DLF Aquifer Operations Plan
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DLF Aquifer is a Digital Library Federation initiative. DLF Aquifer models and develops network-based, scalable solutions to make a growing body of digital library content easy to find and use across institutional boundaries. DLF Aquifer draws upon digital content pertaining to American culture and life to create a distributed open digital library that will be implemented differently in different places, to support the work styles and preferences of faculty, students and scholars.

The following plan is designed to answer these questions:
- Who are the DLF Aquifer stakeholders?
- What problems will DLF Aquifer solve?
- What is the purpose of DLF Aquifer within the Digital Library Federation mission?
- What are the DLF Aquifer deliverables?
- How is DLF Aquifer supported?

Purpose:

Scholars working in the humanities and social sciences experience "difficulties with finding, analyzing, and customizing the abundance of online material available."[1] Digital Library Federation members believe that research libraries have a clear mandate to contribute solutions to these problems. As an organization that supports standards and best practices development, the Digital Library Federation[2] launched the DLF Aquifer initiative to model and develop a distributed open digital library to meet the needs of humanities and social science scholars.

Many libraries have created digital collections that are difficult to discover and use, even within their own environments. Researchers are less interested in where a digital collection was created or resides than they are in being able to use the digital objects with other material important to their work. Findings from the OAI Scholars Advisory Panel held in support of the DLF project, *The Distributed Library: OAI for Digital Library Aggregation,* included the observation that the scholars found "[t]he item and its collection are of prime importance, not the institution that holds the item."[3] Library leaders recognize that working together can enable more rapid innovation and development. Collaborating to bring material from diverse collections together simply makes sense.

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[1] Harley, Diane. *Use and Users of Digital Resources.* Berkeley, CA: Center for Studies in Higher Education, 2006. p. 2-2. http://digitalresourcestudy.berkeley.edu/report/index.html (accessed June 20, 2006)

[2] http://www.diglib.org/

[3] http://www.diglib.org/architectures/oai/imls2004/OAISAP05.htm

Goals:

DLF Aquifer supports scholarship by making digital library collections widely available through library services tailored to scholarly discovery and use. DLF Aquifer contributes solutions to enable scholarly use of digital objects in context by:

> ➢ Developing schemas, protocols and communities of practice to bring DLF Aquifer collections to scholars and students where they do their work
> ➢ Developing the best possible systems for finding, identifying and using digital resources by
>> ❖ promoting digital library best practices and
>> ❖ developing tools and services to improve digital resource access and use

Positioned within the Digital Library Federation, DLF Aquifer has access to standards-based development through participant libraries. DLF Aquifer participants and other DLF members hold rich digital collections in American culture and life and are well placed to contribute quality content.

Background:

The Digital Library Federation was established in 1995 to "bring together -- from across the nation and beyond -- digitized materials that will be made accessible to students, scholars, and citizens everywhere, and that document the building and dynamics of America's heritage and cultures"[4]. The first goal in the DLF charter is:

> The implementation of a distributed, open digital library conforming to the overall theme and accessible across the global Internet. This library shall consist of collections -- expanding over time in number and scope -- to be created from the conversion to digital form of documents contained in our and other libraries and archives, and from the incorporation of holdings already in electronic form.[5]

The Digital Library Federation has been working towards the strategic programmatic goals expressed through DLF Aquifer since the Federation was founded, through support, coordination, and participation in the development of prototypes, proofs of concept, and test-beds. At a May 2003 strategic planning retreat, the DLF Distributed Open Digital Library (DODL) was re-named DLF Aquifer. The DLF Aquifer programmatic focus assembles and builds on existing DLF development and identifies areas for further work. Significant DLF OAI-PMH (Open Archives Initiative Protocol for Metadata Harvesting) activity underpins DLF Aquifer. In particular, *The Distributed Library: OAI for Digital Library Aggregation*[6] project funded by the Institute for Museum and Library Studies (IMLS):
> ➢ built the foundation for the DLF Aquifer OAI Portal

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[4]Digital Library Federation Charter (1995). (http://www.diglib.org/about/dlfcharter.htm)
[5] Ibid
[6] http://www.diglib.org/architectures/oai/imls2004/ (accessed July 31, 2006)

> ➢ developed best practices for sharable metadata that informed the MODS Implementation Guidelines
> ➢ created a DLF collections registry from which DLF Aquifer content is being selected

Management:

DLF Aquifer is a Digital Library Federation initiative, within the overall DLF programmatic framework. The DLF Aquifer director reports to the president of the Digital Library Federation board. The DLF Aquifer director works with the Aquifer Implementation Group to set policy.

