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In each issue of HatCheck, Director of Community Strategy and Outreach, Thornton Staples, will introduce a topic of interest from the Fedora Commons Community Registry. Contact us (<http://fedora-commons.org/contact.php?id=communityregistry>) to add your project to the Registry.

Developing community activities around Fedora Commons' priority areas is one of our central functions as an organization. We are well placed to organize communities for development in a variety of areas, especially including development of the core software and application development in a variety of solution areas that have a natural affinity with Fedora. Other community activities could include such things as standards development, issue advocacy or simple information sharing in a particular area.

Our initial push in this direction is to concentrate on community building around particular solution areas, for which complete applications could be built on top of Fedora. We think of these applications as “solution bundles” implying that there is a complete end-user package that bundles software created externally with a specific set of Fedora Commons Framework services into an integrated application that addresses a particular use case of the solution area.

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HatCheck is a quarterly newsletter published by Fedora Commons (<http://fedora-commons.org>) that is provided by and for communities of Fedora users, developers, vendors and decision makers to facilitate the exchange of news, events, information and achievements. Your comments and content are most welcome! Contact Carol Minton Morris, (communications@fedora-commons.org; 607 255-2702) Fedora Commons Director of Communication and Outreach, to contribute news and information for the December 9, 2008 issue of HatCheck.

Fedora Commons Overview

Strategic Developments in Our Dynamic Open Source Communities

By Sandy Payette, Executive Director, Fedora Commons



Ithaca, NY — It's been an exciting summer with the release of Fedora 3.0, Mulgara 2.0, and the kickoff of the new collaboration of Fedora Commons and the DSpace Foundation.

In July, Michele Kimpton, Executive Director of the DSpace Foundation, and I stood on the steps of the Library of Congress to shake hands as a symbol of our commitment to collaboration. This is a very exciting development for our organizations and our communities for several reasons. First, our communities will benefit from our efforts to bring the DSpace and Fedora repository systems closer together and make them more interoperable. We have heard from many users that the ideal solution for them would be to have the “best of both” and we are committed to determining the best strategies to meet this requirement. Second, our non-profit organizations will benefit from the strategic alliance we have formed. Both the DSpace Foundation and Fedora Commons are situated in an exciting and dynamic context that is influenced by both technical and social forces. With many new players in the terrain that might loosely be described as “repositories” we believe that together DSpace and Fedora can continue to provide a unique value proposition over the long haul. We both have strong communities, successful open source products, deep understanding of the challenges of digital preservation and scholarly communication, and close relationships with universities, libraries, scholars, and scientists. Working together, we will continue to serve our mission by leveraging new technologies and by developing new strategies for integrating repositories in Web-based knowledge spaces and emerging cyberinfrastructure. We look forward to lots of community participation as we refine our ideas and translate them into software development plans. Check out the press release (<http://expertvoices.nsd.org/hatchcheck/2008/07/29/dspace-foundation-and-fedora-commons-form-working-collaboration/>) about our collaboration and stay

tuned for more information over the next few months.

Fedora 3.0 Milestone

Both the core Fedora development team and committers and contributors from the wider community have done a great job in delivering Fedora 3.0. I consider this an important milestone for several reasons: (1) it streamlines the core Fedora repository service, (2) it introduces the first in a series of new features that will make the Fedora repository integrate better with new and emerging Web technologies and standards, and (3) it provides a simple starting point for creating and storing “content models” that describe different genre of digital objects.

I'll mention a few things about better integration with the Web. With feedback from our community, we are focused on providing new lightweight interfaces for the Fedora repository that make it much easier to integrate with Web applications. Also, we would like to expose the repository in a manner that promotes interoperability using common Web protocols and formats. In Fedora 3.0, we took our first steps by introducing a new REST interface for managing the repository and supporting ingest/export using the Atom syndication format. In the next six months we will kick off a number of new innovative projects to improve the repository fit within the Web, both from the perspective of front-end access to the repository, and from the perspective of integrating Web storage providers at the back-end of the repository.

Here's my simple explanation of the new “Content Model Architecture (CMA) unveiled in Fedora 3.0... Given that you can register a description of what a particular type of digital object should look like (for example a “book” digital object), it's a lot easier to take the next step, which is to assert which digital objects in the repository conform to the model. With Fedora's new CMA features, the relationships between digital objects and their content models can be easily recorded via RDF. At a minimum, this enables you to “round up all the suspects” during times when you would like to find all the “book” objects for maintenance or migration. Better yet, you can use content models as the basis for which transformative services can be dynamic associated with digital objects.

Mulgara Semantic Triplestore

Finally, I would like to draw your attention to the new release of the Mulgara semantic triplestore, whose development is supported by Fedora Commons. This week Mulgara 2.0.5 was released (<http://expertvoices.nsd.org/hatchcheck/2008/09/08/mulgara-205-released/>). The new Mulgara 2.0 line is a major milestone that continues to advance the state of this very powerful RDF triplestore in open source. With the release of Mulgara 2.0 we now have SPARQL query support, plus an array of new features that greatly improve reliability and scalability. Check out the details at the Mulgara web site (<http://www.mulgara.org/>).

