

# Composer Cheat Sheet



## Installation

Download Composer from <https://getcomposer.org/download/> and follow the instructions.

Enable bash autocompletion:

```
composer completion bash | sudo tee /etc/bash_completion.d/composer
```

## Installing dependencies

Command	Description
<code>composer install</code>	Install dependencies from <code>composer.lock</code>
<code>composer install --no-dev</code>	Install without development dependencies

## Managing dependencies

Command	Description
<code>composer require &lt;package&gt;</code>	Add a new dependency to <code>composer.json</code> and install it
<code>composer require &lt;package&gt;:&lt;version&gt;</code>	Require a specific version of a dependency
<code>composer require --dev &lt;package&gt;</code>	Add a new development dependency to <code>composer.json</code> and install it
<code>composer update</code>	Update all dependencies to their latest installable versions
<code>composer update &lt;package&gt;</code>	Update a dependency to its latest installable version
<code>composer update &lt;vendor&gt;/*</code>	Update all dependencies of a vendor to their latest versions
<code>composer remove &lt;package&gt;</code>	Remove a dependency from <code>composer.json</code> and uninstall

## Global dependencies

Command	Description
<code>composer global require &lt;package&gt;</code>	Add a new global dependency to <code>composer.json</code> and install it
<code>composer global update</code>	Update all global dependencies

## Configuration

Command	Description
<code>composer config sort-packages true</code>	Sort packages in <code>composer.json</code> alphabetically

## Authentication

Command	Description
<code>composer config --global github-oauth.github.com &lt;token&gt;</code>	Authenticate with GitHub using a personal access token
<code>composer config --global http-basic.repo.packagist.com &lt;username&gt; &lt;password&gt;</code>	Authenticate with Private Packagist using a username and password

## Dependency analysis

Command	Description
<code>composer show</code>	List all installed dependencies
<code>composer show &lt;package&gt;</code>	Display detailed information about a package
<code>composer outdated</code>	List dependencies that are outdated
<code>composer audit</code>	Check for known security vulnerabilities in dependencies
<code>composer licenses</code>	List all licenses of installed dependencies
<code>composer status</code>	Show a list of packages with local modifications

## Creating new Composer projects

Command	Description
<code>composer init</code>	Create a <code>composer.json</code> file in the current directory
<code>composer create-project &lt;package&gt;</code>	Create a new project from a package

## Other commands

Command	Description
<code>composer --version</code>	Show the current Composer version
<code>composer self-update</code>	Update Composer to the latest version

## Version constraints

Constraint	Description
1.0.2	Exactly version 1.0.2
>=1.0.2	Version 1.0.2 or higher
>=1.0.2 <1.1.0	Version 1.0.2 or higher but lower than 1.1.0
>=1.0.2 <1.1.0    >=1.2.0	Version 1.0.2 or higher but lower than 1.1.0 or version 1.2.0 or higher
1.0 - 2.0	Version 1.0 to 2.0 (including 1.0 and 2.0)
1.0.*	Version 1.0 with any patch version
~1.2	Version 1.2 or higher but lower than 2.0
~1.2.3	Version 1.2.3 or higher but lower than 1.3
^1.2	Version 1.2 or higher but lower than 2.0
^1.2.3	Version 1.2.3 or higher but lower than 2.0

## Repositories

Command	Description
<code>composer config repositories.foo</code> <code>composer &lt;url&gt;</code>	Add a new repository named foo with the given URL as a Composer repository
<code>composer config repositories.foo vcs</code> <code>&lt;url&gt;</code>	Add a new repository named foo with the given URL as a VCS repository
<code>composer config repositories.foo vcs</code> <code>git@github.com:foo/bar.git</code>	Add a new GitHub repository named foo/bar as a VCS repository
<code>composer config repositories.foo path</code> <code>&lt;path&gt;</code>	Add a new repository named foo with the given path as a path repository