The DLF Aquifer Implementation Group consists of the chairs of four DLF Aquifer working groups: collections, services, architecture/technology, and metadata and three at-large members, typically participant library directors or their designated representatives. The executive director of the Digital Library Federation is an *ex officio* member.

Participation:

DLF Aquifer participation is open to all DLF member libraries. Participants may join and leave the project depending on their level of interest and ability to commit during any given phase of the project. For the initiative to remain operational, at least a third of DLF member libraries will need to be actively engaged, as outlined in *Appendix II, Joining DLF Aquifer*.

Organizational structure:

The working group structure established in March 2005 provides a framework and the capacity for collaboration in three areas:

- o Understanding what users need and want.
- o Understanding the impacts of metadata quality on building services for shared collections.
- o Developing, adapting or adopting architectural models, software and schemas to enable access to and use of distributed collections.

Capacity for technical development comes from funded projects. For example, a project to develop an architectural model, schemas and data models for interoperability and a metadata enhancement workflow involve a subset of DLF Aquifer participants in work plans with defined durations.

Target Audiences and Stakeholders:

DLF Aquifer is aimed at meeting the needs of scholars in the humanities and social sciences and serves five market segments:
1. Research faculty
2. Graduate students

3. Teaching faculty
4. Undergraduate students
5. Librarians assisting content consumers

Even when they are not the content consumers, digital library developers, curators and bibliographers in libraries and cultural heritage organizations play a key role in integrating DLF Aquifer objects into a variety of environments such as:

➢ Commercial search services
➢ Course management systems
➢ Library or other portals that support citation management
➢ Federated search environments

The forty member organizations comprising the Digital Library Federation have a strong interest in seeing DLF investment in DLF Aquifer benefit DLF Aquifer participants, members of the DLF, the digital library community at large, "students, scholars, lifelong learners, and the general public."[7]

Stakeholders include:
1. DLF Board members
2. DLF Aquifer working group members
3. Participant library staff
4. Scholars
5. Students
6. Teachers
7. Digital library professional working on complementary projects
8. Outside funding organizations
9. Vendors (e.g. commercial search service providers)

Environment:

While the scholarly communication process is changing rapidly, there remains a vital role for libraries, identifying collections and developing library services to make the material easier for scholars to find and use. DLF Aquifer has been compared and contrasted with a variety of programs and products from library service providers, commercial search services, course management system developers, other consortia and individual libraries.

Some qualities that differentiate DLF Aquifer are:

➢ Integrated access to multiple digital formats
➢ Integrated access to digital objects across domains
➢ Infrastructure that supports interoperability
➢ Infrastructure that supports tools and services for scholars in the humanities and social sciences (e.g. annotation, collection, modification)

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[7] http://www.diglib.org/about/dlfmission.htm (accessed September 25, 2006)

The combination of these features distinguish DLF Aquifer from collections of digital material within an institution, and from discipline specific stand alone portals. Libraries, service providers and scholars, through individual effort, partnerships and collaborations have successfully created a number of contained, stand-alone collections, available through clients that must be installed and maintained on the scholar's desktop or accessed by pointing to a web page. Making of America[8], RLG Cultural Materials[9] and The Walt Whitman Archive[10] are examples of valuable, impressive stand-alone collections. What remains to be accomplished is to enable digital content from a variety of collections to be found and used within the context of the scholar's local work environment, bringing the library to the scholar.

Some perceived competition for DLF Aquifer comes from commercial search services. Anecdotal evidence suggests that many undergraduate students and a growing number of faculty members view Google™ as a complete research solution. Independent scholars, who often experience barriers to receiving library services, embrace Google™ solutions to meet their information needs. Making every effort to see that DLF Aquifer collections are indexed by commercial search services is important for exposing and promoting DLF Aquifer collections. However, some portion of the DLF Aquifer market is likely to prefer other, more focused means of access and use, which DLF Aquifer will also support.

Course management systems such as Sakai™ are developing services for building course content from digital library materials. A key DLF Aquifer scenario will be to document best practices for integrating DLF Aquifer, as a suite of services, into course management and e-learning systems.