Engineering Punchlist

Three-part Development Focus for Fall 2008

By Dan Davis, Chief Software Architect, Fedora Commons

Ithaca, NY — Fedora Commons has re-launched all 671 pages from the old wiki site at fedora.info with Atlassian's Confluence enterprise wiki software to continue to enable the community to work together to create Fedora's cutting-edge open source repository framework.

<http://fedora-commons.org>, click on the red "wiki" button on the upper right of the web page

<http://fedora-commons.org/confluence/>, direct link to the new Fedora Commons wiki

You will find content that you have been actively working on in the *Fedora.info Wiki Archive*:
<http://fedora-commons.org/confluence/display/FEDINFO/Home>

Panagiotis Louridas, author of *Using Wikis in Software Development* (http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=1605183), reviews the history of Ward Cunningham's early hypertext environment that was dubbed "Wiki," meaning "quick" in Hawaiian. Cunningham's goal was to create a system to facilitate the rapid exchange of information among members of a community. The Wiki concept has evolved to include both the notion of a program for easy web page editing, and a philosophy of openness. Fedora Commons' Wiki environment has been used by the community to keep in touch and share information since the first MediaWiki version was launched in the spring of 2006.

The new Fedora Commons wiki provides a stable environment for developing Fedora software, documentation and communities. The new wiki features additional personalization and development tools for communication and tracking including a feature long-requested by the community – automated account registration with "Capcha." So it's easy to join our community while making it difficult for spammers.

Please note that you do not need an account to read the Fedora Commons wiki – it's open to everyone. You must register at the new wiki, however, if you want to add comments, articles, ask for help, or participate with other members of the community. Please visit the Fedora Commons wiki, and read about Fedora Commons activities and software. Better yet, please complete the simple registration process at <https://fedora-commons.org/jira/secure/Signup!default.jspa> to join online.

Feel free to experiment with the new space. Contact Carissa Smith (csmith@fedora-commons.org) with questions and suggestions for organizing the wiki. FYI we cannot move old accounts directly from the old wiki to the new one, so you must re-register at the new wiki. We would also appreciate your help in identifying any content that should be reformatted. Send us an email or search for pages in the *Fedora.info Wiki Archive* at

<http://fedora-commons.org/confluence/display/FEDINFO/Home>, and comment on them (in the comments section on the bottom of each page).

We can create unlimited new community spaces. Please let us know what you would like here. You will find Documentation and the Roadmap in the new wiki where these documents can be easily, accurately, and transparently updated. Using the new wiki, you will be able to comment, add your Fedora experiences to assist new users, and improve Fedora software.

News

Now Available: Production-Ready Fedora 3.0 Fits With the Web

Dan Davis, Carol Minton Morris, and Chris Wilper

Ithaca, NY — On Tuesday, July 30, 2008, Fedora Commons released version 3.0 of the popular Fedora software that completes all general release features. Dan Davis, Chief Software Architect, Fedora Commons, explained, "We are pleased to offer a Fedora 3.0 that is a foundational step towards a model-driven content architecture." He went on to say, "Users will find it simpler to maintain and operate their repositories with version 3.0 – it's more scalable and fits better into the Web."

Fedora 3.0 features the Content Model Architecture (CMA), an integrated structure for persisting and delivering the essential characteristics of digital objects in Fedora. The software is available at <http://www.fedora-commons.org/> and at <http://sourceforge.net/projects/fedora-commons>. The Fedora CMA plays a central role in the Fedora architecture, in many ways forms the over-arching conceptual framework for future development of Fedora Repositories.

Overview of New Features in Fedora 3.0 Release

- **Content Model Architecture:** Provides a model-driven approach for persisting and delivering the essential characteristics of digital content in Fedora
- **Fedora REST API:** A new API that exposes a subset of the Access and Management API using a RESTful Web interface contributed by MediaShelf
- **Mulgara Support:** Fedora supports the Mulgara 2.0 Semantic Triplestore replacing Kowari
- **Migration Utility:** Provides an update utility to convert existing collections for Content Model Architecture compatibility
- **Relational Index Simplification:** The Fedora schema was simplified making changes easier without having to reload the database and significantly increasing scalability
- **Dynamic Behaviors:** Objects may be added or removed dynamically from the system moving system checks into run-time errors
- **Error Reporting:** Provides improved run-time error details
- **Multiple Owner as a CSV String:** Enables using a CSV string as ownerID and in XACML policies

- **Java 6 Compatibility:** Fedora may be optionally compiled using Java 6 while retaining support for Java Enterprise Edition 1.5 deployments
- **Relationships API:** API-M has been extended to enable adding, removing, and discovering RDF relations between Fedora objects
- **Revised Fedora Object XML Schemas:** The new schemas are simpler, supporting the CMA and removing Dissemimators
- **Atom Support:** Fedora objects can now be imported and exported in the Atom format
- **Messaging Support:** Integrates JMS messaging for sending notification of important events
- **Validation Framework:** Provides system operators a way to validate all or part of their repository, based on content models
- **3.0-Compatible Service Releases:** New versions of the OAI Provider and GSearch services are compatible with Fedora 3.0. The GSearch release also enables messaging support for GSearch, which allows for more robust and seamless integration with the Fedora repository.
- **Many new enhancements:** see the Release Notes available at <http://www.fedora-commons.org/documentation/3.0/userdocs/distribution/release-notes.html>

The Fedora CMA builds on the Fedora architecture simplifies use while unlocking potential. Dan Davis explains the CMA in the context of Fedora 3.0, "It's a hybrid. The Fedora CMA handles content models that are used by publishers and others, and is also a computer model that describes an information representation and processing architecture." By combining these viewpoints, Fedora CMA has the potential to provide a way to build an interoperable repository for integrated information access within organizations and to provide durable access to our intellectual works.

