Small Business Application

To put in a client name select all (ctrl A) then f9Nash Tech Software Development

**Application Installation Guide**

**Version – Issue 1.0**

**9th April, 2019**

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RECORD OF CHANGE

\* A – Added, M – Modified, D - Deleted

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date** | **Changed Items** | **\*A, M, D** | **Description** | **Version** |
| 9 April 2019 |  | A | Build and deployment guide for Mobile and Web | 1.0 |

SIGN OFF

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| **Originator** | Huy Ha | 9 April 2019 |  |
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ASSOCIATED DOCUMENTS OR FILES

This document is associated with the following other documents or file:

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**CONSTRAINT**

This document is for persons who had basic knowledge of Front-end, Hybrid Mobile application (Cordova, Android and iOS).TABLE OF CONTENTS

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# Introduction

This document will help to setup the environment to build and deploy the SBA web and mobile application (Android and iOS)

# Environment setup

## Nodejs (v8.11) and npm(v5.6)

To install Node JS, please go to this [link](https://nodejs.org/en/download/) and get it follow with windows or macOS. Then install it.

## Android sdk

For Android SDK, go to [Android site](https://developer.android.com/studio/index.html) and download for Windows/Mac (the browser will detect suitable SDK package) and install to your computer.

## xCode

To install XCode on your Mac machine, please open the “App store” application from your Mac and then search for “XCode” and install.

## Cordova

From the terminal application on Mac, type the below command to install cordova:

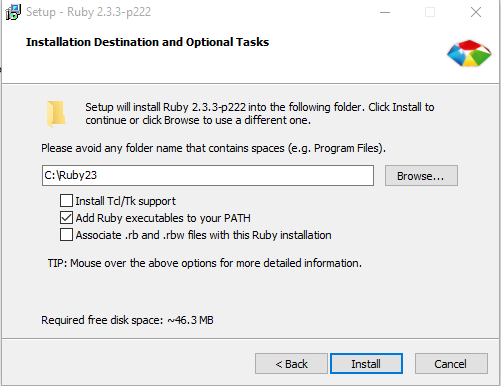
***sudo npm install -g cordova@7.1.0***

From command prompt tool on Windows you can type below command to install cordova:

***C:\>npm install -g cordova@7.1.0***

## *Ruby and SASS*

Go to [Ruby](https://rubyinstaller.org/downloads/) and download installer version 2.3.3 without DevKit for Windows/Mac and install to your computer. Remember to check “Add Ruby executable to your PATH” checkbox.



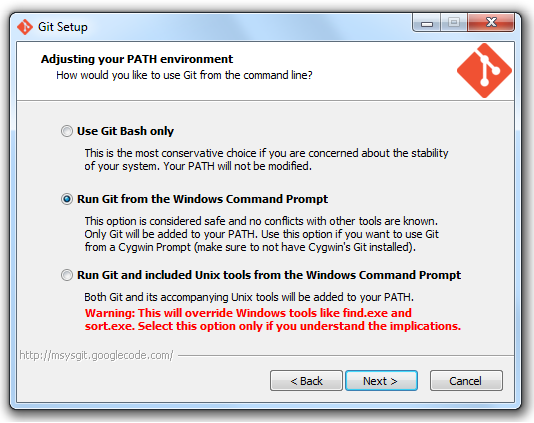
Start Command Prompt with Ruby, and type command line:

g***em install sass***

Ruby sass will be installed with version 3.5.6

## GIT

Go to [Git](https://git-scm.com/downloads) and download version 2.18 for Windows/Mac and install to your computer. Remember to check “Run Git from Windows Command Prompt” checkbox for download libraries.



## Grunt cli

Type below command to install grunt cli: ***npm install -g grunt-cli***

# Build and deploy UIBuilder

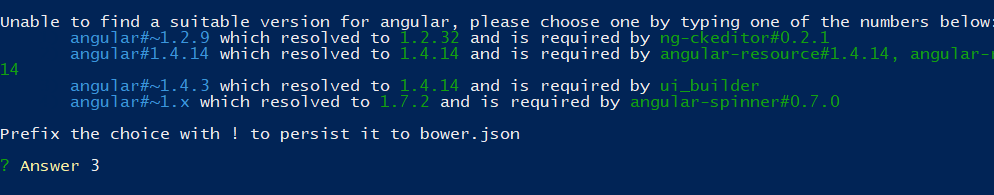
## Prerequisite

* To install dependencies and libraries, open command prompt and type below command:

***cd <uibuilder\_folder>***

***npm install***

* Then it will display suitable version of angular, you should choose number 3



## Build UIBuilder

### For localhost

* From <uibuilder\_folder>, open command prompt tool and type bellow command:
  + Compile scss to app.css

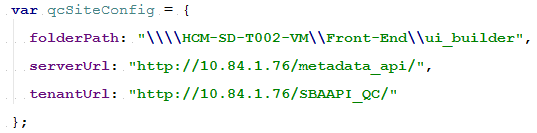
***grunt default***

* + Run uibuilder on browser

***npm run start***

### For QC site

* QC server url is defined in GruntFile.js



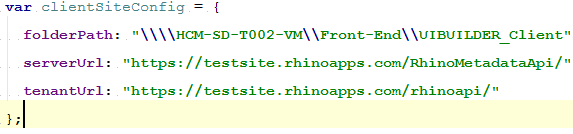
* From command prompt tool on Window, you can type below command

***grunt releaseQC***

* Your build was copied to 10.84.1.76\Front-End\ui\_builder folder
* Note: replace by your server, in this case i’m using server 10.84.1.76
* Password: F183EA78-88E7-4293-9D44-B059B04ABEEC ( you can change on Database)

### For Client Test site

* Client Test server url is defined in GruntFile.js



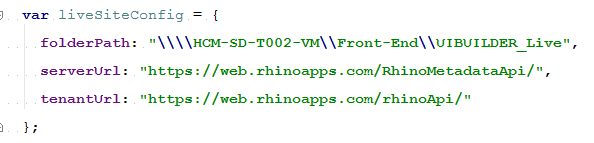
* From command prompt tool on Window, you can type below command

***grunt releaseClient***

* Your build was copied to 10.84.1.76\Front-End\UIBUILDER\_CLIENT folder
* Note: replace by your server, in this case i’m using server 10.84.1.76
* Password: F183EA78-88E7-4293-9D44-B059B04ABEEC ( you can change on Database)

### For Live site

* Live server url is defined in GruntFile.js



* From command prompt tool on Window, you can type below command

***grunt releaseLive***

* Your build was copied to 10.84.1.76\Front-End\UIBUILDER\_LIVE folder
* Note: replace by your server, in this case i’m using server 10.84.1.76
* Password: F183EA78-88E7-4293-9D44-B059B04ABEEC ( you can change on Database)