CONTENTdm® and Greenstone are examples of products that support digital library workflows. Support for the creation of new digital collections is currently out of scope for DLF Aquifer. RLG Cultural Materials and ARTStor are products that provide access to the digital collections ingested in them for customers that subscribe. DLF Aquifer tools and services are being built with respect to particular collections but DLF Aquifer services will be loosely integrated into a variety of existing environments such as the course management and e-learning systems mentioned above, portals that enable federated searching of DLF Aquifer content with commercial resources and integration with scholarly work environments that link to citation management systems.

Rather than being implemented as a stand-alone product or portal, DLF Aquifer will be implemented locally, bringing the distributed open digital library to the place where the scholar works. Distributed, local implementation gives DLF Aquifer an advantage over other collections and products that must be separately implemented, maintained and learned by faculty members and students.

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[8] http://www.hti.umich.edu/m/moagrp/ (accessed August 15, 2006)
[9] http://culturalmaterials.rlg.org/ (accessed August 15, 2006—restricted)
[10] http://www.whitmanarchive.org/ (accessed August 15, 2006)

Operations Status:

The DLF Aquifer working groups and the metadata harvesting host library, University of Michigan, issued the following core work products in 2005 and the first quarter of 2006:

- o DLF Aquifer Services: Institutional Survey Report
  http://www.diglib.org/aquifer/SWGisrfinal.pdf

The report analyzes results of a baseline survey of DLF libraries to learn what is known about digital collection use. Findings from the survey are informing DLF Aquifer development priorities and identifying gaps in the user services assessment area. Survey findings indicate that:
  - o little assessment is made of collection use over time;
  - o the most significant obstacles to digital library service development are lack of resources, time, trained staff, and budget support;
  - o and addressing issues created by inconsistent metadata is seen as the basis for providing integrated access to distributed digital collections.

The survey confirms that investments made in digital collections need to be better leveraged by increasing the utility of these collections for users, and that the perceived insufficient investments in digital library services need to be leveraged through collaboration.

- o DLF Aquifer OAI portal http://www.hti.umich.edu/a/aquifer/

Intended as a metadata workspace, this interface allows examination and analysis of rich harvested MODS (Metadata Object Description Schema) descriptive metadata. The richness of the MODS records differentiates this harvesting experiment from OAI portals that harvest Dublin Core descriptive metadata. Building on its predecessor DLF MODS portal http://www.diglib.org/architectures/oai/imls2004/index.html, the DLF Aquifer OAI portal harvests collections within the DLF Aquifer collection scope and gives DLF Aquifer working group members a place to explore the capacity for service development that more complete descriptive information can enable for pooled collections.

- o MODS Implementation Guidelines for Cultural Heritage Materials
  http://www.diglib.org/aquifer/DLF_MODS_ImpGuidelines_ver4.pdf

Building on the strong DLF foundation in metadata best practices development, these guidelines are intended to address specific issues that arise when descriptive metadata for distributed collections are brought together. Understanding what happens when objects are removed from their local context and combined with objects from other collections is a fundamental prerequisite to building services for shared collections. Comments and feedback from a range of communities, institutions, and individuals indicate the guidelines fill a need. The Library of Congress has reviewed the guidelines and is incorporating some of the concepts into the MODS standard.

o Asset Action Packages http://rama.grainger.uiuc.edu/assetactions/index.asp

This experimental schema demonstrates the power that lightweight agreements bring to pooling distributed collections by allowing digital objects in disparate collections to be presented consistently to the content consumer. See *Appendix I.*

The collections working group completed a collections policy and the metadata working Group is finalizing the MODS Guidelines. The technology/architecture working group has architectural policies and principles in place and is poised to begin constructing an architectural model. The services working group and technology working group created functional requirements for metadata harvesting that the University of Michigan Digital Library Production Service is implementing. The Services Working Group continues to lead the functional requirements development effort for other DLF Aquifer services.

Three Year Work-plan:

Level of accomplishment depends on level of outside funding support. White cells represent work that can be accomplished by the Aquifer director and through working groups. Blue cells represent work to be done through the Mellon funded *DLF Aquifer Development for Interoperability Across Scholarly Repositories: American Social History Online* project. Yellow cells are unfunded work that has been defined by the working groups but for which the initiative does not currently have capacity. See **Project Support** and **Key Deliverables** sections below.

