DuraSpace & Fedora Project Update

Valorie Hollister

Director of Community Programs

Washington D.C. Regional Fedora Users Meeting

October 14, 2011

Overview

- DuraSpace
- Selected 12 month highlights
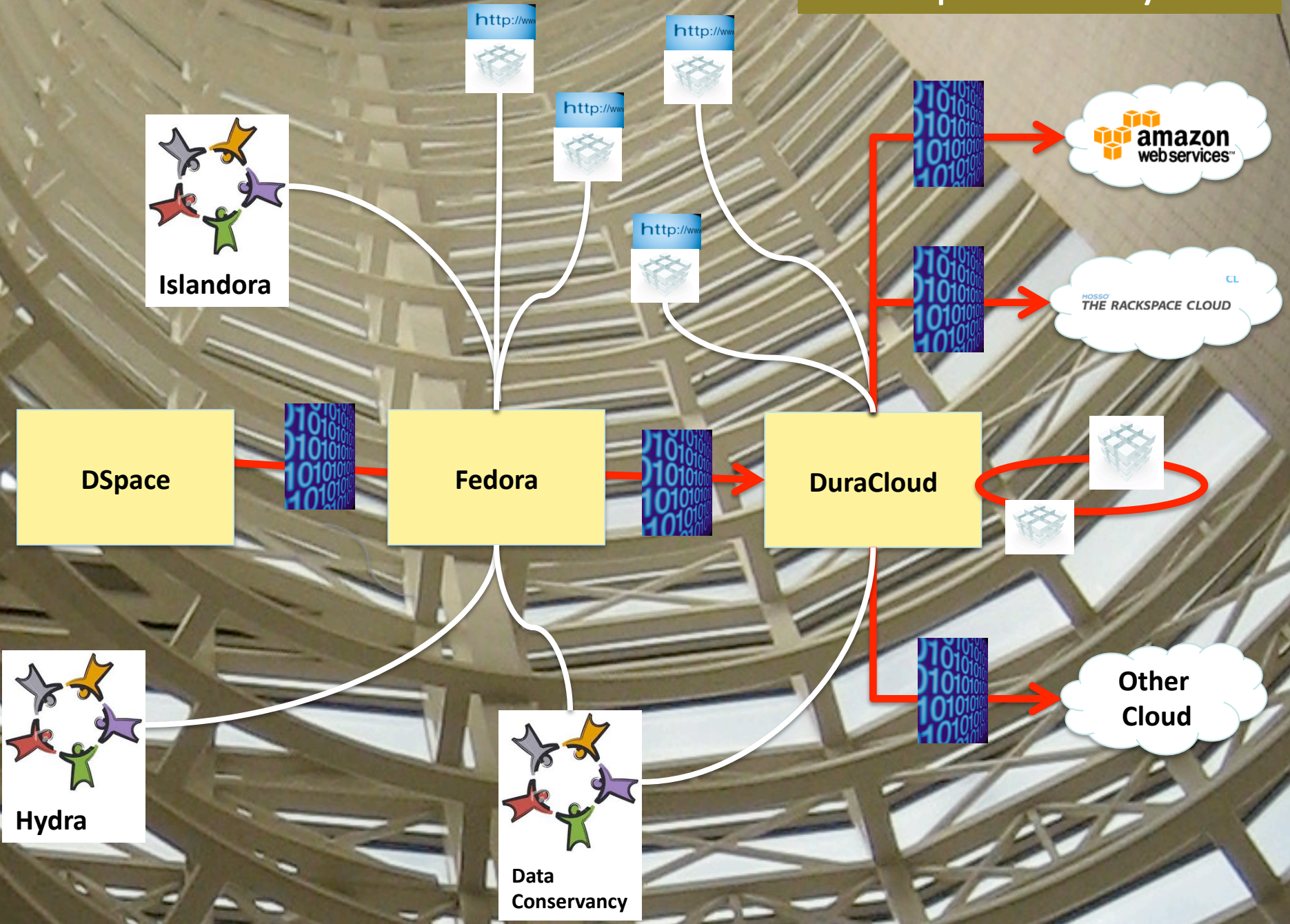- What's ahead for 2012
