OpenGeoMetadata

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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

```json
{
  "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](https://github.com/OpenGeoMetadata/ogm_utils-python)

• **GeoCombine** - Ruby [https://github.com/OpenGeoMetadata/GeoCombine](https://github.com/OpenGeoMetadata/GeoCombine)
More information at:

https://github.com/OpenGeoMetadata/metadatarepository