Category	2007	2008	2009
Project Management	Implement project plan	Create and implement sustainability plan	Hand off to distributed support
Collections	Solicit and add collections	Implement digitization projects to fill collection gaps	Continue to grow by adding collections and formats
Metadata	Establish levels of compliance for MODS guidelines, linked to services	Develop capacity for enhanced retrieval (metadata remediation and enhancement)	Provide metadata enhancement services to contribute to sustaining project
Technology	Define interoperability architecture; develop asset action next steps	Integrate DLF Aquifer services into local environments	Register and document development to ensure sustainability
Services	Develop functional requirements for services	Assess DLF Aquifer service implementation in local environments	Develop and implement continuous assessment process/best practices

Key Deliverables:

The project is expected to result in the following outcomes as a result of anticipated funding from the Mellon Foundation:

- *Improved Access for Scholars*. DLF and DLF Aquifer expect to make meaningful progress towards making digital objects from distributed sources easier for scholars to use in their local work environments.

- *Increasing Digital Collection Use.* DLF Aquifer expects to expose more of the unique digital material for which libraries are stewards by making the digital objects easily accessible in the scholars' work-space.

- *Assessment Methods and Data.* By developing an assessment methodology for DLF Aquifer, implementing and testing it, DLF Aquifer expects to contribute to best practices development for usability research studies.

- *Stimulating New Research Questions.* DLF Aquifer predicts that the "one collection" juxtaposition of diverse digital content that has been impossible to achieve will inspire scholars to pose fresh questions and to view old subjects through new lenses.

- *Supporting Interdisciplinary Study.* By bringing material in different formats together, DLF Aquifer will add context to studies in American literature and culture.

- *Supporting Cross-Regional Research.* Bringing collections together will enable research that crosses regional boundaries in a newly efficient way.

Model Development. More broadly, DLF Aquifer anticipates creating a documented, functioning interoperability model that can be implemented by other libraries and cultural materials organizations for use in other subject matter areas and disciplines.

Project Support:

Overall project direction is the responsibility of the Aquifer director with the assistance of a part-time project manager. Most project activity is distributed among participant libraries, with various component projects managed by those libraries. Adding a centrally located systems architect will be a key factor in coordinating and accelerating development.

Administrative support for the DLF Aquifer initiative is provided through the central DLF office. DLF resources consist of a program associate and an administrative associate. DLF Aquifer support is balanced and prioritized with other DLF administrative and program needs by the DLF executive director.

DLF Aquifer participant and DLF member libraries contribute collections by the terms outlined in the DLF Aquifer Collection Submission Agreement in *Appendix III*. In future

phases, specific targeted collections may be digitized to fill collection gaps and collections may be solicited from outside the DLF. Digitization projects may be part of an in-kind member library contribution or may be supported by grant funding. Models for procuring outside collections will be generated as the initiative develops.

DLF Aquifer technology solutions may be built or bought and integrated into DLF Aquifer. Open source solutions are preferred; solutions based on open standards are expected. Hardware is housed at DLF Aquifer participant institutions or at other institutions, by contract on a fee for service basis. By mutual agreement between DLF and the service provider, fees may be waived. For example, the University of Illinois, Urbana-Champaign hosts the DLF collections registry as an outgrowth of the IMLS grant funded project.

Mapping out specific locations for technology is not critical to successful implementation as long as adequate infrastructure to deliver services is present in the environment and agreements for services that need to be sustained are in place. Collections will be available to users regardless of location. Which DLF Aquifer services are available to content consumers will be a local implementation function. DLF Aquifer is network-based and relies on collaboration.

Finances, Budget and Capital Requirements:

The Digital Library Federation, a membership organization created and supports DLF Aquifer. Funding comes from both DLF operating and capital funds. DLF Aquifer participant libraries contribute significant resources through in-kind contributions. Participants contribute largely by assigning staff resources to the initiative. DLF Aquifer member libraries also supply hardware and software, host services or meetings and fund travel for their staff to attend DLF Aquifer related events. DLF Aquifer seeks grant support from both public and private sources for innovation and development.

Collection development, establishing standards and best practices, developing and implementing tools and services all require systems resources and staff. DLF capital and operational funds form the financial foundation for the initiative. DLF investment at the $200,000 annual level, with in-kind contributions from participant libraries enables a basic level of activity. The DLF board has agreed to support DLF Aquifer at this basic level through the end of 2008 but expects outside funding to be obtained during this period. Significant innovation and development require additional investment in focused development projects.

