

Configuration Management

A True Life Story



CHROMATIC

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What is configuration?



”

In Drupal, configuration is the collection of admin settings that determine how the site functions, as opposed to the content of the site.

<https://www.drupal.org/docs/8/configuration-management>

Configuration vs. Content

Configuration	Content
Content types	Nodes
Taxonomy vocabulary	Taxonomy terms
Menus	Menu links
Blocks	Block content
Media types	Media

Pantheon Workflow

Code Moves Up, Content Moves Down



<https://pantheon.io/docs/pantheon-workflow/#code-moves-up-content-moves-down>

Other types of configuration

- Fields (for entities)
- Views
- Display modes (for entities)
- Image styles
- Language settings
- System settings
- User roles
- Module settings



Where is configuration stored?



Configuration Storage: Database

- Active configuration
- Stored in a relational database
- Changes applied immediately
- Benefits:
 - Performance
 - Security



Configuration Storage: Filesystem

- Staged configuration
- Stored on the filesystem as YAML files
- Changes applied by export or import
- Benefits:
 - Portability
 - Security



Configuration Manager



Configuration Manager

- Core module
- Import and export a single set of configuration to the filesystem
 - User Interface
 - Drush
- Install configuration from modules, profiles and themes
 - Required config
 - Optional config

Synchronize

[Synchronize](#)[Import](#)[Export](#)

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Used config split configuration: Local

1 new

Name	Operations
saml.service_provider.plan	View differences

5 changed

Name	Operations
config_split.config_split.dev	View differences
config_split.config_split.local	View differences
config_split.config_split.prod	View differences
saml.service_provider.member	View differences
config_split.config_split.stage	View differences

language.es configuration collection

[Import all](#)



View changes of core.extension

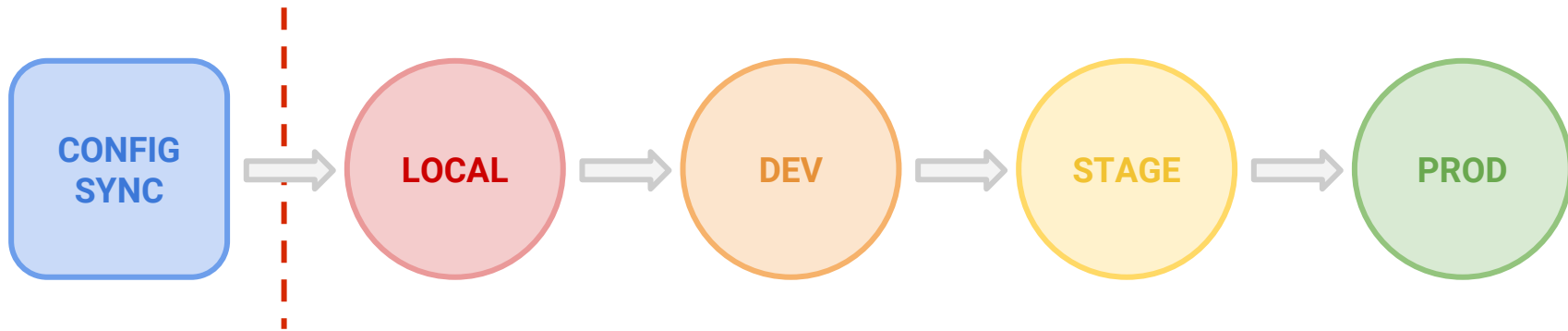
ACTIVE	STAGED
commerce_paypal: 0	commerce_paypal: 0
commerce_price: 0	commerce_price: 0
- commerce_pricelist: 0	
commerce_product: 0	commerce_product: 0
commerce_promotion: 0	commerce_promotion: 0

[Back to 'Synchronize configuration' page.](#)

View Differences

Configuration Manager: Workflow

The Configuration Management module offers a linear workflow where each environment shares the same set of configuration.



Configuration Split



Configuration Split

- Contributed module
- Import and export multiple sets (splits) of configuration to the filesystem
 - User Interface
 - Drush
- Enable/disable modules or themes for different environments
- Store different configuration values for different environments
 - Complete Split / Blacklist
 - Conditional Split / Graylist

Configuration Split Setting

[Home](#) » [Administration](#) » [Configuration](#) » [Development](#) » [Synchronize](#)

[Add Configuration Split Setting](#)

Configuration Split Setting	Machine name	Status	Operations
Development	dev	inactive	Edit ▼
Local	local	active (overwritten)	Edit ▼
Production	prod	inactive	Edit ▼
Staging	stage	inactive	Edit ▼



COMPLETE SPLIT

Modules

- Admin Toolbar
- Admin Toolbar Links Access Filter
- Admin Toolbar Extra Tools
- Automated Cron
- Backup and Migrate

Select modules to split. Configuration depending on the modules is automatically split off completely as well.

