Creating a New Architecture App

> **CAUTION**
>
> This documentation is still **experimental** and details are subject to changes as we iterate. Feel free to share your feedback on the discussion inside the working group for this page.
>
> Moreover, it contains several **manual steps**. Please note that this won't be representative of the final developer experience once the New Architecture is stable. We're working on tools, templates and libraries to help you get started fast on the New Architecture, without having to go through the whole setup.

This page will help you create a new React Native app that uses the New Architecture.

Development Environment

Before continuing, make sure you've followed all the steps in the Setting up the development environment section under the **React Native CLI Quickstart** tab.

If following the setup guide, stop when you reach the section **Running your React Native Application**, and resume following this guide.

> **CAUTION**
>
> If you're using Expo, you can't enable the New Architecture at the moment and will have to wait for a future release of the Expo SDK.

Creating a New Application

> If you previously installed a global `react-native-cli` package, please remove it as it may cause unexpected issues:

```
npm uninstall -g react-native-cli @react-native-community/cli
```

If you already have your development environment set up, create a new React Native project from the template:

```
npx react-native@latest init AwesomeProject
```

> **CAUTION**
>
> The New Architecture is available in React Native version 0.68 or later.

Configuration

Follow the steps below to enable the New Architecture and build the app.

Enable Hermes

Hermes is an open-source JavaScript engine optimized for React Native. Hermes will be the default engine in the future, and we highly recommend you use it.

Please follow the instructions on the React Native website to enable Hermes in your application.

Enable the New Architecture

Target OS

Android | **iOS**

Navigate to the `ios` directory and run the following:

```
# from `ios` directory
bundle install && RCT_NEW_ARCH_ENABLED=1 bundle exec pod install
```

Then build and run the app as usual:

```
yarn ios
```

> **NOTE**
>
> You will need to run `pod install` each time a dependency with native code changes. Make this command easier to run by adding it to `scripts` to your project's `package.json` file:
>
> ```
> "scripts": {
>   "pod-install": "RCT_NEW_ARCH_ENABLED=1 bundle exec pod install"
> }
> ```
>
> and run it with `yarn pod-install`. Note that `bundle install` does not need to run a second time, as long as the Gemfile has not changed.

Troubleshooting

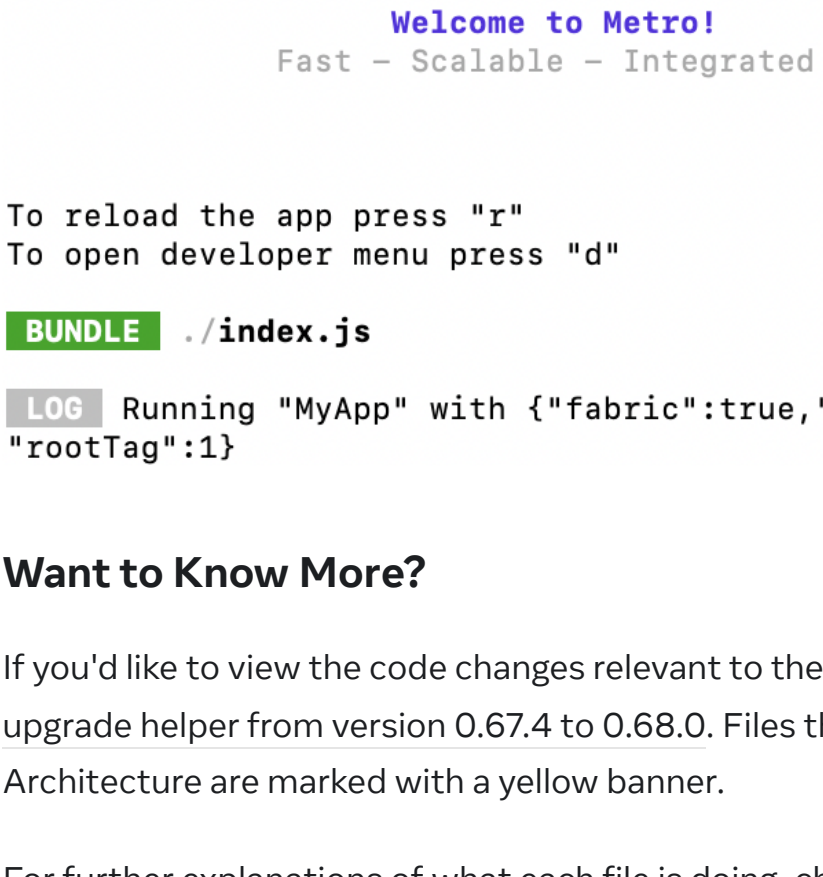
`react-native run-ios` fails

If you see a build failure from `react-native run-ios`, there may be cached files from a previous build with the old architecture. Clean the build cache and try again:

1. Open the project `ios/project.xcworkspace` in Xcode
2. In XCode, choose Product > Clean Build Folder
3. In the project directory, remove the `ios/Podfile.lock` file and `ios/Pods` directory: `rm -rf ios/Podfile.lock ios/Pods`
4. Re-run `yarn pod-install` and `yarn ios`

Confirming the New Architecture is in Use

After you build and run the app when Metro serves the JavaScript bundle, you should see `"fabric": true` in the Metro logs:



Want to Know More?

If you'd like to view the code changes relevant to the New Architecture, take a look at the upgrade helper from version 0.67.4 to 0.68.0. Files that were added for the New Architecture are marked with a yellow banner.

For further explanations of what each file is doing, check out these guides to walk through the changes step-by-step: Enabling The New Architecture in Your App

Is this page useful?

Edit this page

*Last updated on **Jun 21, 2023***