DLF Aquifer budget for FY 2007 forward is based on the experience of FY2006 expenditures and accomplishments. Core activities, project planning, white papers, schema development, etc. are funded by the DLF and participant in-kind contributions. Revenue comes from both DLF operating resources and capital resources. Expenditures for DLF Aquifer are not generally what would be considered capital expenditures. The Aquifer director position is the primary expenditure funded from capital resources.

Requirements for capital equipment for DLF Aquifer are expected to be minimal and will be met primarily through participant library in-kind contributions and hosting services.

Robust software development, including construction of an architectural framework requires outside support of focused projects. Sources for outside funding are regularly sought. The Aquifer director creates project proposals and submits them to outside funding organizations in consultation with the working groups and the DLF board president.

Cash Flow:
Staff and systems at the Council of Library and Information Resources (CLIR) and Digital Library Federation support DLF Aquifer financial functions. CLIR and DLF are co-located in Washington D.C. Revenue is collected by DLF administrative staff and tracked through CLIR financial systems. The DLF Board provides financial oversight through a board treasurer and budget approval process. DLF Aquifer participant libraries invoice DLF for contract services supplied to the initiative, including hosting the DLF Aquifer director (Stanford) and hosting metadata harvesting services (University of Michigan).

Pricing:
DLF Aquifer collections will be made available to DLF Aquifer participants, DLF members, the library community, and beyond without cost. Cost recovery or revenue generating services such as metadata enhancement and normalization may help sustain a level of centralized support and fund future development as the initiative matures.

Marketing, Promotion and Assessment:
DLF Aquifer is designed to meet the needs of scholars. The services working group is developing best practices for usability testing and assessment. Development of an assessment process for DLF Aquifer is incorporated into the *DLF Aquifer Development for Interoperability Across Scholarly Repositories* project. Assessment activities will be an integral part of DLF Aquifer being introduced in participant libraries.

The DLF Aquifer initiative has a web presence on the Digital Library Federation web site. DLF Aquifer initiative goals and progress have been featured in presentations at conferences, including the Digital Library Federation fall and spring forums.

Risks:
While DLF Aquifer participants are clearly motivated to contribute to the project, libraries have many competing priorities. It is possible that DLF Aquifer participants will not be able to sustain the level of commitment that will be needed to keep the project moving. To remain viable, project goals within the initiative must be aligned with individual institutional goals and priorities. Funding levels will influence the ability to progress. Although it is likely that initiative values and goals will appeal to funding agencies, there is some chance that the project direction will need to shift to be in closer alignment with funding program interests and directions.

DLF Aquifer also faces some risks in developing models for sustainability, although the distributed DLF Aquifer model builds in good success factors. The distributed collections will be sustained, as agreed by the libraries that contribute them when the libraries sign the collection submission agreement. Integration of collections and services also builds in some degree of sustainability through local maintenance.

To insure a level of ongoing centralized support, DLF Aquifer and the Digital Library Federation will need to continue developing and clarifying relationships with other organizations that maintain schema registries, standards and best practices such as OCLC and the Library of Congress. In addition, DLF Aquifer and the Digital Library Federation may need to develop funding models that support sustaining DLF Aquifer as an ongoing initiative rather than an experimental project, if some level of centralized support is needed and a distributed open digital library is something the DLF wishes to continue to support.

Conclusion:
The DLF Aquifer concept has been refined since the DODL initiative was proposed in May 2003. The fundamental goals have remained closely aligned with the goals stated by the DODL Initiative Committee in their May 2003 document, "Framework for a Distributed Open Digital Library."

The DLF Aquifer initiative, originally called the Distributed Open Digital Library of the Digital Library Federation, has been established to:

- o Create a framework for shared digital content, tools and services among the DLF membership and broader community
- o Catalyze collaboration among digital library stakeholders in the development of rich content and innovative services
- o Develop an extensible architecture to leverage existing digital library assets, enable the development of layered services, and explore models for managing digital content rights in a collaborative environment
- o Generate, facilitate, and evaluate use of digital library content and services

These goals are being realized through participant library capacity, DLF investment in a position dedicated to the initiative and the additional resources obtained through outside funding.

