







# USING SUBTREE SPLITS TO SPREAD DRUPAL INTO EVERYTHING

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# CLARIFICATION

**Drupal:** Everything **except** the /core folder.

**Drupal core:** Everything in the /core folder.



# DEPENDENCY MANAGEMENT

**npmjs.com**  
**bower.io**  
**bundler.io**





# DEPENDENCY MANAGEMENT

## in Drupal

```
name = Really Neat Widget
description = Provides a really neat widget for
your site's sidebar.
core = 7.x
package = Views
dependencies[] = views
dependencies[] = panels
```



# COMPOSER

[composer.org](https://composer.org)

**Composer is a tool for dependency management in PHP.**







# CONSUMERS & PROVIDERS





# DEPENDENCY MANAGEMENT

## in Drupal

```
name = Really Neat Widget  
description = Provides a really neat widget for  
your site's sidebar.  
core = 7.x  
package = Views  
dependencies[] = views  
dependencies[] = panels
```





# CONSUMERS

**Projects that consume libraries via  
Composer**





# CONSUMERS

composer.json

```
{  
  "require": {  
    "guzzlehttp/guzzle": "~5.0"  
  }  
}
```





## PRO-TIP

Generate (or update) composer.json

```
$ composer require guzzlehttp/guzzle ~5.0
```



# DOWNLOADING DEPENDENCIES

```
$ composer install
```





# DOWNLOADING DEPENDENCIES

```
Loading composer repositories with package information
```

```
Installing dependencies (including require-dev)
```

- Installing react/promise (v2.2.0)

```
Loading from cache
```

- Installing guzzlehttp/streams (3.0.0)

```
Loading from cache
```

- Installing guzzlehttp/ringphp (1.0.7)

```
Loading from cache
```

- Installing guzzlehttp/guzzle (5.2.0)

```
Loading from cache
```

```
Writing lock file
```

```
Generating autoload files
```



# DOWNLOADING DEPENDENCIES

```
-rw-r--r--  composer.json  
-rw-r--r--  composer.lock  
drwxr-xr-x  vendor
```





# LOCKING DEPENDENCIES

composer.lock

```
{
  "packages": [
    {
      "name": "guzzlehttp/guzzle",
      "version": "5.2.0",
      "source": {
        "type": "git",
        "url": "https://github.com/guzzle/guzzle.git",
        "reference": "475b29ccd411f2fa8a408e64576418728c032cfa"
      }
    }
  ]
}
```



# IGNORING DEPENDENCIES

.gitignore

```
vendor/
```





# AUTOLOADING

```
<?php  
  
require 'vendor/autoload.php';  
  
$client = new GuzzleHttp\Client();  
$response = $client->get('http://guzzlephp.org');
```



# GET OFF THE ISLAND

core/composer.json

```
{
  "require": {
    "symfony/yaml": "2.6.*",
    "twig/twig": "1.18.*",
    "doctrine/common": "~2.4.2",
    "doctrine/annotations": "1.2.*",
    "guzzlehttp/guzzle": "~5.0",
    "symfony-cmf/routing": "1.3.*",
    "easyrdf/easyrdf": "0.9.*",
    "zendframework/zend-feed": "2.4.*",
    "stack/builder": "1.0.*",
    "egulias/email-validator": "1.2.*",
    "masterminds/html5": "~2.1"
  }
}
```





# PROPOSAL #1

Issue #1475510

**Remove external dependencies from the core repo and let Composer manage the dependencies instead**



# PROPOSAL #1

Issue #1475510

```
$ cd core; composer install;
```





# PROPOSAL #2

Issue #2444615

**Move phpunit and mink to require-dev**





# PROPOSAL #2

Issue #2444615

```
{
  "require": {
    "mikey179/vfsStream": "1.*",
    "stack/builder": "1.0.*",
    "egulias/email-validator": "1.2.*"
  },
  "require-dev": {
    "phpunit/phpunit": "4.4.*",
    "behat/mink": "~1.6",
    "behat/mink-goutte-driver": "~1.1",
    "fabpot/goutte": "^2.0.3",
    "masterminds/html5": "~2.1"
  }
}
```





# PROPOSAL #2

Issue #2444615

```
$ cd core; composer install --no-dev;
```



# PROPOSAL #3

**Require Drush as a dev dependency**



## PROPOSAL #3

```
{  
  "require-dev": {  
    "drush/drush": "~7.0"  
  }  
}
```





# PROVIDERS

**Package (typically a library) that can be consumed by another package or project**



# PROVIDERS

composer.json

```
{  
  "name": "guzzlehttp/guzzle",  
}
```



# PROVIDERS

composer.json

```
{  
  "name": "guzzlehttp/guzzle",  
  "description": "Guzzle is a PHP HTTP  
client library and framework for building  
RESTful web service clients"  
}
```