# Build and deploy SBA for Web and Mobile

## Prerequisite

### Project architecture

|  |  |  |
| --- | --- | --- |
| D:\SBA transition\Screenshot_2.pngScreenshot_2 | * *“/build”* – contains temperature build before copy to site 10.84.1.76/Front-End * *“/commonData”*   + “config.json” - defines server api url which is called in application   + “menu.json” - defines items which will is displayed on Menu * “/*commonViews*” - contains all html file of each screen * “/*img*” – all images and icons * “/*js*” - contains project’s business such as controllers, services, helpers…   + /vendor - all libraries that are added by bower (refer to bower.json)   + /libs - all libraries that are added manually * *“/language”* - contains html files (list/form of each screen) and json data which get from UI Builder package * *“/mobile”* – contains source code which is used to build mobile application      * *“/node\_modules”* - contains all dependencies which are added by npm (refer to package.json) | |
|  | |  |

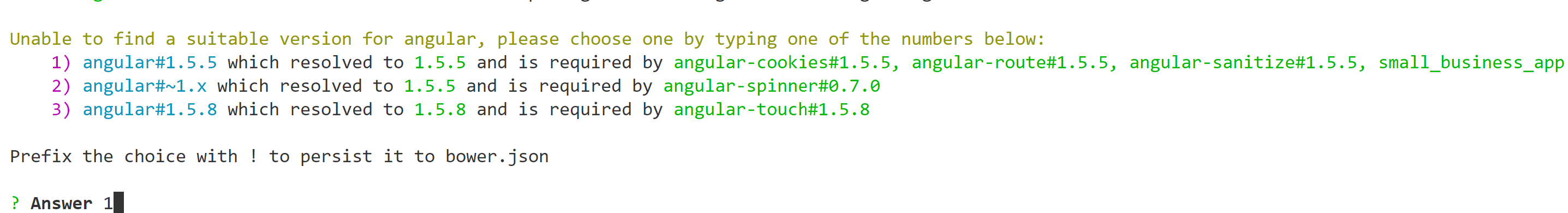
### Install dependency and framework/library

* To install dependencies and libraries, open command prompt and type below command:

***cd <sba\_folder>***

***npm install***

* Then it will display suitable version of angular, you should choose number 1



## Build SBA Web

### For localhost

* From <sba\_folder>, open command prompt tool and type bellow command:
  + Compile scss to app.css

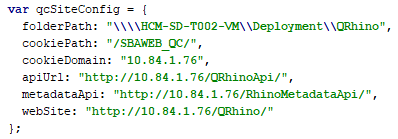
**grunt compileCSSS**

* + Run sba on browser

**npm run start**

### For QC site

* QC server url is defined in GruntFile.js



* From command prompt tool on Window, you can type below command

***grunt releaseWebQC***

* Your build was copied to 10.84.1.76\Deployment\QRhino folder
* Note: replace by your server, in this case i’m using server 10.84.1.76

### For Client test site

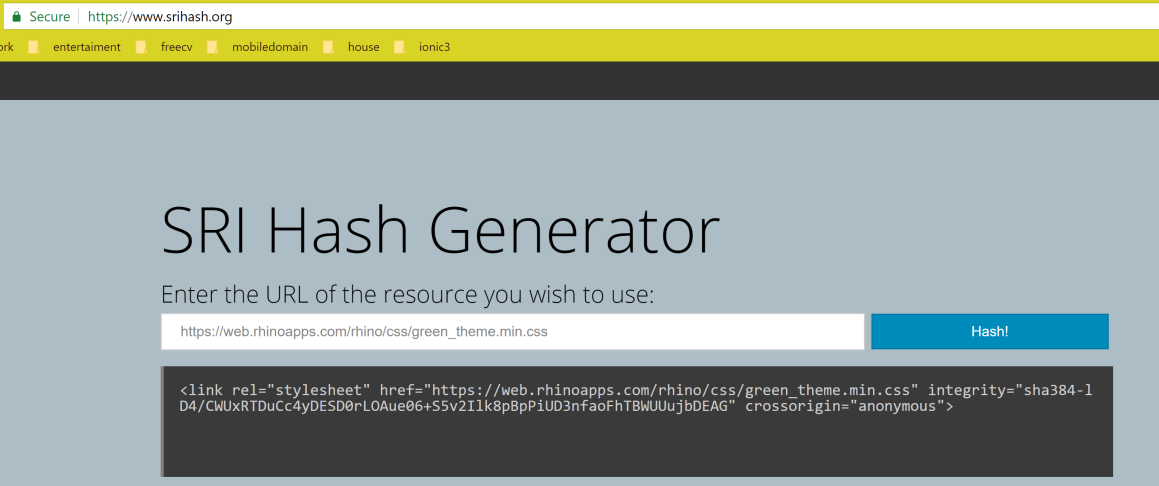
* Client test server url is defined in GruntFile.js



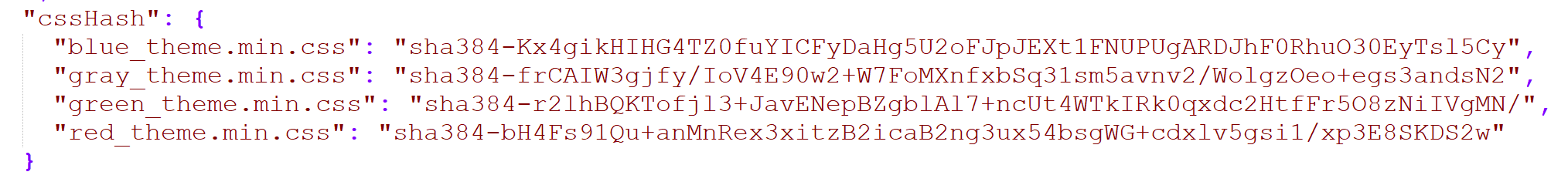
* From command prompt tool on Window, you can type below command

***grunt releaseWebClient***

* Your build was copied to 10.84.1.76\Deployment\TRhino folder
* Note: replace by your server, in this case i’m using server 10.84.1.76
* After copy build source code to Client Test site. You have to update css integrity in commonData/config.json to support change theme
* Go to <https://www.srihash.org/>
* Copy each theme css link and paste into input, then click “Hash” button



* Replace new integrity to cssHash object in commonData/config.json



### For Live site

* Live server url is defined in GruntFile.js



* From command prompt tool on Window, you can type below command:

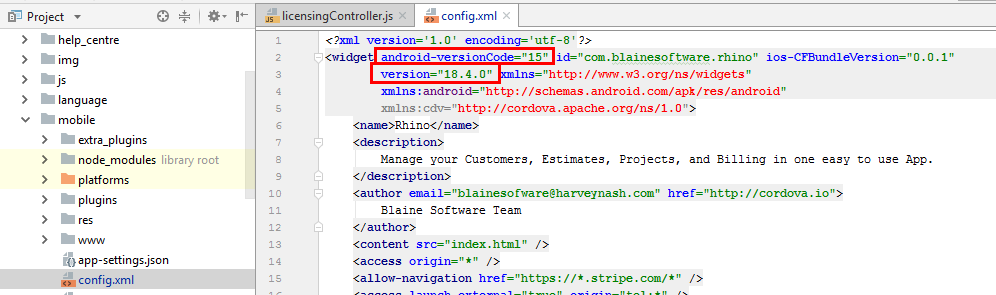
***grunt releaseWebLive***

* Your build was copied to 10.84.1.76\Deployment\LRhinofolder
* After copy build source code to Live site. You have to update css integrity in commonData/config.json to support change theme
* Note: replace by your server, in this case i’m using server 10.84.1.76

