



Display suite

“The future of your display”

Bram “aspilicious” Goffings

AMPLEXOR



About me



Bram Goffings

Drupal developer @ Nascom

Twitter: @aspilicious

D.o: @aspilicious

Co-maintainer Display Suite

Play a mean game of table tennis



What is part of this session?

- Short introduction to Display Suite
- Demo
- Display Suite in D8
- How did we manage to port Display Suite
- Which API's did we use

What is NOT part of this session?

- 40 minute Display Suite tutorial for site builders
- Best practices

Display Suite?



Display Suite!

- Display Suite allows you to take full control over how your content is displayed using a drag and drop interface.

Display Suite!

- Display Suite allows you to take full control over how your content is displayed using a drag and drop interface.
- Allow developers to easily add new elements to their entity displays

Display Suite!

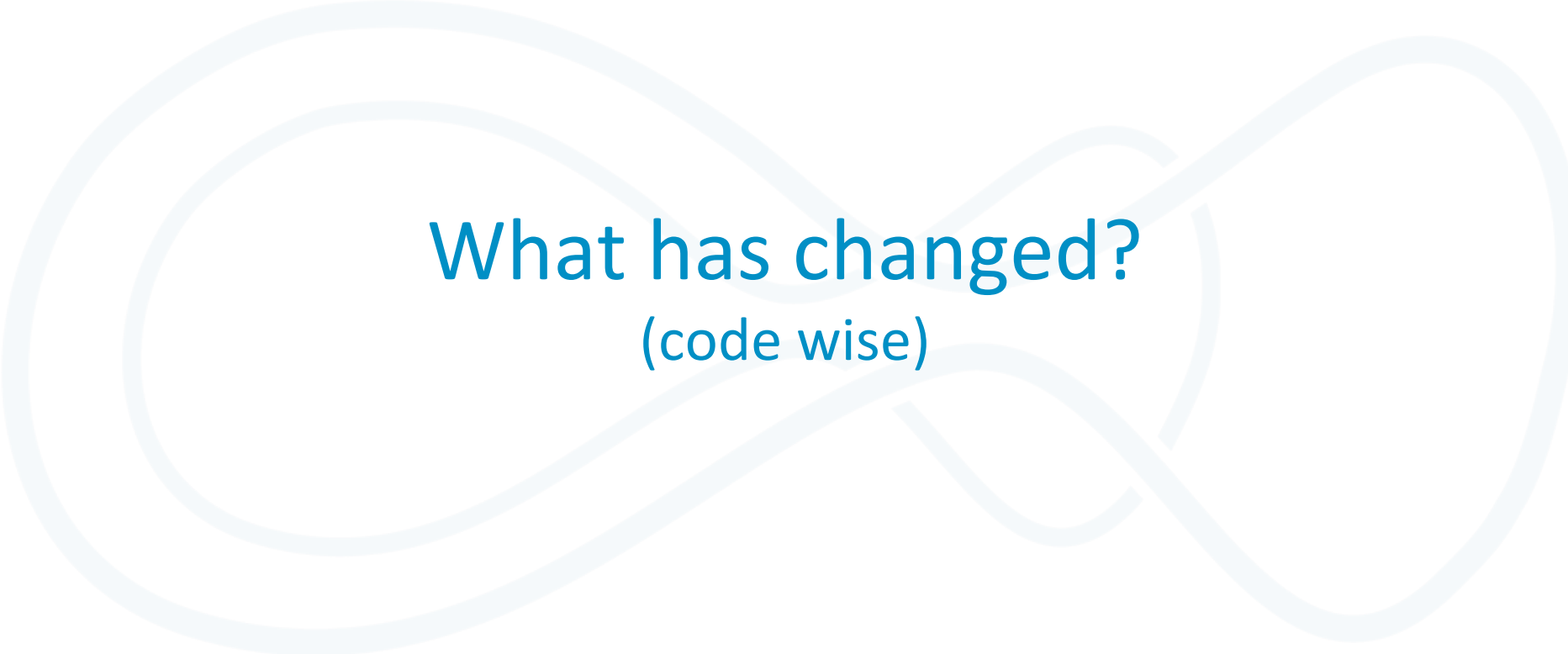
- Display Suite allows you to take full control over how your content is displayed using a drag and drop interface.
- Allow developers to easily add new elements to their entity displays
- Take full control over the generated html on entity AND field level

Display Suite!

- Display Suite allows you to take full control over how your content is displayed using a drag and drop interface.
- Allow developers to easily add new elements to their entity displays
- Take full control over the generated html on entity AND field level. Without writing custom templates.