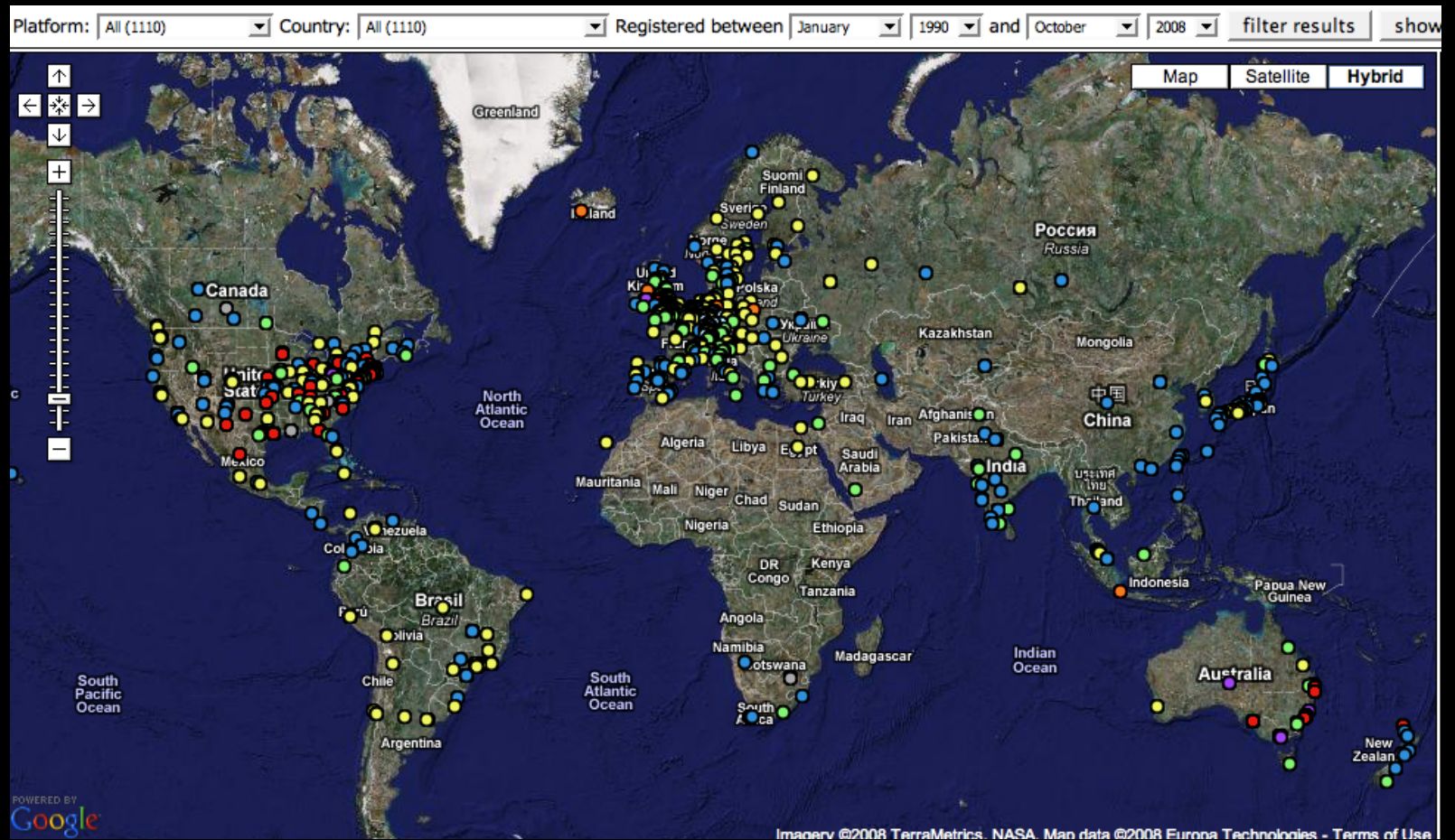- Fedora

DuraSpace Organization

Open Source Portfolio

We are committed to providing open technologies and services that promote durable, persistent access to digital data.

