Getting Started with Composer

Composer

https://getcomposer.org/

(image used under MIT license by https.getcomposer.org)

Composer is a tool for dependency management in PHP. It allows you to declare the libraries your project depends on and will manage (install / update) them for you. Composer manages packages on a per-project basis. Composer is cross platform - it strives for functionality on Windows, Linux and MacOS.

Requirements

PHP 5.3.2+

git or other vcs to install packages beyond simple zip archives

System / php.ini settings (composer will warn about invalid settings)

Installation

Windows / Linux / MacOS / Unix

Find instructions at:

https://getcomposer.org/doc/00-intro.md

Project Setup

Have Composer run through the interactive configuration generator where you define your project and search for dependencies. Creates initial `composer.json` :

```
php /path/to/composer init
```

Add packages to your project. Composer will add an entry for each package to the `require` key of your `composer.json` file:

```
php /path/to/composer require name-of-package [version constraints]
```

Install packages. Package resources are installed in `vendor` directory of project:

```
php /path/to/composer install
```

Commit `composer.json` and `composer.lock` to vcs, but exclude `vendor` directory

Using Package Resources

`Include` / `require` the generated `autoload.php` file in your application:

```
<?php
include "path/to/vendor/autoload.php";
```

Add project files to Composer autoloader by adding `autoload` key in `composer.json` :

```
    "autoload": {
        "psr-4":
"path/to/project/files"
    }
```

Updating Resources

Update project dependencies:

```
php /path/to/composer update
```

Update Composer:

```
php /path/to/composer self-update
```

Finding packages

Visit https://packagist.org/ to find packages

Use Composer to search for packages

```
php /path/to/composer search [search string]
```

Composer Help

List available commands:

```
php /path/to/composer list
```

Show help for command:

```
php /path/to/composer help [command]
```

Version constraints

Rules for package versioning constraints at: https://getcomposer.org/doc/articles/versions.md

Check constraints at https://semver.mwl.be/