to a personal workspace in the system to perform their assigned task. Items that do not make it through the process are not archived in the system.

### *Technology platform*

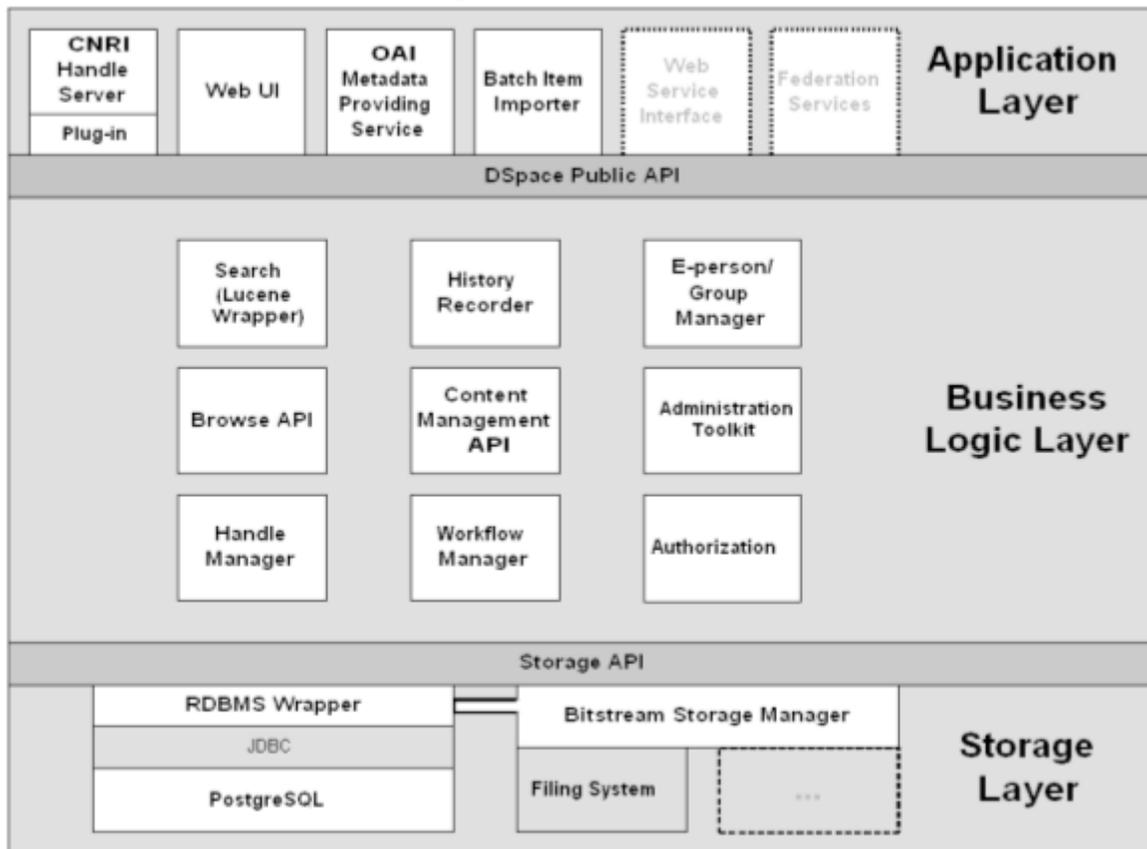
DSpace was developed to be open source, and in such a way that institutions and organizations with minimal resources could run it. The system is designed to run on the UNIX platform, and comprises other open source middleware and tools, and programs written by the DSpace team. All original code is in the Java programming language. Other pieces of the technology stack include a relational database management system (PostgreSQL), a Web server and Java servlet engine (Apache and Tomcat, both from the Apache Foundation), Jena (an RDF toolkit from HP Labs), OAICat from OCLC, and several other useful libraries. All leveraged components and libraries are also open source software. Libraries are bundled where possible (exceptions are described in the

installation instructions). The system is available on SourceForge [4], linked from both the DSpace informational web site [5] and the HP Labs site [6].

