

ZONE 1: A RESCUE REPOSITORY FOR DIGITAL CONTENT

Library Lab Final Report, November 15, 2012

Submitted by the Zone 1 Phase 2 Team:

Andrea Goethals, Digital Preservation and Repository Services Manager, Harvard Library

Wendy Gogel, Digital Content and Projects Manager, Harvard Library

Sebastian Diaz, Senior Systems Administrator, Berkman Center (Manager of Zone 1 development)

Janet Taylor, Usability and Interface Librarian, Library Technology Services (LTS)

PROJECT SUMMARY

This was the second round of funding for Zone 1, a prototype rescue repository developed for use by Harvard staff, students and faculty. This repository would provide temporary, secure storage for content that is not a good fit for other more specialized content repositories. This includes content:

- at immediate risk of loss, e.g. on degrading media such as magnetic tape
- with temporary value, e.g. for university records retention requirements or classroom use
- not yet supported by the existing repositories, e.g. learning objects that support coursework
- of undetermined long-term value, e.g. unprocessed collections
- identified as having likely permanent value by content contributors and researchers, but currently without a solution to preserve the content long-term

The repository would provide the minimum infrastructure needed to rescue and secure the digital content while decisions were being made about its longer-term disposition.

ACCOMPLISHMENTS

1. DEVELOPMENT

During this second development phase, 95 bug fixes and features were completed. The major features completed include:

- Ability to export Zone 1 content to another repository
 - As a proof of concept, content was exported to the test version of the DASH repository using the DASH API. The workflow that was designed is:
 - A Zone 1 user selects “Export to DASH” link on the “Selected >” drop-down menu on the Search Results page.

- An instructive confirmation modal dialog box is displayed.
 - The user confirms they want to export, and the currently checked stored files are queued to be exported.
 - After the export is completed, the user receives an email confirmation.
 - This is a demo of the “push” function which could be used to integrate additional repositories such as the DRS.
- Bulk metadata import updates
 - This allows a Zone 1 user to edit the metadata for a set of Zone 1 content outside the Zone 1 interface, and then import the metadata into Zone 1. The workflow that was designed is:
 - A Zone 1 user selects “Edit via CSV” from the “Selected >” drop-down menu on the Search Results page.
 - A Comma-separated values (CSV) file is created and populated with the metadata for the selected set of content.
 - The user edits the CSV file using software external to Zone 1.
 - The user clicks on an “Upload CSV” button in the Zone 1 interface. A dialog box pops up. The user uploads the file using this dialog box.
 - The metadata is updated in Zone 1.

Many enhancements to the user interface were made including:

- “Breadcrumbs” for navigation
- Enhancements to the search results table:
 - Resizable columns
 - Addition of a “next box” at the bottom of a page when in thumbnail view and there are additional pages to view
 - Dynamic window resizing
 - Addition of the Google-like display of the number of items selected with an option to select all items on all pages
- New visual screens for the administrative tasks
- Change to the update screen to remove a confusing button.

Many bug fixes and smaller features were completed as well, including but not limited to:

- A bug causing the SFTP upload credentials to not be shown to a person trying to upload files in bulk.
- A bug causing an error when a user performs edits
- Data model changes to improve the tracking of completed uploads and edits.

Some of the partially completed work includes:

- Identification of an open source tool, SparkleShare¹, that could be used for a Dropbox-like deposit option
- Creation of an API to export files and metadata from Zone 1
 - As a proof of concept, Zeega was used as the system accessing Zone 1 content. Content that has its access marked to “Open” or “Partially Open” can

¹ See <http://sparkleshare.org/>

be retrieved although this does not include any authentication currently. The current implementation will be redone as part of the “Zone1 and Zeega: Coming Together to Create Better Tools for Scholarship” Library Lab project.

2. USABILITY TESTING

Janet Taylor developed a usability testing plan and script for Zone 1. It will help determine the usability of the interface and will provide guidance and recommendations for future development. It focuses on 5 areas:

- Efficiency: Can users efficiently make use of important system functionality? Are the important features obvious to users?
- Learnability: Can users quickly learn other system functions? What workflows are people using intuitively?
- Scanning: Can users easily locate content and functions when scanning the pages? Do people know how to move around the interface?
- Content: What content should be included on each page?
- Language: What are the most effective language and terminology?

