Tutorial – Building an Application Binary

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appMobi{!}

Purpose

This document will show you the developer how to take your appMobi application written using the appMobi XDK and generate an Android or iOS binary file. Please note that in order to generate any iOS binary (even an adHoc build) the build process requires an iOS Developer Account. For more information on acquiring an iOS Developer Account, see this tutorial:

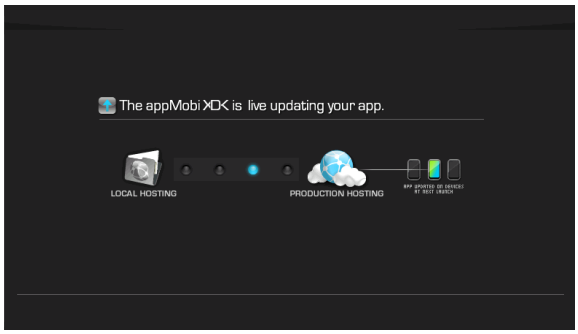
http://www.appmobi.com/amdocs/index.php?DOC=TUTORIAL_APPSTORE_CREDENTIALS

Building an iOS Binary

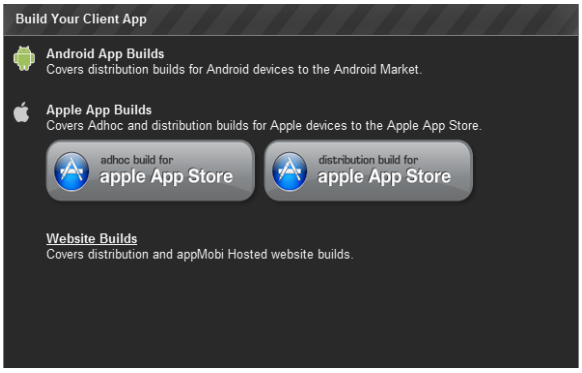
In order to make iOS binary builds, you will first have to have an iOS Developer Account with Apple. To purchase an iOS Developer Account, point your browser to http://developer.apple.com.

Once you have an iOS Developer Account, and you are ready to create an actual binary file for your iOS device, open the XDK to your application and click the *Build for App Store* icon (pictured to the right) that is found across the top of the XDK.

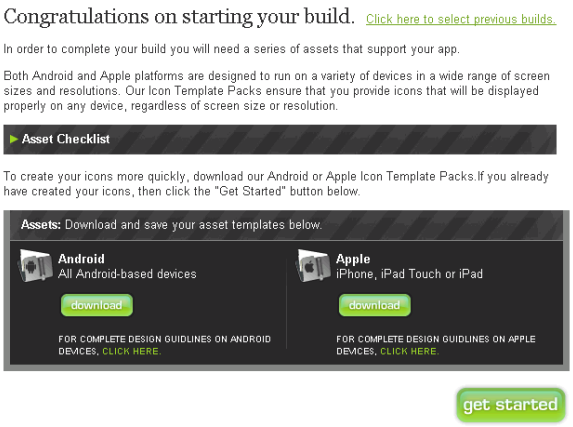
The XDK will immediately copy your application to the cloud to incorporate it into a binary build.



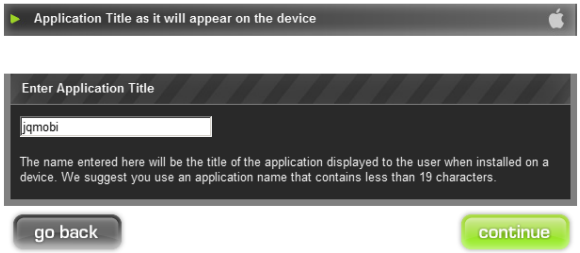
Once your application has been copied to the cloud, the XDK will take you to the build process. Select the list of available Apple App Builds. Here you'll choose between an adhoc build a distribution build. An *adhoc* build will allow you to install your application on up to 100 devices which you would assign within your iOS Developer Account on your own. A *distribution* build is a final build which may only be used to submit your application for consideration for the Apple Appstore.



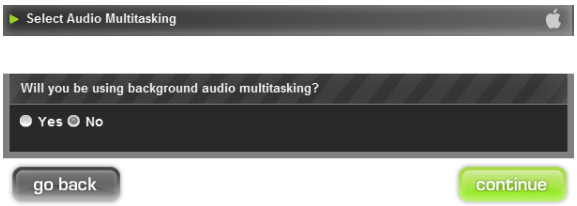
In order to complete your build, you will need a series of assets such as buttons and splash screens. The next page will allow you to download sample assets and directions for creating your own. Once you have what you need from this screen, click *Continue*.