While DSpace is open source and freely available, neither MIT Libraries nor HP offer formal support for DSpace adopters. It is our assumption that institutions that use DSpace will have resources to use the system, including adequate hardware that runs the UNIX operating system, and a UNIX systems administrator to install and configure the system [7]. Most institutions using DSpace will also want the services of a Java programmer who can localize and customize for them, or enhance it, although this is not absolutely necessary to run the system.

As DSpace continues to be improved by staff at HP, the MIT Libraries, and other institutions that adopt it during the coming year, MIT will take responsibility for evaluating and reincorporating these improvements into the main open source system available to the public. Plans for building a more sustainable open source maintenance strategy through the DSpace Federation will be discussed later.

## System Architecture



**Figure 2: DSpace technical architecture**

The DSpace architecture is a straightforward three-layer architecture, including storage, business, and application layers, each with a documented API to allow for future customization and enhancement. The storage layer is implemented using the file system, as managed by PostgreSQL database tables. The business layer is where the DSpace-specific functionality resides, including the workflow, content management, administration, and search and browse modules. Each module has an API to allow DSpace adopters to replace or enhance that function as desired. Finally, the application layer covers the interfaces to the system: the web UI and batch loader, in particular, but also the OAI support and Handle server for resolving persistent identifiers to DSpace items. This is the layer that will get much of the attention in future releases, as we add web services for new features (e.g., to support interoperability with other systems) and define Federation services across the range of institutions adopting DSpace.

### ***Open Archives Initiative (OAI)***

To further its goal of supporting interoperability with other DSpace adopters, and with other digital repositories, preprint, and e-print servers, the system has implemented the Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH) [8]. DSpace used the OCLC OAICat [9] to accomplish this, and is currently exposing Dublin Core metadata for every item in the system. For material that is restricted to local access, the item metadata is exposed to OAI harvesters but the system will enforce the restriction

when a user requests the associated bitstream(s). DSpace at MIT has recently been added to the OAI registry, and as the system is deployed at other institutions, we intend to investigate what added-value services might be built on top of this promising piece of infrastructure to work across the Federation. For example, we may examine the possibility of defining and building preprint and e-print collections for a particular academic discipline with individual items distributed among many institutionally-based multidisciplinary repositories, all OAI compliant.

### ***Persistent Identifiers (Handles)***

One goal of persistent digital repositories is that it be possible to find and retrieve deposited items far into the future. In particular, it is considered crucial that citations to archived material, whether found in printed articles or online, remain valid for long periods. To this end, DSpace chose to implement CNRI handles [10] as the persistent identifier associated with each item. The Handle System® covers assignment, management, and resolution of these persistent identifiers (or "handles"). Although CNRI has not registered with the IETF for an official namespace, handles are compliant with the IETF's Uniform Resource Name (URN) specification.

Handle resolution can be done using a special client, or handles can be packaged in the form of URLs and a proxy server used to resolve these into the handle form, which is, in turn, resolved to the local system location for the item. This second approach is the one we have taken in DSpace. The main alternative to using handles is to use persistent URLs with HTTP redirection to allow items to move around over time. The long-term viability of these alternatives is not yet sufficiently understood.

We plan to discuss this decision and its implications with other institutions adopting DSpace over the coming year, to see if the DSpace Federation can support other systems of persistent identification while supporting distributed services.

### **MIT Libraries' DSpace Implementation**

DSpace is a system, a tool, and a platform for collecting, managing, indexing, and distributing digital items. Exactly how it is used, for what sort of digital material, by whom, for how long, and so on, are policy issues to be decided by each organization adopting the system. In order to make the difference between system and policy more transparent, and to help other institutions get started, MIT is openly sharing its own policy decisions with regard to DSpace. It is our hope that, while we acknowledge that our policies may not work well for other institutions, and will certainly evolve over time, they may offer guidance to others regarding the depth and breadth of issues that should be considered.

### ***Collections Scope***

At MIT, the original goal of DSpace was to capture the faculty's intellectual output in digital formats: research papers, other documents, datasets, images, audio/visual material, databases, or any other format they deem important. This goal led to two important policies: only *faculty* research would be accepted (not student material, not institutional records, and not material from non-faculty researchers without sponsorship from faculty), and *faculty* would choose what would be submitted (within certain general constraints set by the Libraries and Archives).