Demo



What has changed?
(code wise)

Configuration management (cmi)

- Display Suite settings are stored in configuration files
- Custom fields made in the UI are saved in configuration files
- Custom field and region classes are saved in configuration files
- ...

Configuration management (cmi)

Example 1: ds.settings.yml

```
# ds.config.yml  
field_template: '0'  
ft-default: theme_field  
ft-kill-colon: '0'
```

Configuration management (cmi)

Example 2: fields made in the UI

```
# ds.field.test.yml
```

```
properties:
```

```
  code:
```

```
    value: test
```

```
    format: ds_code
```

```
    use_token: 0
```

```
field: test
```

```
label: test
```

```
ui_limit: "
```

```
entities:
```

```
  node: node
```

```
field_type: code_field
```

Configuration management (cmi)

- Configuration schema's added for each config file

Configuration management (cmi)

- Configuration schema's added for each config file
- Helps the multilingual initiative

Configuration management (cmi)


Example: config.schema.yml

```
ds.settings:  
  type: mapping  
  label: 'Display Suite settings'  
  mapping:  
    disable:  
      type: boolean  
      label: 'Disable Display Suite attaching fields'  
    additional_settings__active_tab:  
      label: 'Active tab'  
    field_template:  
      type: boolean  
      label: 'Uses field templates'  
    ft-default:  
      label: 'The default template'  
    ft-kill-colon:  
      type: boolean  
      label: 'Kill the label colon'
```

Configuration management (cmi)

Example: config.schema.yml

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ds.settings:  
  type: mapping  
  label: 'Display Suite settings'  
  mapping:  
    disable:  
      type: boolean  
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      label: 'Active tab'  
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      type: boolean  
      label: 'Uses field templates'  
  ft-default:  
    label: 'The default template'  
  ft-kill-colon:  
    type: boolean  
    label: 'Kill the label colon'
```



Configuration management (cmi)

[Home](#) » [Administration](#) » [Reports](#) » [Configuration inspector](#)

Raw configuration data for *ds.settings* ⚙

☒ Uses field templates

The default template

theme_field

☐ Kill the label colon

https://drupal.org/project/config_inspector

Configuration management (cmi)



Gains for Display Suite?

Configuration management (cmi)

Everything is exportable!

An abstract background graphic consisting of several thick, light blue, wavy lines that flow across the slide, creating a sense of movement and depth.

Configuration management (cmi)

Everything is exportable!

Configuration is translatable!

Configuration management (cmi)

Everything is exportable!

Configuration is translatable!

Configuration schema's add useful metadata!

Twig

Drupal 8 uses twig!



Twig

Drupal 8 uses twig!



Display Suite uses twig!



Twig

Display Suite one-col layout

```
{#  
/**  
 * @file  
 * Display Suite 1 column template.  
 *  
 * Available variables:  
 * - ds_content_wrapper: @todo  
 * - attributes: @todo  
 * - title_suffix: @todo  
 * - ds_content: @todo  
 */  
#}  
<{{ ds_content_wrapper }} class="ds-1col {{ attributes.class }}" clearfix" {{ attributes }} >  
  
{% if title_suffix.contextual_links is not null %}  
  {{ title_suffix.contextual_links }}  
{% endif %}  
  
  {{ ds_content }}  
</{{ ds_content_wrapper }}>  
  
{% if drupal_render_children is not null %}  
  {{ drupal_render_children }}  
{% endif %}
```



Twig

Display Suite one-col layout

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{% if drupal_render_children is not null %}  
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```

← comments



Twig

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```

```
{% if title_suffix.contextual_links is not null %}  
  {{ title_suffix.contextual_links }}  
{% endif %}
```

← Contextual links support

```
{{ ds_content }}  
</{{ ds_content_wrapper }}>
```

```
{% if drupal_render_children is not null %}  
  {{ drupal_render_children }}  
{% endif %}
```



Twig

Display Suite one-col layout

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```

← DS form support



Twig

Display Suite one-col layout

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</{{ ds_content_wrapper }}>  
  
{% if drupal_render_children is not null %}  
  {{ drupal_render_children }}  
{% endif %}
```

Actual template!



Twig

Drush layout script is working!



Twig

Example:

```
drush ds-build "My layout name"
```



Twig

Gains for Display Suite?



Twig

Not much, but core won't render PHP templates

Templates are “cleaner”

We can please the frontend people!



Routing, controllers and Symfony

- Converted hook_menu to the new routing system
- Converted procedural callbacks to controller classes
- Converted form callbacks to form classes
- Made use of the symfony request objects.
- ...