# COME TO OUR ISLAND

core/composer.json

```
{  
  "name": "drupal/core",  
  "description": "Drupal is an open source content  
management platform powering millions of websites  
and applications.",  
  "type": "drupal-core"  
}
```



# DRUPAL CORE AS A DEPENDENCY

composer.json

```
{  
  "require": {  
    "drupal/core": "~8.0"  
  }  
}
```



# COMPOSER INSTALLERS

[composer.github.io/installers](https://composer.github.io/installers)

**A Composer plugin that installs  
packages of a specific type in a specific  
directory**







# DRUPAL CORE AS A DEPENDENCY

composer.json

```
{  
  "require": {  
    "composer/installers": "^1.0.20",  
    "drupal/core": "~8.0"  
  }  
}
```



# PROJECT TYPE

composer.json

```
{  
  "type": "project"  
}
```



# PROJECTS & FRAMEWORKS

Project	Framework
Drupal	Drupal Core
Symfony Standard	Symfony
Laravel	Laravel Framework





# PROPOSAL #4

Issue #2385387

**Permanently split Drupal and Drupal  
core into separate repositories**



# PROPOSAL #5

Issue #2352091

**Create (and maintain) a subtree split of  
Drupal core**



# PROPOSAL #5

Issue #2352091

## Config

PHP ★ 30 🔗 13

[READ-ONLY] Subtree split of the Symfony Config Component -- clone into  
Symfony/Component/ (master at symfony/symfony)

Updated 21 hours ago

## Yaml

PHP ★ 151 🔗 62

[READ-ONLY] Subtree split of the Symfony YAML Component -- clone into  
Symfony/Component/ (master at symfony/symfony)

Updated 21 hours ago








# PROPOSAL #5

Issue #2352091

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## Packagist

The PHP package archivist.

[Submit Package](#)

### drupal/core

Drupal is an open source content management platform powering millions of websites and applications.

Maintainer: [Dries](#)

Canonical: <https://github.com/tstoeckler/drupal-core>

Source: <https://github.com/tstoeckler/drupal-core/tree/master>


Issues: <https://github.com/tstoeckler/drupal-core/issues>




Overall:	2 378 installs
30 days:	683 installs
Today:	12 installs







# PROPOSAL #5



## Issue #2352091



 **tstoeckler / drupal-core**  
forked from [RobLoach/core](#)


 Watch ▾ 5  Unstar 5  Fork 8



Subtree split of Drupal 8's /core directory. <https://github.com/tstoeckler/drupal-core/tree/8.0.x>



 27,702 commits  2 branches  4 releases  3 contributors

 branch: 8.0.x ▾ **drupal-core** / + 


This branch is 27702 commits ahead, 3 commits behind RobLoach:master  Pull Request  Compare


Issue #2369987 by aneek, alexpott, joelpittet, rteijeiro, pgautam, ja... 


 Nathaniel Catchpole authored 2 hours ago latest commit 02e9ed88b1 


 <a href="#">assets/vendor</a>	Issue #2485573 by alanburke, ragnarkurm: Update JS library domready t...	2 days ago
 <a href="#">config</a>	Issue #1923406 by stefan.r, yannickoo, catch, Crell, amateescu, pwola...	8 days ago


<> Code

 Issues 0

 Pull requests 0

 Wiki

 Pulse

 Graphs



# PROPOSAL #6

**Split each component into a read-only repository**





# PROPOSAL #6

core/lib/Drupal/Component/README.txt

Drupal Components are independent libraries that do not depend on the rest of Drupal in order to function.

In other words, only dependencies that can be specified in a composer.json file of the Component are acceptable dependencies. Every Drupal Component presents a valid dependency, because it is assumed to contain a composer.json file (even if it may not exist yet).

16 components are ready to be shared





# PROPOSAL #6

## Popular Packages

[psr/log](#)

Common interface for logging libraries

[symfony/event-dispatcher](#)

Symfony EventDispatcher Component

[monolog/monolog](#)

Sends your logs to files, sockets, inbox...

[symfony/console](#)

Symfony Console Component

[symfony/yaml](#)

Symfony Yaml Component

[swiftmailer/swiftmailer](#)

Swiftmailer, free feature-rich PHP mailer...

[phpunit/phpunit](#)

The PHP Unit Testing framework.

[phpunit/php-code-coverage](#)

Library that provides collection, proces...