As a result of discussions with faculty, early adopter Communities, and others, the goal is unchanged but the policies have evolved. The first change was in what could be submitted. If a DSpace Community defines a collection that, in order to be useful, should include material authored by non-faculty (or non-MIT faculty) then it can be deposited by that Community as long as the necessary copyright permissions are obtained. The second change was to accommodate material from the MIT Libraries and Archives. We will create a Libraries and Archives Community to hold digital collections of material such as e-theses and reformatted images—material that is heavily used and represents valuable assets of the institution.

Beyond faculty-authored documents and data, another category of material has taken the spotlight for possible support by DSpace: educational material, or "Learning Objects". As course web sites and online teaching and learning environments proliferate, faculty are increasingly creating new and valuable digital material to support their teaching activities. These can take the form of traditional lecture notes, sample exams, and course calendars, but also include things like complex simulations and visualizations, multimedia presentations, or videos of key lectures. As a matter of local policy, the MIT Libraries will accept this type of material and is actively collaborating with two MIT-based projects in this area: the Open Knowledge Initiative (OKI) [11] and OpenCourseWare (OCW) [12]. For OKI, DSpace could serve as an active repository of course "content items"—those items of persistent, ongoing value (e.g., a physics simulation used regularly in various courses). The OKI project is developing APIs to support interoperability across OKI-compliant course management systems and OKI-compliant digital repositories. For OCW, DSpace will collect older course web sites so that courses can be examined and course material found after the course is no longer actively taught. Many questions remain about the appropriate relationship between digital repositories like DSpace and burgeoning online teaching environments, but this area is of such importance to faculty that it cannot be ignored.

### *Faculty engagement*

There are several ways to describe the value of an institutional repository to the faculty who will contribute material, and the administration that will support the effort. And it is critical to explain those benefits, and to market the service, to both constituencies.

As a multidisciplinary repository that represents the scholarship of MIT, DSpace at MIT showcases the international prominence of our faculty both individually and collectively. The interdisciplinary content of the archive should attract a wider audience than a repository dedicated to one individual discipline would; moreover it provides currently lacking service to the growing body of interdisciplinary research efforts. The ability to distribute research results quickly will emphasize the cutting-edge nature of MIT's research, and supports the mission of the Institute to generate, disseminate, and preserve knowledge [13].

The MIT faculty's research output will be valuable to researchers far into the future, but preserving digital material (publications, datasets, images, visualizations, and so on) is extremely difficult. To ensure long-term access to this important scholarship the MIT Libraries will manage DSpace as a preservation archive, keeping this material accessible, and often immediately usable, far into the future.

The Libraries provide guidance in establishing new Communities, and assistance to faculty and others in using the system. DSpace was envisioned by the MIT Libraries as a continuation of their mission to collect, make available, and preserve important scholarly material of all kinds, especially that of MIT's own faculty and research community. The Libraries are working to extend their services in the digital era, to reflect current trends in scholarly communication and education, and to offer new means of distributing research material that are enabled by network technology.

Over the past few years MIT has been placing new emphasis on educational technology with initiatives such as OpenCourseWare and Open Knowledge Initiative. Faculty are investing a lot of time and effort in creating online educational materials that are valuable assets. DSpace is collaborating with the major educational technology initiatives at the Institute, including OpenCourseWare, so that storing, relocating, reusing and repurposing course content becomes reliable and easy.

Faculty accustomed to finding documents online, whether published or pre-publication, expect to continue to work with discipline-defined collections. DSpace can store and deliver preprints and eprints from the host institution and could support virtual collections from different academic disciplines by means of federation across large numbers of participating institutions. Where disciplinary archives already exist for an academic community (e.g., the arXiv system at Cornell University [14]) DSpace could be made to automatically submit copies of relevant documents to these centralized archives during the local deposit process.