Configuration items

- domain.record.store_leica_geosystems_com_it
- domain.record.store_leica_geosystems_com_jp
- domain.settings
- domain_access.settings
- domain_alias.alias.leicastore_Indo_site

Select configuration to split. Configuration depending on split modules does not need to be selected here specifically.

Additional configuration

Select additional configuration to split. One configuration key per line. You can use wildcards.

Complete Split/Blacklist: Configuration listed here will be removed from the sync directory and saved in the split directory instead. Modules will be removed from core.extension when

Complete Split



CONDITIONAL SPLIT

Configuration items

```
block_content.type.card_callout
block_content.type.card_callout_display
coffee.configuration
comment.type.comment
commerce_avatax.settings
```

Select configuration to split conditionally.

Additional configuration

Select additional configuration to conditionally split. One configuration key per line. You can use wildcards.

☒ Include dependent configuration

If this is set, conditionally split configuration will also include configuration that depends on it.

☒ Split only when different

If this is set, conditionally split configuration will not be exported to the split directory if it is equal to the one in the main sync directory.

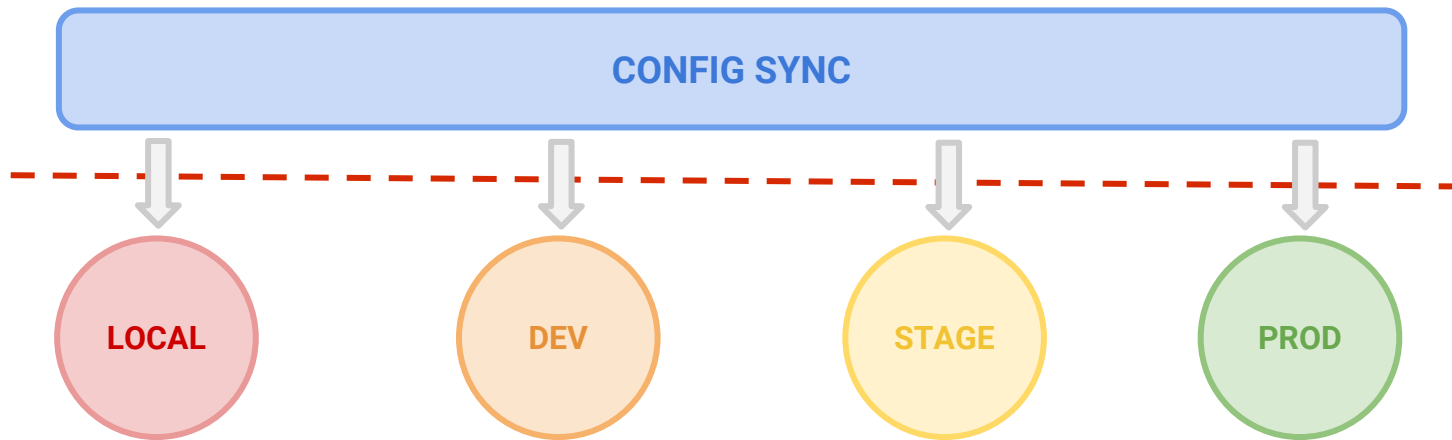
Conditional Split/Graylist: Configuration listed here will be left untouched in the main sync directory. The *currently active* version will be exported to the split directory. Use this for configuration that is different on your site but which should also remain in the main sync directory.

Conditional Split



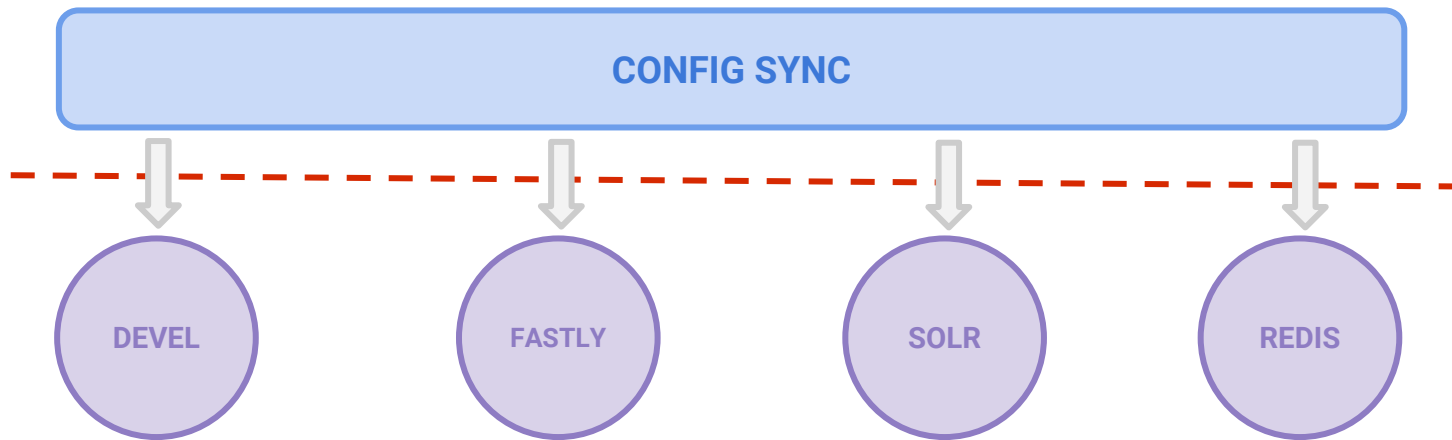
Configuration Split: Environment Workflow