Please continue to contribute your observations and comments to fedora-commons-developers@lists.sourceforge.net or fedora-commons-users@lists.sourceforge.net. Fedora 2.2.2 will continue to be supported for production repositories.

Acknowledgements

The release of Fedora 3.0 is made possible by a collaborative partnership with community developers and the Fedora core software development team that include: Chris Wilper (Fedora Commons), Eddie Shin (Fedora Commons), Bill Branan (Fedora Commons), Paul Gearon (Fedora Commons and Mulgara), Robert Haschart (Fedora Commons), Ross Wayland (Fedora Commons), Aaron Birkland (Fedora Commons and National Science Digital Library), Jim Blake (Fedora Commons and National Science Digital Library), Matt Zumwalt (API-M LITE, MediaShelf), Gert Schmeltz Pedersen (GSearch), Cuong Tran (API-M LITE, Digital Innovation South Africa), Pradeep Krishnan, Ronald Tschalär, Bill Arrow, Jim Paul and many others.

DSpace Foundation and Fedora Commons Form Working Collaboration

Heather Denny, Michele Kimpton, Carol Minton Morris, and Sandy Payette

Washington, DC — On Friday, July 25, 2008, two of the largest providers of open source software for managing and providing access to digital content, the DSpace Foundation and Fedora Commons, announced plans to combine strengths to work on joint initiatives that will more closely align their organizations' goals and better serve both open source repository communities in the coming months.

This advance comes as institutions such as universities, libraries, museums and research laboratories worldwide are focused on utilizing open source software solutions for the dissemination and preservation of scholarly, scientific, and cultural heritage digital content into the future. Making books, articles, films, music, large and small data sets, scholarly works, multi-media, learning objects and mash-ups from all parts of the globe discoverable and accessible is at the core of the DSpace and Fedora collaboration.

The collaboration is expected to benefit over 500 organizations from around the world who are currently using either DSpace (examples include MIT, Rice University, Texas Digital Library and University of Toronto) or Fedora (examples include the National Library of France, New York Public Library, Encyclopedia of Chicago and eSciDoc) open source software to create repositories for a wide variety of purposes.

Coalition for Networked Information (CNI) director Clifford Lynch remarked, "Repositories are a key part of the infrastructure for supporting scholarly work, and they need to integrate more effectively with a range of other evolving components. I think there are great opportunities for DSpace and Fedora to work together not only on repository interoperability but on common approaches to repository roles in the scholarly and scientific workflows."

The decision to collaborate came out of meetings held this spring where members of DSpace and Fedora Commons communities discussed multiple dimensions of cooperation and collaboration between the two organizations. Ideas included leveraging the power and reach of open source knowledge communities by using the same services and standards in the future. The organizations will also explore opportunities to provide new capabilities for accessing and preserving digital content, developing common web services, and enabling interoperability across repositories.

In the spirit of advancing open source software, Fedora Commons and DSpace will look at ways to leverage and incubate ideas, community and culture to:

1. Provide the best technology and services to open source repository framework communities.
2. Evaluate and synchronize, where possible, both organizations' technology roadmaps to enable convergence and

interoperability of key architectural components.

3. Demonstrate how the DSpace and Fedora open source repository frameworks offer a unique value proposition compared to proprietary solutions.

The announcement came on the heels of an event sponsored by the Joint Information Systems Committee's (JISC) Common Repository Interface Group (CRIG) held at the Library of Congress. The event, known as "RepoCamp," was a forum where developers gathered to discuss innovative approaches to improving interoperability and web-orientation for digital repositories. Sandy Payette, Executive Director of Fedora Commons, and Michele Kimpton, Executive Director of the DSpace Foundation, reiterated their commitment to collaboration and encouraged input and participation from both communities as work gets underway.

About the DSpace Foundation

The DSpace Foundation (<http://dspace.org/>) was formed in 2007 to support to the growing global community of institutions using DSpace open source software to manage scholarly works in a digital archive. DSpace was jointly developed in 2002 by HP and the MIT Libraries. Today, there are over more than 350 organizations worldwide a using the software to capture, preserve and share their artifacts, documents, collections and research data. To learn more about the DSpace community of users see: http://www.dspace.org/index.php?option=com_content&task=view&d=596&Itemid=182

About Fedora Commons

In 2007 Fedora Commons (<http://fedora-commons.org/>) was established as the permanent home of Fedora open source software which is a robust, integrated, repository platform that enables storage, access and management of virtually any kind of digital content. Fedora has been downloaded 25,000 times in the last year, and is used by over 125 national libraries, institutions, and businesses worldwide to do more with their digital collections, enable long-term preservation of digital assets, build on a flexible and extensible, modular architecture, keep control of their data, and participate in Fedora's innovative community. To find out about Fedora organizations, institutions and projects see: <http://fedora-commons.org/confluence/x/KINB>.

