
Troubleshooting Common Hyrax “Gotchas”

— Benjamin Kiah Stroud —

Benjamin Kiah Stroud

Junior Web Developer • Notch8



translation missing: en.slide_title

Language Switch" > English ▾



admin ▾

translation missing:... / translation missing:... / translation missing:...

translation missing: en.hyrax.admin.sidebar.collections

translation missing: en.hyrax.dashboard.all.collections

translation missing: en.hyrax.dashboard.my.your_collections

New

translation missing: en.hyrax.my.count.collections.in_repo

Collections

translation missing: en.hyrax.dashboard.my.heading.collection_type ▾

Show 10 ▾ per page

Label

<span class="translation_missing" title="translation missing: en.hyrax.search.for"

Html

Select

Title

Type

Visibility

Items

Last Modified

Action



Default Admin Set ▾

translation missing: en.hyrax.collection_type.admin_set_title

translation missing: en.hyrax.visibility.restricted.text

0 09/20/2019

Select ▾

Context: Translations (i18n)

- “Hyrax translates user interface strings into multiple languages”
- `i18n-tasks` gem (utilizing the Google Translate API)
- Translations controlled by YAML files
- Localization files live under:
 - config/locales/
- Language codes:
 - `hyrax.en.yml`
 - `hyrax.fr.yml`

Fun Fact: the abbreviation “i18n” means “i-eighteen letters-n”

```
1 ---
2 en:
3   hyrax:
4     | account_name: My Institution Account Id
5     | base:
6     |   | collections:
7     |   |   | show:
8     |   |   |   | subcollection_count: Collections in this Collection
9     | bread_crumb:
10    |   | search_results: Back to Search Results
11    | collections:
12    |   | index:
13    |   |   | collections: Collections <-- en.hyrax.collections.index.collections
14    |   | show:
15    |   |   | works_in_collection: Items in this Collection
16    | controls:
17    |   | collections: Collections
18    |   | institutions: Institutions
19    |   | participate: Participate
20    | dashboard:
21    |   | collections:
22    |   |   | show:
23    |   |   |   | metadata_header: Collection Details
24    | directory:
25    |   | suffix: "@example.org"
26    | footer:
27    |   | copyright_html: "<strong>Copyright © 2019 Samvera</strong> Licensed under the Apache License, Version 2.0"
28    |   | service_html: A service of <a href="http://samvera.org/" class="navbar-link" target="_blank">Samvera</a>.
29    | institution_name: Institution
30    | institution_name_full: The Institution Name
31    | pages:
32    |   | tabs:
33    |   |   | about_page: About
```

Filter collections:

Collection Type ▾

Show 10 ⬆ per page

Search Hyrax

Enter search terms

Go

<input type="checkbox"/> Select	Title	Type	Visibility	Items	Last modified	Actions
<input type="checkbox"/>	 Default Admin Set ➔	translation missing: en.hyrax.collection_type.admin_set_title	Private	0	09/20/2019	Select ▾



```
1 ---
2 en:
3   hyrax:
4     | account_name: Account Id
5     | collection_type:
6     |   | admin_set_title: Admin Set
7     | directory:
```

Filter collections:

Collection Type ▾

Show 10 ⬆ per page

Search Hyrax

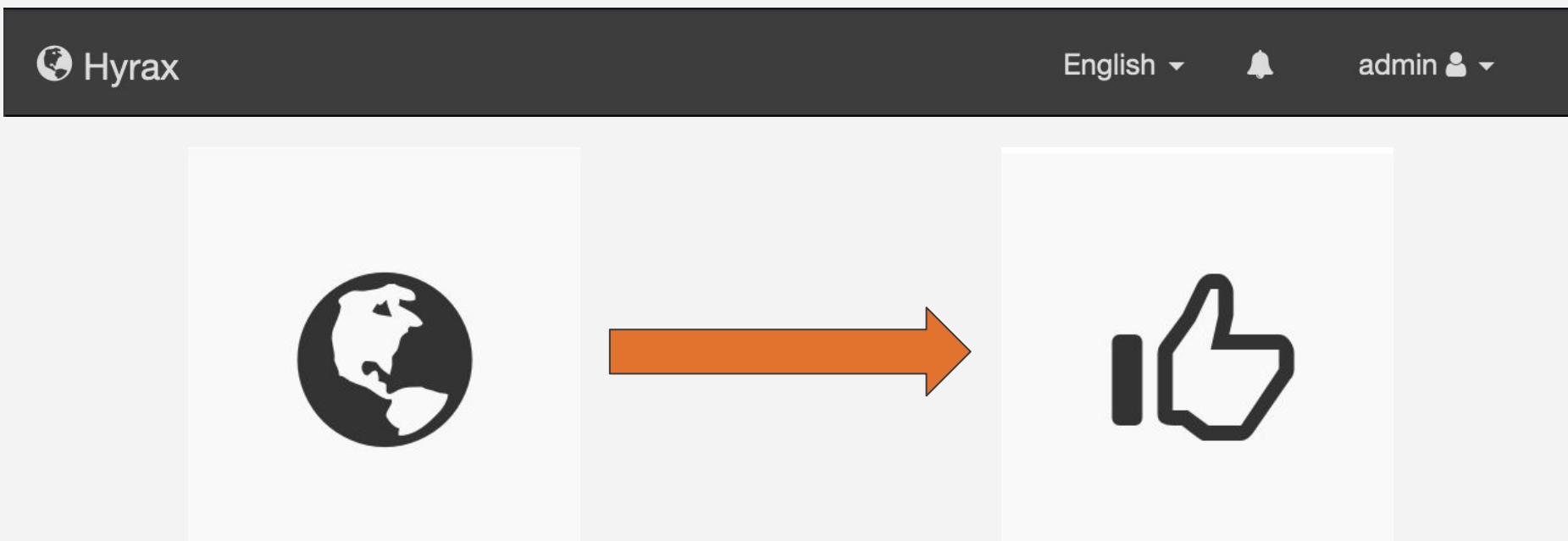
Enter search terms

Go

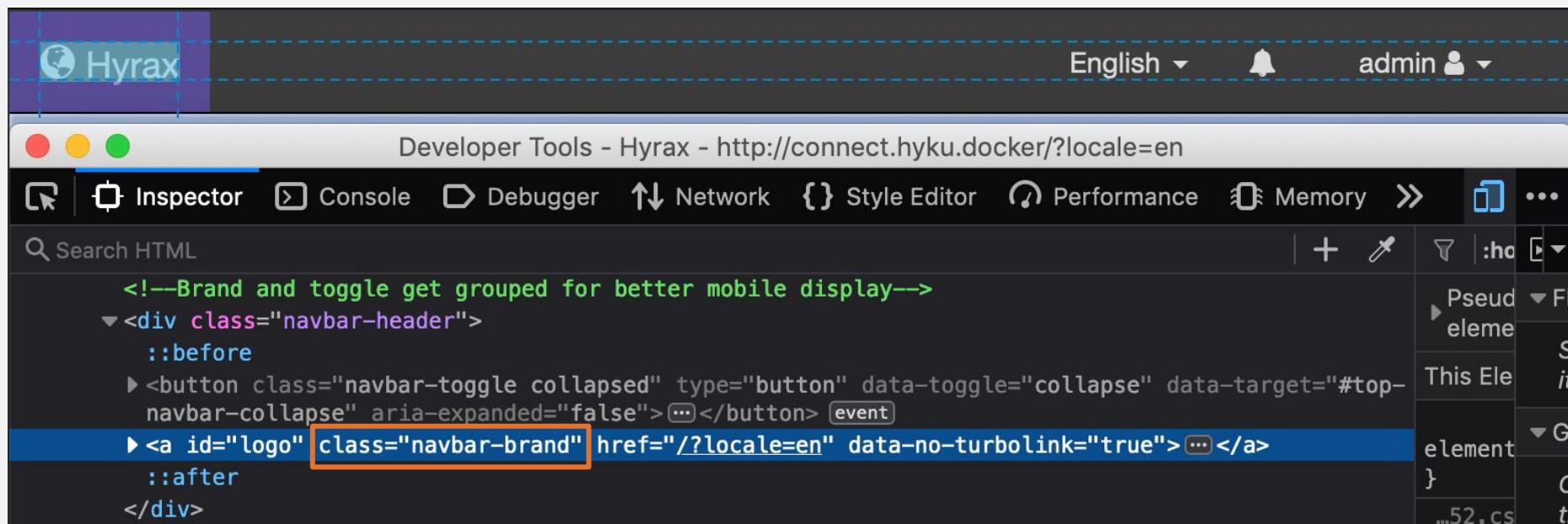
<input type="checkbox"/> Select	Title	Type	Visibility	Items	Last modified	Actions
<input type="checkbox"/>	 Default Admin Set ➔	Admin Set	Private	0	09/20/2019	Select ▾