She plans to recruit 5 Harvard students, faculty and staff for the testing based on recommendations made by Andrea and Wendy. Each testing participant will receive a \$10 gift card to J.P. Licks.

The test starts with a use case where the testing participants imagine they just got back from a research trip and need to store the content in Zone 1, and share it with colleagues. The full test script is included in Appendix A.

CHALLENGES

Although many significant enhancements were made to Zone 1 this year, a few of the tasks were not completed:

- The Zone 1 API was begun but not finished. It will be completed as part of an upcoming Library lab project that was just funded - “Zone1 and Zeega: Coming Together to Create Better Tools for Scholarship”.
- The Dropbox-like deposit functionality was not completed. The development team did identify an open source client (SparkleShare) that could be used for this but did not want to take on the maintenance of a separate client application as part of the Zone 1 prototype. This will be revisited should it become a production application.
- We had planned to explore using the iCommons technology for selecting courses into the group management function in Zone 1, but wasn’t able to fit this into this round of development.

Additional features desired by the Harvard/MIT archival community were not implemented because of timing. We met with representatives from this community to

demo Zone 1 and discuss their requirements but did not have their summary document of requirements in time to influence the development.

NEXT STEPS

- Janet Taylor will schedule usability testing sessions with 5 Harvard students and faculty from Nov. 16th-28th, and then will complete a usability report.
- The API will be completed next year as part of the “Zone1 and Zeega: Coming Together to Create Better Tools for Scholarship” Library Lab project.
- This is a good time to start discussing how Zone 1 might move into production. As a placeholder, LTS has added this to their “project pipeline” as a project waiting for prioritization and resources.

DEPOSITED CODE

The code is available on the [Berkman Center's GitHub account](#).

BUDGET SPENT

TBD

PROJECT PUBLICITY AND PRESENTATIONS

February 3, 2012: Hauser Initiative Fair

Wendy demoed the Zone 1 interface.

February 16, 2012: OIS Department Meeting, Cambridge, MA

Andrea demoed the Zone 1 interface.

February 19 and April 19, 2012, Cambridge, MA

Andrea and Wendy met with potential users of Zone1 (archivists and records managers), and demoed the interface for them.

April 23, 2012, , Cambridge, MA

Wendy and Andrea met with potential users of Zone1 (History of Art and Architecture Librarians and staff from Academic Computing), and demoed the interface for them.

July 26, 2012: Library Lab Lightning Round, Lamont Forum Room

Wendy demoed the Zone 1 interface.

July 26, 2012: CURATEcamp Processing 2012 (held the day after the National Digital Information Infrastructure and Preservation Program (NDIIPP) and the National Digital Stewardship Alliance (NDSA) sponsored Digital Preservation annual meeting), Washington DC

During a Lightning Round of presentations, Andrea introduced the group to the Zone 1 project and demoed the interface. This was blogged about in the Spellbound Blog:

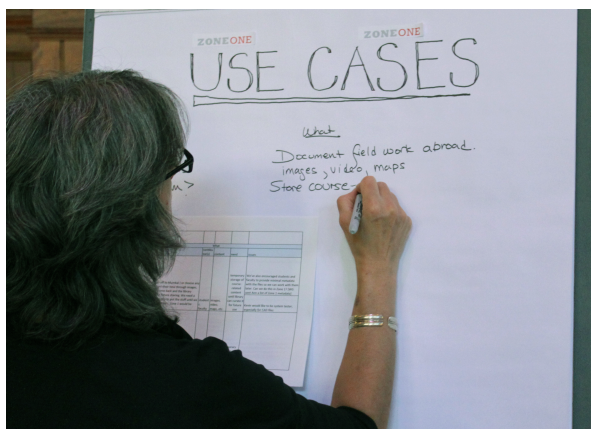
"While all the talks were interesting, there was one that really stuck with me: Harvard University's Zone 1 project which is a 'rescue repository'. I would love to see this model spread!" [<http://www.spellboundblog.com/2012/08/05/curatecamp-processing-2012/>]

October 24, 2012: ARANZ Conference 2012: "Inside and Outside the Box", Wellington New Zealand

Wendy gave a presentation titled "Zone 1: Removing the barrier between content creators and collectors at Harvard University" and demoed the Zone 1 interface.

November 15: Library Lab Showcase, Radcliffe Gym

Wendy and Andrea demonstrated the Zone 1 interface and discussed the repository and how it might be used with people who visited our table.