WGBH Boston Pilots Fedora-Based Moving Image Archives Project

Thornton Staples

Boston, MA — With support from the Andrew W. Mellon Foundation, the WGBH Media Library and Archives has embarked on a 20-month project that will (1) utilize scholarly input to design and pilot an online media archive content delivery system for research and classroom use, and (2) construct a preliminary business plan with the aid of a business consultant. This project is Phase Two of a three-phase project to design and implement a digital library that is intellectually appropriate and technically workable, and that provides a financially feasible and sustainable

model for delivering public broadcasting moving image and audio content to scholars and educators.

Working with three prominent scholars, WGBH is designing a web-based system to address scholars' needs in terms of searching, selecting and accessing archival moving image materials. In conversation with the scholars, the Media Library and Archives staff discovered that academic researchers want not only to pinpoint items relevant to their work, but also to get an overview of collections and their relationships to other materials. For example, scholars researching in media collections may seek information about the provenance of a particular slice of footage, who shot it, who owns it, and how it was used, or not used, by producers for a particular WGBH program or web site, and they want to do this all online.

WGBH has selected Fedora as the back end for this project because it allows them to express and manipulate this information so well. As an archive of film, videos, images and documents which are constantly used and re-used by their productions, the relationships between their archival materials is often highly complex. For example, a WGBH production collects hundreds of images, interviews and stock footage in its research phase, much of which never makes it into the final documentary film. These "outtakes" are stored in the archives and re-used by other productions or for their web sites. Fedora will allow them to express both the sources and many uses of a particular production element, as well as its intellectual relationship to other elements in the collection.

WGBH is developing a custom PHP front end, using the Zend Framework (<http://framework.zend.com/>), that communicates with the Fedora repository using Matt Zumwalt's REST interface. Fedora services are used to translate the internal PBCore metadata into a variety of formats for exchange and reuse by other archives. An OAI-PMH (<http://openarchives.org/>) provider will supplement the web page to allow compatible harvesters to integrate with the WGBH catalog. WGBH is also committed to making the process of searching the audio-visual collection easier by encoding interview transcripts in the TEI (tei-c.org) format. WGBH has also deployed the Solr search server to make integrated full-text and field-based searching simple, which combined with useful features like faceted searching and relatedness matching will make a powerful search experience for the user. In addition to the Mellon prototype project, the WGBH Media Library and Archives will implement a Fedora back end to their IMLS funded Vietnam Archives project. This project will make archival moving image materials from Vietnam: A Television History available online for educators and the general public in the spring of 2010.

About WGBH

WGBH Boston has long been one of the major producers of education television in America. They produce one-third of PBS's prime time broadcasting, including Nova, FRONTLINE, American Experience, Antiques Roadshow, Masterpiece, Arthur and Curious George, and The World and The Takeaway on public radio. They have also long been pioneers in producing educa-

tional multimedia. The WGBH archives are currently available to researchers by appointment, with selected materials available on the web at openvault.wgbh.org.

Mulgara 2.0.5 Released

Paul Gearon

This update release addresses an issue that appeared in 2.0.4 when building from source on Windows. A new default configuration file for mulgara-core is included allowing it to start a basic server without any manual configuration.

Fixes

- Removed a symlink that documented javacc as version 4.0. A poorly written task was trying to pick up this link as a real file, which doesn't work on Windows.
- Fixed the namespace map in the RDF/XML writer so it can't accidentally use a generated URI in an export.

Cleanup

- Removed unnecessary config files from the mulgara-core distribution.

New Features

- Created a cut-down default config file for the mulgara-core distribution.

For full details see the release notes at:
<http://mulgara.org/release.html#v2.0.5>

You can download Mulgara 2.0.5 at:
<http://mulgara.org/download.html>

Muradora DRAMA Team Change of Focus

Chi Nguyen

Sydney, Australia — After the recent release of Muradora 1.3 (<http://www.muradora.org/software>) that included an all-in-one installation package, Chi Nguyen has announced that the DRAMA team at Macquarie University (<http://www.mq.edu.au/>) will no longer work full time on Muradora development effective July 1, 2008, in order to undertake a new area of work. Muradora will be developed and maintained as a side project until such time as new funding can be secured for further focused development. The code and documents will remain available for download. The DRAMA team hopes that users will continue to experiment with Muradora.

Muradora (<http://www.muradora.org/>) is a web-based GUI for the popular Fedora repository, built using enterprise Java Spring and Struts 2 frameworks. Among common features found in a typical repository such as search, browse, self-submission, and versioning supports, Muradora enables flexible access control for

end users (based on the XACML standard), inter-domain authentication and federated identity (using Shibboleth implementation of the SAML standard), and multiple metadata schema management (via W3C XForms standard).

iRODS Storage Module for Fedora From SDSC

Carol Minton Morris

San Diego, CA — The iRODS 1.1 storage module for Fedora has been tested and now is ready for release. The software, both `irodsLowLevel.jar` and `Jargon.jar`, can be downloaded from: <https://www.irods.org/index.php/Fedora>

iRODS™ stands for i Rule Oriented Data Systems. This data grid software system being developed by the San Diego Supercomputer Center (SDSC) (<http://www.sdsc.edu/>) Storage Resource Broker team (<https://www.irods.org/index.php/SRB>) and collaborators is described as “the next generation data management cyberinfrastructure.” iRODS is based on the expertise gained through the application of the SRB (Storage Resource Broker) technology in support of data grids, digital libraries, persistent archives, and real-time data systems. The management policies (sets of assertions that these communities make about their collections) are being characterized in terms of rules and state information. At the iRODS core a Rule Engine interprets rules to decide how the system is to respond to various requests and conditions. iRODS is open source under a BSD-type license.

