DuraCloud Roadmap

Project Summary

Welcome to the DuraCloud project!

DuraCloud is a suite of software applications used together to manage files stored in a variety of third-party storage systems. DuraCloud makes use of cloud storage for its many benefits and provides a consistent API and interface through which content is managed, as well as a second level of verification for all managed content.

DuraCloud was created by DuraSpace, a non-profit organization, to provide a hosted preservation storage solution as a service for those managing digital content without the tools to preserve it. We invite anyone interested in digital preservation for the common good to help us maintain, improve, and deploy DuraCloud to prevent the loss of culturally relevant digital content.

The DuraCloud Project strives to produce frequent releases, each with limited scope, in order to allow for updates to be deployed quickly. We work within the agile methodology and use continuous integration techniques. All work is focused on the current, supported release.

How to Get Involved

- **Talk with us:** Join the users mailing list and tell us about how you would like to use DuraCloud
- **Test:** Are you already a DuraCloud user? If so, you can perform tests on your existing account. If not, you can either sign up for a hosted account or deploy DuraCloud to perform your testing. If you find a bug or an issue, please let us know!
- **Deploy:** Launch DuraCloud in your own AWS account. Instructions are here: https://github.com/duracloud/deployment-docs
- **Develop:** Deploy DuraCloud on your own then fix bugs, or add new features. We are always happy to review pull requests! Start by looking through the list of outstanding bugs and feature requests, selecting one, and commenting on the ticket to let us know you're interested.
- **Help with Documentation:** DuraCloud documentation can be found here: https://wiki.duraspace.org/display/DURACLOUDDOC. If you see something that should be updated, just leave a comment on the page. No suggestion is too small.
- **Let us know:** What can we do to make it easier for you to contribute? Post suggestions to our users mailing list.

Timeline

Our goals include working on the next major release and communications products to clarify and define DuraCloud for all project stakeholders.

Short term - what we're working on now

The next major software release, version 5.0, will focus on the following interrelated features:

- ☐ Support for multi-part uploads

    - ☐ Large files will be transferred to DuraCloud using an API addition which makes use of the S3 multipart upload feature
    - ☐ This will remove the need for the DuraCloud client tools to handle chunking and stitching of content.
    - ☐ This change will allow large files to be viewed and retrieved in DuraCloud as a single file, rather than a set of chunks

- ☑ Support for Range-based GET requests

    - ☑ To support the retrieval of large files which will no longer be chunked, Range requests will allow multiple threads to retrieve sections of a file in parallel.

- ☑ Removal of support for OpenStack-based storage providers

    - ☑ In order for multi-part upload support to function, one version of cloud-based large file support had to be selected. The S3 API has become the de-facto standard for object storage platforms, allowing for an expanded selection of storage options without the need to also support an additional API.

- ☑ Update DuraCloud media streaming (add support for HLS, to support HTML 5 and mobile viewers)

We're also working on the following community artifacts:

- ☑ Articulating a vision and value proposition uniquely for DuraCloud
- ☐ Establish a shared decision making process
- ☑ Establish methods by which projects contributors can become engaged

    - ☑ Establish a contributor meeting schedule and communication strategy
    - ☐ Define a committer policy

- ☐ Establish code development guidelines

- [x] Create coding style requirements and instrument these in the build process (Completed code style guidelines)
- [ ] Create written contribution guidelines
- [ ] Create written code release policies

- [ ] Developing a framework for DuraCloud Partnerships (e.g. running services with the support of DuraSpace)
- [ ] Determine best practices for managing documentation (e.g. wiki vs github).

Longer term items - working on this soon!

- Establish a process for contributing community use cases and requirements
- Describing and differentiating DuraCloud in the context of the digital preservation ecosystem
- Developing DuraCloud Case Studies
- Working with a group of like-minded organizations on the Digital Preservation Declaration of Shared Values and other initiatives to support digital preservation
  - Announcement
  - Digital Preservation Declaration of Shared Values