DuraSpace Ecosystem

Islandora

DSpace

Fedora

DuraCloud

Hydra

Data Conservancy

amazon webservices

THE RACKSPACE CLOUD

Other Cloud

DuraSpace – large global network

DuraSpace is:

Jonathan Markow
Chief Strategy Officer

Michele Kimpton
Chief Executive Officer

Brad McLean
Chief Technology Officer

Carol Minton Morris
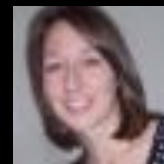Marketing/Comm

Valorie Hollister
Community Outreach

Tim Donohue
DSpace Tech

Chris Wilper
Fedora Tech

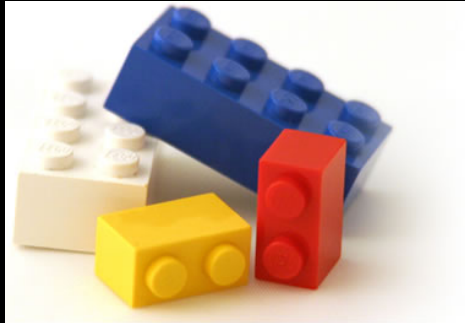**Bill Branan**
Fedora/DuraCloud
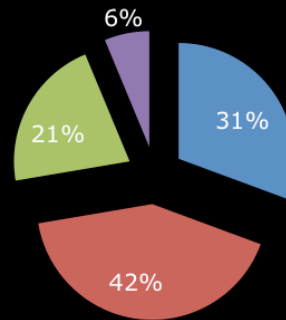
Carissa Smith
Partner Specialist

Andrew Woods
Fedora/DuraCloud

Sandy Payette
Advisor to Executive Team

DURASPACE™

Selected 12 month highlights

Selected 12-Month Highlights

Integrations on Technologies
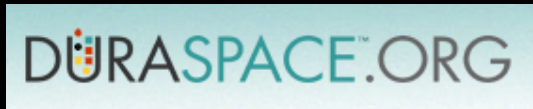
6%

31%

21%

42%

Turned the Corner on Income Diversification Strategy

Successful Sponsor Program

Completion of Pilot Program and Launch Plan for Q3 2011

New Islandora Websites

FedoraCommons™

DSPACE

Thriving Global Repository Communities

Registered Service Provider Program

Education Program

DURASPACE™

Funding Sources

Funding Sources 2011
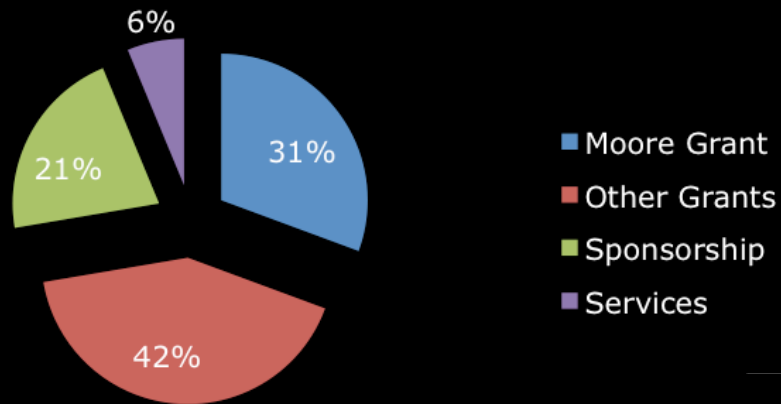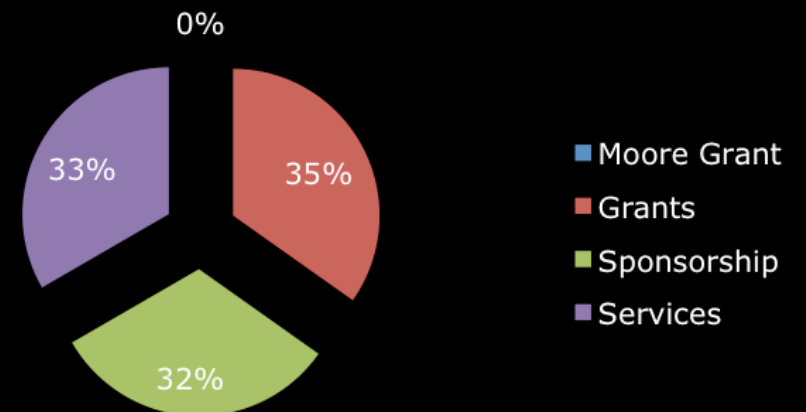
- Moore Grant — 31%
- Other Grants — 42%
- Sponsorship — 21%
- Services — 6%