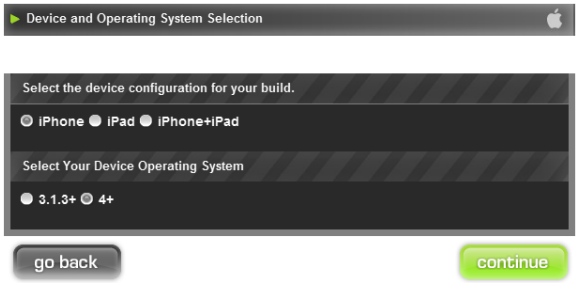
Next, you'll be asked to type in the title of your application as it will appear on the device. Be aware that on iOS devices, if the name is too long it will be truncated with an ellipsis or broken to a second line. As a rule of thumb, we suggest keeping the application name less than 19 characters.



Next, you'll be asked if you want your application to feature audio multitasking. Unless you specifically have an application that you would like to be able to serve audio even when relegated to the background, leave this selection as a "No" because turning this selection on will prompt the user the first time they start up the application with a choice whether they want to give the application this feature or not. Click *Continue* to go on.



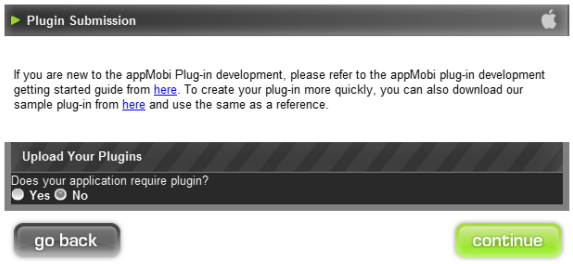
The operating system selection page will give you the choice between a variety of hardware configurations, and operating systems. If your application is sized only for an iPhone or iPad, select the appropriate device. Otherwise, if you have written your device to size dynamically between the two devices using the *AppMobi.display.useViewport* command or a method of your own making, select the iPhone+iPad option. Always choose the most up to date operating system, unless you know for certain that you need to support legacy devices. Be aware that selecting older operating systems may limit the functionality available to your application. Click *Continue* once you are done.



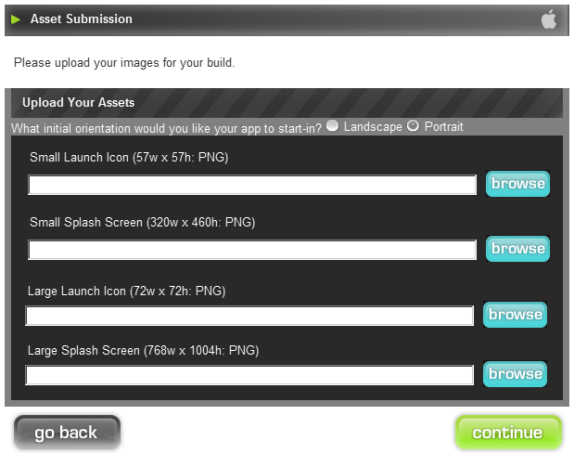
The next page is used to include custom native code known as "plugins" into your build. To learn more about appMobi plugins, download the plugin documentation here:

http://www.appmobi.com/documentation/index.php?DOC=PLUGIN_DOCUMENT

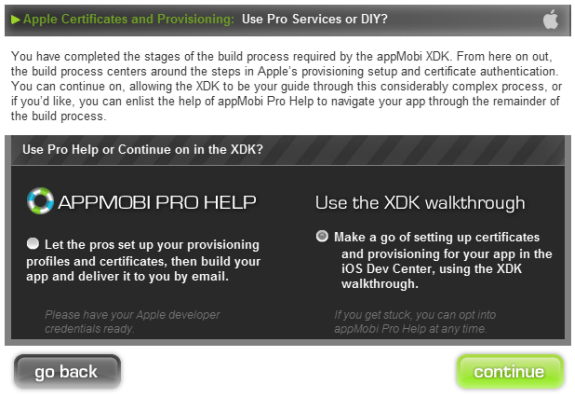
Otherwise, just click *Continue.*



The next screen is where you'll include your assets discussed earlier. You have an option to create your application for landscape or portrait on this page. Once you have the initial orientation you want start uploading the appropriate assets for the application. All assets are .PNG files of a certain width and height.

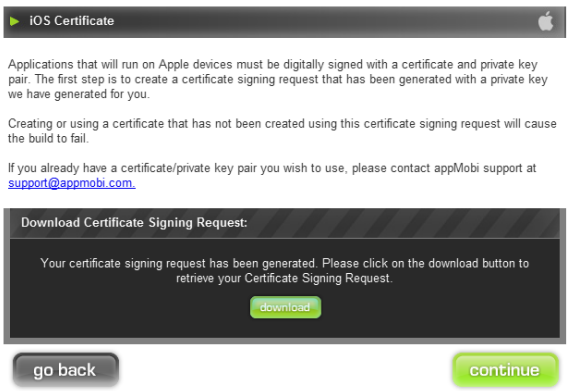


The next screen will give you the option to enlist the aid of appMobi Pro help, or continue on your own to set up certificates and provisioning for your application in the iOS Developer Center.