## Build SBA Mobile

### Build source code for mobile

* Open sba/mobile/config.xml and update new version and version code



* From command prompt tool on Window, you can type below command
  + for QC:

***grunt releaseDeviceQC***

* + for Client test site:

***grunt releaseDeviceClient***

* + for Live site:

***grunt releaseDeviceLive***

* Update config to ios/android source cod*e*

***cd mobile***

***cordova prepare***

### Add Platforms

* Use the command line: ***cordova platform add android*** for android and ***cordova platform add ios*** for ios
* To check current platform: ***cordova platform ls***
* Note: If this is the first time you build SBA mobile ("sba/mobile/platforms/” is empty), you will have to do step 4.3.2

### Build Android application

* Use the command line: ***cordova build android***
* Get the apk file ad "sba/mobile/platforms/android/build/output/apk/android-debug.apk" and install to android device or use the command line "cordova run android" (make sure you plugged in only 1 android device/emulator)

### Build iOS application

* Use the command line: ***cordova build ios*** --- If this step is failed with a permission error, please try to run the command "chmod –R 777 ./" to allow access for this folder.
* Open Finder, go to "sba/platforms/ios" and open file [projectName].xcodeproj by using Xcode.
* From XCode, you can configuration your XCode project to install it on your phone or simulator

## Deploy SBA Mobile

### Deploy to the simulator

1. In the upper left hand corner of XCode, click on the Scheme dropdown and select the project name as the target.
2. Click the device section and select an iOS simulator such as iPhone7
3. Click the Run button in your project window’s toolbar to build, deploy and run the application in the simulator

### Deploy to the Device

Requirements

1. Join the Apple iOS developer Program
2. Create a Provisioning Profile within the [iOS Provisioning Portal](https://developer.apple.com/ios/manage/overview/index.action), you can also use its. Development Provisioning Assistant to create then install the profile and certificate for use within XCode
3. Verify that the Code Signing Identity in the Code Signing sections of the XCode project settings has been set with your provisioning profile name

Deployment

1. Plug your device into Mac via the USB Cable
2. Select the target and device at the upper left hand corner of XCode (click the Scheme drop down and select the project name as the target). If your device is plugged in via the USB but not visible, click the Organizer button to determine any errors.
3. Click the run button to build, deploy and run the application on your device.

# Installation guide

## Android

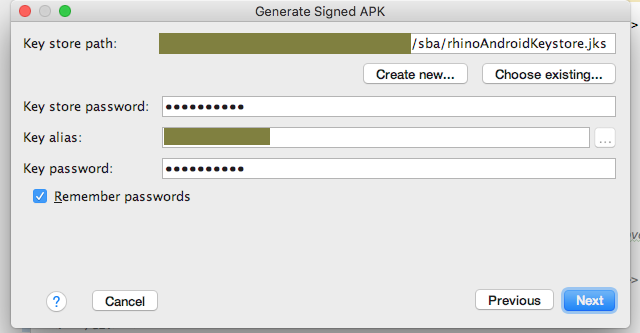
### Run Android application directly in device

* Your device is connected via USB, install your application on the device by selecting Run > Run (or Run > Debug) from the Android Studio menu bar
* Or from command line tool (terminal/cmd) type command

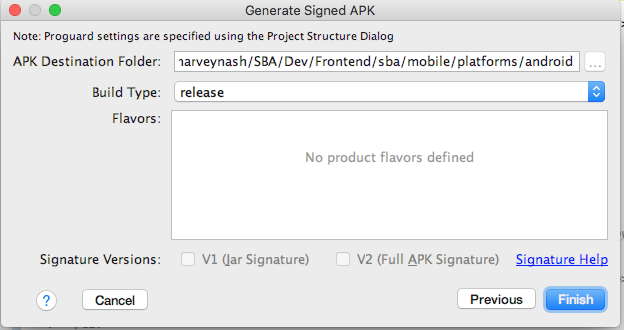
***adb install [path\_of\_apk]***

### Build the .apk package

* Choose “Build” > “Generate Signed APK” on menu of Android Studio
* Choose existing key store from sba/rhinoAndroidKeystore.jks
* Information of KeyStore: ask Eugene to get information

