OpenCDSS Memorandum

To: Brian Macpherson (Colorado Water Conservation Board), Carolyn Kemp (CWCB),
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From: Steve Malers (Open Water Foundation)
Subject: Notes on using GitHub Pages
Date: May 22, 2018

Contents

Introduction

This memorandum provides informal notes about using GitHub Pages for an organization website, using the Open Water Foundation (OWF) as an example. This approach might be appropriate to provide information to OpenCDSS GitHub site users. The following notes explain how OWF set up its GitHub pages site.

Notes

GitHub Pages is a service offered by GitHub to host an organizational website on GitHub (projects can also be used for specific projects). For background, see:

- http://learn.openwaterfoundation.org/owf-learn-documenting/ref-github/#github-pages-for-organization
- https://help.github.com/articles/user-organization-and-project-pages/

OWF already has an organizational website (http://openwaterfoundation.org) created with WordPress technologies and hosted on BlueHost.com. Therefore, it does not make sense to use GitHub to host the organizational website. Using GitHub as the main website for an entity may be appropriate for single-purpose web domains such as OpenCDSS (but may not be the best solution due to limited functionality of GitHub pages, such as lack of search and navigation features).

Configure Domain Name Service

In order to demonstrate how hosting a website on GitHub would occur, add a CNAME record to the OWF Domain Name Service (DNS) records that redirects as follows:

github.openwaterfoundation.org -> openwaterfoundation.github.io

Doing the same within the State of Colorado's CDSS environment might map the domain using one of the following approaches. The approach take would need to consider whether the GitHub page is intended to be the main landing page for OpenCDSS or is implemented as a convenience to understand the GitHub OpenCDSS conventions (OWF recommends using another technology such as MkDocs for OpenCDSS landing page):

opendss.state.co.us -> opencdss.github.io
opencdss.cdss.state.co.us -> opencdss.github.io
open.cdss.state.co.us -> opencdss.github.io
github.opencdss.state.co.us -> opencdss.github.io

Configure GitHub Pages on GitHub

Using OWF as an example, add the custom domain for the GitHub pages site using https and github.openwaterfoundation.org as the custom domain:

https://help.github.com/articles/adding-or-removing-a-custom-domain-for-your-github-pages-site/

Go to the OpenWaterFoundation.github.io repository to set up the GitHub pages site.

1. Pick the theme as Cayman (another theme could be selected).
2. GitHub detects that no content is available and creates a default README.md using Jeckyll format. The initial version is listed at the bottom of this document.
3. Create an index.md file as the landing page for the website - Jeckyll will convert to HTML.
4. Then add more content as appropriate by editing content directly on the GitHub website (it is possible to clone the repository locally and edit, but not sure how to view the resulting web page without installing Jeckyll locally).
5. View by refreshing a page with https://github.openwaterfoundation.org.

Configure README.md and Select Pinned Repository

The README.md file for the OpenWaterFoundation.github.io repository was updated to provide links to the deployed website. The OpenWaterFoundation GitHub account page was also updated so that the organizational GitHub Page is listed at the top. In summary, the following are the URLs for the website content and the rendered result:

https://github.openwaterfoundation.org

https://github.com/OpenWaterFoundation/OpenWaterFoundation.github.io

Original README.md File

This is the original README.md file for the GitHub pages repository…

```
## Welcome to GitHub Pages

You can use the [editor on
GitHub](https://github.com/OpenWaterFoundation/OpenWaterFoundation.github.io/
edit/master/README.md) to maintain and preview the content for your website
in Markdown files.

Whenever you commit to this repository, GitHub Pages will run
[Jekyll](https://jekyllrb.com/) to rebuild the pages in your site, from the
content in your Markdown files.

### Markdown

Markdown is a lightweight and easy-to-use syntax for styling your writing. It
includes conventions for

```markdown
Syntax highlighted code block

# Header 1
## Header 2
### Header 3

- Bulleted
- List

1. Numbered
2. List

**Bold** and _Italic_ and `Code` text

[Link](url) and ![Image](src)
```

For more details see [GitHub Flavored
Markdown](https://guides.github.com/features/mastering-markdown/).

Jekyll Themes

Your Pages site will use the layout and styles from the Jekyll theme you have
selected in your [repository
settings](https://github.com/OpenWaterFoundation/OpenWaterFoundation.github.i
o/settings). The name of this theme is saved in the Jekyll `_config.yml`
configuration file.

Support or Contact

Having trouble with Pages? Check out our
[documentation](https://help.github.com/categories/github-pages-basics/) or
[contact support](https://github.com/contact) and we'll help you sort it out.
```