Customizing Hyrax View Elements

Example: Navbar Icon



1. Inspect Element for Keywords



2. Search Hyrax Repository for keyword/phrase

The screenshot shows a GitHub search interface. In the search bar at the top, the query "navbar-brand" is entered. Below the search bar, a navigation menu includes "Pull requests", "Issues", "Marketplace", and "Explore". On the right side of the header are icons for notifications, a plus sign, and user profile.

The main content area displays search results for "samvera/hyrax". A summary message says "2 code results in samvera/hyrax or view all results on GitHub".

The first result is titled "app/views/_logo.html.erb". It shows two lines of code:

```
1 <a id="logo" class="navbar-brand" href="<%= hyrax.root_path %>" data-no-turbolink="true">
2   <span class="glyphicon glyphicon-globe" role="img" aria-label="<%= application_name %>" aria-hidden="true"></span>
```

Below the code, it says "HTML+ERB Showing the top match Last indexed on Aug 16, 2018".

The second result is titled "app/views/shared/_appearance_styles.html.erb". It shows four lines of code:

```
14 .navbar-inverse .navbar-text,
15 .navbar-inverse .navbar-brand { color: <%= appearance.header_text_color %>; }
16
17 .btn-primary {
```

Below the code, it says "HTML+ERB Showing the top match Last indexed on Jun 28, 2018".

On the left sidebar, there are sections for "Code" (2 results), "Commits" (1), "Issues" (0), "Packages" (0), and "Wikis" (0). Below that is a "Languages" section showing "HTML+ERB" (2). At the bottom of the sidebar are links for "Advanced search" and "Cheat sheet".

3. Copy File Into Local Repository

3 Methods:

- 1) If the Hyrax repo is cloned on the local machine

- a) Git checkout the correct version

- i) <https://stackoverflow.com/a/35979751>

- b) `cp ~/Development/source-code/hyrax/app/views/_logo.html.erb app/views`

Copy command

Path to file in Hyrax clone

Desired destination

- 2) If using Docker (inside the web container)

- a) Show path to gem using: `bundle show hyrax`

- b) `cp /usr/local/rvm/gems/ruby-2.5.3/gems/hyrax-2.5.1/app/views/_logo.html.erb app/views/`