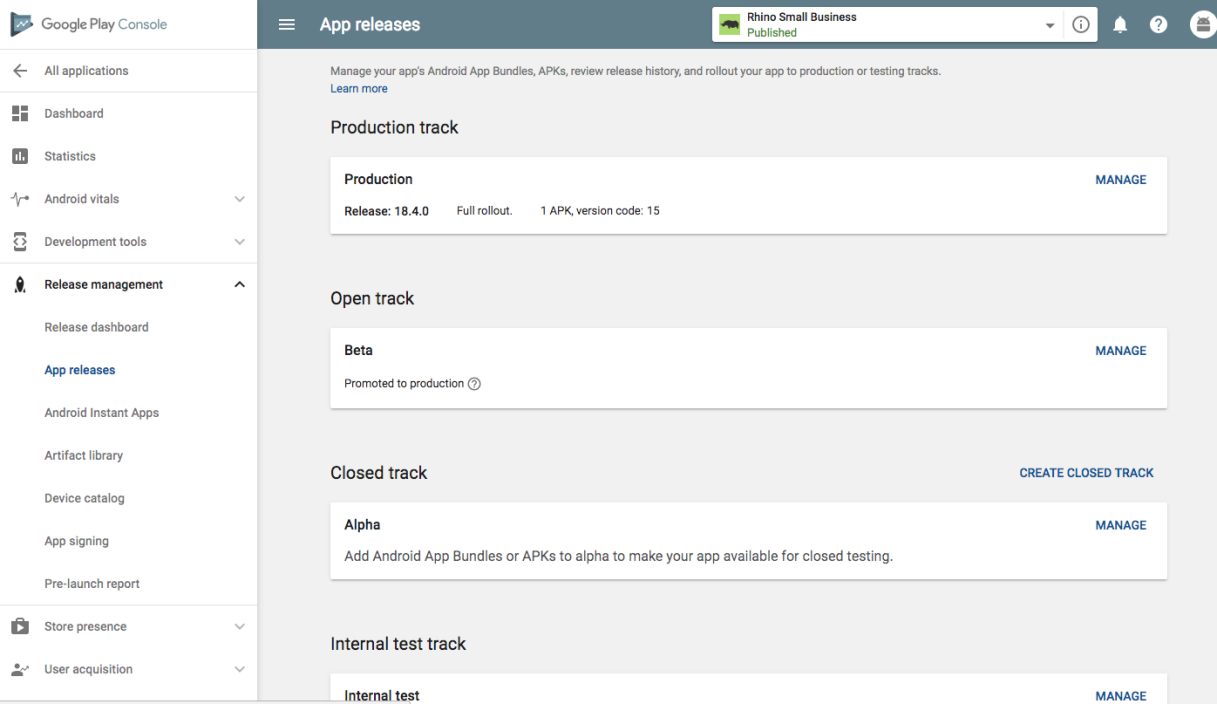


* Click “Next” to generate app-release.apk

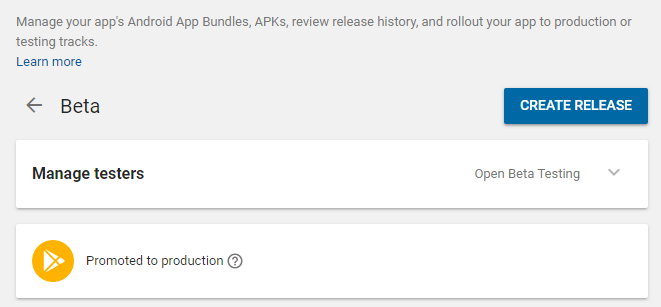


### Publish new app version to Google Play

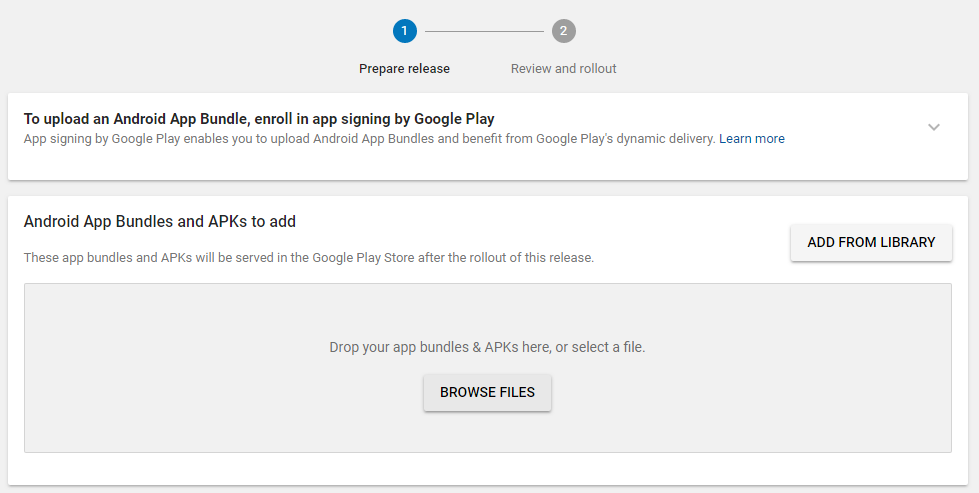
* Start in your browser, navigate to [Play Console](https://play.google.com/apps/publish/) and login with your Google developer
* Select “Rhino Small Business”
* On the left menu, select “Release management” > “App releases”
* Create Beta release by clicking on “Manage” of Beta



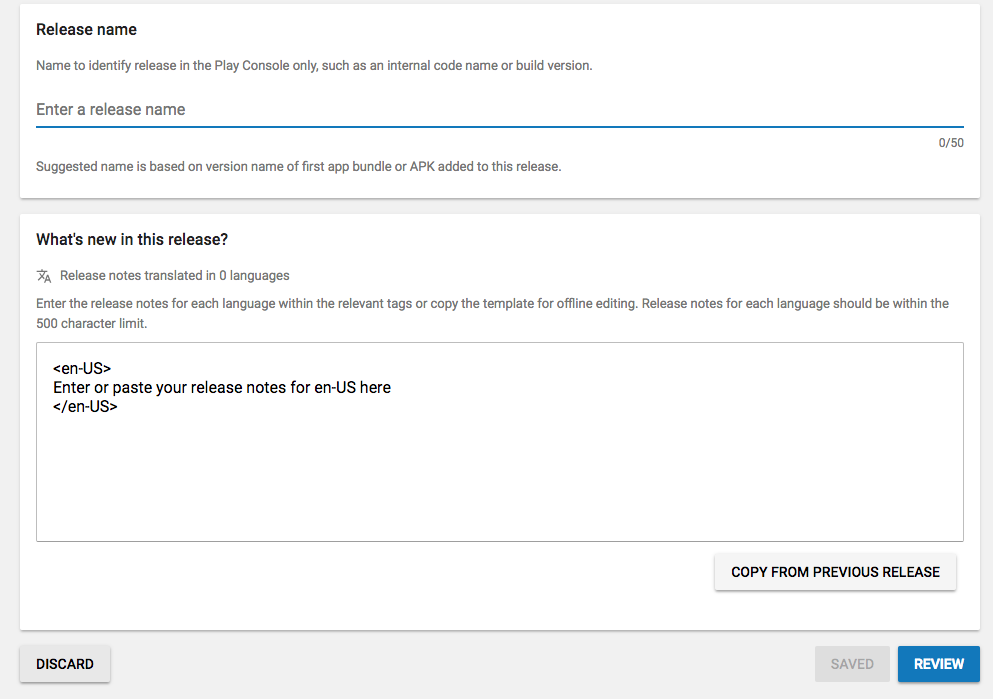
* Click “Create Release”



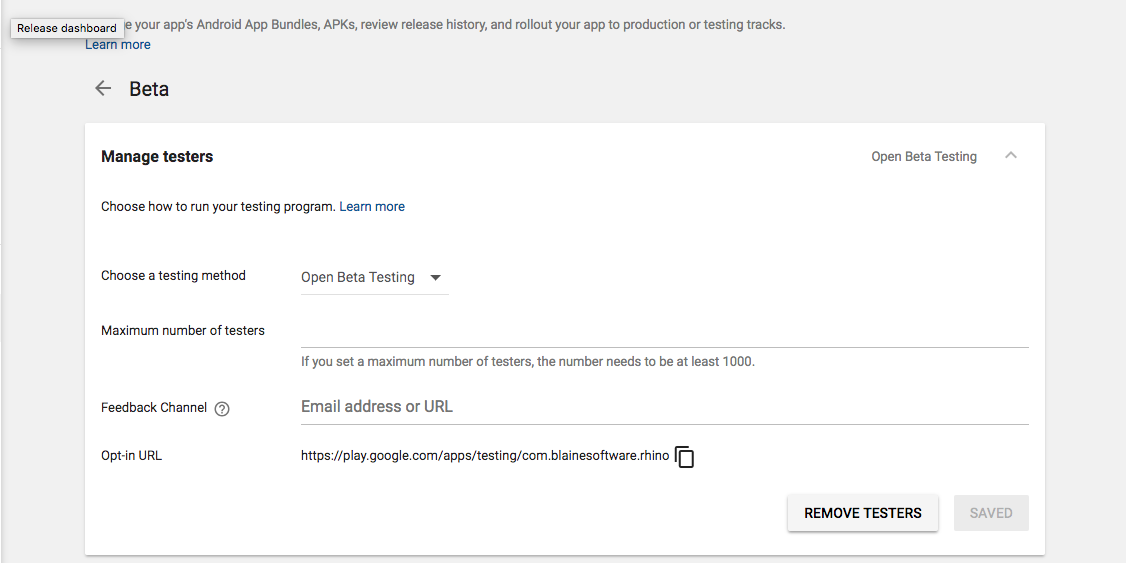
* Upload app-release.apk that was built with keystore



* Fill “Release name” and “What’s new in this release”



* Click “Review” and click “Start Rollout To Beta”
* For testing Beta release, you copy “Opt-in Url” and send to your testers.



