The End of a Statewide Digital Preservation System: Coping with the Fallout.
“We are The Gator Nation, a diverse community dedicated to excellence in education and research and shaping a better future for Florida, the nation and the world.”
Them, but still us

The mission of the Florida Digital Archive (FDA) is to provide a cost-effective, long-term preservation repository for digital materials in support of teaching and learning, scholarship, and research in the state of Florida.
The Florida Digital Archives
And so, in the beginning...
Everything worked!

- SIPs (mostly)
- AIPs (we assume)
- DIPs (occasionally)
NDSA, good enough for me?

<table>
<thead>
<tr>
<th>Storage and Geographic Location</th>
<th>Level 1 (Protect your data)</th>
<th>Level 2 (Know your data)</th>
<th>Level 3 (Monitor your data)</th>
<th>Level 4 (Repair your data)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Two complete copies that are not collocated</td>
<td>- At least three complete copies</td>
<td>- At least one copy in a different geographic location</td>
<td>- At least three copies in geographic locations with different disaster threats</td>
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<tr>
<td>- For data on heterogeneous media (optical discs, hard drives, etc.) get the content off the medium and into your storage system</td>
<td>- At least one copy in a different geographic location</td>
<td>- Document your storage system(s) and storage media and what you need to use them</td>
<td>- Have a comprehensive plan in place that will keep files and metadata on currently accessible media or systems</td>
<td></td>
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<tr>
<th>File Fairty and Data Integrity</th>
<th>- Check file fatty on ingest if it has been provided with the content</th>
<th>- Check file fatty on all ingests</th>
<th>- Check fatty of all content at fixed intervals</th>
<th>- Check file fatty of all content in response to specific events or activities</th>
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<tr>
<td>- Create fatty into if it wasn't provided with the content</td>
<td>- Use write-blockers when working with original media</td>
<td>- Maintain logs of fatty into, supply audit on demand</td>
<td>- Ability to replace/repair corrupted data</td>
<td></td>
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<tr>
<td>- Virus-check high risk content</td>
<td>- Perform audit of logs</td>
<td>- Ability to detect corrupted data</td>
<td>- Ensure no one person has write access to all copies</td>
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<tr>
<th>Information Security</th>
<th>- Identify who has read, write, move and delete authorization to individual files</th>
<th>- Document access restrictions for content</th>
<th>- Maintain logs of who performed what actions on files, including deletions and preservation actions</th>
</tr>
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<tr>
<td>- Restrict who has those authorizations to individual files</td>
<td>- Store administrative metadata</td>
<td>- Store standard technical and descriptive metadata</td>
<td>- Store standard preservation metadata</td>
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<tr>
<th>Metadata</th>
<th>- Inventory of content and its storage location</th>
<th>- Store transformative metadata and log events</th>
<th>- Monitor file format obsolescence issues</th>
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<tbody>
<tr>
<td>- Ensure backup and non-collocation of inventory</td>
<td>- - Store standard</td>
<td>- Perform format migrations, emulation and similar activities as needed</td>
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</tbody>
</table>

| File Formats | - When you can give input into the creation of digital files encourage use of a limited set of known open formats and codecs | - Inventory of file formats in use | - - |
A hypothetical lifecycle

1. Technical problems in need of solutions
2. Soft money funding
3. Develop solution
4. Physical infrastructure exceeds working life
5. Fail to build committed community of practice
6. Grow Service
7. R.I.P. FDA '05-'19
8. Rapid Response Transfer
The natural condition of mankind, 2019 edition

UWF takes heat after tapping state programs to meet budget needs

By ANDREW ATTERBURY | 10/10/2019 05:01 AM EDT | Updated 10/10/2019 12:52 PM EDT

POLITICO obtained more than 100 documents, including emails, that detail the school’s sweep activity, which has financially devastated some programs.

The sweeps have gutted Florida Virtual Campus, or FLVC, which provides electronic resources to Florida’s 28 public colleges and 12 state universities, according to a top program official.

Looking forward, looking backward

<table>
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<td>Preservation requires a committed community</td>
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<td>Preservation requires funding</td>
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<td>Dark archives, functionality vs. security</td>
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<tr>
<td>Risk analysis shortcomings</td>
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<td>Sustainability and selection</td>
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The University of Florida Digital Collections (UFDC) hosts more than 300 outstanding digital collections containing over 14 million pages, covering over 78 thousand subjects in rare books, manuscripts, unique maps, children's literature, newspapers, theses and dissertations, data sets, photographs, oral histories, and more for permanent access and preservation. Through UFDC, users have free and Open Access to full unique and rare materials held by the University of Florida and partner institutions.

The UF Libraries encourage and support faculty collaboration on digital collections and digital scholarship.

UFDC is constantly growing with new resources, new scholarship, and system enhancements to the Open Source SobekCM Software. The search box above searches across all the digital resources in all the collections. By clicking on the icons below, you can view and search individual collections.

Follow us on social media: Facebook, Twitter, Instagram

ARTS, HUMANITIES AND SOCIAL SCIENCES COLLECTIONS

- Arts Collections
- Baldwin Library of Historical Children's Literature
- Book Arts
- Center for the Humanities & the Public Sphere
- Center for the Study of Race and Race Relations
- The Harold and Mary Jean Hanson Rare Book Collection
- History and Heritage Collections
- Literature Collections
- Samuel Proctor Oral History Program (SPOHP)
Previous Digital Preservation and Backup System
New Workflow

UFDC

UFIT Basic Storage Tier
Backup and TIFFs

Backup and TIFFs

TIVOLI
UF Campus Data Center

TIVOLI
UF East Campus Data Center

TIVOLI
Remote Data Center
Atlanta
Data Migration from FDA/DAITSS back to UF

How to do it?

• Transfer data over the network between the FALSC data center and UF?
• Physically transfer the backup tapes of FDA to UF and load on our system.
• Load content on a network storage device and physically transport and load the content at UF.
Let’s talk Staffing

Fall 2018

Unit Manager

Programmer 1

Programmer 2

Programmer 3

Winter 2019

Unit Manager

Programmer 1

Programmer 2

Programmer 3

Spring 2019

Unit Manager

Programmer 1

Programmer 2

Programmer 3
Data Migration from FDA/DAITSS back to UF

Checking the Data
“Airplane” was the second in a trilogy of ads for EDS (the others featured squirrels and cat herding). The campaign was developed by Fallon and premiered in the Superbowl on 30 January 2000
Benefits of this change

Improved Workflows
- Deletes duplicate archiving and backup processes
- Improves file access to high definition TIFF files

Data Residency and Control
- The data is housed entirely within the University of Florida technology infrastructure
Parting Thoughts

• Need for Exit Strategies and Planning
• Monitoring of external/hosting partners
  • Fiscal health for continued support of shared systems.
  • Awareness of code/system stagnation leading to costly technical debt.
Questions?