## Appendix I: Asset Action Experiment

The asset action implementation, hosted by University of Illinois, Urbana-Champaign, enables image thumbnails from multiple distributed collections to be displayed along with brief metadata in one view, although the images may not exist with these properties in their native environments. See Figure I.

Figure 1
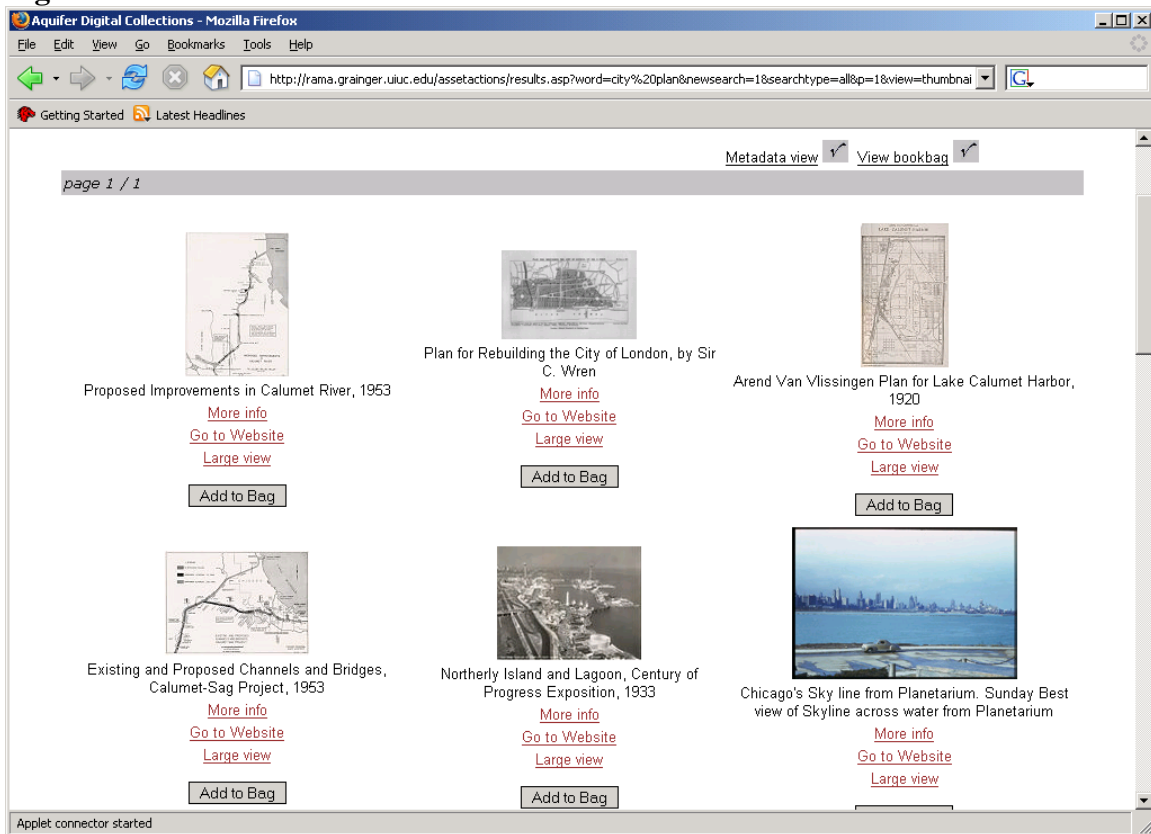
Applying a collector tool developed by the University of Virginia to the experiment demonstrates one way the schema enables distributed collections to be used by a separate, local application. See Figure 2.