Instructions are included regarding installation and Fedora configuration for using iRODS in Fedora. Some screen snapshots are also included in the wiki page.

Please note that an iRODS user account is needed for running the software correctly from a Fedora server. For demo purpose, you can ask iRODS system administrator, Sheau-yen Chen (sheauc@sdsc.edu), to create a user account for you. Please let us know if you have any question or encounter some problem in using the software.

The port was done by Bing Zhu (bzhu@sdsc.edu).

Tools and Standards that Power the National Science Digital Library

Carol Minton Morris

Ithaca, NY — A new web site provides easy-to-use access to the tools and standards that power the NSDL. The NCore (<http://ncore.nsdsl.org>) next-generation, open source digital library framework based on Fedora Commons open source repository software provide users, developers, information managers and decision-makers with systems for description, organization, interrelation, and annotation of resources. Other tools and services support the creation, organization, and indexing of resource

references and metadata in the library. Together NCore tools for discovery, creation and organization form a dynamic information layer on top of library resources and metadata.

Upcoming Events

The First Fedora EU User Group Meeting in Aarhus

Aarhus, Denmark — The first Fedora EU User Group meeting will be held in conjunction with the ECDL conference (<http://www.ecdl2008.org/>) in Aarhus, Denmark on September 19, 2008.

Highlights of the all-day meeting include a talk by Sandy Payette, Executive Director of Fedora Commons, and an early morning session for Fedora newbies, to help them with setting up and running Fedora. If you have an interesting Fedora-based project, we have some time slots available for short(!) presentations.

The full agenda for the day and other details can be found on the Fedora Commons wiki at <http://fedora-commons.org/confluence/display/Events/Aarhus+Fedora+EU+User+Group+Meeting>. The event is free. If you intend to participate, please let us know by sending an email to either Matthias Razum (matthias.razum@fiz-karlsruhe.de) or Kåre Fiedler Christiansen (kfc@statsbiblioteket.dk).

aDORe/Fedora Discussion at Upcoming Fedora Day in Aarhus

Aarhus, Denmark — Repository managers and developers who maintain large collections of digital objects over time who will be attending the Aarhus Fedora EU User Group Meeting will be interested in a BOF discussion scheduled for September 18, 2008, right after the DORS DL2 Workshop at ECDL 2008 (Aarhus, Denmark), or later in the evening (exact time to be announced). For the sake of this discussion focused on exchanging ideas regarding the integration of aDORe as a scalable storage repository for Fedora, “Large” starts at around 1 million and goes beyond 100 million. The BOF is being organized by Ryan Chute (LANL), Sandy Payette (Fedora Commons), and Herbert Van de Sompel (LANL). Exact location to be announced.

“Infrastructure for Future Research” Meeting at Swedish National Library in Stockholm

Stockholm, Sweden — Organizer Eva Müller, Head of the National Library of Sweden (NLS) Digital Library Department (<http://www.kb.se/english/about/organization/digital/>), introduced Thornton Staples, Fedora Commons Director of Community Strategy and Outreach who offered an introduction and update on Fedora Commons during the June 25 “Infrastructure for

Future Research” meeting at the National Library of Sweden (<http://www.kb.se/english/>). Staples joined other presenters who were on hand to showcase ideas and solutions for 90 attendees who represented libraries, museums, archives and government agencies from all over Sweden.

Jérôme Dupont, Bibliothèque nationale de France (BnF) (<http://www.bnf.fr/>), gave a presentation entitled “Implementing OAI at BnF with Fedora” about their initiative to expand digital services by establishing a Distributed Archiving and Preservation System (SPAR) based on the Fedora platform. Oskar Grenholm gave a presentation about experiments with a digital deposit system built by the National Library of Sweden (NLS). Other speakers included Magdalena Gram, National Library of Sweden, Stina Degerstedt, National Library of Sweden who gave a presentation entitled “Metadata modelling and metadata creation tool.” A panel session with all of the speakers concluded the meeting.

SPARC Digital Repositories Fall Meeting

Washington, DC — Higher-education leader David Shulenburger, Science Commons head John Wilbanks, and marketing communications strategist Bob Witeck are keynote speakers slated for the SPARC Digital Repositories Meeting 2008 in Baltimore on November 17-18. The international gathering, organized by SPARC (the Scholarly Publishing and Academic Resources Coalition) in cooperation with SPARC Europe, and SPARC Japan (a Japan National Informatics Institute initiative), will offer a practical exploration of how open online archives hosted by universities, colleges, and government agencies can enhance their service to scholars, institutions, and the public.

In the opening keynote address, John Wilbanks, Vice President for Science at Creative Commons and director of the Science Commons program, will provide his unique and inspiring vision for the potential of a fully enabled research Web. The following day, Bob Witeck, CEO and co-founder of Witeck-Combs Communications, a renowned marketing communications and public relations agency in Washington, DC, will tackle how repository advocates can introduce their services to campus and agency communities. David Shulenburger, Vice President for Academic Affairs at the National Association of State University and Land-Grant Colleges (NASULGC) will wrap up the meeting with a public policy perspective on the emerging role of open digital repositories.