#### ***Transition Team and Business plan***

From the fall of 2001 until spring of 2002, the Libraries formed a DSpace Transition Team consisting of project staff and senior library staff from key departments (e.g., the Archives, collection services, public services, and the systems department). This group was charged with figuring out how to deploy DSpace as a new service of the MIT Libraries: the necessary policies, staffing requirements, communications strategies, management and governance structures, training plans, and operational requirements. Participation in this group proved to be a useful vehicle for the library staff to become more familiar with the system, and discussions of these various issues were invaluable to the development of the production DSpace service.

Participating in the Transition Team group were two senior business consultants funded by a grant from the Andrew W. Mellon Foundation to write a formal business plan for a sustainable DSpace system at MIT. Their work consisted of compiling the results of the transition team deliberations and decisions, incorporating the work into detailed cost information for system operation, and outlining possible revenue options. The major conclusion of this planning process was that DSpace at MIT would be offered as a combination of subsidized core services (built into the Libraries' operating budget), and cost-recovered premium services that would allow the Libraries to meet varying unique needs for DSpace from particular Communities (e.g., exceptional amounts of disk storage, assistance with metadata creation, or conversion of files to supported formats). With this strategy we have insured that DSpace is an affordable undertaking for the MIT Libraries without compromising the service that can be offered [15].

### *Preservation*

Recent discussions of digital preservation focus on at least two levels: "bit preservation", where a digital file is carefully preserved exactly as it was created without the slightest change, and what we'll refer to as "functional preservation", where the digital file is kept useable as technology formats, media, and paradigms evolve. In the first case, it's very unlikely that the file could still be read or processed by software after five or ten years have passed, but we assume it's possible for "digital archeologists" to work with the file to try to unlock its secrets many years later, especially if they have some additional information about the format (e.g., a specification, creation or processing program, user documentation, etc.). In the latter case the material is always kept immediately useable (viewable, playable, searchable, or whatever you could *do with it* originally). Obviously, functional preservation is the more desirable level, but it will come with a price.

As a community, our understanding of functional digital preservation is at an interesting juncture: we know how important the need is, we know how it can be done at an abstract level (e.g., format migrations or complex system emulation and so on). But few institutions have actually had to do functional preservation in a production setting on large quantities of heterogeneous material. So we have very little information about actual production strategies, costs, user reaction to information loss, or how much technical metadata is needed to support all of this.

How does this all relate to DSpace? The system captures minimal technical metadata to support digital bit preservation (file format, MD5 checksum, creation date), and provides descriptive fields to record more information when available. With this metadata and proper production procedures (e.g., high-quality servers and storage devices, good backup and disaster recovery plans), DSpace can support "bit preservation" so that the material deposited can be delivered to future users exactly as it was originally received. For some digital formats this may be the best option available—for example, an executable program for which no corresponding source code was provided or a format that's so rare (or proprietary) that the DSpace host institution has no way of knowing how to provide functional preservation.

However, functional preservation is currently a matter of institutional policy, and will only be implemented more thoroughly in DSpace when we understand more about the production techniques, user requirements, and cost/benefit tradeoffs. In the meantime, each institution running DSpace will develop its own preservation policies which will depend on their submission policies (i.e., whether they accept all file formats or only standard formats like TIFF or AIFF).

MIT plans to provide functional preservation for a list of "supported" formats, listed on the web site and shown to users during the deposit process. Supported formats include those that are documented standards (e.g., TIFF, AIFF, XML) or have published specifications (e.g., PDF, RIFF). The other two categories of support for MIT's DSpace are "known" and "unsupported". "Known" formats are those that are common enough to be familiar and usually quite popular, but which are proprietary in that there are no published specifications on which to base functional preservation. "Unsupported" formats are those that are either unknown to the Libraries or are extremely rare (e.g., a compiled program, a commercial CAD/CAM file, etc.). The reason for distinguishing between "known" and "unsupported" is that for the former we expect to see commercial

conversion programs become available as these formats become obsolete since there are so many files in these formats in existence with many industries dependent on them. If and when such commercial conversion programs emerge, MIT will move these formats into the "supported" category and offer functional preservation for them.