Figure 2
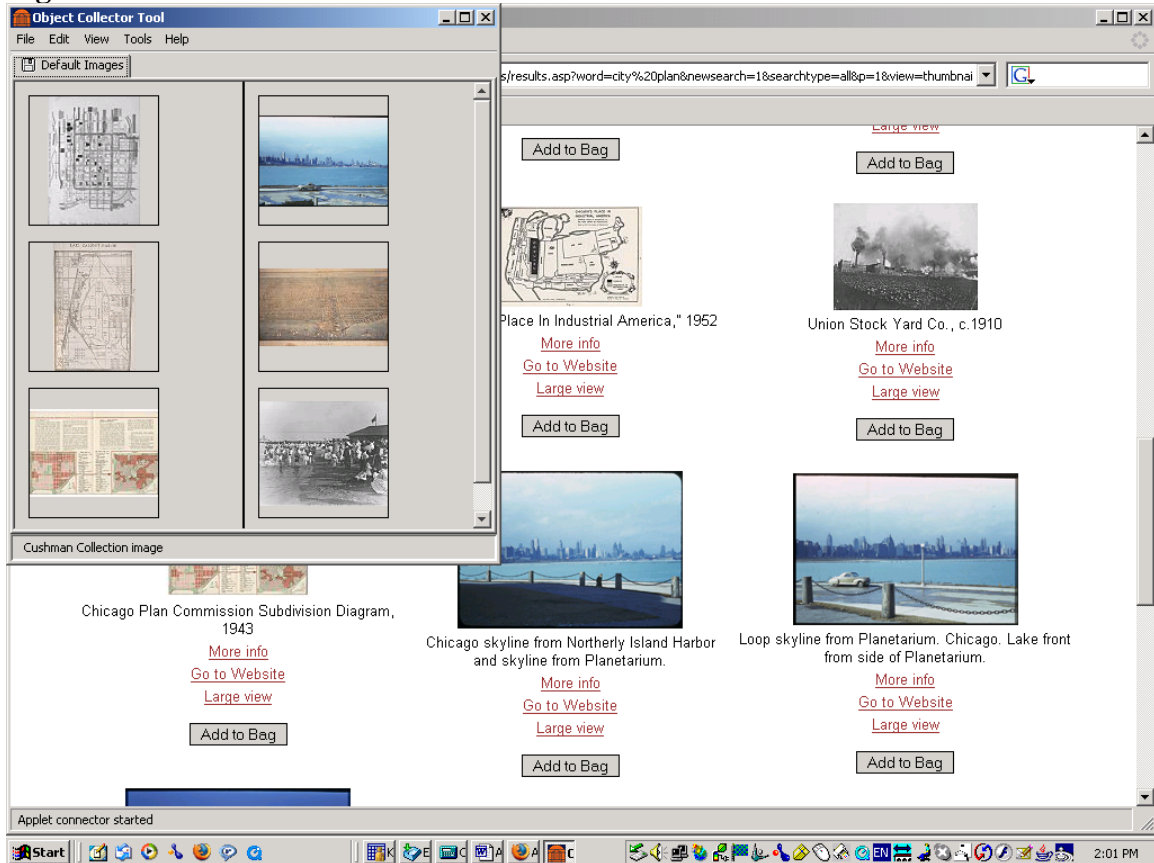
The underlying concepts upon which asset action packages are built can be extended to mesh well with models for interoperability under discussion, such as the Pathways Core,[11] the high level model put forth by DLF Aquifer participant library, Johns Hopkins University in the study *A Technology Analysis of Repositories and Services*,[12] and the OCKHAM initiative.[13] DLF Aquifer is well positioned to become a test bed for some of these ideas.

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[11] http://msc.mellon.org/Meetings/Interop/lagoze_data_model.pdf

[12] http://ldp.library.jhu.edu/projects/repository/documents/Analysis_Final_Report.pdf

[13] http://www.ockham.org/services.php

Appendix II: Joining Aquifer

Joining DLF Aquifer

*Aquifer Participation and Management Are Based
on the Shared Commitment of Its Members*

DLF Aquifer is an integrated program of the Digital Library Federation based on objectives fundamental to the DLF mission. Aquifer is comprised of member institutions exercising a shared commitment to work together to enhance access and use of digital resources for teaching, learning, and research. Leveraging their mutual commitment and collaborative spirit, Aquifer members participate in coordinated efforts to exploit the collective value of their rich digital collections for users worldwide.

Essential to these efforts is the application of common standards and best practices and the shared development, testing, and application of tools for selecting, organizing, and providing access to valued digital content. Confident that libraries contribute educational and cultural value through cooperative endeavors to organize and disseminate information, Aquifer encourages and enables collaboration among libraries and archives, and with scholars and other partners. While focusing on tangible means and achievements, it is envisioned that future broad-scale alliances will be stimulated by and modeled on the DLF Aquifer experience.

Membership

Shared Commitment is the underlying principle upon which DLF Aquifer governance, management, and membership are based. This principle is reflective of basic elements of the digital library movement and the principle tenants articulated at the founding of the Digital Library Federation. Only DLF members may join Aquifer, but partnerships with other institutions will be established as appropriate to selected initiatives. All DLF members are encouraged to join.

