

Prerequisites

Both the CLI and generated project have dependencies that require Node 6.9.0 or higher, together with NPM 3 or higher.

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Installation

BEFORE YOU INSTALL: please read the [prerequisites](#)

```
npm install -g @angular/cli
```

Usage

```
ng help
```

Generating and serving an Angular project via a development server

```
ng new PROJECT-NAME
```

```
cd PROJECT-NAME
```

```
ng serve
```

Navigate to <http://localhost:4200/>. The app will automatically reload if you change any of the source files.

You can configure the default HTTP host and port used by the development server with two command-line options :

```
ng serve --host 0.0.0.0 --port 4201
```

Generating Components, Directives, Pipes and Services

You can use the `ng generate` (or just `ng g`) command to generate Angular components:

```
ng generate component my-new-component
```

```
ng g component my-new-component # using the alias
```

```
# components support relative path generation
```

```
# if in the directory src/app/feature/ and you run
```

```
ng g component new-cmp
```

```
# your component will be generated in src/app/feature/new-cmp
```

```
# but if you were to run
```

```
ng g component ../newer-cmp
```

```
# your component will be generated in src/app/newer-cmp
```

```
# if in the directory src/app you can also run
```

```
ng g component feature/new-cmp
```

```
# and your component will be generated in src/app/feature/new-cmp
```

You can find all possible blueprints in the table below:

| Scaffold | Usage |
|---------------------------|--|
| Component | <code>ng g component my-new-component</code> |
| Directive | <code>ng g directive my-new-directive</code> |
| Pipe | <code>ng g pipe my-new-pipe</code> |
| Service | <code>ng g service my-new-service</code> |

| Scaffold | Usage |
|---------------------------|---------------------------------|
| Class | ng g class my-new-class |
| Guard | ng g guard my-new-guard |
| Interface | ng g interface my-new-interface |
| Enum | ng g enum my-new-enum |
| Module | ng g module my-module |

angular-cli will add reference to components, directives and pipes automatically in the app.module.ts. If you need to add this references to another custom module, follow this steps:

1. ng g module new-module to create a new module
2. call ng g component new-module/new-component

This should add the new component, directive or pipe reference to the new-module you've created.

Updating Angular CLI

If you're using Angular CLI 1.0.0-beta.28 or less, you need to uninstall angular-cli package. It should be done due to changing of package's name and scope from angular-cli to @angular/cli:

```
npm uninstall -g angular-cli
npm uninstall --save-dev angular-cli
```

To update Angular CLI to a new version, you must update both the global package and your project's local package.

Global package:

```
npm uninstall -g @angular/cli
npm cache clean
```

```
# if npm version is > 5 then use `npm cache verify` to avoid errors (or to avoid using --force)
```

```
npm install -g @angular/cli@latest
```

Local project package:

```
rm -rf node_modules dist # use rmdir /S/Q node_modules dist in Windows Command Prompt; use rm -r -fo node_modules,dist in Windows PowerShell
```

```
npm install --save-dev @angular/cli@latest
```

```
npm install
```

If you are updating to 1.0 from a beta or RC version, check out our [1.0 Update Guide](#).

You can find more details about changes between versions in [the Releases tab on GitHub](#).

Development Hints for working on Angular CLI

Working with master

```
git clone https://github.com/angular/angular-cli.git
```

```
cd angular-cli
```

```
npm link
```

npm link is very similar to npm install -g except that instead of downloading the package from the repo, the just cloned angular-cli/ folder becomes the global package. Additionally, this repository publishes several packages and we use special logic to load all of them on development setups.

Any changes to the files in the angular-cli/ folder will immediately affect the global @angular/cli package, allowing you to quickly test any changes you make to the cli project.

Now you can use @angular/cli via the command line:

```
ng new foo
```

```
cd foo
```

```
npm link @angular/cli
```

```
ng serve
```

`npm link @angular/cli` is needed because by default the globally installed `@angular/cli` just loads the local `@angular/cli` from the project which was fetched remotely from npm. `npm link @angular/cli` symlinks the global `@angular/cli` package to the local `@angular/cli` package. Now the angular-cli you cloned before is in three places: The folder you cloned it into, npm's folder where it stores global packages and the Angular CLI project you just created.

You can also use `ng new foo --link-cli` to automatically link the `@angular/cli` package.

Please read the official [npm-link documentation](#) and the [npm-link cheatsheet](#) for more information.

To run the Angular CLI test suite use the `node tests/run_e2e.js` command. It can also receive a filename to only run that test (e.g. `node tests/run_e2e.js tests/e2e/tests/build/dev-build.ts`).

As part of the test procedure, all packages will be built and linked. You will need to re-run `npm link` to re-link the development Angular CLI environment after tests finish.