

# LESSONS LEARNED: DRUPAL 8 MODULE PORTING



CivicActions

## LESSONS LEARNED: D8 MODULE PORTING | OUTLINE

- **Introduction**
- **Where to start?**
- **Configuration Management**
- **Entities**
- **Plugin Systems**
- **Recent Exploration**
- **Best Practices**

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- Associate Director of Engineering, CivicActions
- Masters of Science, Information Systems Security
- Drupal 8 enthusiast

## LESSONS LEARNED: D8 MODULE PORTING | OUTLINE

- Password Policy, Password Strength, Taxonomy Menu
- Services, Multi Select, SecurePages
- Key, Encrypt, Field Encrypt, File Encrypt
- Two Factor Auth, Security Review
- Google Summer of Code: Google Authenticator Login, PubKey Encrypt (ownCloud)
- Composer Deploy (just began working on this)
- New sandbox project: Vault

# Porting modules is an incredible way to learn Drupal 8 and give back

**You can make an  
incredible D8 module port  
if you do it right**



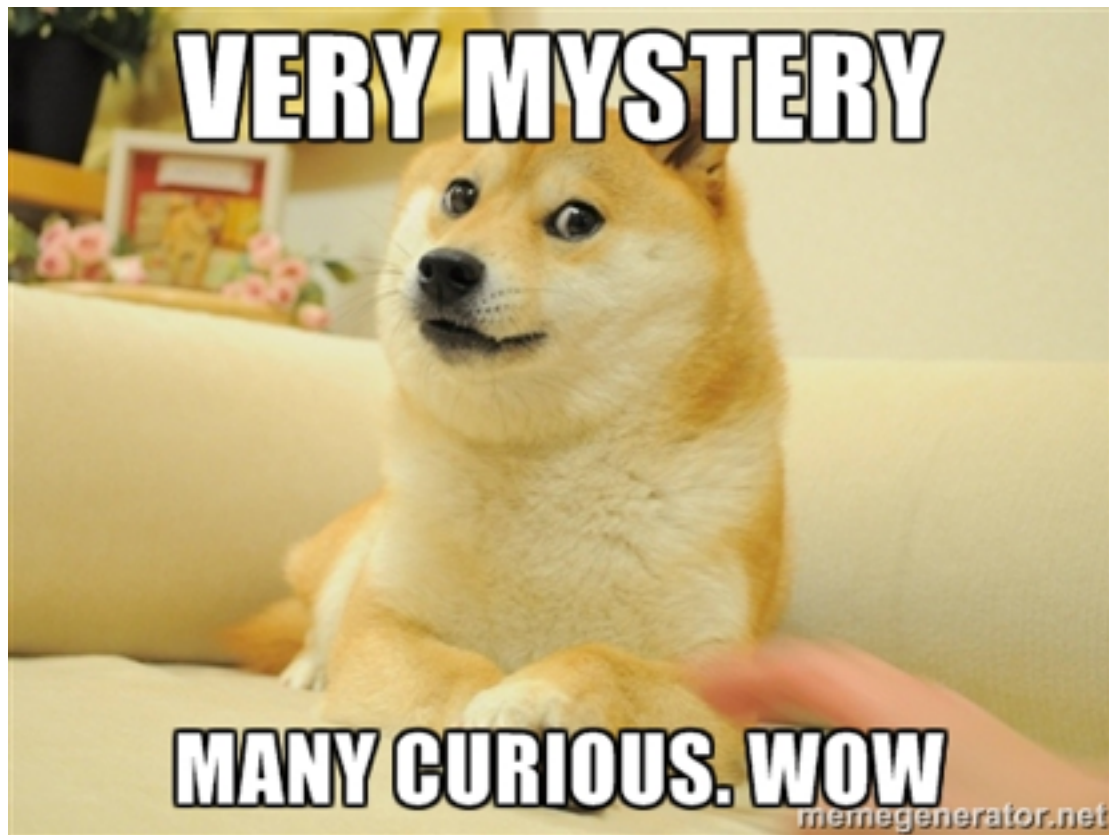
# Where do you start?