Copy command

Path to file in Hyrax gem

Desired destination

3. Copy File Into Local Repository (continued)

3 Methods:

- 3) Manually copy-paste from GitHub

```
en:
  activefedora:
    models:
      batch_upload_item: Works by Batch
      file_set: File
    activemodel:
      errors:
        messages:
          cannot_have_child_nested: cannot have child nested within it
          cannot_nest_in_parent: cannot nest within parent
          cannot_remove_relationship: permission is inadequate for removal of nesting relationship
          conflict: Your changes could not be saved because another user (or background job) updated this %{model} after you began editing. Please make sure all file attachments have completed successfully and try again. This form has refreshed with the most recent saved copy of the %{model}.
          exceeds_maximum_nesting_depth: nesting exceeds the allowed maximum nesting depth.
          is_not_nestable: is not nestable
    blacklight:
      search:
        fields:
          facet:
            admin_set_sim: Admin Set
            collection_type_gid_sim: Collection Type
            member_of_collections_sim: Collection
            resource_type_sim: Resource type
            suppressed_bsi: Status
            visibility_ssi: Visibility
          show:
            admin_set: 'In Administrative Set'
            based_near_label: Location
            contributor: Contributors
            keyword: Keyword
          filters:
            title: 'Filtering by:'
            start_over: Start Over
        errors:
          messages:
            carrierwave_download_error: Couldn't download image.
            carrierwave_integrity_error: Not an image.
            carrierwave_processing_error: Cannot resize image.
            extension_blacklist_error: 'You are not allowed to upload %{extension} files, prohibited types: %{prohibited_types}!'
            extension_whitelist_error: 'You are not allowed to upload %{extension} files, allowed types: %{allowed_types}!'
        helpers:
          action:
            add: Add
            admin_set:
              new: Create new administrative set
            batch:
              new: Create batch of works
            cancel: Cancel
            close: Close
            collection:
              new: New Collection
```

4. Make Changes

- 1) Commit unmodified file first
 - a) Easier to look back on diffs in git history
- 2) Add override comments
 - a) Top of file: `# Override file from Hyrax v2.5.1`
 - b) Everywhere changes are made: `# Change icon from globe to thumbs up`
- 3) Add and commit changes

Customized View Element: Result

```
1 <%# Override file from Hyrax v2.5.1 %>
2 <a id="logo" class="navbar-brand" href="<%= hyrax.root_path %>" data-no-turbolink="true">
3   <%# Change icon from globe to thumbs up %>
4   <span class="glyphicon glyphicon-thumbs-up" role="img" aria-label="<%= application_name %>" aria-hidden="true"></span>
5   <span class="institution_name"><%= application_name %></span>
6 </a>
```

Adding / Changing Work Properties in Hyrax

When Adding / Changing Property

app/models/{work}.rb

app/indexers/{work}_indexer.rb

app/models/solr_document.rb

app/forms/{work}_form.rb

app/presenters/{work}_presenter.rb

app/views/hyrax/base/_attribute_rows.html.erb

app/views/hyrax/{work}/_attribute_rows.html.erb

app/controllers/catalog_controller.rb

config/locales/{work}.yml

When Adding a Custom Property

(Everything on the left, plus:)

app/views/records/edit_fields/{custom_field}.html.erb

app/views/records/show_fields/{custom_field}.html.erb

Ldp::Conflict error, “Can’t call create on an existing resource”

- Well documented issue
 - <https://github.com/samvera/hyrax/issues/3128>
 - Has since been resolved as of Hyrax v2.5.0
- Can occur when creating a new Work or Collection
 - Wrapped in SQL database transaction
 - Doesn't know how to rollback changes to Fedora / Solr

Ldp::Conflict error, “Can’t call create on an existing resource”

Solutions

- Need to keep database data:

```
[ ::Noid::Rails::Service.new.minter.mint, ::Noid::Rails::Service.new.minter.mint]
```

- Forces Minter to skip two ids (Fedora / FileSet)

- Don't need to keep database data:

- Warning! Destructive!
 - Will wipe all data from Fedora and Solr
 - Will **not** clear data from ActiveRecord

```
require 'active_fedora/cleaner'; ActiveFedora::Cleaner.clean!
```

- Great for test db cleanup

Couldn't find Hyrax::PermissionTemplate

“Permissions templates have a 1-1 relationship to admin sets. Admin sets are the Fedora portion of the implementation, and Permission templates are the database portion.”

