

# **Getting (Your Data) into Drupal 8**

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# Drupal 6 -> 7

# Upgrade Path (Core)

- Replace files in-place, run updates
- Legacy data carried into new site

# Migration (contrib)

- Provided by `migrate` and `migrate_d2d` modules
- Start from scratch, import data
- Provide base classes to extend

# Configuring a Migration

```
// my_migration_module.migrate.inc

function my_migration_module_migrate_api() {
  return array(
    'api' => 2,
    'groups' => array(
      'beer' => array(
        'title' => t('Beer Imports')
      ),
      'wine' => array(
        'title' => t('Wine Imports')
      ),
    )
  )
}
```

# Configuring a Migration

```
// my_migration_module.migrate.inc

...

'migrations' => array(
  'BeerTerm' => array(
    'class_name' => 'BeerTermMigration',
    'group_name' => 'beer',
  ),
  'BeerUser' => array(
    'class_name' => 'BeerUserMigration',
    'group_name' => 'beer',
  ),
)
```

# Adding a Migration

```
class BeerTermMigration extends BasicExampleMigration {  
  ...  
  
  $this  
    ->addFieldMapping('parent_name', 'style_parent')  
    ->description(t('The incoming style_parent field is the name of the term parent'));  
  
  $this->addFieldMapping(NULL, 'region')  
    ->description('Will a field be added to the vocabulary for this?')  
    ->issueGroup(t('Client Issues'))  
    ->issuePriority(MigrateFieldMapping::ISSUE_PRIORITY_MEDIUM)  
    ->issueNumber(770064);  
  
  ...  
}
```



# Migrations in Drupal 7

- A lot of verbose PHP code
- Nested arrays
- Descriptive, but long method names

# Drupal 8

# D8 Migrate

- No upgrade path.
- `migrate`, `migrate_drupal`, `migrate_drupal_ui` modules in core.
- Additional modules in contrib.
- PHP classes, annotations, YAML

► CORE

▼ CORE (EXPERIMENTAL)

- BigPipe** ► Sends pages using the BigPipe technique that allows browsers to show them much faster.
- Content Moderation** ► Provides moderation states for content
- Datetime Range** ► Provides the ability to store end dates.
- Inline Form Errors** ► Adds WCAG 2.0 accessibility compliance for web form errors, but some functionality might not work.
- Migrate** ► Handles migrations
- Migrate Drupal** ► Contains migrations from older Drupal versions.
- Migrate Drupal UI** ► Provides a user interface for migrating from older Drupal versions.

# Experimental Modules

*Like other features, new experimental modules can only be added in minor releases, but unlike other features, they may change between patch releases while they are still experimental, **including API changes.***

– <https://www.drupal.org/core/experimental>

# Building a Source Database

# **Sculpin => MySQL**

- Data extracted from YAML.
- Imported into MySQL database.
- Tables
  - venues
  - events
  - speakers
  - talks

# Venues

venues:

sift:

name: 'Sift Digital'

website: <http://www.siftdigital.com/>

proctors:

name: 'Proctor & Stevenson'

website: <http://www.proctors.co.uk/>



<input type="checkbox"/> Modify	<b>id</b>	<b>name</b>	<b>website</b>	<b>old_id</b>
<input type="checkbox"/> edit	28	Sift Digital	<a href="http://www.siftdigital.com/">http://www.siftdigital.com/</a>	sift
<input type="checkbox"/> edit	29	Proctor & Stevenson	<a href="http://www.proctors.co.uk/">http://www.proctors.co.uk/</a>	proctors
<input type="checkbox"/> edit	30	The Elephant	<a href="http://www.theelephantbristol.co.uk/">http://www.theelephantbristol.co.uk/</a>	the_elephant
<input type="checkbox"/> edit	31	Llandoger Trow	<i>NULL</i>	llandoger
<input type="checkbox"/> edit	32	Mothers Ruin	<a href="http://mothersruinbristol.weebly.com/">http://mothersruinbristol.weebly.com/</a>	mothers_ruin
<input type="checkbox"/> edit	33	The Urban Wood	<a href="http://www.theurbanwood.com/">http://www.theurbanwood.com/</a>	urban_wood
<input type="checkbox"/> edit	34	Golden Guinea	<a href="http://www.thegoldenguinea.co.uk/">http://www.thegoldenguinea.co.uk/</a>	golden_guinea
<input type="checkbox"/> edit	35	Small Bar	<a href="http://www.smallbarbristol.com/">http://www.smallbarbristol.com/</a>	small_bar
<input type="checkbox"/> edit	36	Temple Studios	<a href="http://www.templestudiosbristol.co.uk/">http://www.templestudiosbristol.co.uk/</a>	temple_studios