* Then notify your beta testers to give it a try. If it passes the testing phase, you create a Product release. Choose “Add APK from Library”, select your beta version and click “Review” -> “Start rollout to Production.

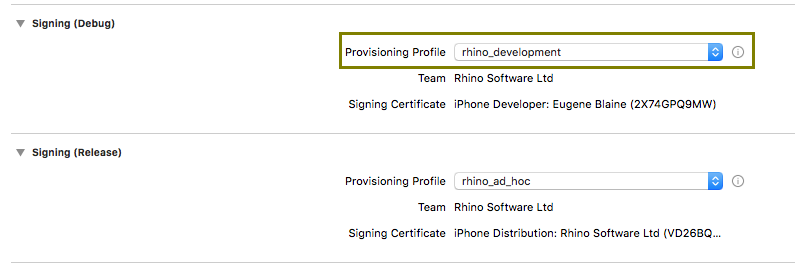
## iOS

### Prerequisite

* You should have an Apple developer account.
* Create the Development Certificate for your Mac on Apple developer portal and import it to your Mac.
* Create the Application Id on the Apple developer portal.
* Create the Provisioning profiles (Development, Ad-hoc, Distribute) on the Apple developer portal and import it to your XCode.
* Setting up code signing identity for your project.

### Run iOS application directly within a device

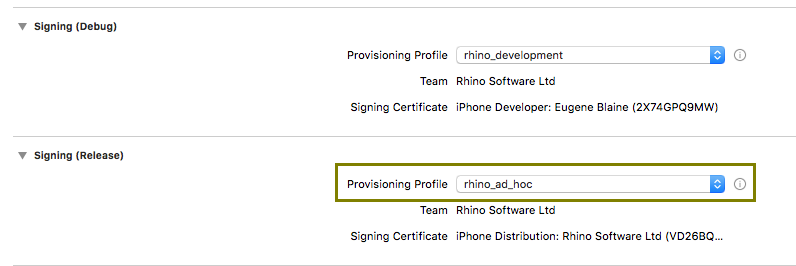
* Open up your project in XCode, make sure you have a correct Bundle Identifier and that you’ve chosen the correct Development Certificate



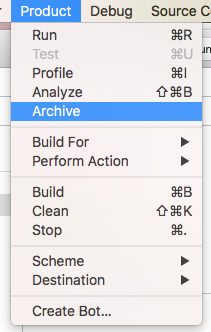
* Plug the iPhone/iPad to Mac machine.
* Select target to build as your device name
* Click on the Run button to run on your device.

### Build the ipa package

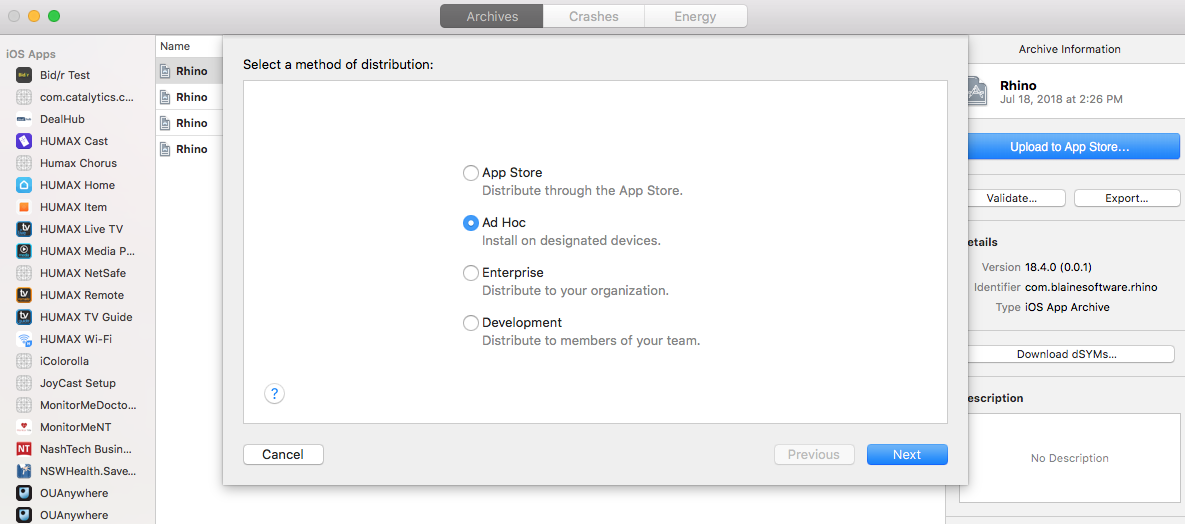
* Open up your project in XCode, make sure you have a correct Bundle Identifier and that you’ve chosen the correct Ad-hoc Certificate