### *The DSpace Federation*

Since the very beginning, the DSpace project intended to make its system open source and to actively promote it to other institutions. Why? There are many reasons for taking this approach:

- Developing a critical corpus of content that represents the intellectual output of the world's leading research universities
- Promoting the continued development of the DSpace service through the open source community
- Promoting interoperability of archival repositories and long-term preservation of scholarly work

In 2002, MIT formed collaborative partnerships with a small number of other academic research institutions in the US, UK, and Canada, to address some specific questions such as: what will it take to successfully deploy the system at another institution? How much localization, how much customization, and how much time and effort are needed? What services can be defined to leverage the digital collections of these institutions, and how can they be implemented in DSpace? What sort of organization will the Federation become: A consortium? A new membership organization? An informal and loose collaboration? Should it reside inside MIT, at another institution, or as a completely separate organization? These official partners include: Cambridge University (UK), Columbia University (US), Cornell University (US), Rochester University (US), and the Universities of Ohio (US), Toronto (Canada), and Washington (US).

In addition to these formal collaborations, many organizations have downloaded the DSpace system (almost 1,500 since early November) and many of these are in the process of evaluating it for adaptability to their local requirements. Clearly there is great need for a system like DSpace, and as we explore the definition of the DSpace Federation over the coming year, we hope to get feedback and advice from many of these institutions about how the system should evolve and how to make it sustainable beyond MIT.

### **Conclusion**

Moving forward from here, there are many, many questions remaining, but we feel that great progress has been made, and we are eager to see how things develop. At MIT we are very pleased and excited to have a platform to begin exploring these issues, both within the Institute and with other institutions that want to advance the agendas of open access to scholarly information and the management and preservation of digital material. At HP we are excited by the role that DSpace can play as a vehicle for exploring and developing standards, and for ongoing research in digital asset management, archival, and preservation systems. Together we anticipate that DSpace

will play an important role in the future of academic libraries and archives, and we look forward to productive collaboration with other institutions in this area.

### **Acknowledgements**

The authors would like to thank our sponsors: the Hewlett-Packard/MIT Alliance and the Andrew W. Mellon Foundation. We would also like to thank the previous members of the DSpace project team whose contributions were invaluable, including Eric Celeste, Bill Cattet, Dan Chudnov, Peter Breton, Peter Carmichael, and Joyce Ng. Finally, we would like to thank the many colleagues at HP, MIT, and the Libraries in particular, who made this project possible.

### **Notes**

- [1] Berkeley Standard Distribution License, <<http://www.opensource.org/licenses/bsd-license.php>>.
- [2] Particularly the work described in Arms, <<http://www.dlib.org/dlib/July95/07arms.html>>; Kahn and Wilensky, <<http://www.cnri.reston.va.us/home/ctr/arch/k-w.html>>; and the FEDORA project, <<http://www.fedora.info>>.
- [3] METS information is available at <<http://www.loc.gov/standards/METS>>.
- [4] SourceForge.net, <<http://sourceforge.net/projects/dspace>>.
- [5] DSpace, <<http://dspace.org>>.
- [6] Downloadable software developed by researchers at HP Labs, <<http://www.hpl.hp.com/research/downloads/>>.
- [7] Since the system is written in java in can, in theory, run on other platforms than UNIX but this is untested by the DSpace development team.
- [8] Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH), <<http://www.openarchives.org/OAI/openarchivesprotocol.htm>>.
- [9] OAICat can be found at <<http://www.oclc.org/research/software/oai/cat.shtm>>.
- [10] See the Handle System® <<http://www.handle.net>>.
- [11] See <<http://web.mit.edu/oki>> for more information about the Open Knowledge Initiative.
- [12] See <<http://www.ocw.mit.edu>>, for more information about OpenCourseWare.
- [13] See <<http://web.mit.edu/about-mit.html>> for MIT's mission statement.
- [14] See the arXiv.org e-Print archive, <<http://arxiv.org/>> at Cornell University for information about the arXiv project.
- [15] See <<http://www.dspace.org/mit/plan.html>> for the MIT Libraries' DSpace business plan.

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