Joining the keynoters are speakers and panelists from around the world, who will look at four conference program areas: The Policy Environment, New Horizons, Value-added User Services, and Campus Publishing Strategies. Invited speakers include: Sayeed Choudhury (Johns Hopkins University, USA), Rea Devakos (University of Toronto T-Space, Canada), Norbert Lossau (Goettingen State and University Library and DRIVER, Germany), Bernard Rentier (University of Liege, Belgium), and Syun Tutiya (Chiba University, Japan). Additional speakers are to be selected

by an expert program committee from submitted proposals.

The SPARC Digital Repositories Meeting 2008 is supported by major contributions from Microsoft (Conference Sponsor) and Berkeley Electronic Press (Coffee Break Sponsor), and by additional contributions from a number of Supporting Organizations, including: the Association of College and Research Libraries (ACRL), the Association of Research Libraries (ARL), Canadian Research Knowledge Network (CRKN), the DSpace Foundation, Fedora Commons, Hewlett-Packard (HP), the Japanese Coordinating Committee for University Libraries, JISC (the UK's Joint Information Systems Committee), and the National Information Standards Organization (NISO).

The program is being developed by the members of the 2008 Program Committee: Jun Adachi (SPARC Japan), Raym Crow (SPARC), Richard Fyffe (Grinnell College), Susan Gibbons (University of Rochester), Melissa Hagemann (Open Society Institute), Karla Hahn (Association of Research Libraries), Bill Hubbard (SHERPA), Rick Johnson (SPARC), Michelle Kimpton (DSpace Foundation), Norbert Lossau (Goettingen State and University Library and DRIVER), Joyce Ogburn (University of Utah), Terry Owen (University of Maryland, College Park), Kathleen Shearer (Canadian Association of Research Libraries), Alma Swan (Key Perspectives Ltd.), Sean Thomas (Massachusetts Institute of Technology), Susan Veldsman (eIFL), and Charles Watkinson (The American School of Classical Studies at Athens).

This meeting is a follow up to SPARC's popular 2004 institutional repositories conference, which drew hundreds of participants from around the globe and set the stage for some of the key developments in open access of the past four years.

To register for the SPARC Digital Repositories Meeting 2008, and for more details, including biographies for the keynote speakers, visit the conference Web site at <http://www.arl.org/sparc/ir08>. Early Bird Registration ends September 15.

About SPARC

SPARC (Scholarly Publishing and Academic Resources Coalition), with SPARC Europe and SPARC Japan, is an international alliance of more than 800 academic and research libraries working to create a more open system of scholarly communication. SPARC's advocacy, educational and publisher partnership programs encourage expanded dissemination of research.

“On the Record” A Global Resource Forum on Electronic Media and the Preservation of News

The CRL Global Resources Network (GRN) (<http://www.crl.edu/>) and the New York Public Library (<http://www.nypl.org/>) are co-sponsoring a forum on “electronic media and the preservation of news.” The forum is open to members of CRL/GRN, the research community, the news media, publishers and other information providers. Conference details and registration are

available at <http://www.crl.edu/grn/news-conference/>. Attendance for CRL members is gratis, but advance registration is still required.

The pages of the world's newspapers have traditionally provided a detailed record of the notable events and interests of the communities for which they were produced. Much of this “first rough draft of history” has been preserved intact for decades and even centuries in research libraries and archives. Today news is produced and delivered in digital media that are inherently dynamic and fugitive, challenging society's ability to ensure the survival of yesterday's reporting for future study. “On the Record” will bring individuals from journalism and the news media, academia, business, and policy research together with library policy- and decision-makers to explore this challenge. Participants will explore the myriad ways in which news content is created, distributed and consumed today, and will engage in focused discussions to formulate innovative strategies for preserving and accessing these materials.

“On the Record” is the fourth in a series of Global Resources Forums. Previous GRN forums were hosted by Yale University Library's Center for International and Area Studies (on Scholarly Communications, in 2005), the Andrew W. Mellon Foundation (on Latin American Studies, in 2006), and Columbia University (on Human Rights Archives and Documentation, in 2007).

About the CRL

The Center for Research Libraries (CRL) is a consortium of North American universities, colleges and independent research libraries. The consortium acquires and preserves newspapers, journals, documents, archives and other traditional and digital resources for research and teaching.

About the NYPL

The New York Public Library (NYPL) is a privately managed, nonprofit corporation with a public mission to provide free and open access to the accumulated wisdom of the world, without distinction as to income, religion, nationality, or other human condition.

Bookmarks

“Installing Fedora in Two Minutes”

Ithaca, NY — Got a minute, or two? Join Fedora Commons lead developer Chris Wilper on YouTube as he takes you on a quick tour of *How to Install and Test a Fedora Repository* (http://www.youtube.com/watch?v=Utoymym_yal) – in two minutes. His simple, clear instructions will have you up and running with Fedora, almost right now!

Two other instructional videos by Wilper are also available on YouTube: *Preparing Eclipse for Fedora Development* (http://www.youtube.com/watch?v=f_daoRXm3Ik) and *Getting the Trunk and Building Fedora from Source* (<http://www.youtube.com/>)

watch?v=4XJ3HV-ejcM&feature=related).