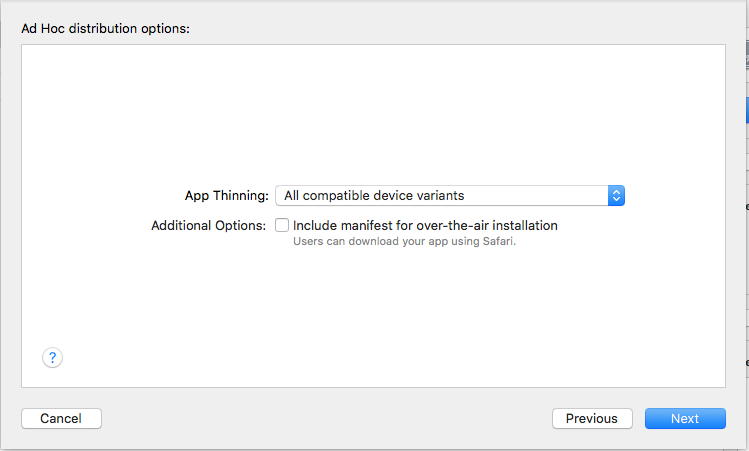
* Archive your project



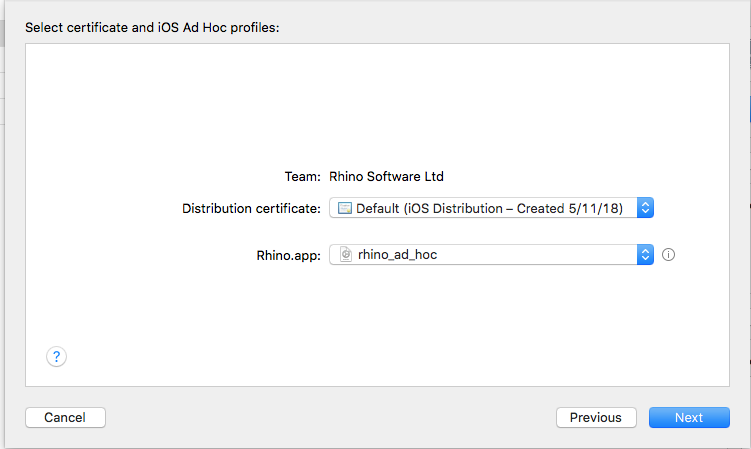
* Choose export as Ad-hoc package



* Then click Next

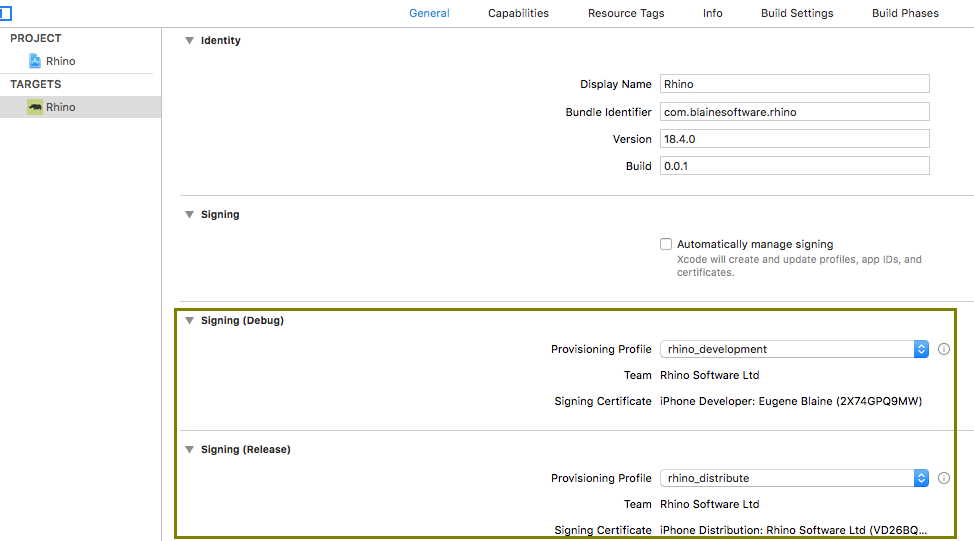


* Then click Next to generate Rhino.ipa

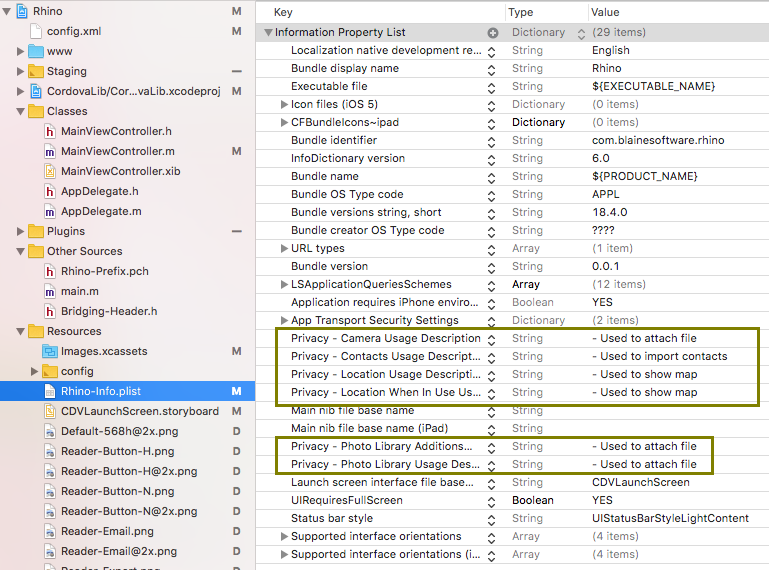


### Submit iOS build to iTuneConnect

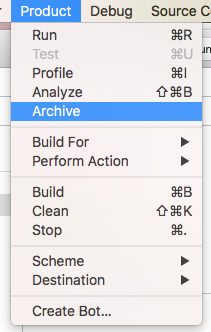
* Open up your project in XCode, make sure you have a correct Bundle Identifier and that you’ve chosen the correct Distribution Certificate



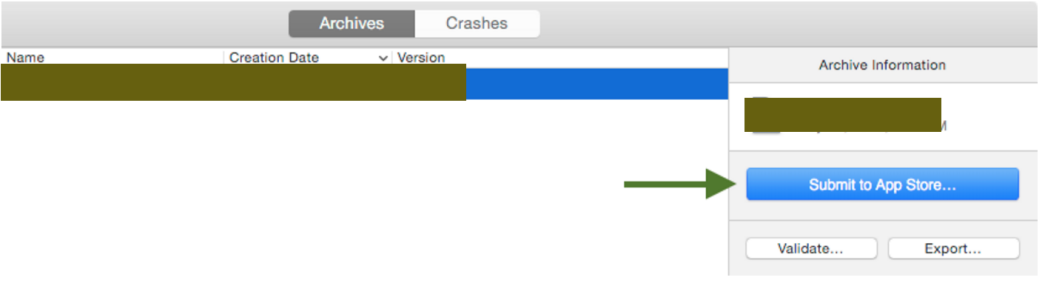
* Make sure that you provided all usage descriptions in the Rhino-Info.plist



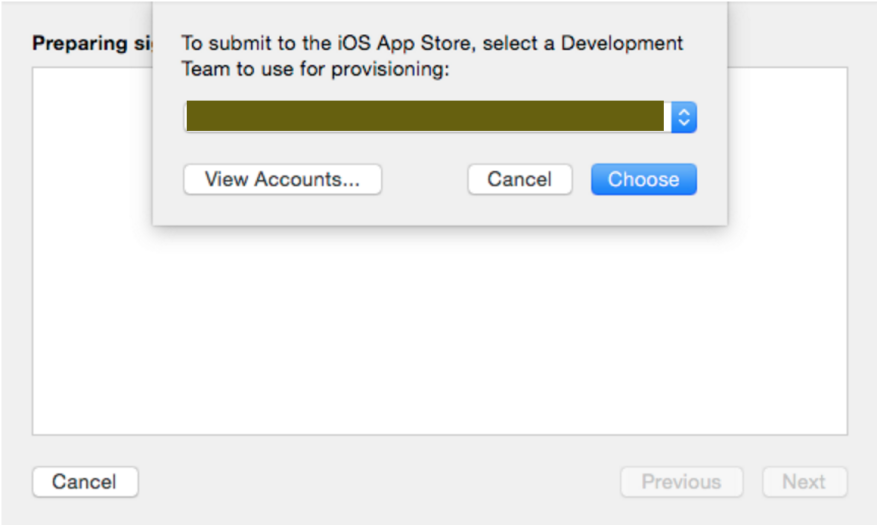
* Choose Product\Archive from the top toolbar



