



Mastering Drupal 8's Twig

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Drupal™



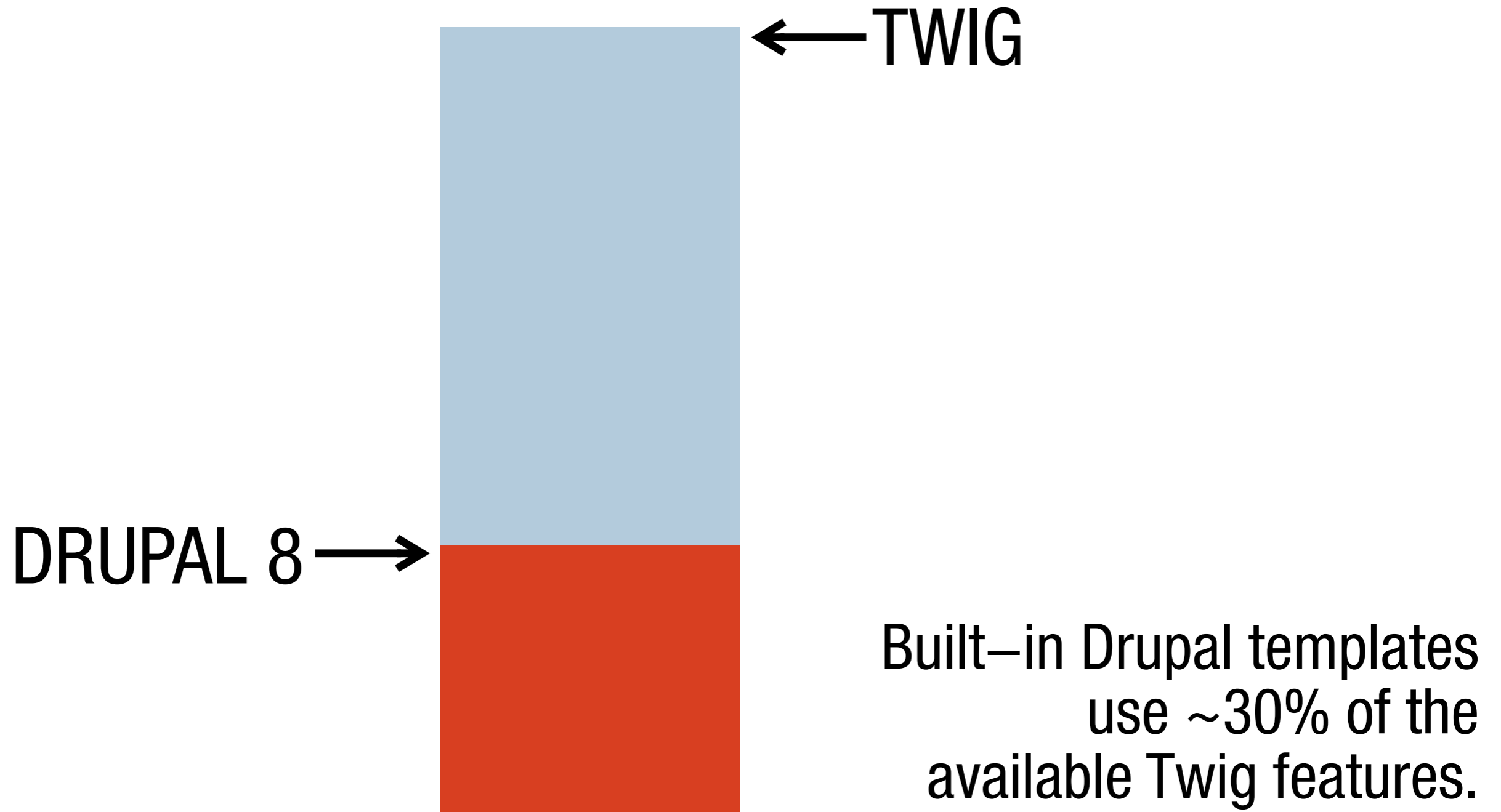
Twig

<http://twig.sensiolabs.org/>

Twig for Template Designers

<https://twig.symfony.com/doc/1.x/templates.html>

Drupal 8.4.2 has Twig 1.32.0



Why Twig?



Modern Syntax


Drupal 7: `<?php print variable; ?>`

Twig: `{{ variable }}`



Where's the performance hit?

```
<?php if ($is_true): ?> <b>TRUE!</b> <?php endif; ?>
```



PHP parser/compiler has to context switch

Twig
compiles templates
into PHP classes



Twig syntax

`{{ variable }}`

`{# comment #}`

`{% command %}`



Variable drilling

```
{{ variable.thing }}
```

```
{{ page.primary_menu }}
```

```
{{ comment.owner.anonymous }}
```

This is how Twig resolves complex variables

```
<nav>{{ content.links }}</nav>
```

```
$content['links']
```

```
$content->links
```

```
$content->links()
```

```
$content->getLinks()
```

```
$content->isLinks()
```

```
null
```



Twig tries all these alternatives and uses the first one that exists.