RepoCamp at the Library of Congress

Washington, DC — If you cross Amazon.com CTO Verner Vogels', "Two Pizza Team Rule" with what David Flanders, Project Manager, The Bloomsbury Colleges, and organizer of the summer of 2008 "Repository Road Shows," compares to "Penny Universities" of the 18th century that were often convened in taverns, or to the work life of Shakespeare who more than likely developed his best collaborative plays around a pub table, you will get a 'RepoCamp.' The open, non-territorial, and thought-provoking slogan for this series of events for knowledge managers of every stripe, "The coolest thing to do with your data will be thought of by someone else," was interesting enough to inspire about 25 people to attend RepoCamp at the Library of Congress in Washington, D.C. on July 25, 2008.

The idea for RepoCamp came out of UK "BarCamp" and "Un-conference" events sponsored by the JISC Common Repository Interfaces Group (CRIG) (<http://www.ukoln.ac.uk/repositories/digirep/index/CRIG>). Unstructured, rapid prototyping events are designed to speed up on-the-fly innovation. Instead of spending time in meetings discussing possibilities RepoCamp participants quickly explain ideas and write code together in a friendly environment.

A typical day at RepoCamp goes something like this: Sharing five minute "elevator pitches" loosely based on what's currently inspiring or bothering participants about managing, developing or running a repositories; self-organizing around flip charts with notes from pitches so that people can gather to contribute insights around particular ideas; ad hoc prototyping with selected "gurus" who coordinate progress and help grab services off the web; sharing conclusions with a new round of elevator pitches based on outcomes that can include step-by-step paper-prototypes, working interfaces or brand new ideas. The real RepoCamp wrap-up is traditionally conducted at a local bar where the best ideas seem to emerge. "Let's make a lot of mistakes and make them fast," is an often-repeated RepoCamp direction says Flanders. More challenging issues such as scalability, robustness, and interoperability are post-RepoCamp fodder.

CRIG takes an inclusive view of knowledge management in interfacing repositories with other services. Rachel Bruce, founder of CRIG along with Rachel Heery, observes, "These issues are global and not something to be dealt with solely within national boundaries." The opportunity to reach out to developers in the U.S. to create solutions with a series of RepoCamp events grew out of collaborations that were already taking place with DSpace, EPrints, Fedora developers.

Sandy Payette, Executive Director of Fedora Commons, home of Fedora open source repository software, sees RepoCamp and other emerging programming events as being particularly useful

for developers who enjoy social networking around things that matter to them – most often problem solving that leads to rapid prototyping. "It's a way to gauge interest on-the-spot," She said.

The DSpace Foundation and Fedora Commons recently announced plans to collaborate based on meetings held this spring where members of DSpace and Fedora Commons communities discussed multiple dimensions of cooperation and collaboration between the two organizations. Ideas included leveraging the power and reach of open source knowledge communities by using the same services and standards in the future. The organizations will also explore opportunities to provide new capabilities for accessing and preserving digital content, developing common web services, and enabling interoperability across repositories.

JISC CRIG saw this and other community efforts towards achieving greater integration and interoperation as an opportunity to host the U.S. Repository Roadshow that wrapped up at the Library of Congress on July 25. The JISC CRIG team would like to extend thanks to Ed Summers for arranging the LOC venue.

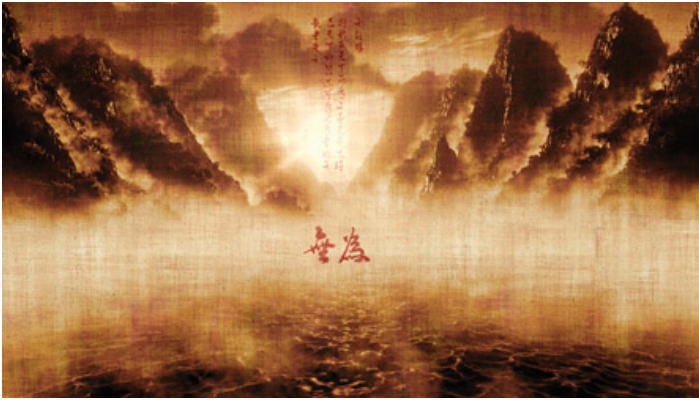
JISC will sponsor an academic developer-focused event in 2009 that will utilize RepoCamp ideas (Flanders suggests, for example, that the conference dinner might be something like a massive video game party) to continue to work towards that elusive but worthy goal of "interoperability" by building relationships among developers and programmers across academia. Look for an official announcement of JISC's "Developer Happiness Days" early in 2009.

Open Repositories 2009

<http://or09.library.gatech.edu/index.php>

Reality Check: SIGGRAPH 2008

Los Angeles, CA — Los Angeles is a town where reality is a reinvented on a daily basis. Even so the exhibits, talks and media presented at SIGGRAPH 2008 (<http://www.siggraph.org/s2008/>) pushed the limits of perceived reality with a provocative theme exhorting participants to "Evolve." However the almost 30,000 (<http://www.foxbusiness.com/story/markets/industries/technology/breaking-news--halls-siggraph-conference/>) graphics and robotics researchers, entertainment industry representatives, educators, programmers, artists and students from 87 countries who attended the 35th International Conference and Exhibition on Computer Graphics and Interactive Techniques held at the Los Angeles Convention Center August 11-15, 2008 appeared to be mostly human. Other already-evolved types of attendees such as Quasi the Robot were clearly distinguishable, which may not be the case in the future.