Displaying Zone 1 use cases at the Library Lab Showcase, November 2012.
(Photo: Sue Kriegsman)

APPENDIX A: ZONE 1 USABILITY TESTING SCRIPT

On screen: <http://zoneone.dev.berkmancenter.org/>

1. (INTRODUCTION TO THE TESTING PROCESS.)

2. GENERAL QUESTIONS

Are you a student faculty staff other? _____

Which faculty or department are you associated with? _____

Do you know what Zone One is? yes no not sure

Have you ever used Zone One? yes no not sure

Do you use a PC (as opposed to a Mac) regularly? yes no sometimes

If no: I may have to walk you through a few steps, like finding files on the desktop.

Please read the description of Zone One posted on <http://zoneone.dev.berkmancenter.org>. After reading that description, do you have a sense of what Zone One will be used for?

“YES”: Please describe the purpose of the system based on the description that you just read.

After response: This is the summary I provide to people who do not know what Zone 1 does... Zone One allows Harvard students, faculty and staff to temporarily store files in a central location so that users can access and share files, catalog the files and tag them, and request that they be considered for preservation by the Library. This is intended to be short-term storage to be used before files are moved to a long-term storage facility.

“NO”: Zone One allows Harvard students, faculty and staff to temporarily store files in a central location so that users can access and share files, catalog the files and tag them, and request that they be considered for preservation by the Library. This is intended to be short-term storage to be used before files are moved to a long-term storage facility.

3. TODAY'S USE CASE

I'm proposing a use case or scenario, that will help put some of the tasks and questions about Zone One into context.

1. You recently travelled for a field project in China for a course.
2. On your computer, you have 10 files from your trip: photos, a map, and related map data. They are located on the desktop in a folder called "Zone One Field Project 2012."
3. You would like to store the files and be able to access them from multiple locations.
4. The stored files will need some sort of organization, so you can locate them easily.
5. You would like to share some of the files.
6. One of the files, the image of a historical map, may be a candidate for long-term preservation by the Harvard Library.

Let's look at the files:

1. Go to the desktop (help if necessary).
2. Open the folder called "Zone One Field Project 2012."
3. Let me know if you have any questions about the files.
4. OK, let's go back to Zone One (help if necessary).

4. TASKS

Let's get started working with the system. As you perform these tasks, please speak aloud and explain to me what you are doing and why you are doing it. Speak freely: the more I hear, the better I can understand your experience.

1. This is the Zone One homepage. You first want to upload your files to Zone One. Where would you go to do that?
Note: user must login.
Username = x & password = x
Note: stop user when they reach the upload screen. The upload files link is in the header.
2. All of the files you going to be uploading are from your field project. Before you upload them, can you add information to any of these "attribute" fields that would help you identify all of the files you are uploading as being from the same project? Go ahead.
Note: if necessary, prompt to enter "China" in Collections input box.
3. Please upload all of the files from the computer that are in the "Zone One Field Project 2012" folder into Zone One. Let me know when you are done.
Note: if the computer does not default to the correct folder, help the participant find it by clicking on "Desktop."
4. Now, look at your files in Zone One.

Note: either use “See your files” or go back to homepage and use “Find files”

5. Change the view from list to grid or grid to list.
6. Now we want to enter information about one of your files. Please pick any file you want and add a title to it.

Note: prompt to “Update” if record is not already saved.

7. Now try to add a tag called “China” to all of the files that you uploaded.

Note: walk through if unsuccessful, this is complicated.

8. We want other people that were part of the field project to have permission to be able to open the files you just uploaded to Zone One. Can you find a way to open the files up to the group called “Field Project 2012?”

Note: if something happens to the group, help the participant add the group:

- Janet H. Taylor in header
- Manage Groups
- Create Group

Note: All of the check boxes have to be checked. Prompt user if they get stuck.

Note: prompt to “Update” if record is not already saved.

9. How many files did you just update?
10. The file called “historical_map_china_image.tif” is especially interesting and may be worthy of preservation by the Harvard Library. Can you nominate that image for preservation?
11. Download that same file.
12. Search for all the files tagged with “China” and download all of them.

5. QUESTIONS

1. Can you imagine a situation where Zone One would be useful to you? Please describe.
2. In using Zone One, was there anything you thought worked especially well?
3. If you could change anything about Zone One, what would you change?
4. Do you have any comments or observations that you would like to share that we haven’t already touched upon?