Funding Sources 2014

- Moore Grant — 0%
- Grants — 35%
- Sponsorship — 32%
- Services — 33%

DURASPACE™

Sponsorship 2011

GOLD SPONSORS

ASU Libraries — Arizona State University Libraries

COLUMBIA UNIVERSITY LIBRARIES — Columbia University Libraries

Cornell University Library — Cornell University Library

DEff Denmark's Electronic Research Library — Denmark's Electronic Research Library

EMORY UNIVERSITY — Emory University Library

IU INDIANA UNIVERSITY — Indiana University Libraries: IUB Libraries; IUPUI Libraries; UITS Research Technologies

ICPSR — Inter–University Consortium for Political and Social Research (ICPSR)

JOHNS HOPKINS UNIVERSITY — Johns Hopkins University Libraries

MIT Libraries — Massachusetts Institute of Technology (MIT) Libraries

Microsoft — Microsoft Research

NCSU LIBRARIES — North Carolina State University Libraries

Stanford University — Stanford University Libraries and Academic Information Resources

Texas Digital Library — Texas Digital Library

Tufts UNIVERSITY — Tufts University

THE UNIVERSITY OF BRITISH COLUMBIA — University of British Columbia

UNIVERSITY OF ILLINOIS — University Library, University of Illinois at Urbana–Champaign and University of Illinois at Chicago Library

UNIVERSITY OF MICHIGAN M Library — University of Michigan Library

UNIVERSITY OF PITTSBURGH ULS UNIVERSITY LIBRARY SYSTEM — University Library System, University of Pittsburgh

UNIVERSITY OF TORONTO — University of Toronto

UNIVERSITY OF VIRGINIA LIBRARY — University of Virginia Library

VirginiaTech Invent the Future — Virginia Tech Libraries

Registered Service Provider Program

DuraSpace.org Site

A simple and scalable cloud-based solution to address the challenge of preserving digital content.

- Strategic Significance
  - Provide easy pathway into cloud
  - Support both preservation and access
  - Simple, practical and powerful
  - Our first move into services for revenue

Upcoming Launch

Services at Launch

Duplication on ingest and synchronization

Duplication on demand

Bit Integrity Checking

Scalable

Image Viewing

Media Streaming

Future: Image Transformation

DURASPACE™

…more on roadmap

Fedora/DuraCloud Integration

- Command line sync piloted and proven

- "Fedora CloudSync" UI

    - Features granular backup/restore

- Mixed Mode local/cloud repositories under research

DURASPACE™

What about the DSpace & Fedora integration?

- Issued the proposal to the community

- Held panel discussion at OR12

- Exploring data model

- A few in the community interested in the effort

What else is ahead for 2012?

- Efforts on funding diversification
- Launch incubator program
- Catalyst for community groups
- Content development for educational program
- DuraCloud – DTR & even more simple

DURASPACE™

Fedora

Where We've Been.

- August 2010 - 3.4
  - second community-managed release
  - Steve Bayliss, Acuity Unlimited