Creating configuration splits by environment allows developers to group sets of configuration that differ per environment (e.g. dev, test, prod).



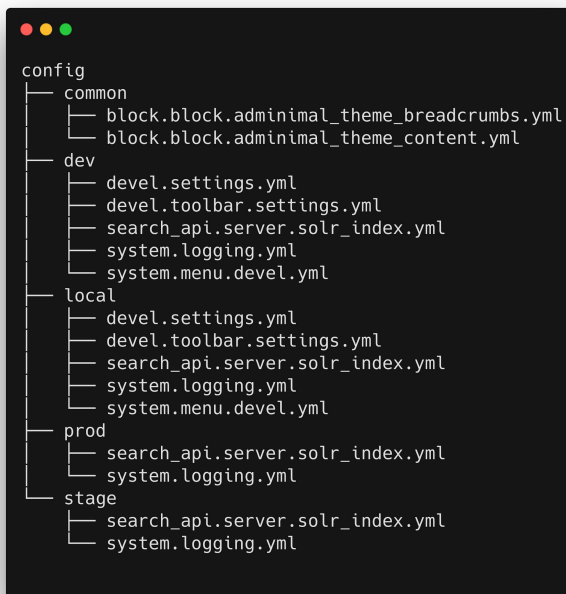
Configuration Split: Feature Workflow

Creating configuration splits by features allows developers to turn individual features (e.g. modules) on and off no matter the context the site is running in.

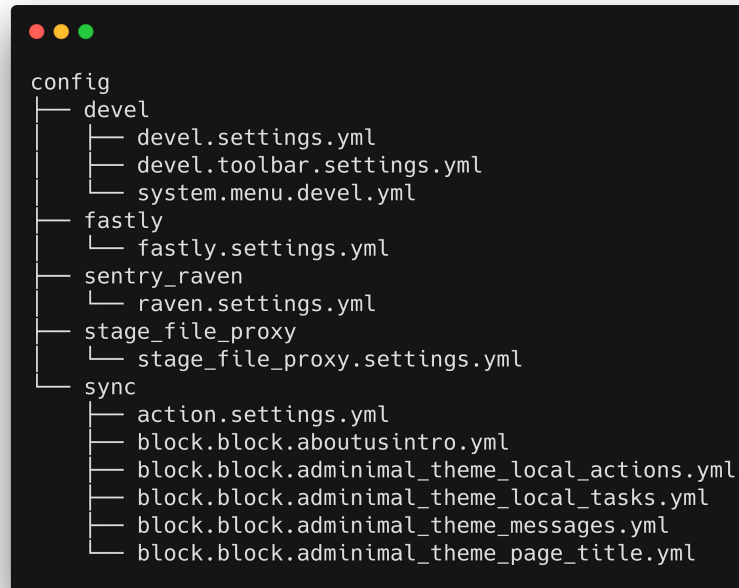


Comparison of Config Directories

Environment Splits



Feature Splits



Comparison of Settings Files

Environment Splits

```
<?php

/**
 * @file sites/default/settings.php
 */

// Change the config split based on the environment.
switch ($ENV['DRUPAL_ENVIRONMENT']) {
  case 'local':
    $config['config_split.config_split.local']['status'] = TRUE;
    break;

  case 'dev':
    $config['config_split.config_split.dev']['status'] = TRUE;
    break;

  case 'stage':
    $config['config_split.config_split.stage']['status'] = TRUE;
    break;

  case 'prod':
    $config['config_split.config_split.prod']['status'] = TRUE;
    break;
}
```

Feature Splits

```
<?php

/**
 * @file sites/default/settings.php
 */

// Change the config split based on the environment.
switch ($ENV['DRUPAL_ENVIRONMENT']) {
  case 'local':
    $config['config_split.config_split.devel']['status'] = TRUE;
    $config['config_split.config_split.stage_file_proxy']['status'] = TRUE;
    break;

  case 'dev':
    $config['config_split.config_split.stage_file_proxy']['status'] = TRUE;
    break;

  case 'stage':
    $config['config_split.config_split.stage_file_proxy']['status'] = TRUE;
    break;

  case 'prod':
    $config['config_split.config_split.fastly']['status'] = TRUE;
    $config['config_split.config_split.sentry_raven']['status'] = TRUE;
    break;
}
```

Note: Each config split is turned **OFF** by default, enabling splits are cleaner in settings.php



Configuration Read-only



Configuration Read-only

- Contributed module
- Prevents administrators from editing active configuration through the User Interface
- Module can be enabled per environment with Configuration Split
- Warning: Have a solid continuous integration pipeline and testing procedures in place before enabling in a production environment.

