Lesson: Drupal is dead. Long live Drupal

May 10, 2016

What did we learn in Previous Lessons

What are Islandora CLAW Microservices

How Islandora CLAW Microservices Work

Modern Php

Silex is Symfony's little power child

So now what?

Let's talk about our Loved (or not so loved) CMS.

Let's fall in love again!

But first: breaking news

Our microservices will have their own home in github and a code name

"CRAYFISH" == LITTLE TINY LOBSTERS

Putting the pieces together

(new skills, Drupal 8)

Trivia

Q: Are you folks going to port all islandora 7.x modules to Drupal 8

A: N000...no

Q: i heard Drupal 8 is not production ready

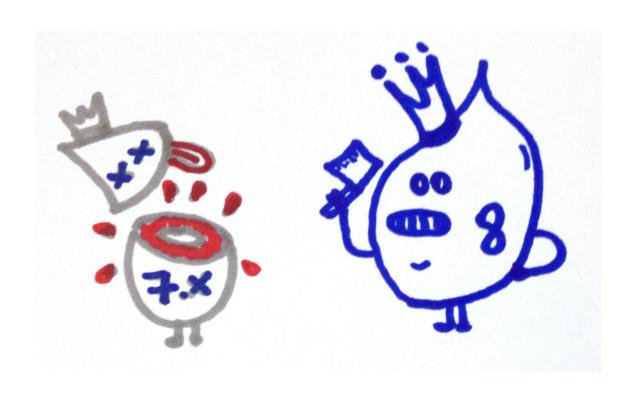
A: FALSE

Q: So is this just an upgrade?

A: NO

WE ARE STARTING FROM ZERO (ALMOST)

Sadly



Quick why

Drupal has a hard deprecation policy

- Drupal Community is not maintaining/further developing Drupal 7 Modules
- There are features missing in current Drupal we need
- Drupal 7 is procedural

Drupal 8 is modern PHP

- Drupal 8's core is Symfony
- Drupal 8 is composer ready
- Drupal 8 is PSR-2/PSR-4
- Drupal 8 uses YAML files
- Drupal 8 modules are Services, controllers, routes, twig templates...





Baby steps: Getting Drupal 8

As simple as it gets

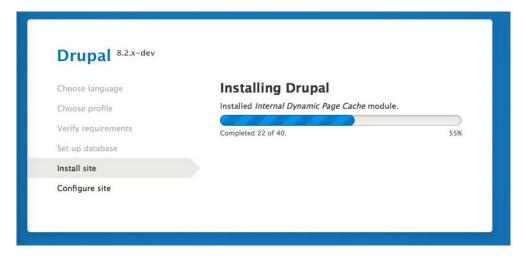
(more help: https://www.chenhuijing.com/blog/drupal-101-getting-started-with-d8/#=_)

You need:

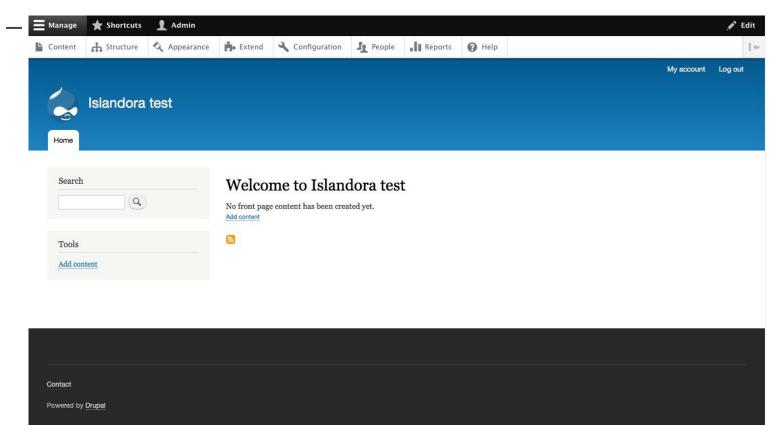
- Drush 7 or 8 (let's go for 8)
 HTTPS://www.iii.iaRot.com/articles/switchtng-drush-verstons
- A working L(W)AMP environment (a VM is fine)

\$ drush dl drupal-8 --select (You will have to choose one, i went for 8.2.x)

- Go to your new site URL
- Follow the instructions



And good looking too



Building a Drupal 8 module

(some help at: http://www.kalose.net/oss/drupal-8-create-simple-module/)

Look for 2016 tutorials!

