An Introduction to DuraCloud

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Who are we?

DSpace
Fedora
DuraCloud
Why cloud?

A style of computing where massively scalable IT-related capabilities are provided “as a service” using Internet technologies to multiple external customers.
(Gartner 6/08)
DuraCloud Project History

10/2009 Initial Pilot Program Begins

02/2010 Release 0.2 Service Infrastructure

06/2010 Release 0.4 Media Streaming

11/2009 Release 0.1 Cloud Storage Mediation

05/2010 Release 0.3

07/2010 Release 0.5 Open Source

09/2010 Second Pilot program starts

06/2011 .9 release Beta production

08/2011 Service Public Lauch

09/2010 Release 1.0

10/2011 .7 release Bulk services

12/2010
## Phase 2 Pilot Partners

<table>
<thead>
<tr>
<th>University</th>
<th>Use Case</th>
<th>Repository</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice U</td>
<td>Preservation</td>
<td>DSpace, meta archive</td>
</tr>
<tr>
<td>Hamilton College</td>
<td>Access/international collaboration</td>
<td>Fedora</td>
</tr>
<tr>
<td>Northwestern U</td>
<td>Preservation books, audio, image</td>
<td>Fedora</td>
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<td>U of PEI</td>
<td>Image access</td>
<td>Fedora/Islandora</td>
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<tr>
<td>ICPSR</td>
<td>Preservation</td>
<td>Fedora</td>
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<tr>
<td>IUPUI</td>
<td>Preservation</td>
<td>DSpace, Content DM</td>
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<tr>
<td>Rhodes College</td>
<td>Image Access</td>
<td>DSpace</td>
</tr>
<tr>
<td>North Carolina State U</td>
<td>Preservation</td>
<td>DSpace</td>
</tr>
<tr>
<td>CARL</td>
<td>Preservation and Services</td>
<td>Fedora</td>
</tr>
<tr>
<td>MIT</td>
<td>Preservation</td>
<td>Dspace</td>
</tr>
<tr>
<td>Columbia</td>
<td>Preservation and Services</td>
<td>IA, Fedora</td>
</tr>
</tbody>
</table>
What is DuraCloud?

• Open technology and managed service that utilizes cloud infrastructure for preservation support and access services

✓ Upload once and make multiple copies to various storage providers

✓ Access anywhere from any Internet connected device
How does DuraCloud work?

Transfer Content via:
- Web User Interface
- Sync Utility
- REST API
Features

- **Simple**: upload once and make multiple copies to various storage providers
- **Hosted Service**: web-enabled, no client software needed
- **Fully managed solution**: one unified interface across multiple providers
- **Flexible**: built on highly scalable cloud platform
- **Turnkey services**: preservation support and media access
- **Open source platform**
DuraCloud services

Archiving and Preservation

- Online Backup(s) and synchronization
- File Format Identification
- Bit Integrity Checking
- Duplicate and change on Demand

Multimedia Access

- Advanced Image Viewing
- Media Streaming
- Image Transformation

...more on the roadmap
Repository software integrations

- DuraCloud is integrated with Fedora and DSpace repository platforms

Islandora, OJS in process
Use case: digital archiving

Use Cases:
- Retrieval of lost files (admin error)
- Replacement of damaged files
- Partial/Full disaster recovery

Preservation services:
- Monitoring
- File retrieval
- Access
- Integrity checking
- Replication

Package for each
Community, Collection & Item

AIP backup
Use case: file/collection retrieval

Use Cases:
- Retrieval of lost files (admin error)
- Replacement of damaged files
- Partial/Full disaster recovery

Preservation services:
- monitoring
- file retrieval
- access
- integrity checking
- replication

Package for each Community, Collection & Item
AIP backup
How can DuraCloud help me?

✓ Ability to easily move online copies offsite, distribute geographically
✓ Easily check health of remote online copies
✓ Easily replace deleted, corrupted or lost files
✓ Scale storage up or down as needed
✓ Full Web access with ability to view/edit/delete and upload/download your content
✓ Ability to stream video files and embed into local applications
✓ Provide access to content through simple http link if desired
Pilot partner comments

• “The **ease-of-use** of DuraCloud is its most impressive feature.”
  ~Columbia

• “DuraCloud delivers the **benefits** of a diverse network of storage locations, but **without the overhead** of managing different vendors.”
  ~ICPSR

• “One of the best things that DuraCloud does is **bridge the complex gap** between normal users and cloud-based services, and it does this job very well.”
  ~Rhodes College
# Pricing

<table>
<thead>
<tr>
<th>Service Plan</th>
<th>Basic archiving</th>
<th>Basic media access</th>
<th>Professional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly subscription fee</td>
<td>$375</td>
<td>$375</td>
<td>$599</td>
</tr>
<tr>
<td>Number of accts</td>
<td>5</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>Free storage</td>
<td>500 GB</td>
<td>500 GB</td>
<td>1000 GB</td>
</tr>
<tr>
<td>Services</td>
<td>archiving</td>
<td>media</td>
<td>all</td>
</tr>
<tr>
<td>Additional storage</td>
<td>NA</td>
<td>NA</td>
<td>$.086-$1.25 per GB*</td>
</tr>
<tr>
<td>* Varies by storage provider, up to 50 TB</td>
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* Annual invoices also available

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What does the fee cover?

• Management and servicing of the DuraCloud software
• Your own hosted instance of Duracloud
• Access to all services offered in Duracloud
• Complimentary software upgrades
• Single Web console for account management
• One invoice from DuraSpace- annual or monthly
• Basic technical support
## Commercial Cloud Vendors vs. DuraCloud

<table>
<thead>
<tr>
<th>Features</th>
<th>Commercial Cloud Vendors</th>
<th>DuraCloud</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online backup</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Web access</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Ability to transfer content via web</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Online Sharing</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Media Streaming</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Integrated management console</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>File health checkup</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Ability to copy content to multiple cloud providers</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Advanced image viewing</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Image Transformation</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Open source software</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Community-share platform</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>
On the roadmap

• Services
  – Improved video handling
  – Search
  – File validation
  – DSpace as a service application

• Storage providers
  – Chronopolis (UCSD)
  – Azure
  – Local Eucalyptus integration
The open source platform

• Available for organizations to run locally
• Requires cloud (commercial or private) infrastructure
• Being tested by several organizations now
• Looking for organizations that want to enable their “software as a service” in DuraCloud
• For more details visit the wiki at:
  https://wiki.duraspace.org/display/duracloud/
Upcoming Webinars

✦ *Using DuraCloud for Archiving and Preservation*  
  October 26 at 1pm ET

✦ *Technical Overview of DuraCloud*  
  November day/time TBA

✦ *DSpace and DuraCloud*  

✦ *Fedora and DuraCloud*  
  November/December days/times TBA
Free DuraCloud Trial Accounts

Store and do more
ON-DEMAND STORAGE AND SERVICES FOR YOUR DIGITAL CONTENT

FIND OUT MORE
TRY IT
GET STARTED
Where can I find out more?

- Web site: www.duracloud.org
- Email: csmith@duraspace.org

Contact me if interested in a live DuraCloud demo session.