OpenGeoMetadata

April 8, 2015

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What is it?

- A shared repository for geospatial metadata
- Centralized highly available service
- Decentralized collaborators

Traditional approaches to metadata collaboration

- No collaboration
  - Resource intensive $$$
  - Many institutions are creating metadata on same or similar data

Traditional approaches to metadata collaboration

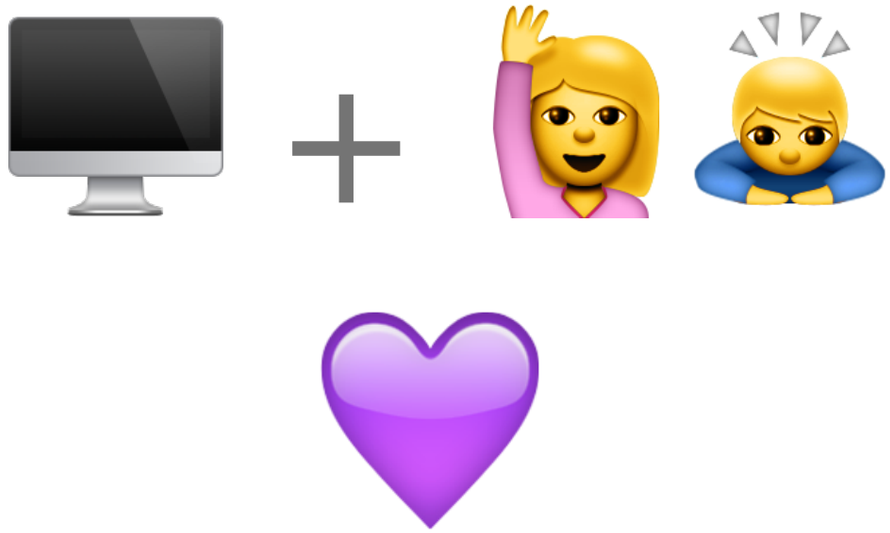
- Use listservs and personal contacts to email records and best practices
    - Difficult to collaborate with more than a few people
    - Ephemeral record of collaboration
    - No version control

Traditional approaches to metadata collaboration

- Publishing / harvest software
  - Can be difficult to get started, requires infrastructure costs to implement and maintain
  - Great for publishing / harvesting but falls short on collaboration