# Events

events:

- title: 'First Meetup!'  
date: '2011-04-19'  
link: 'https://groups.drupal.org/node/141239'  
location: sift
- title: 'South West User Group May Meetup'  
date: '2011-05-25'  
link: 'https://groups.drupal.org/node/147324'  
location: proctors

<input type="checkbox"/> Modify	id	name	date	link	venue_id
<input type="checkbox"/> edit	63	First Meetup!	1303171200	<a href="https://groups.drupal.org/node/141239">https://groups.drupal.org/node/141239</a>	28
<input type="checkbox"/> edit	64	South West User Group May Meetup	1306281600	<a href="https://groups.drupal.org/node/147324">https://groups.drupal.org/node/147324</a>	29
<input type="checkbox"/> edit	65	Bristol & South West September Meetup	1315958400	<a href="https://groups.drupal.org/node/173879">https://groups.drupal.org/node/173879</a>	30
<input type="checkbox"/> edit	66	October Meetup	1317772800	<a href="https://groups.drupal.org/node/176284">https://groups.drupal.org/node/176284</a>	30
<input type="checkbox"/> edit	67	November Meetup	1320192000	<a href="https://groups.drupal.org/node/182259">https://groups.drupal.org/node/182259</a>	30
<input type="checkbox"/> edit	68	Christmas Meal	1323216000	<a href="https://groups.drupal.org/node/193243">https://groups.drupal.org/node/193243</a>	30
<input type="checkbox"/> edit	69	January Meetup	1326240000	<a href="https://groups.drupal.org/node/199703">https://groups.drupal.org/node/199703</a>	30
<input type="checkbox"/> edit	70	February Meetup	1328054400	<a href="https://groups.drupal.org/node/206338">https://groups.drupal.org/node/206338</a>	30
<input type="checkbox"/> edit	71	March Meetup	1331078400	<a href="https://groups.drupal.org/node/210443">https://groups.drupal.org/node/210443</a>	30
<input type="checkbox"/> edit	72	April Meetup	1333497600	<a href="https://groups.drupal.org/node/220599">https://groups.drupal.org/node/220599</a>	30
<input type="checkbox"/> edit	73	May Meetup	1335916800	<a href="https://groups.drupal.org/node/227113">https://groups.drupal.org/node/227113</a>	30

# Adding the Source Database

```
// settings.local.php
```

```
$databases['default']['default'] = [  
  'driver' => 'mysql',  
  'host' => 'localhost',  
  'database' => 'drupal',  
  'username' => 'drupal',  
  'password' => 'drupal',  
];
```

```
$databases['migrate']['default'] = [  
  'driver' => 'mysql',  
  'host' => 'localhost',  
  'database' => 'migrate',  
  'username' => 'migrate',  
  'password' => 'migrate',  
];
```

# Building a Custom Migration

# Drupal 8 Module Structure

```
|— config
|   └─ install
|       └─ migrate_plus.migration.event_node.yml
|       └─ migrate_plus.migration.venue_term.yml
|       └─ migrate_plus.migration_group.drupalbristol.yml
|— drupalbristol_migrate.info.yml
|— drupalbristol_migrate.install
└─ src
    └─ Plugin
        └─ migrate
            └─ source
                └─ EventNode.php
                └─ SpeakerNode.php
                └─ TalkNode.php
                └─ VenueTerm.php
```

# drupalbristol\_migrate.info.yml

```
name: 'Drupal Bristol Migrate'  
description: 'Migrate content from Sculpin.'  
type: module  
core: '8.x'  
package: 'Drupal Bristol'  
dependencies:  
  - drupal:migrate  
  - migrate_plus:migrate_plus  
  - migrate_tools:migrate_tools
```

# Adding a Migration Group

```
# config/install/migrate_plus.migration_group.drupalbristol.yml
```

```
id: drupalbristol
```

```
label: 'Drupal Bristol'
```



# Adding a Migration Source (1)

```
// src/Plugin/migrate/source/VenueTerm.php

namespace Drupal\drupalbristol_migrate\Plugin\migrate\source;

use Drupal\migrate\Plugin\migrate\source\SqlBase;

/**
 * Source plugin for speakers.
 *
 * @MigrateSource(id="venue_term")
 */
class VenueTerm extends SqlBase {
}
```

# Adding a Migration Source (2)

...

```
public function query() {  
    return $this  
        ->select('venues', 'v')  
        ->fields('v', ['id', 'name', 'website']);  
}
```