Some Drupal variables names are special

core/themes/bartik/bartik.theme

```
$variables['site_slogan']['#markup'] = ...
```

```
{{ site_slogan.#markup }}
```

← This doesn't work because of the # character

```
{{ site_slogan['#markup'] }}
```

```
{{ attribute(site_slogan, '#markup') }}
```

Improving Twig performance

- Twig provides a PHP extension.
- This extension only implements the variable resolving logic.
- See twig.sensiolabs.org/doc/installation.html#installing-the-c-extension

EXPECTED
PERFORMANCE
INCREASE

15%

Twig filters

(added by Twig)

* `{{ variable|escape('html') }}`

* `{{ variable|e('html') }}`

* Also accepts: 'js', 'css', 'url', 'html_attr'

* `{{ variable|raw }}`

* collections: |keys |first |last |length

* `{{ variable|date('Y-m-d') }}`

`{{ 'now'|date(timezone=user.timezone) }}`

*Drupal
auto-escapes
by default!*

<http://twig.sensiolabs.org/doc/filters/index.html>

Twig filters

(added by Drupal)

- * `{{ variable|safe_join(', ') }}`
- * `{{ variable|without('something') }}`
- * `{{ variable|clean_class }}`
`{{ variable|clean_id }}`
- * `{{ variable|format_date('medium') }}`
- * `{{ 'Some string'|t }}`

<https://www.drupal.org/node/2357633>

Translation

- * `{{ 'a string' |t }}`
`{{ 'a string' |trans }}`
- * `{% trans %}`
Submitted by `{{ author_name }}`
on `{{ date }}`
`{% endtrans %}`

Attribute object

- * `{{ attributes.addClass('foo') }}`
- * `{{ attributes.removeClass('bar') }}`
- * `{% if attributes.hasClass('thing') %}`
- * `{{ attributes.setAttribute('id', 'thing') }}`
- * `{{ attributes.removeAttribute('id') }}`

[https://api.drupal.org/api/drupal/core!lib!Drupal!Core!
Template!Attribute.php/class/Attribute/8](https://api.drupal.org/api/drupal/core!lib!Drupal!Core!Template!Attribute.php/class/Attribute/8)

Control directives

* `{% if thing %}`

`{% endif %}`

* `{% for user in users %}`

`...`

`{% else %}`

`There is no spoon.`

`{% endfor %}`

* `{% for item in collection if item.published %}`

Control directives

```
{% for row in images|batch(3) %}  
  <div class="row">  
    {% for image in row %}  
      <div class="image">  
        <img src="" alt="" >  
      </div>  
    {% endfor %}  
  </div>  
{% endfor %}
```

Extends

bartik/templates/region--header.html.twig:

```
{% extends "region.html.twig" %}
```

```
{% set attributes = attributes.addClass('clearfix') %}
```

classy/templates/layout/region.html.twig:

```
{%
```

```
  set classes = [
```

```
    'region',
```

```
    'region-' ~ region|clean_class,
```

```
  ]
```

```
%}
```

```
<div{{ attributes.addClass(classes) }}>
```

```
  {{ content }}
```

```
</div>
```

Extends

classy/templates/block/block--system-branding-block.html.twig:

```
{% extends "block.html.twig" %}
{% block content %}
    <a href="{{ path('<front>') }}" rel="home">
        
    </a>
{% endblock %}
```

classy/templates/block/block.html.twig:

```
<div{{ attributes.addClass(classes) }}>
    <h2{{ title_attributes }}>{{ label }}</h2>
    {% block content %}
        {{ content }}
    {% endblock %}
</div>
```

Include

- * `{% include '@my_theme/grid_3.twig' %}`
- * `{% include '@my_theme/grid_3.twig' with {
 var1: "a new value",
 var2: anotherVar,
} only
%}`

Embed

```
* {% embed '@my_theme/grid_3.twig' %}  
  {% block column1 %}  
    ...block contents...  
  {% endblock %}  
{% endembed %}
```

Debugging

- * In sites/default, copy `default.services.yml` to `services.yml`.
- * Look for these lines and change "false" to "true".
`twig.config:`
`debug: false`

<https://www.drupal.org/node/1906392>

Libraries

(adding CSS & JS)

my_theme.libraries.yml:

breadcrumb:

css:

component:

components/breadcrumb/breadcrumb.css: {}

dependencies:

- my_theme/visually-hidden

<https://www.drupal.org/node/2216195>

What else?

Drupal 8 Theme Guide:
www.drupal.org/theme-guide/8



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