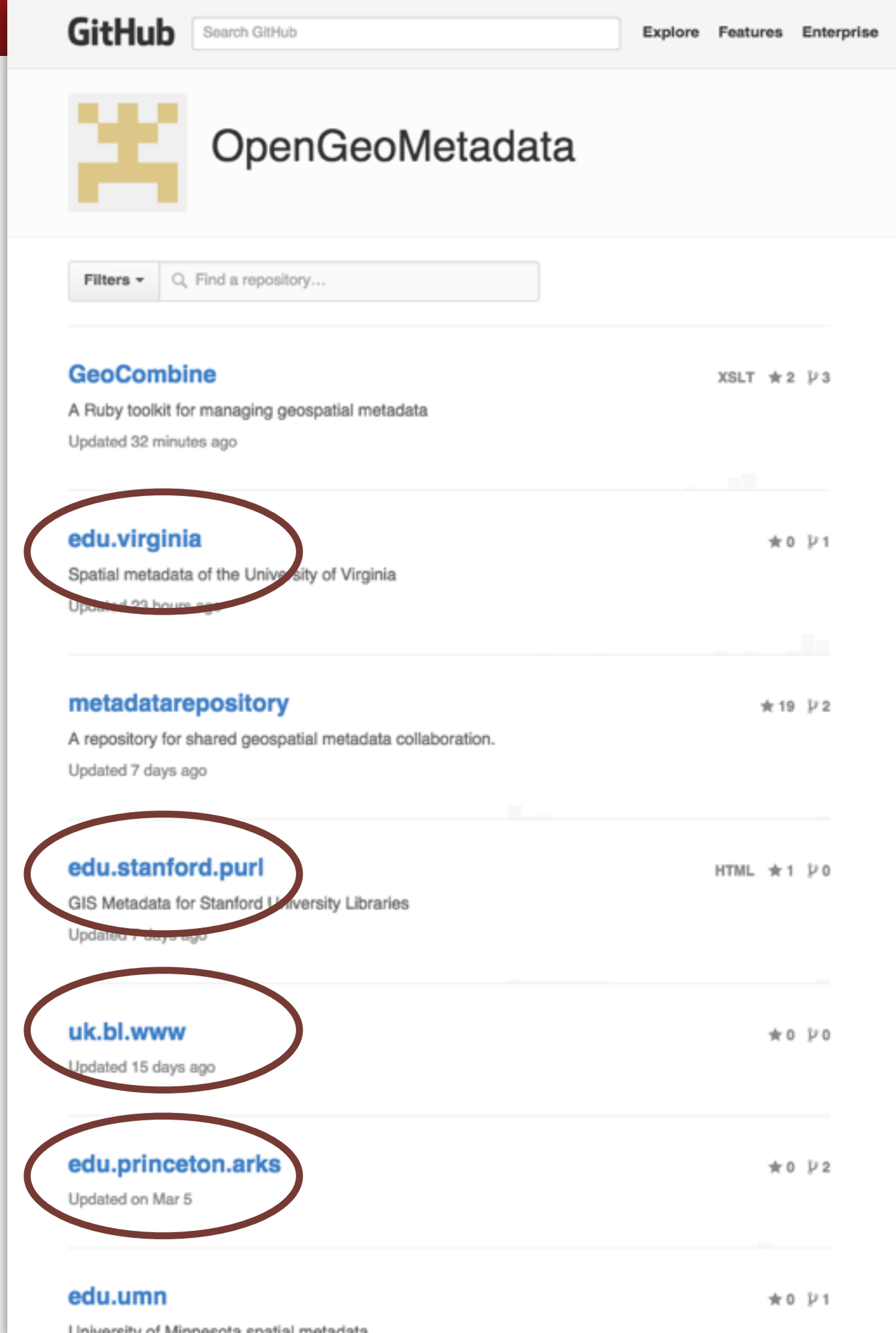
OpenGeoMetadata as a solution

- Uses git software to version control metadata
- Uses GitHub as a highly-available platform for collaboration



Implementation

- Individual metadata repositories for each collaborating organization under a common GitHub Organization
  - Namespace benefits
  - Internal user management
- No metadata standards enforcement



Implementation

- Recommended repository structure
  - Git repository with a unique namespace for each organization

```
/edu.stanford.purl/
```

Implementation

- Recommended repository structure
  - Individual “layer” metadata be contained within a unique directory

```
/edu.stanford.purl/
                    layer123/
                              fgdc.xml
                    layer456/
                              fgdc.xml
```

Basic implementation

Implementation

- Recommended repository structure
  - Ideally this should be a pear tree structure

```
/edu.stanford.purl/
                  bb/338/jh/0716/
                                 iso19110.xml
                                 iso19139.xml
                                 preview.jpg
                  bb/509/gh/7292/
                                 iso19110.xml
                                 iso19139.xml
                                 preview.jpg
```

Recommended implementation

Implementation

- Recommended repository structure
  - Include a **`layers.json`** file for mapping

```
/edu.stanford.purl/
    bb/338/jh/0716/
                        iso19110.xml
                        iso19139.xml
                        preview.jpg
                        layers.json
```

Recommended implementation

Implementation

- Recommended repository structure
  - **`layers.json`** looks like this

```
{
  "unique-identifier": "directory-location",
  "druid:bb338jh0716": "bb/338/jh/0716",
  "druid:bb509gh7292": "bb/509/gh/7292",
  "druid:bc899yk4538": "bc/899/yk/4538",
  ...
}
```

Recommended implementation

Implementation

- Recommended repository structure
  - Institutions can include as much or as little metadata within a layers individual directory

Example directory within /bc/899/yk/4538/ (View on Github)

```
geoblacklight.json
iso19110.xml
iso19139.xml
mods.xml
preview.jpg
```

Recommended implementation

Toolkits forming around this

- ogm_utils - Python https://github.com/OpenGeoMetadata/ogm_utils-python
- GeoCombine - Ruby https://github.com/OpenGeoMetadata/GeoCombine

More information at:

https://github.com/OpenGeoMetadata/metadatarepository