

# Installing Ionic and its Dependencies

Previous: [All About Ionic](#)

## Chapter 2: Installation

In this chapter, we are going to walk through the process of downloading Ionic and installing all necessary dependencies for development.

### Platform notes

First, we need to start with a note about minimum requirements for building your app with the current release of Ionic. Ionic targets iPhone and Android devices (currently). We support iOS 6+, and Android 4.0+ (though 2.3 should work). However, since there are a lot of different Android devices, it's possible certain ones might not work. As always, we are looking for help testing and improving our device compatibility and would love help from the community on our [GitHub](#) project.

You can develop Ionic apps on any operating system you prefer. In fact, Ionic has been developed at various times on Mac OS X, Linux, and Windows. However, right now you'll need to use the command line in order to follow this guide and you must have OS X in order to develop and deploy iPhone apps, so OS X is recommended if possible.

If you are on Windows, make sure to download and install [Git for Windows](#) and optionally [Console2](#). You will be executing any commands in this guide in the Git Bash or Console2 windows.

First, we will go and install the most recent version of [Apache Cordova](#), which will take our app and bundle it into a native wrapper to turn it into a traditional native app.

To install Cordova, make sure you have [Node.js](#) installed, then run

```
$ sudo npm install -g cordova
```

Drop `sudo` from the above command if running on Windows. Depending on the platforms you wish to develop for, you'll need to install platform-specific tools. Follow the Cordova platform guides for [Android](#) and [iOS](#) to make sure you have everything needed for development on those platforms. Luckily, you'll only need to do this once.

Linux Android note

Windows note on Java, Ant and Android

## Install Ionic

Ionic comes with a convenient command line utility to start, build, and package Ionic apps.

To install it, simply run:

```
$ sudo npm install -g ionic
```

## Create the project

Now, we need to create a new Cordova project somewhere on the computer for the code for our app:

```
$ ionic start todo blank
```

That will create a folder called `todo` in the directory the command was run. Next, we will go into that directory and list the contents. Here is what the outer structure of your Ionic project will look like:

```
$ cd todo && ls
```

```
├─ bower.json      // bower dependencies
├─ config.xml     // cordova configuration
├─ gulpfile.js    // gulp tasks
```

```
└─ hooks // custom cordova hooks to execute on
specific commands
└─ ionic.project // ionic configuration
└─ package.json // node dependencies
└─ platforms // iOS/Android specific builds will
reside here
└─ plugins // where your cordova/ionic plugins
will be installed
└─ scss // scss code, which will output to
www/css/
└─ www // application - JS code and libs,
CSS, images, etc.
```

If you are planning on using any version control system, you can go ahead and set it up in this new folder.

## Configure Platforms

Now, we need to tell ionic that we want to enable the iOS and Android platforms. Note: unless you are on MacOS, leave out the iOS platform:

```
$ ionic platform add ios
$ ionic platform add android
```

If you see errors here, make sure to follow the platform guides above to install necessary platform tools.

Android on OS X note

## Test it out

Just to make sure the default project worked, try building and running the project (substitute ios for android to build for Android instead):

```
$ ionic build ios
```

```
$ ionic emulate ios
```

Android emulator note

## Let's go!

Now we are ready to start building our app, so continue on to the next chapter:

[Chapter 3: Starting your app](#)