Routing, controllers and Symfony

I need a few hours to go through all the changes.

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Browse through the Display Suite UI module source code if you're curious how the routing system is working in D8 now.

Routing, controllers and Symfony

I need a few hours to go through all the changes.

Browse through the Display Suite UI module source code if you're curious how the routing system is working in D8 now.

The router stuff will still change a lot before Drupal 8 is released.

Plugins



Plugins

Display suite uses plugins for custom fields written in code

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Plugins replace `hook_ds_fields_info`

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Display suite uses plugins for custom fields written in code

Plugins replace `hook_ds_fields_info`

`Hook_ds_fields_info_alter` still exists

What is a DS field plugin?



What is a DS field plugin?

A class that implements the `DsFieldInterface` interface

What is a DS field plugin?

A class that implements the DsFieldInterface interface

Placed in the DsField namespace

```
namespace Drupal\<module>\Plugin\DsField;
```

What is a DS field plugin?

A class that implements the DsFieldInterface interface

Placed in the DsField namespace

```
namespace Drupal\<module>\Plugin\DsField;
```

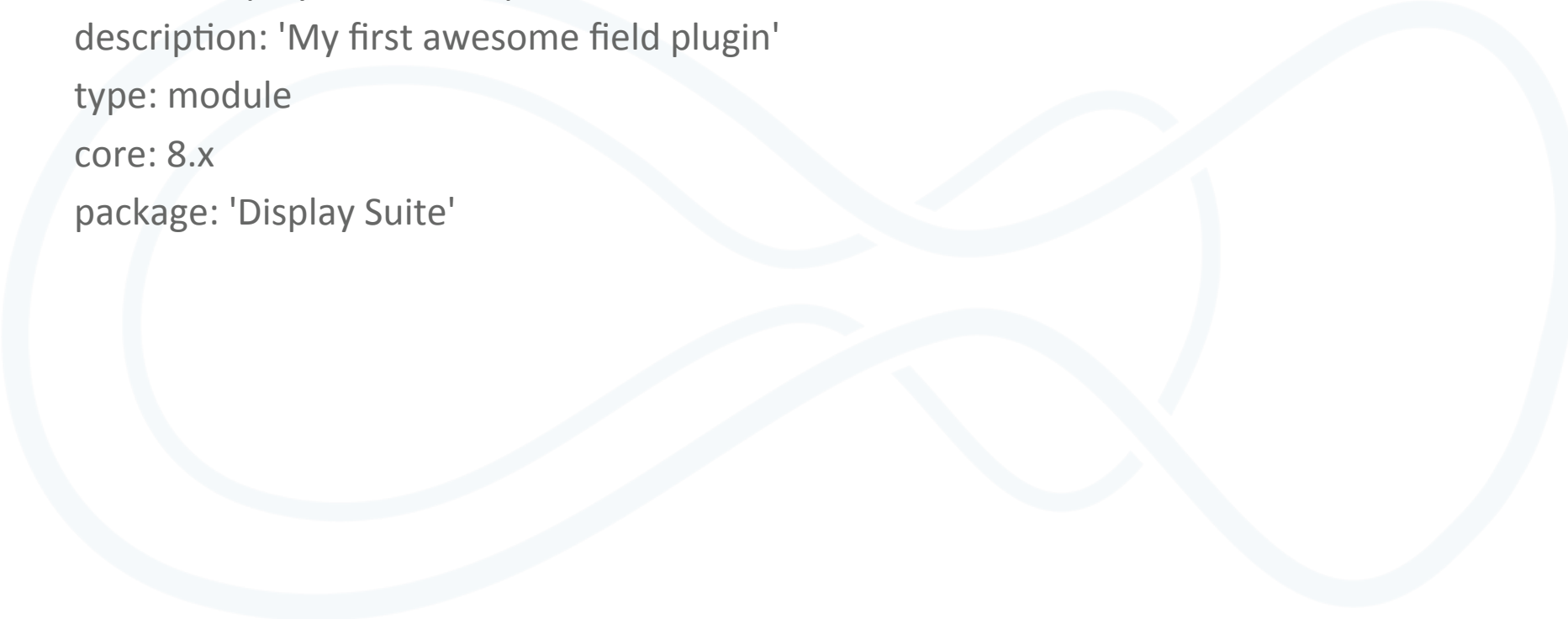
What does that mean???

A large, light blue infinity symbol (∞) is centered on a white background. The symbol is composed of two interlocking loops, with the text overlaid in the center.