- October 2010 - 3.4.1
  - security release

- January 2011 - 3.4.2
  - bug fix release

- August 2011 - 3.5

Other Good Stuff

- Move to GitHub
  - Making developers' lives easier
  - Lowering barriers

- Growth
  - Now 12 Committers
  - Steady stream of contributors
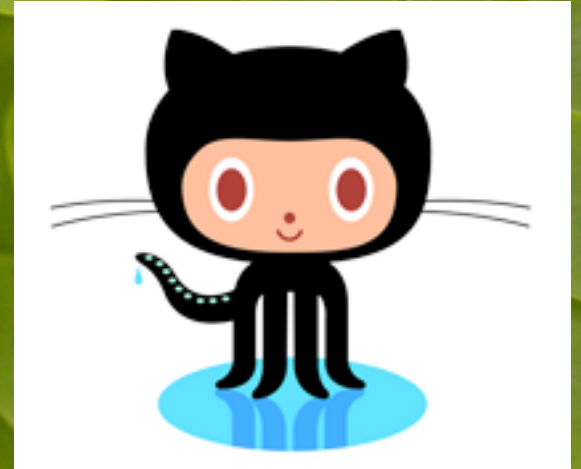
The Fedora Committers

Ben Armintor
Asger Askov Bleking
Steve Bayliss

Aaron Birklan
Bill Branan
Dan Davis

Gert Schmeltz
Pedersen
Scott Prater
Edwin Shin

Kai Strnad
Chris Wilper
Andrew Woods

Fedora 3.5: Current Release

- Third Community-Managed Release
  - Aaron Birkland, Cornell University

- ~20 Features/Improvements, including:
  - stage-setting for full move to Spring
  - FESL no longer dependent upon DBXML
  - functional test improvements

- ~15 Bug Fixes

- Now working on a couple issues discovered in testing

Fedora 3.6: Early 2012

- Major Focus: Performance & Stability
    - bottleneck analysis
    - stress testing
    - performance improvements
    - *repeatable tests*

- Move to Modern Web Services Stack
    - CXF (GSoC Project)

- *Last 3.x Release*

4.0 Aspirations
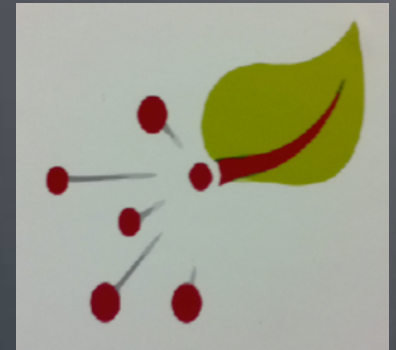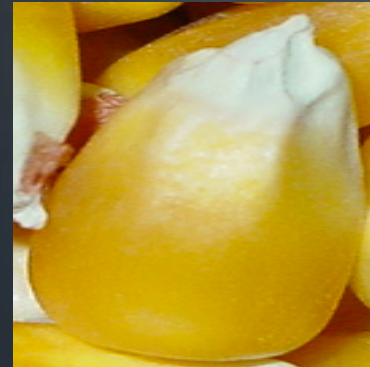
- Kernelization of Fedora
  - Full move to Spring
  - Fedora as Spring Bean
  - Resource Index as Service

- High Level Storage
  - Storage Plugins at the *Object* level

- Messaging Improvements
  - Publish events at the data modification level
  - Complete enough to replay (e.g. for Journaling)

It's a Big World.

- Popular Front-Ends
  - Hydra Heads
  - Islandora

- New Integrations
  - DuraCloud: CloudSync
  - Hadoop FileSystem: Akubra-hdfs

- Many Others
  - See Fedora Create

- Growing community
  - Particularly in gov't: USGS, Goddard Space, NASA, NLM

Image credits

- Road to Uluru: http://www.flickr.com/photos/joanet/2994421437/
- Jindai botanical garden: http://www.flickr.com/photos/61259390@N04/5579042364/
- Octocat: http://github.com/
- Pinwheel Mo: Deb (of SmileyStuff fame)
- Finish Line: http://www.flickr.com/photos/jayneandd/4450623309/
- Lamborghini LP560-4: http://www.flickr.com/photos/limlikwei/3269785875/
- Field Corn: http://www.flickr.com/photos/alternative_heat/5640862933
- Fedora Springification: Ben Armintor (cleverly lifted from his OR11 Poster)
- This is not a social media megaphone: http://www.flickr.com/photos/altemark/337248947/
- Old Globe: http://www.flickr.com/photos/toasty/1540997910/

Thank you!

Valorie Hollister

vhollister@duraspace.org