# **Running On Device**

It's always a good idea to test your app on an actual device before releasing it to your users. This document will guide you through the necessary steps to run your React Native app on a device and to get it ready for production.



If you used <code>create-expo-app</code> to set up your project, you can run your app on a device in Expo Go by scanning the QR code that is displayed when you run <code>npm start</code>. Refer to the Expo guide for <code>running your project</code> on <code>your device</code> for more information.



## Running your app on iOS devices

#### **Development OS**



### 1. Plug in your device via USB

Connect your iOS device to your Mac using a USB to Lightning cable. Navigate to the ios folder in your project, then open the .xcodeproj file, or if you are using CocoaPods open .xcworkspace, within it using Xcode.

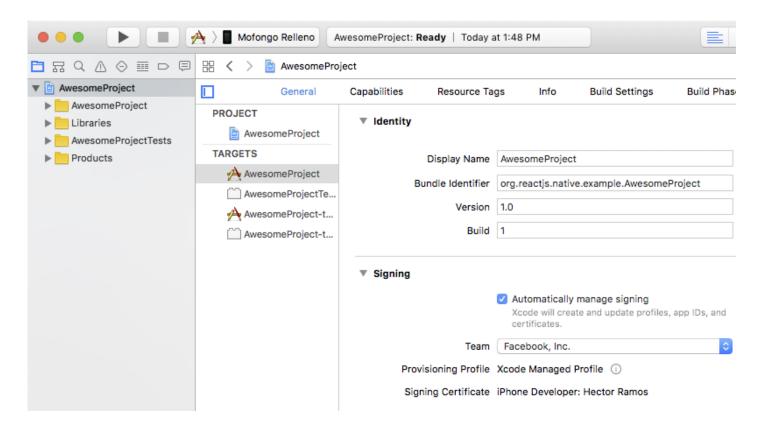
If this is your first time running an app on your iOS device, you may need to register your device for development. Open the **Product** menu from Xcode's menubar, then go to **Destination**. Look for and select your device from the list. Xcode will then register your device for development.

## 2. Configure code signing

Register for an Apple developer account if you don't have one yet.

Select your project in the Xcode Project Navigator, then select your main target (it should share the same name as your project). Look for the "General" tab. Go to "Signing" and make sure your Apple developer account or team is selected under the Team dropdown. Do the same for the tests target (it ends with Tests, and is below your main target).

Repeat this step for the Tests target in your project.



### 3. Build and Run your app

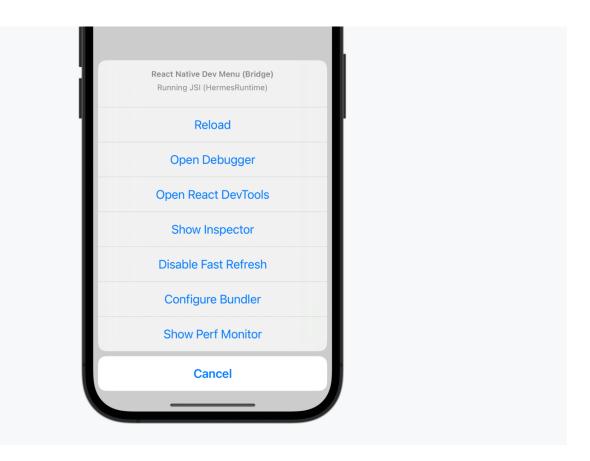
If everything is set up correctly, your device will be listed as the build target in the Xcode toolbar, and it will also appear in the Devices pane (Shift + Cmd + 2). You can now press the **Build and run** button (Cmd + R) or select **Run** from the **Product** menu. Your app will launch on your device shortly.



If you run into any issues, please take a look at Apple's Launching Your App on a Device docs.

## Connecting to the development server

You can also iterate quickly on a device using the development server. You only have to be on the same Wi-Fi network as your computer. Shake your device to open the <a href="Dev Menu">Dev Menu</a>, then enable Live Reload. Your app will reload whenever your JavaScript code has changed.



### **Troubleshooting**

If you have any issues, ensure that your Mac and device are on the same network and can reach each other. Many open wireless networks with captive portals are configured to prevent devices from reaching other devices on the network. You may use your device's Personal Hotspot feature in this case. You may also share your internet (Wi-Fi/Ethernet) connection from your Mac to your device via USB and connect to the bundler through this tunnel for very high transfer speeds.

When trying to connect to the development server you might get a red screen with an error saying:

Connection to http://localhost:8081/debugger-proxy?role=client timed out. Are you running node proxy? If you are running on the device, check if you have the right IP

address in RCTWebSocketExecutor.m.

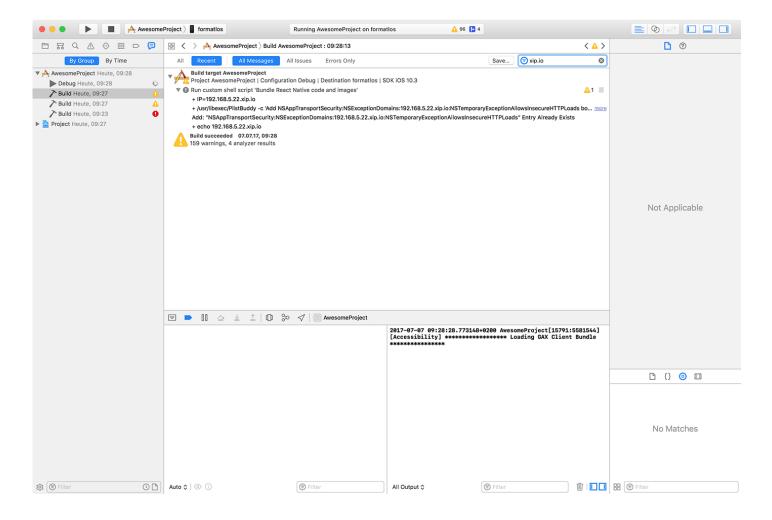
To solve this issue check the following points.

#### 1. Wi-Fi network.

Make sure your laptop and your phone are on the **same** Wi-Fi network.

#### 2. IP address

Make sure that the build script detected the IP address of your machine correctly (e.g. 10.0.1.123).



Open the **Report navigator** tab, select the last **Build** and search for IP= followed by an IP address. The IP address which gets embedded in the app should match your machines IP address.

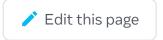
## **Building your app for production**

You have built a great app using React Native, and you are now itching to release it in the App Store. The process is the same as any other native iOS app, with some additional considerations to take into account. Follow the guide for publishing to the Apple App Store to learn more.

Is this page useful?







Last updated on Aug 10, 2023