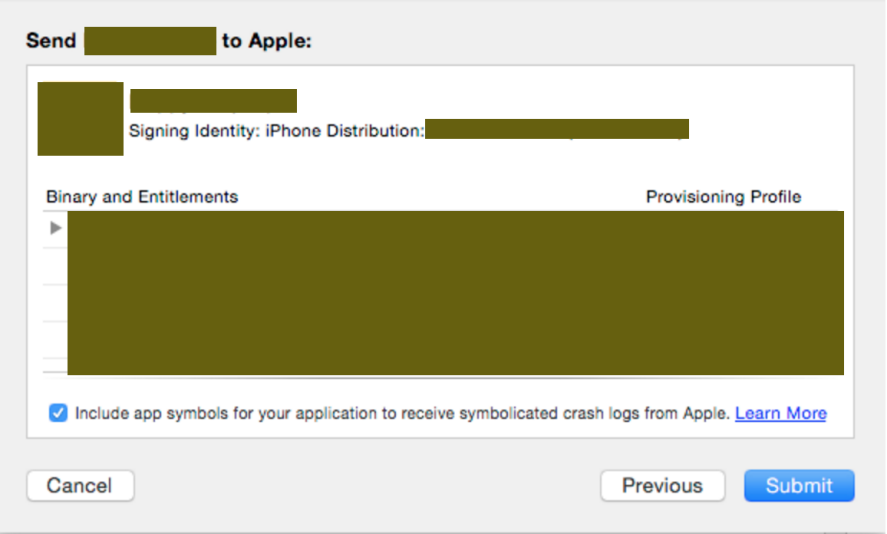
* Once XCode finishes archiving your project, click the shiny blue “Submit to App Store … “ button



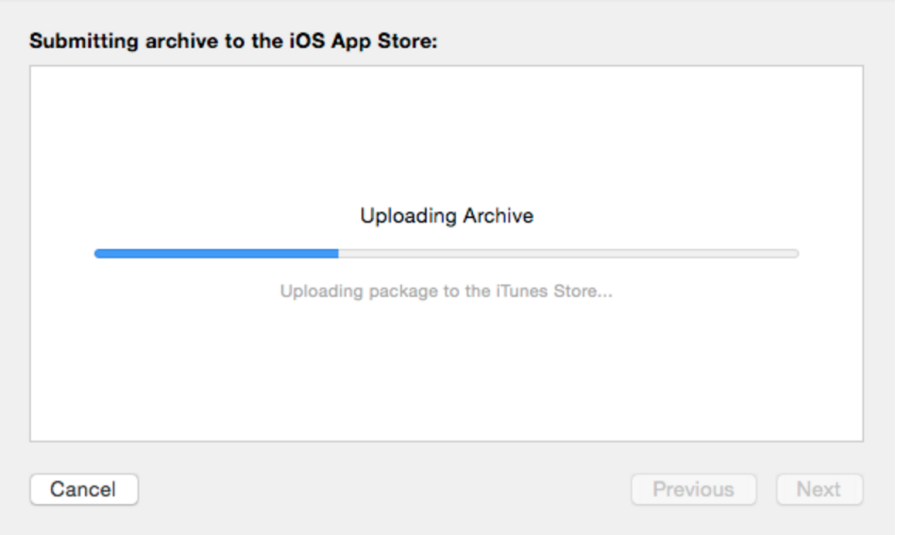
* After that, you need to choose your development team



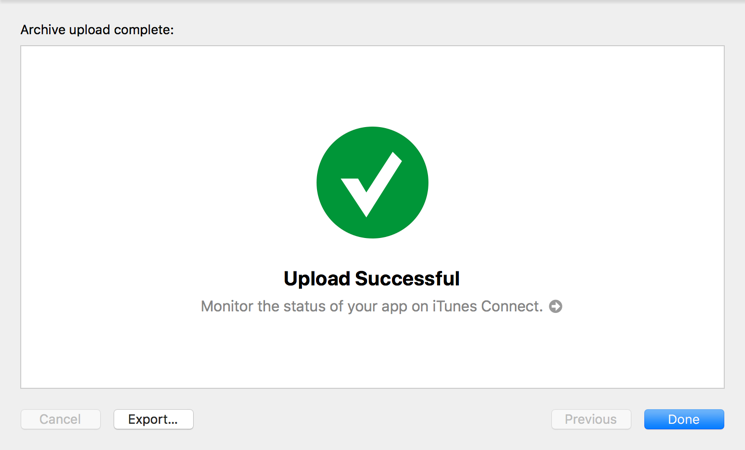
* Click submit

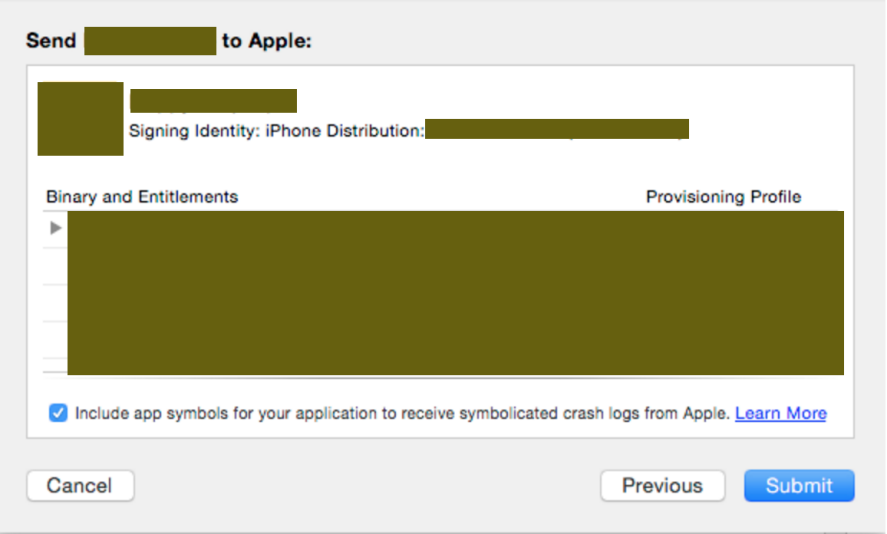


* Wait for a few minutes as your build uploads



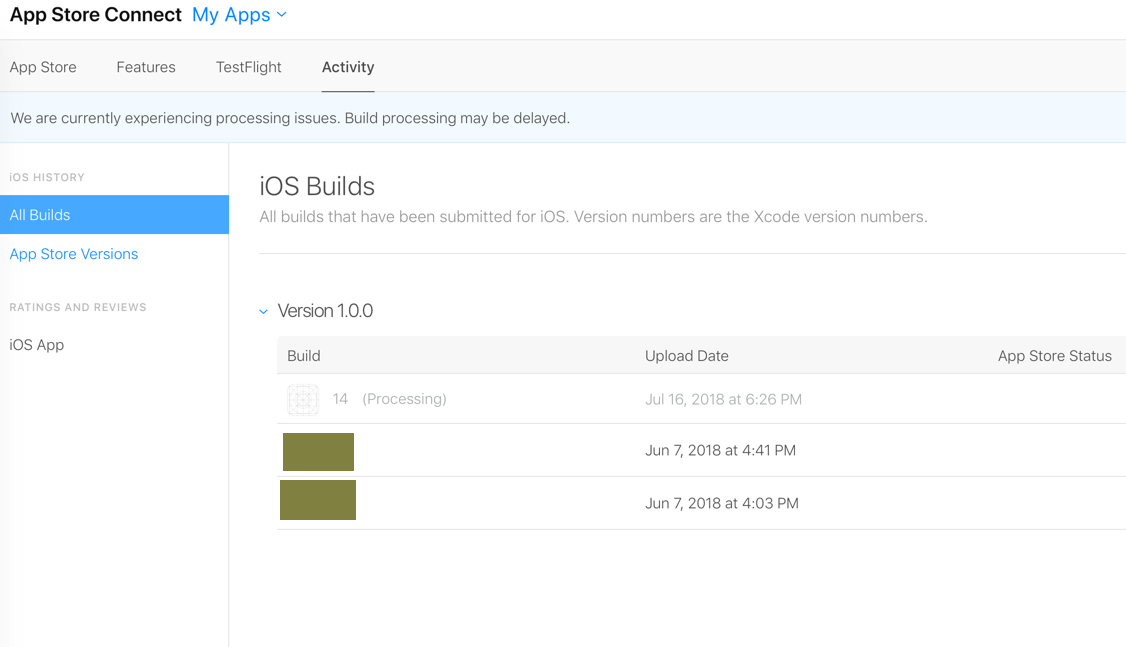
* One you’re done. You should receive a success message like the following