This rich atmospheric still image is from "Nature Tzu-jan" by Ari Rubenstein, Curv Studios.

As the field of computer graphics has advanced over the last quarter of a century the simulation of reality has come into its own as an art form. SIGGRAPH 2008 artists and programmers presented computer graphics imagery that embodied inherent aspects of the medium such as exposed wire frame underpinnings and subtle textures, just as the qualities of paint, ink, stone and clay have always been used to express thoughts, feelings and ideas.



The graphic icon that was used on posters and signage throughout SIGGRAPH is a 3D holographic, machine-like image entitled "Animation Mother" by Meats Meier (<http://www.3dartspace.com/>). The being appears human-like and yet is composed of distinctly recognizable computer animation elements.

The SIGGRAPH Computer Animation Festival featured a sensory cornucopia of screenings representing a wide range of media examples from all over the world. The event was hosted by Pixar Animation Studios, Sony Pictures Imageworks, and Lucasfilm in the state-of-the-art NOKIA Theater.

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Ed Catmull, President, Walt Disney and Pixar Animation Studios, opened the conference with a look back over his pioneering career in managing work groups who were responsible for creating groundbreaking full-length animated films such as "Toy Story"

and "Finding Nemo."

RenderMan® (<https://renderman.pixar.com/>) is a Pixar high quality rendering product used for making feature films that was collaboratively developed by engaging a community of digital effects and computer graphics companies. Catmull said, "It has been a standard for 20 years." He continued, "We set a complexity goal that we thought was impossible and have far exceeded our goals." The success of the Renderman® development process demonstrated the benefits of open sharing and decision-making.

There is a lot of pressure to 'get it right the first time' when making feature films because mistakes are so expensive. Production managers are sometimes seen as a roadblock to artists and programmers who are actively involved in creative processes. Catmull emphasized that communication in a creative environment should happen between anybody at anytime. Catmull believes that balancing this complex work culture was made easier because early animation teams believed that they were making history.

On the heels of Catmull's talk the Walt Disney Company announced (http://www.cmu.edu/news/archive/2008/August/aug11_disneylab.shtml) that they will open a research and development lab at Carnegie Mellon University to engage top technology for its theme parks, television networks and animation studios. The Disney Research Pittsburgh Lab is scheduled to open this fall.

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This is a computer rendering of an ancient Roman market area from the Rome 1.0 model that visitors were invited to 'walk through' at the Rome Reborn exhibit booth.

Of particular interest to those interested in new ways to interact with complex data was the Rome Reborn (<http://romereborn>).

virginia.edu/) multimedia exhibit at SIGGRAPH. The exhibit was the result of an international collaboration led by The Institute for Advanced Technology in the Humanities at the University of Virginia that includes industry partner IBM, and the German Archeological Institute, the Universite de Michel de Montaigne-Bordeaux III, the Universite de Caen, the Politecnico di Milan and UCLA. These rich data sets (Rome 1.0 and Rome 2.0) depict Rome as it might have appeared in A.D. 320. The models includes hills, valleys and water features of the city where over one million people lived and worked in 7,000 located and identified buildings. Significant architectural, political and social structures and monuments are represented in great detail.

The exhibit was divided into several sections where each of the partners demonstrated devices and technology that allowed viewers to participate in the life of ancient Rome in new ways. Comparative hand-held walking tour devices, large scale viewing screens, three dimensional depictions, and interactive displays are all ways that this "data" can be experienced. Creators of Rome Reborn believe that this model is an accurate representation of what a visit to the city would have been like during the time of Constantine the Great.

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Computer and Robotics Professor Takeo Kanade, who is also the Director of the Quality of Life Technology Engineering Research Center at Carnegie Mellon gave the final keynote of the conference and looked to a balanced future where robots and machines would provide humans with just enough assistance to improve their lives, but not take over. Most SIGGRAPH attendees that I spoke with were overwhelmed by the volume and variety of information that was packed into a few action-packed days, but as they say, that's entertainment. And as Kanade concluded, this field is fun.

2008 Joint Conference on Digital Libraries Spans Culture and Technology

<http://dlib.org/dlib/july08/morris/07morris.html>

Community Building Around Solution Areas

(continued from page 1)

These communities would be intended to bring together software that is already developed in each of these areas, as well as to organize new efforts to develop software.

Rather than take a top-down approach to organizing communities, we plan to act as the catalyst for self-organizing communities. Taking lessons from others who are applying research about emergence in complex systems to social systems, as well as

developments happening all around us in Web 2.0 space, we are starting with four solution communities. These include:

- Data Curation
- Open-access Publishing
- Preservation and Archiving
- Solutions Integration

In each of these areas, we will start out by identifying a core group with a strong interest that can take responsibility for getting it going. The plan is for each team to start developing a knowledge-base on the Fedora Commons wiki gathering information in each of these four areas about standards, useful software, good practice, etc. They will also be aggressively looking for new recruits who have a strong interest in each subject. If all goes as we hope, "solution councils" will emerge in each area that can lead the development of solution bundles that address each of the use cases. We should have the first public face of these four efforts available in the next month or so. We will send notices to our mailing lists when we do.