- <https://wiki.duraspace.org/display/samvera/Code+for+Permission+Templates>
- Occurs when the permission template of a still-existing AdminSet is deleted
- “This may happen if you cleared your database but you did not clear out Fedora and Solr.”
 - https://github.com/samvera/hyrax/blob/master/lib/tasks/default_admin_set.rake#L10-L11

Couldn't find Hyrax::PermissionTemplate

Solutions

- Non-destructive:

```
Hyrax::PermissionTemplate.create!(source_id: AdminSet::DEFAULT_ID)
```

- Destructive:

```
require 'active_fedora/cleaner'; ActiveFedora::Cleaner.clean!
```

Web Console

- Debugging tool
 - Similar to `pry` or `byebug`
 - Runs a console through the browser instead of the command line
- Usage
 - Add `fail` or `raise 'hello world'` to block

Web Console: Setup

- Add to Gemfile
 - `'web-console', group [:development]`
 - `bundle install`
- Whitelist IP address(es)

```
1 # config/environments/development.rb
2 Rails.application.configure do
3   # Settings specified here will take precedence over those in config/application.rb.
4   config.web_console.permissions = ['172.16.0.0/12', '192.168.0.0/16', '127.0.0.1']
5 
```

Note: older versions of the `web-console` gem may use `#whitelisted_ips` instead of `#permissions`

RuntimeError in Hyrax::Homepage#index

Showing /home/app/webapp/app/views/_logo.html.erb where line #3 raised:

Extracted source (around line #3):

```
1  <%# Override file from Hyrax v2.5.1 %>
2  <a id="logo" class="navbar-brand" href="<%= hyrax.root_path %>" data-no-turbolink="true">
3  <% fail %>
4  <%# Change icon from globe to thumbs up %>
5  <span class="glyphicon glyphicon-thumbs-up" role="img" aria-label="<%= application_name %>" ar
6  <span class="institution_name"><%= application_name %></span>
```

```
>> hyrax.root_path
=> "/?locale=en"
>> █
```

Lightning Round!!!

Useful Methods

#to_solr

- Can be used on objects like FileSets
- Useful for inspecting / troubleshooting Solr documents

#method(:method_name) .source_location

- Locate the definition of a provide method
- E.g. AdminSet.method(:indexer).source_location

#methods.grep /fuzzy_keyword/

- Narrow list of methods down to only show those that match a Regular Expression
- E.g. User.last.methods.grep /validat/

Miscellaneous

IIIF Search Troubleshooting

```
{root_path}/catalog/(:id)/iiif_search?q=foo
```

```
{root_path}/concern/{work_type}/(:id)/manifest
```

Additional Troubleshooting Documentation

- <https://samvera.github.io/troubleshooting-production.html>
- https://samvera.github.io/troubleshooting_riif.html

Sources

- [https://github.com/samvera/hyrax/wiki/Translations-\(internationalization\)](https://github.com/samvera/hyrax/wiki/Translations-(internationalization))
- <https://whatis.techtarget.com/definition/internationalization-I18N>
- <https://stackoverflow.com/a/35979751>
- https://docs.google.com/presentation/d/1bhb1OyJb300WNErOj3T5Zb4dyjwMhNdvi_WVUYfYUEk/edit#slide=id.g29090e454a_0_38
- <https://github.com/samvera/hyrax/issues/3128>
- <https://wiki.duraspace.org/display/samvera/Code+for+Permission+Templates>
- https://github.com/samvera/hyrax/blob/master/lib/tasks/default_admin_set.rake#L11-L14
- <https://github.com/rails/web-console#configuration>

Thank you!



Benjamin Kiah Stroud

GitHub: [bkiahstroud](https://github.com/bkiahstroud)

Email: kiah@notch8.com

LinkedIn:

www.linkedin.com/in/bkiahstroud/