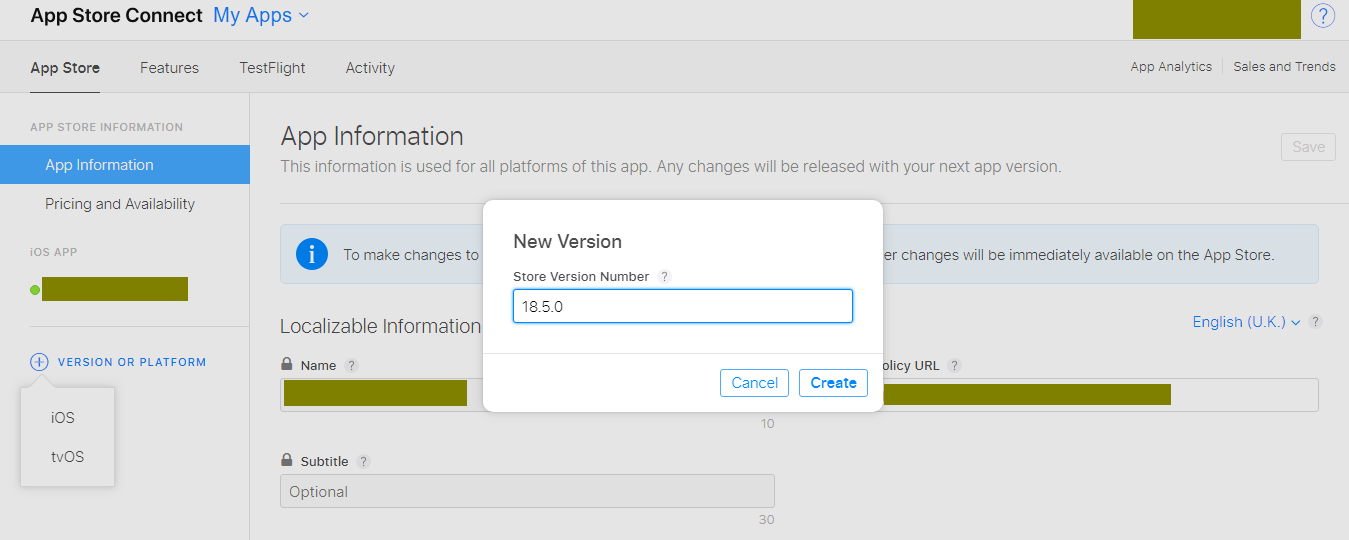


### Publish new app version to Apple Store

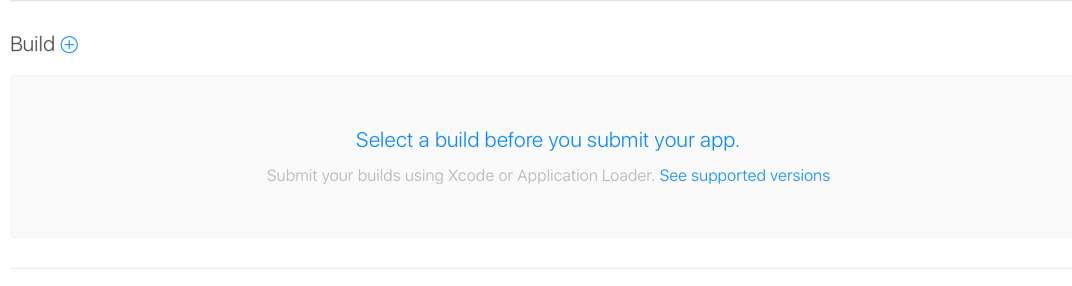
* Start in your browser, navigate to [iTunes Connect](https://itunesconnect.apple.com/login) and login with your Apple developer
* Click My Apps. Choose “Rhino Small Business”
* The latest build was submitted from XCode that will be in “Activity”tab

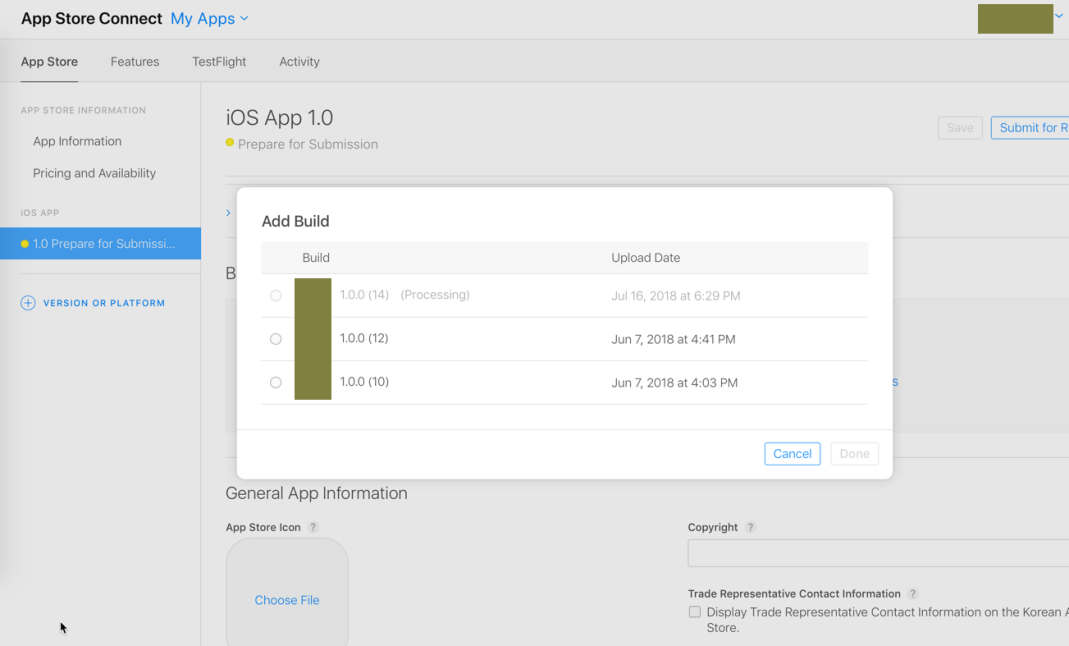


* Click the “(+) VERSION OR PLATFORM” in the left bottom of screen. Input your new version and click “Create”



* Fill “What's New in This Version” and choose latest build.





* Then click “Save” and “Submit for review” on right top of screen
* It will take about 2-3 days for Apple review. You can view your app status in “Activity” tab