[doctrine/inflector](#)

Common String Manipulations with regard...

[phpunit/php-token-stream](#)


Wrapper around PHP's tokenizer extension...





# PROPOSAL #6

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## Packagist

The PHP package archivist.

[Submit Package](#)

### symfony/event-dispatcher

Symfony EventDispatcher Component

Maintainer: [fabpot](#)  
Homepage: <https://symfony.com>  
Canonical: <https://github.com/symfony/EventDispatcher>  
Source: <https://github.com/symfony/EventDispatcher/tree/master>

Overall:	10 389 471 installs
30 days:	881 114 installs
Today:	26 651 installs





# CONTRIB

```
{  
  "require": {  
    "guzzlehttp/oauth-subscriber": "0.2.*"  
  }  
}
```



# COMPOSER MANAGER

## Composer Manager

[View](#) [Version control](#) [Revisions](#) [Automated Testing](#)

Posted by [cpliakas](#) on February 27, 2013 at 3:06pm

Composer Manager allows contributed modules to depend on PHP libraries managed via Composer.

[Composer](#) is a command line tool for installing PHP libraries and their dependencies on a per-project basis. Nowadays, all libraries are registered on [Packagist](#) and expect to be installed via Composer. See the Composer [Getting started](#) page for more information.

### How does it work?

Composer expects each project (Drupal installation, in our case) to have a single `composer.json` file listing all required packages. Composer Manager allows each contributed module to ship with its own `composer.json` file, listing the module-specific requirements. It then merges the requirements of all found modules into the consolidated `composer.json` file. This results in a single vendor/ directory shared across all modules which prevents code duplication and version mismatches.

PACKAGE	REQUIREMENTS	VERSION/REQUIREMENT
composer/composer	2.0.0	4.0.0
composer/composer	2.0.0	4.0.0
composer/composer	2.0.0	4.0.0
composer/composer	2.0.0	4.0.0
composer/composer	2.0.0	4.0.0
composer/composer	2.0.0	4.0.0
composer/composer	2.0.0	4.0.0
composer/composer	2.0.0	4.0.0
composer/composer	2.0.0	4.0.0
composer/composer	2.0.0	4.0.0

## Maintainers for Composer Manager

[bojanz](#) – 41 commits  
last: 3 weeks ago, first: 9 months ago

[deviantintegral](#) – 1 commit  
last: 2 months ago, first: 2 months ago

[rhoag](#) – 2 commits  
last: 4 months ago, first: 7 months ago

[pcambra](#) – 2 commits  
last: 5 months ago, first: 5 months ago

[cpliakas](#) – 170 commits  
last: 7 months ago, first: 2 years ago

[View all committers](#)

[View commits](#)



# LOAD MODULE WITH COMPOSER

composer.json

```
{  
  "require": {  
    "drupal/really_neat_widget": "8.1.*"  
  }  
}
```





# DRUPAL PACKAGIST

packagist.drupal-composer.com

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## Drupal Packagist

The composer package repository for Drupal.

Drupal Packagist is the [Composer](#) repository for [Drupal](#). It provides all projects from drupal.org as packages for Composer.  
[Browse packages.](#)

### Getting started

#### Learn about Composer

For getting started with Composer in general, please visit the [official documentation](#).

#### Add Drupal Packagist

For being able to add any Drupal project (module, theme, drush extension) to your composer project, you have to add the Drupal Packagist to your root composer.json's repository section:

### Drupal 7 & Drupal 8

Basically Drupal Packagist will work for Drupal 7 and Drupal 8 projects.

#### Composer installers

In general you will need to add a Composer Installer to your project (like [davidbarratt/custom-installer](#) or [composer/installers](#)), so modules, themes, profiles and drush extensions are downloaded to the correct directories, dependent on your Drupal installation.





# DRUPAL PACKAGIST

```
{  
  "require": {  
    "drupal/really_neat_widget": "7.1.*"  
  },  
  "repositories": [  
    {  
      "type": "composer",  
      "url": "https://packagist.drupal-composer.org"  
    }  
  ]  
}
```



# PROPOSAL #6

**Provide a Release Webhook & Better APIs**





# PROPOSAL #7

Issue #1612910

**Switch to Semantic Versioning for Drupal contrib extensions (modules, themes, etc)**



# PROPOSAL #8

**Move packagist to [packagist.drupal.org](https://packagist.drupal.org)**



## PROPOSAL #9

**Allow contrib developers to define subfolders (modules or libraries) that should have subtree splits**





# QUESTIONS

COMMENTS OR INSULTS