Joining Aquifer requires that an institution commit to collaborative participation in mutual endeavors designed to enhance the value and effective use of digital resources managed by member institutions and allied partners. Achieving these goals requires that each member contribute in equivalent manner in realizing collaborative outcomes. Operationally, Aquifer is dependent on contributions of personnel and other resources by member institutions. Therefore, membership is defined by the willingness of an institution to participate fully in Aquifer planning and programs and to share access to its digital collections. Similarly, if an institution no longer wishes to maintain such a commitment to Aquifer, an institution should convey its intention to withdraw from membership.

Since Aquifer activities are primarily organized through Working Groups, the extent of institutional contribution required has been defined as being equivalent to staff participation in two Working Groups or to the hosting of a shared service. Characterizing the extent of such involvement isn't simple because of the need for elasticity in activity and membership levels within the various Working Groups, but the annual value of participation is presently [2006] estimated at $27,000.

Notification of intent to join Aquifer should be conveyed by a letter to the DLF Board President, with a copy to the DLF Executive Director. An intention to withdraw from Aquifer membership should be similarly conveyed to the DLF Board President with a copy to the DLF Executive Director. A minimum of six months notice is required in order that necessary operational adjustments can be made.

Appendix III: Collection Submission Agreement

DIGITAL LIBRARY FEDERATION AQUIFER PROJECT AUTHORIZATION AND SUBMITTAL AGREEMENT

General Terms:

Aquifer Contributors understand that collections submitted for inclusion in the Digital Library Federation's Aquifer Project will be accessible to the public and must meet with following general and specific terms. Contributors certify that they have the legal authority to submit collection materials – metadata records and digital objects – and agree to assume all legal responsibility resulting from that submittal decision.   Contributors must be the copyright holder, have permission to submit granted to them by the copyright holder, have a reasonable good faith belief that the materials may be deposited in accordance with Fair Use Principles of Law, or be submitting materials in the public domain. Contributors are responsible for clearing any rights prior to submitting any and all materials to DLF Aquifer or granting permission to DLF Aquifer to harvest metadata records and/or digital objects for inclusion in the DLF Aquifer collections.

Specific Terms:

Rights granted to the Digital Library Federation's Aquifer Project through this agreement are entirely non-exclusive.   The Contributor is not transferring any copyright or other ownership interests in the metadata or digital objects submitted to DLF Aquifer. The Contributor is agreeing only to DLF Aquifer's right to utilize the collection materials as described in this agreement. All copyright rights and interests reside with the holding institution or copyright holder. The Contributor may submit updated or additional metadata or digital objects at a later time to Aquifer.

Collection materials are being deposited for open access use. Under this agreement, DLF Aquifer may manually or automatically harvest metadata records and digital objects, add them into the DLF Aquifer collections, and make the materials available to individuals and institutions throughout the world via the Internet.

The Contributor agrees that all metadata records submitted must point to digital objects, and that those digital objects must be publicly accessible. Use restrictions and copyright status for the metadata and the digital objects must be documented in the metadata by the Contributor. The Contributor further agrees that the metadata records submitted will meet DLF Aquifer metadata standards as closely as possible; may be harvested for inclusion in the DLF Aquifer collections; may be transformed to meet DLF Aquifer metadata standards; may be included in a publicly available DLF Aquifer collections catalog; and may be made available for additional harvesting as part of the DLF Aquifer collections.

The Contributor understands that the DLF Aquifer project assumes a distributed environment for the development of tools to access and use the materials included in the DLF Aquifer collections. The Contributor agrees that materials included in the DLF Aquifer collections may be made available through interfaces and tools developed by multiple institutions. As part of the tool development by the DLF Aquifer project, public access catalogs and tools will be developed that may present the objects themselves in addition to their metadata. The metadata and digital objects submitted may be included in this development effort. DLF Aquifer reserves the right to, at a future date, harvest the digital objects referenced in the metadata records for co-location.

The Contributor understands and agrees that collections, once offered, are presumed to be available as long as Aquifer wishes to use them, but DLF Aquifer also asserts the right to withdraw collections from the project for any reason in DLF Aquifer's sole discretion. DLF Aquifer will, however, convey in writing its reasons for withdrawing a collection to the Contributor or contributing institution in writing.

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On behalf of X organization at Y institution

_____

Printed Name

_____

Date