





D8 Migration Plugins

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Who are we?

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- ★ Ryan Weal (Ryan Weal)

Who are you?

- ★ Contrib module developers
- ★ Custom module developers
- ★ Migrate-curious
- ★ Oops, I'm in the wrong room!

D8 Migrate in Core Background

- ★ The Migrate and Drupal-to-Drupal Data Migration modules have been **rewritten** and moved into Drupal 8 core.
- ★ Their scope has been expanded to support migration of **content and configuration**.

D8 Migrate in Core Background

- ★ `core/modules/migrate`
- ★ `core/modules/migrate_drupal`

D8 Migrate in Core Status

- ★ Most of the D6->D8 migration work is done - some bugs remain.
- ★ The D7->D8 migration work is just getting started.
- ★ The migration UI is not {yet} in core.
- ★ Rollbacks and other advanced features not yet in core.

D8 Migrate in Core Status

- ★ Sprint with us tomorrow and Saturday.
- ★ #drupal-migrate
- ★ groups.drupal.org/imp

Extensible! (Duh)

- ★ The best part: D8 migration API is extensible.
- ★ Leverages standard D8 plugins.
- ★ Contrib/custom module authors will be able to provide migration support for the content and configuration data their module manages.

Kinds of Migrations

- ★ Variable Migrations (relatively easy)
- ★ Field migrations
- ★ Entity-type migrations (more complex)
- ★ Others (?)

Kinds of Migrations

- ★ ~~Variable Migrations (relatively easy)~~
- ★ Field migrations
- ★ ~~Entity type migrations (more complex)~~
- ★ ~~Others (?)~~

Field Module Migrations

- ★ When we want to migrate a field (configuration and content), we actually need to run several migrations...

Cck Field Migrations

Field

d6_field.yml

Field widget

d6_field_instance_widget_settings.yml

Field instance

d6_field_instance.yml

Field formatter

d6_field_formatter_settings.yml

Field values

d6_cck_field_values.yml

Field revision values

d6_field_revision.yml

Field Module Migrations

- ★ Luckily, most of the time we only have to worry about four of them...

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What does a migration configuration look like?

D6 FIELD.YML

- ★ source (get the data)
- ★ process (map fields and massage the data)
- ★ destination (save the data)

What does a migration configuration look like?

D6_FIELD.YML - SOURCE

field_name	type	global_settings	active	^	required	multiple	db_storage	module
field_quote	text	a:4:{s:15:"text_processing"...	1	1	0		1	text
field_url	link	a:6:{s:10:"attributes";a:3:{s...	1	0	0		1	link
field_skilllevel	text	a:4:{s:15:"text_processing"...	1	1	0		1	text
field_audience	text	a:4:{s:15:"text_processing"...	1	1	10		0	text
field_prerequisites	text	a:4:{s:15:"text_processing"...	1	1	0		1	text
field_date	date	a:7:{s:11:"granularity";a:5:{...	1	1	0		0	date

What does a migration configuration look like?

D6_FIELD.YML - PROCESS (MAP AND MESSAGE)

```
status: active
field_name: field_name
type:
  -
    plugin: static_map
    source:
      - type
      - widget_type
map:
```

What does a migration configuration
look like?

D6_FIELD.YML - DESTINATION

```
destination:  
  plugin: entity:field_storage_config
```

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Each of these migrations works the same way!

Task

- ★ Create a migration plugin for the D6 Iframe module.
- ★ <https://drupal.org/project/iframe>

Task

- ★ We're not going to demo porting the entire module.
- ★ We're going to migrate D6 iframe field configuration and data to D8 Link field configuration and data.

Drupal 6

Story content
type

iframe field

title
url

Drupal 8

Story content
type

link field

title
url



Task

- ★ All we have to do is add new configuration to existing migrations.
- ★ Why not modify configuration files directly?
- ★ Why not write a separate migration for it?

```
id: d6_field
label: Drupal 6 field configuration
migration_groups:
  - Drupal 6
source:
  plugin: d6_field
  constants:
    entity_type: node
    langcode: en
process:
  entity_type: 'constants/entity_type'
  status: active
  langcode: 'constants/langcode'
  field_name: field_name
type:
  -
    plugin: static_map
    source:
      - type
      - widget_type
map:
  number_integer:
    number: integer
    optionwidgets_select: list_integer
    optionwidgets_buttons: list_integer
    optionwidgets_onoff: boolean
  number_decimal:
    number: decimal
    optionwidgets_select: list_float
    optionwidgets_buttons: list_float
    optionwidgets_onoff: boolean
  number_float:
```

insert iframe field
type mapping
here

Cck Field Migrations

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Inform d6_field.yml about the iframe field type, d6_field_instance_widget_settings.yml about the iframe widget mapping, etc...

Plugins!

- ★ A recent core commit (<https://www.drupal.org/node/2448501>) makes it possible to define a new field migrations with a plugin.
- ★ The abstract `CckFieldPluginBase` class provides the basic functionality that we can expand on.
- ★ `CckFieldPluginBase` implements `MigrateCckFieldInterface`.

MigrateCckFieldInterface

- ★ *processField - add field type mappings
- ★ *processFieldInstance - add field instance mappings
- ★ *processFieldWidget - add field widget mappings
- ★ *processFieldFormatter - add field formatter mappings

MigrateCckFieldInterface (continued)

- ★ `getFieldFormatterMap` - defines the formatter map
- ★ `*getFieldWidgetMap` - defines the widget map
- ★ `processCckFieldValues` - defines new process plugin

* implemented by abstract CckFieldPluginBase class

The Plan

- ★ Subclass CckFieldPluginBase
- ★ Write a custom process plugin to massage iframe field data into Link field data.

Code Walkthrough

- ★ <https://www.drupal.org/sandbox/benjy/2422307>

Future Tasks

- ★ Port the rest of the module?
- ★ Create an iframe field formatter for Link field?



What did you think?

EVALUATE THIS SESSION -
[EVENTS.DRUPAL.ORG/NODE/1011](https://events.drupal.org/node/1011)

THANK YOU!