Extend

List

Update

Uninstall

[Home](#) » [Administration](#)



This form will not be saved because the configuration active store is read-only.

No update information available. [Run cron](#) or [check manually](#).

[Install new module](#)

Filter by name or description

Enter a part of the module name or description

▼ CORE

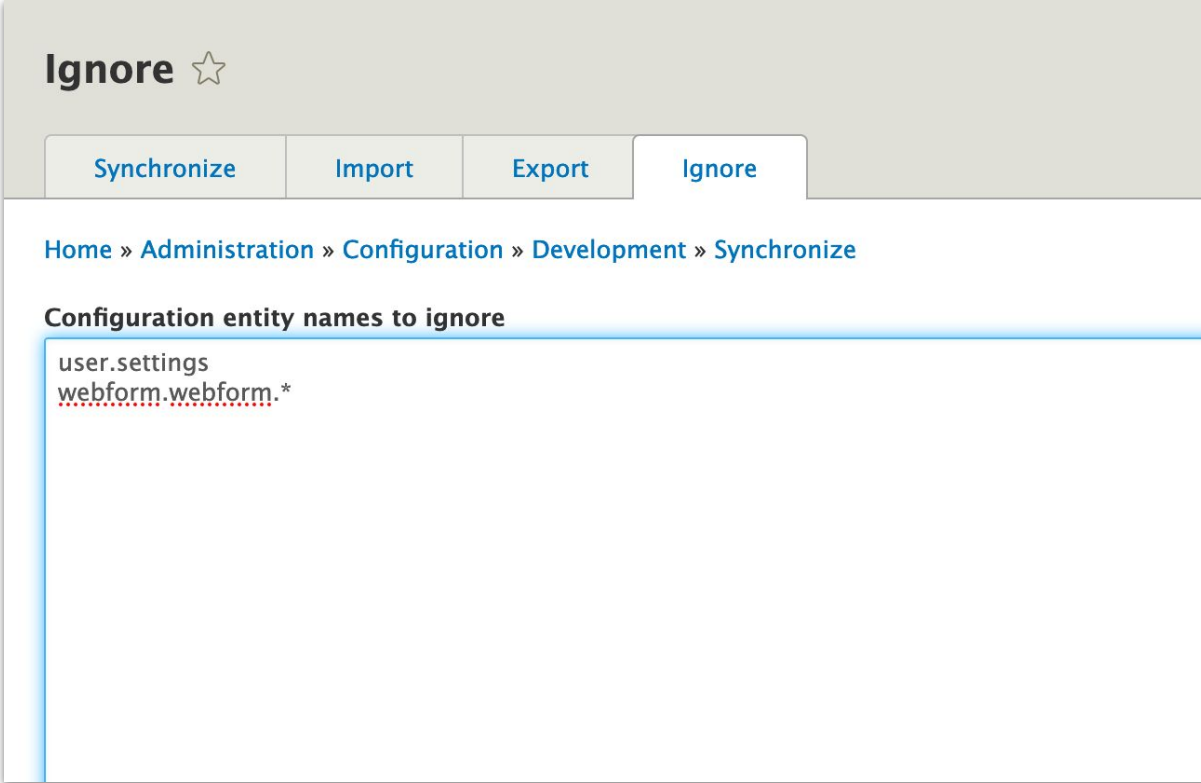


Config Ignore



Config Ignore

- Contributed module
- Allows for defined config to be ignored by import and export
- Module can be enabled per environment with Configuration Split
- Compatibility with Config Readonly:
You can use the **Config Ignore Read-only** module to automatically whitelist configuration forms that are ignored.



Thank You!

Thank you for listening. If you have any questions feel free to contact us.



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Join us for contribution opportunities

Friday, April 12, 2019

Mentored Contribution

9:00-18:00
Room: 602

First Time Contributor Workshop

9:00-12:00
Room: 606

General Contribution

9:00-18:00
Room: 6A

#DrupalContributions



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Locate this session at the DrupalCon Seattle website:

<http://seattle2019.drupal.org/schedule>

Take the Survey!

<https://www.surveymonkey.com/r/DrupalConSeattle>

Thank you!