One of the many anatomies of a Drupal 8 Module

Your module lives in drupalroot/modules/custom/

```
mymodule.module
 mymodule.info.yml
 mymodule.action.yml
 mymodule.menu.yml
mymodule.task.yml
 mymodule.permissions.yml
 src/
     Controller/
     Entity/
    Form/
     Plugin/
 templates/
 config/
```

YAML files. You can write modules without php

Wait! are we going to see every file and write all this stuff? There must be a simpler way (also known as "you are boring!")

Yes we can make it simple!!

Drupalconsole

As simple as it gets (again)

```
$ curl https://drupalconsole.com/installer -L -o drupal.phar
$ mv drupal.phar /usr/local/bin/drupal
$ chmod +x /usr/local/bin/drupal
$ drupal init --override
$ drupal check
$ drupal chain --file=~/.console/chain/quick-start.yml
$ drupal list
Now run:
$ drupal generate:entity:content
(Some input required)
Ready: you have a new content type entity module
```

```
islandoraclaw
  confia
   — schema
   fedora resource type.schema.yml
 - fedora resource.page.inc
 - islandoraclaw.info.yml
 - islandoraclaw.links.action.yml
 - islandoraclaw.links.menu.vml
 - islandoraclaw.links.task.yml
 · islandoraclaw.module
 - islandoraclaw.permissions.yml
 - src

    Controller

   FedoraResourceAddController.php
   Entity

    FedoraResource.php

    FedoraResourceType.php

      - FedoraResourceViewsData.php
   - FedoraResource.php
    - FedoraResourceAccessControlHandler.php

    FedoraResourceHtmlRouteProvider.php

    FedoraResourceInterface.php

    FedoraResourceListBuilder.php

    FedoraResourceTypeHtmlRouteProvider.php

    FedoraResourceTypeInterface.php

    FedoraResourceTypeListBuilder.php

   - Form

    FedoraResourceDeleteForm.php

        FedoraResourceForm.php
        FedoraResourceSettingsForm.php

    FedoraResourceTypeDeleteForm.php

    FedoraResourceTypeForm.php

   — Plugin
     FedoraEntitySearch.php
 templates
   - fedora-resource-content-add-list.html.twig
    fedora resource.html.twig
```

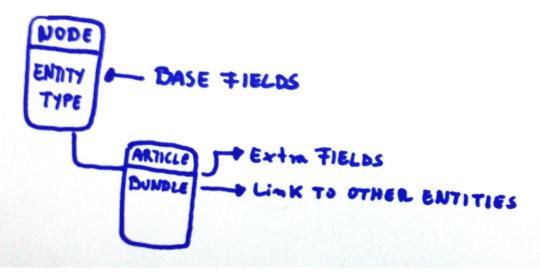
Islandora claw entity module

(and until now no-single line of php code written)

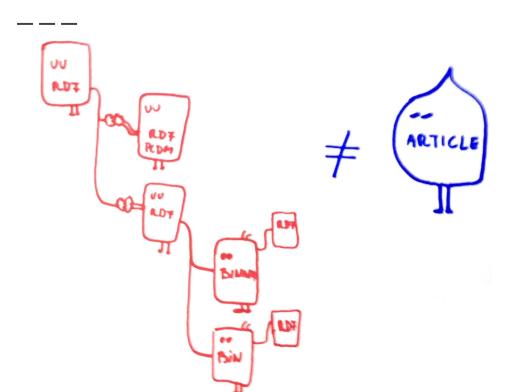
Before going into code: Entities in Drupal 8

Why an entities module for Islandoraclaw?

A: We have a plan (we kinda almost did it for Drupal 7).



But Fedora 4 has a different data model idea



Any Bundle derived from Node Entity type is a unity, means:

- Versionable as a whole
- We can't link to an individual field(image?)
- Makes sync complex
- What if we want to keep some stuff only in fedora 4?

THIS IS NOT HOW LDP/FEDORA4
RESOURCES/RDF WORK

Let's look at the code (and in the UI)

(we are not coming back to this slides)

Your home work

(hint: http://www.lohmeyer.rocks/blog/2015/10/20/0070-how-make-custom-guzzle-requests-drupal-8-modules)

- 1. LOOK FOR/CREATE PUBLIC FUNCTION POSTSAVE IN FEDORAENTITY
 - 2. SERIALIZE THE ENTITY TO JSON-LD OR RDF
 - 3. USE GUZZLE TO CALL RESOURCESERVICE MICROSERVICE (C'MON IT'S ONLY 20 LINES OF CODE!)