Let's build an example module to find out!!

ds_example.info.yml

```
name: 'Display Suite example'  
description: 'My first awesome field plugin'  
type: module  
core: 8.x  
package: 'Display Suite'
```



ds_example.info.yml

name: 'Display Suite example'

description: 'My first awesome field plugin'

type: module

core: 8.x

package: 'Display Suite'

ds_example.module

<?php



ds_example.module

<?php

Seriously?

ds_example.module

<?php

Seriously?

Yeah... ;-(

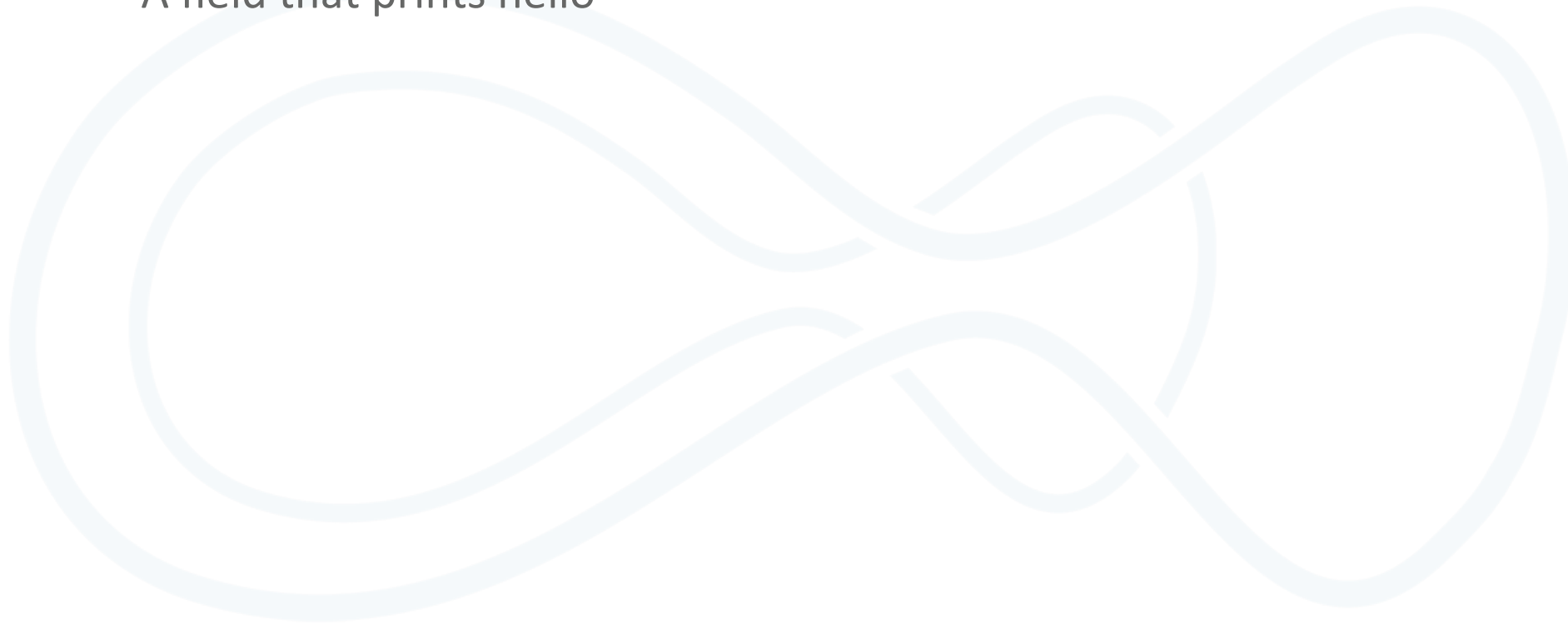
But hopefully we can make this file optional soon.

Hello plugin



Hello plugin

- A field that prints hello



Hello plugin

- A field that prints hello
- Place inside the *Drupal\<module>\Plugin\DsField namespace*

Hello plugin

- A field that prints hello
- Place inside the *Drupal\ds_example\Plugin\DsfField namespace*

Hello plugin

- A field that prints hello
- Place inside the *Drupal\ds_example\Plugin\Dsfeld namespace*

```
▼ ds_example
  ▼ lib
    ▼ Drupal
      ▼ ds_example
        ▼ Plugin
          ▼ Dsfeld
            Hello.php
          ds_example.info.yml
          ds_example.module
```

Hello plugin

- A field that prints hello
- Place inside the *Drupal\ds_example\Plugin\Dsfeld namespace*

```
▼ ds_example
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    ▼ Drupal
      ▼ ds_example
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          ▼ Dsfeld
            Hello.php
          ds_example.info.yml
          ds_example.module
```

That are a lot of directories!!