- 1. Start with new branch and no code**
2. Get familiar D8 architecture
3. Get familiar with project needs
4. Find a mentor
5. Plan an architecture and review it
6. Don't assume a port is needed

**D8 establishes new  
architectural paradigms you  
will want to use, your old  
code does not**

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**You can't make the right  
choices if you don't know  
what choices to make**

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**D8 has a host of new features that might make a potential port irrelevant (Menu Block, Webform)**

# Symfony and Object Oriented

- 1. Namespaces, interfaces, and conventions**
2. Containers and dependency injection
3. Controllers, services, and entity operations
4. Derivers

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# The Symfony Book



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## LESSONS LEARNED: D8 MODULE PORTING | SYMFONY AND OBJECT ORIENTED





1. Namespaces, interfaces, and conventions
2. Containers and dependency injection
3. Controllers, services, and entity operations
4. **Derivers**

# Configuration Management

- 1. No more features**
2. YAML format
3. Usage within projects



**Totes excited**

1. No more features
2. **YML format**
3. Usage within projects

## LESSONS LEARNED: D8 MODULE PORTING | CONFIGURATION MANAGEMENT

→ **Key values**

→ **Nested trees**

→ **Arrays and objects**

1. No more features
2. YML format
3. **Usage within projects**

## LESSONS LEARNED: D8 MODULE PORTING | CONFIGURATION MANAGEMENT

- **Static module settings (info file, services file)**
- **Default installation configuration (settings, config/install)**
- **Configuration entities or the project's entity schemas**
- **Any CMI moves into site wide configuration and overridable**



# Entities

# 1. Instances and metadata

## 2. Fields and Properties

## 3. Content Entities

## 4. Configuration Entities

## 5. Functions/operations

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- 2. Fields and Properties**
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2. Fields and Properties
3. **Content Entities**
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# Avoid creating database schemas, use entities

## LESSONS LEARNED: D8 MODULE PORTING | ENTITIES



1. Instances and metadata
2. Fields and Properties
3. Content Entities
4. **Configuration Entities**
5. Functions/operations

# Configuration:

## To export or not to export, that is the question



1. Instances and metadata
2. Fields and Properties
3. Content Entities
4. Configuration Entities
5. **Functions/operations**

# Plugin Systems

# Drupal 8 is not procedural

**1. Hooks as runtime overrides**

2. Purpose of plugin system

3. Event Subscribers

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- 2. Purpose of plugin system**
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1. Hooks as runtime overrides
2. Purpose of plugin system
3. **Event Subscribers**

# Recent Exploration

# 1. Composer based workflows

## 2. Caching (BigPipe)



## LESSONS LEARNED: D8 MODULE PORTING | RECENT EXPLORATION

- **Packagist**
- **Deployment workflows**
- **Dependencies in and outside of Drupal**

1. Composer based workflows
- 2. Caching (BigPipe)**

## LESSONS LEARNED: D8 MODULE PORTING | RECENT EXPLORATION



# Lessons Learned

# 1. Planning before doing

2. Community visibility and mentoring

3. Use of core

4. Automated testing

5. GitHub, Travis, DrupalTI

6. PHPStorm, Drupal Console, DrupalVM

## LESSONS LEARNED: D8 MODULE PORTING | LESSONS LEARNED



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- Pull requests help rapidly develop
- DrupalTI can bootstrap automated tests in TravisCI
- After alpha, deprecate Github, move to [drupal.org](https://drupal.org)

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- 6. PHPStorm, Drupal Console, DrupalVM**

- **PHPStorm fully supports OO and as code standards built in**
- **PHPStorm has xDebug integration**
- **Console for code generation**
- **DrupalVM has fully suite of tools for a sandbox (Drush, Console, Composer, etc)**

## LESSONS LEARNED: D8 MODULE PORTING | LESSONS LEARNED



# Thank you, Drupal North!

## Questions?