# Adding a Migration Source (3)

...

```
public function getIds() {  
    return [  
        'id' => [  
            'type' => 'integer',  
            'alias' => 'v'  
        ]  
    ];  
}
```

# Adding a Migration Source (4)

...

```
public function fields() {  
    return [  
        'id' => $this->t('ID of the venue'),  
        'name' => $this->t('Name of the venue'),  
    ];  
}
```

# Adding a Migration Source (5)

```
public function prepareRow(Row $row) {  
    if (parent::prepareRow($row) === FALSE) {  
        return FALSE;  
    }  
  
    $speakerIds = $row->getSourceProperty('speaker_ids');  
  
    // Explode comma separated speaker IDs into an array.  
    $row->setSourceProperty('speaker_ids', explode(',', $speakerIds));  
}
```

# Adding a Migration

```
# config/install/migrate_plus.migration.venue_term.yml
```

```
id: venue_term
```

```
label: 'Venue terms'
```

```
migration_group: drupalbristol
```

```
source:
```

```
  plugin: venue_term
```

```
destination:
```

```
  plugin: entity:taxonomy_term
```

```
process:
```

```
  name: name
```

```
  vid:
```

```
    plugin: default_value
```

```
    default_value: venues
```

```
  field_website/uri: website
```

- **Comment types**  
Manage form and displays settings of comments.

---

- **Contact forms**  
Create and manage contact forms.

---

- **Content types**  
Create and manage fields, forms, and display settings for your content.

---

- **Display modes**  
Configure what displays are available for your content and forms.

---

- **Menus**  
Manage menus and menu links.

---

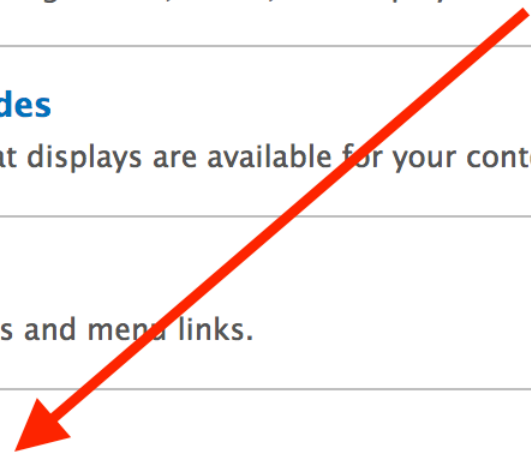
- **Migrations**  
Manage migration processes.

---

- **Taxonomy**  
Manage tagging, categorization, and classification of your content.

---

- **Views**  
Manage customized lists of content.



# Migrations ☆

Home » Administration » Structure

+ Add migration group

MIGRATION GROUP	MACHINE NAME	DESCRIPTION	SOURCE TYPE	OPERATIONS
Drupal Bristol	drupalbristol			List migrations ▾





## Migrations

[Home](#) » [Administration](#) » [Structure](#) » [Migrations](#) » [Edit migration group](#)

MIGRATION	MACHINE NAME	STATUS	TOTAL	IMPORTED	UNPROCESSED	MESSAGES	LAST IMPORTED
	event_node	Idle	62	0	62	0	
	speaker_node	Idle	1	0	1	0	
	talk_node	Idle	1	0	1	0	
	venue_term	Idle	9	0	9	0	

# Source

- View
- Edit
- Messages
- Delete

- Overview
- Source**
- Process
- Destination

Home » Administration » Structure » Migrations » Edit migration group » Migrations » Migration overview

## SOURCE

### Query

```
SELECT v.id AS id, v.name AS name, v.website AS website  
FROM  
{venues} v
```

MACHINE NAME	DESCRIPTION
id	ID of the venue
name	Name of the venue

These are the fields available from the source of this migration task. The machine names listed here may be used as sources in the process pipeline.

# Running a Migration

# Running with Drush (1)

```
drush migrate-status
```

```
drush ms
```

# Running with Drush (2)

```
drush migrate-import venue_term
```

```
drush migrate-import --group=drupalbristol
```

```
drush mi --all
```

# Running with Drush (3)

```
drush migrate-rollback --group=drupalbristol
```

```
drush mr --group=drupalbristol
```

# Running with Drush (4)

```
drush migrate-stop (mst)
```

```
drush migrate-reset-status (mrs)
```

# Demo



# Take Aways

- [https://github.com/opdavies/drupalbristol\\_migrate](https://github.com/opdavies/drupalbristol_migrate)
- Similar but different
- Migrate docs are excellent

# Questions?