Hello plugin

- A field that prints hello
- Place inside the *Drupal\ds_example\Plugin\DsField* namespace

```
▼ ds_example
  ▼ lib
    ▼ Drupal
      ▼ ds_example
        ▼ Plugin
          ▼ DsField
            Hello.php
          ds_example.info.yml
          ds_example.module
```

That are a lot of directories!!

Get used to it 😊

Hello plugin

```
<?php

namespace Drupal\ds_example\Plugin\DsfField;

use Drupal\Core\Annotation\Translation;
use Drupal\ds\Annotation\DsfField;
use Drupal\ds\Plugin\DsfField\DsfFieldBase;

/**
 * @DsfField(
 *   id = "hello",
 *   title = @Translation("Hello"),
 *   entity_type = "node"
 * )
 */
class Hello extends DsfFieldBase {

    public function render($field) {
        return "hello";
    }

}
```

Hello plugin

```
<?php
```

```
namespace Drupal\ds_example\Plugin\Dsfeld;
```

```
use Drupal\Core\Annotation\Translation;  
use Drupal\ds\Annotation\Dsfeld;  
use Drupal\ds\Plugin\Dsfeld\DsfeldBase;
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/**  
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Hello plugin

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 */
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class Hello extends DsfeldBase {
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    public function render($field) {  
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Hello plugin

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```
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```
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```
class Hello extends DsfeldBase {
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```
    public function render($field) {
```

```
        return "hello";
```

```
    }
```

```
}
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Hello plugin

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```
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```
 *   title = @Translation("Hello"),
```

```
 *   entity_type = "node"
```

```
 * )
```

```
 */
```

```
class Hello extends DsfeldBase {
```

```
  public function render($field) {
```

```
    return "hello";
```

```
  }
```

```
}
```


Hello plugin

```
<?php
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namespace Drupal\ds_example\Plugin\Dsfeld;
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class Hello extends DsfeldBase {
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```
  public function render($field) {
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```
    return "hello";
```

```
  }
```

```
}
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Hello plugin

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<?php

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```

Plugins



Gains for Display Suite?

Plugins

DX++

An abstract background graphic consisting of several thick, light blue, wavy lines that flow across the page, creating a sense of movement and depth. The lines are smooth and organic, resembling stylized waves or flowing ribbons.

Plugins

DX++

Reusable plugins

Plugins

DX++

Reusable plugins

Easy to write dynamic ds fields

Drush plugin generator

Lots of boilerplate code!

Drush plugin generator

Lots of boilerplate code!

Prone to copy paste errors!

Drush plugin generator

Lots of boilerplate code!

Prone to copy paste errors!

Drush to the rescue!

Drush plugin generator

Example:

```
drush ds-field "MyField"
```

Other functional changes?



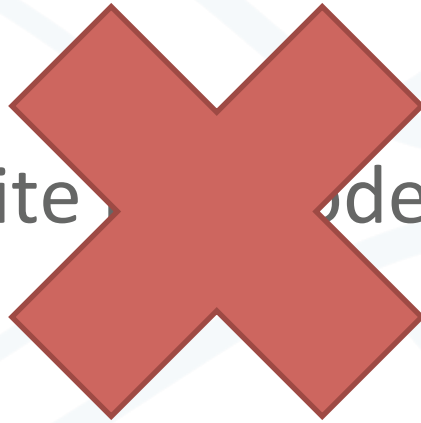
Other functional changes?



Display Suite PHP code formatter...

Other functional changes?

Display Suite & Code formatter...



Other functional changes?

Display Suite **token** formatter!

(work in progress)

A large, light blue infinity symbol (∞) is centered on a white background. The symbol is composed of two interlocking loops, with the text 'Demo (part 2)' centered within the loops.

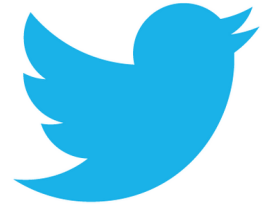
Demo (part 2)



Please test it!

and file a bug report when it fails*

* When filing a bug report, be sure it isn't filed yet. Try to be as specific as possible. Don't run Display Suite on a "real" drupal 8 site yet (if they exist). Stuff could break. We are not responsible for the mental pain a broken Display Suite module causes when there isn't an official release yet. Not everything is converted yet, you can ask us in irc if you're in doubt.



“Keeping up with D8 core
takes 10 minutes a week
once the initial port is done!
So start porting your modules now!”



Your questions?!