

What we've learned about (not) using Migrate

who's this?

Stefan Borchert

- Addicted to Drupal since 2005
- Co-founder of undpaul
- The one who builds the search and migration in nearly all of our projects



Stefan Borchert

Migrate

- Import data from wherever into new site
- Sometimes done using automatic update
- Structure of data often changes during upgrades
- Custom migrations necessary

example of old structure

Title: Allgemein

DKR Ingredient

	Anzahl	Maßeinheit	Zutat	Eigenschaften	Variante	Confidence
+	2	Kilogramm + Create unit display name	Gemüse + Create ingredient	gemischt + Create attribute <small>Please enter here attributes like minced, large or green. You can add more then one attribute.</small>	9594270016	100 %
+		+ Create unit display name	Salz + Create ingredient	+ Create attribute <small>Please enter here attributes like minced, large or green. You can add more then one attribute.</small>	9594290018	70 %
+		+ Create unit display name	Pfeffer + Create ingredient	+ Create attribute <small>Please enter here attributes like minced, large or green. You can add more then one attribute.</small>	9594320096	100 %
+	1	Kilogramm + Create unit display name	Brot + Create ingredient	+ Create attribute <small>Please enter here attributes like minced, large or green. You can add more then one attribute.</small>	9594350096	85 %
+	1	+ Create unit display name	Knoblauchzehe + Create ingredient	+ Create attribute <small>Please enter here attributes like minced, large or green. You can add more then one attribute.</small>	9594360012	100 %
		+ Create unit display name	+ Create ingredient	+ Create attribute <small>Please enter here attributes like minced, large or green. You can add more then one attribute.</small>		

example of new structure

ZUTATEN

⊕	Type: Zutat				Entfernen
Menge	Zutat	Maßeinheit	Attribute		
2	Gemüse (28751) <input type="radio"/>	Kilogramm (1016) <input type="radio"/>	gemischt (2156) <input type="radio"/>		

⊕	Type: Zutat				Entfernen
Menge	Zutat	Maßeinheit	Attribute		
<input type="text"/>	Salz (24421) <input type="radio"/>	<input type="text"/> <input type="radio"/>	<input type="text"/> <input type="radio"/>		

⊕	Type: Zutat				Entfernen
Menge	Zutat	Maßeinheit	Attribute		
<input type="text"/>	Pfeffer (24426) <input type="radio"/>	<input type="text"/> <input type="radio"/>	<input type="text"/> <input type="radio"/>		

⊕	Type: Zutat				Entfernen
Menge	Zutat	Maßeinheit	Attribute		
1	Brot (26956) <input type="radio"/>	Kilogramm (1016) <input type="radio"/>	<input type="text"/> <input type="radio"/>		

⊕	Type: Zutat				Entfernen
Menge	Zutat	Maßeinheit	Attribute		
1	Knoblauchzehe (24706) <input type="radio"/>	<input type="text"/> <input type="radio"/>	<input type="text"/> <input type="radio"/>		

nested structure

Recipe (*content type*)

-> includes recipe steps (*paragraphs*)

-> includes ingredient lists (*paragraphs*)

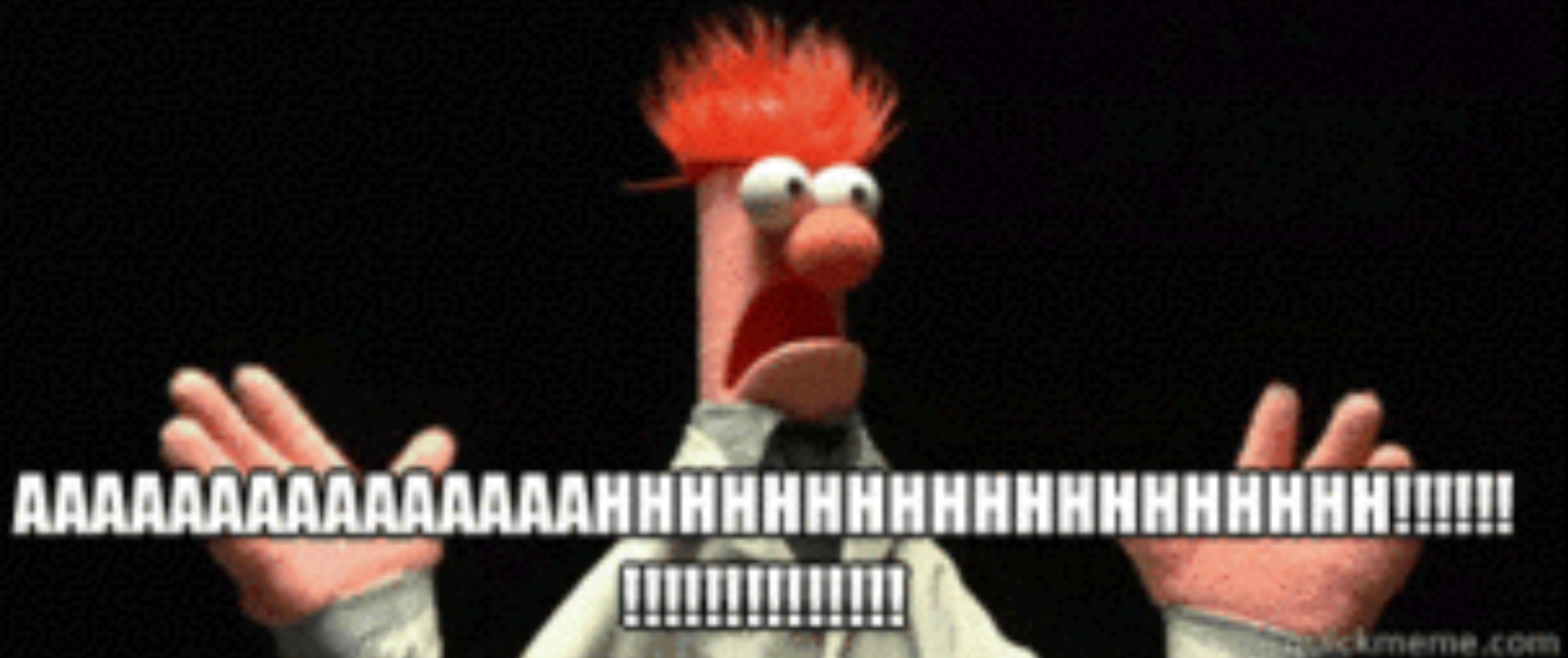
-> includes ingredient (*paragraphs*)

migrating the data

- 1.000 entities per minute
- Feels rather fast
- 1.100.000 items total
- ... "fast" is relative
- 1.100 min ... ~ 18,5 hours

now what?

TIME TO FREAKOUT



now what?

**DON'T
PANIC**



image credits: <http://blueseatblogs.com/>

reduced migrations

```
id: node__recipe__base
label: Base migration for recipe nodes
migration_group: dkr
destination:
  plugin: entity:node
source: =
process:
  type: 'constants/bundle'
  title: title
  status: status
  langcode: language
  created: created
  changed: changed
  promote: promote
  sticky: sticky
  uid:
    -
      plugin: migration
      migration: user_accounts
      no_stub: true
      source: uid
    -
      plugin: default_value
      default_value: 1
  field_recipe_servings: servings
  field_recipe_difficulty: difficulty
  field_recipe_price: price_category
  'field_recipe_note/format': 'constants/format'
  'field_recipe_note/value': note
  field_recipe_bread_units: bread_units
migration_dependencies: =
```

```
id: node__recipe__fields_simple
label: Add values of simple fields to recipe nodes
migration_group: dkr
destination:
  plugin: entity:node
source: =
process:
  nid:
    plugin: migration
    migration: node__recipe__base
    source: nid
    no_stub: true
  field_recipe_baking_time: bake_time
  field_recipe_cooling_time: cool_time
  field_recipe_prep_time: preparation_time
  field_recipe_cooking_time: cooking_time
  field_recipe_kcal: kcal
  field_recipe_kj: kj
  field_recipe_carbs_g: carbohydrates
  field_recipe_protein: protein
  field_recipe_fat: fat
  field_recipe_approved: approved
  field_recipe_legacy_cat_best: category_push
  field_recipe_legacy_child_best: child_push
  field_recipe_top_recipe: top_recipe
migration_dependencies: =
```

custom processing

```
/**
 * {@inheritdoc}
 */
public function process($limit = 1, $options = []) {
    $query = $this->getRemainingItemsQuery();
    if ($limit > 0) {
        // Limit number of items to process.
        $query->range(0, $limit);
    }

    $this->insertIgnore('paragraph__field_ingredients')
        ->fields(['entity_id', 'revision_id', 'field_ingredients'])
        ->from($query)
        ->execute();
    $this->insertIgnore('paragraph_revision__field_ingredients')
        ->fields(['entity_id', 'revision_id', 'field_ingredients'])
        ->from($query)
        ->execute();

    return ($limit > 0) ? $limit : 1;
}

/**
 * {@inheritdoc}
 */
public function cleanup($options = []) {
    $database = \Drupal::database();
    $database->query('UPDATE IGNORE {paragraph__field_ingredients}
        . SET deleted = 0, langcode = :langcode', [':langcode' => $options['langcode']]);
    $database->query('UPDATE IGNORE {paragraph_revision__field_ingredients}
        . SET deleted = 0, langcode = :langcode', [':langcode' => $options['langcode']]);

    return TRUE;
}
```

- Collects necessary data
- Uses custom mapping tables
- Dump into field table
- Multiple times faster than migration
- Disadvantages?
 - paragraph parent
 - file_usage
 - taxonomy_index

summary

- Migrate is great! Really
- For data structures with lots of migration-references consider custom scripts
- Always run (final) tests with complete data set
- Consider buying a specialized computer for migration tasks



image credits: @ollyginal

feedback

- Questions?
- Your stories?

- Twitter: #drupalmountaincamp
- <https://www.undpaul.de/>