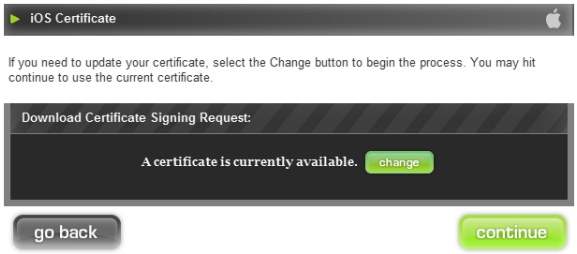


If you have never used the appMobi iOS build system before, you'll be asked to download a signing certificate in order to create your certificate and private key pair.

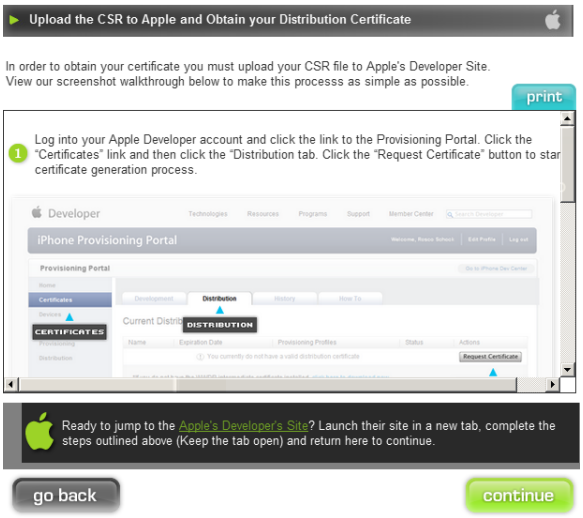
Click *Download* to retrieve the signing request, and then click on *Continue*.



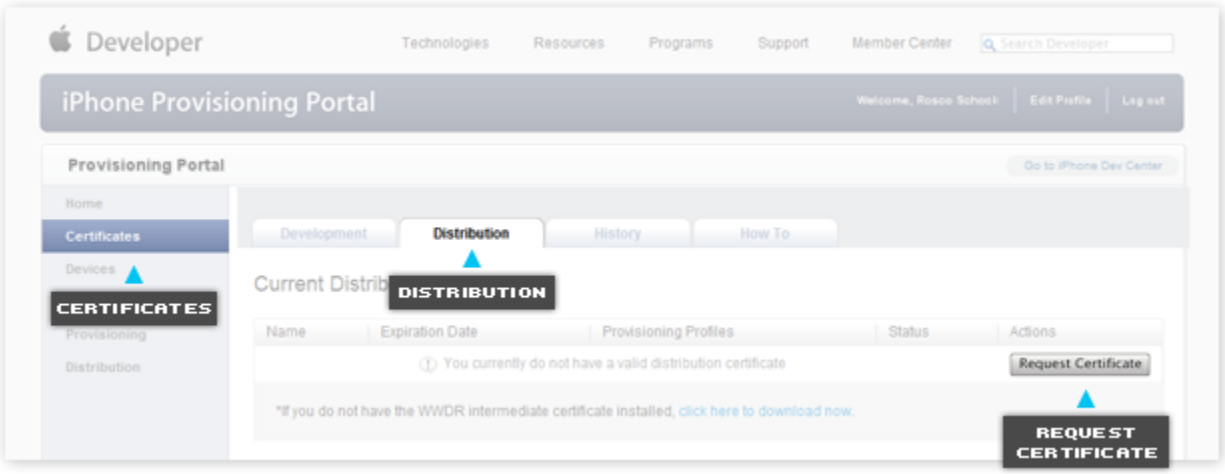
If you **have** created a certificate before, you'll instead be presented with an option to change your certificate or move on past this step. Click *Continue* to do so.



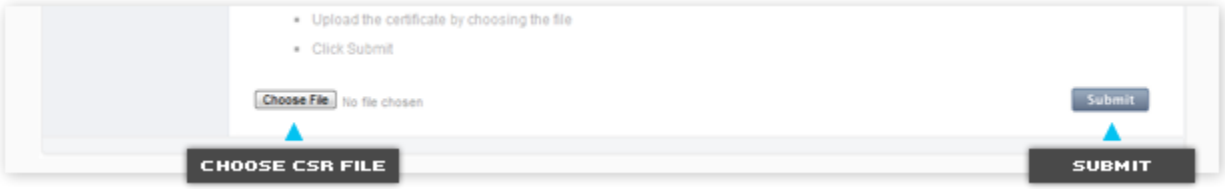
Next, you'll be directed to Apple's Developer site to create your certificate. The instructions are framed on this page of the process. This document includes those instructions below. Click *Continue* once you have done them.



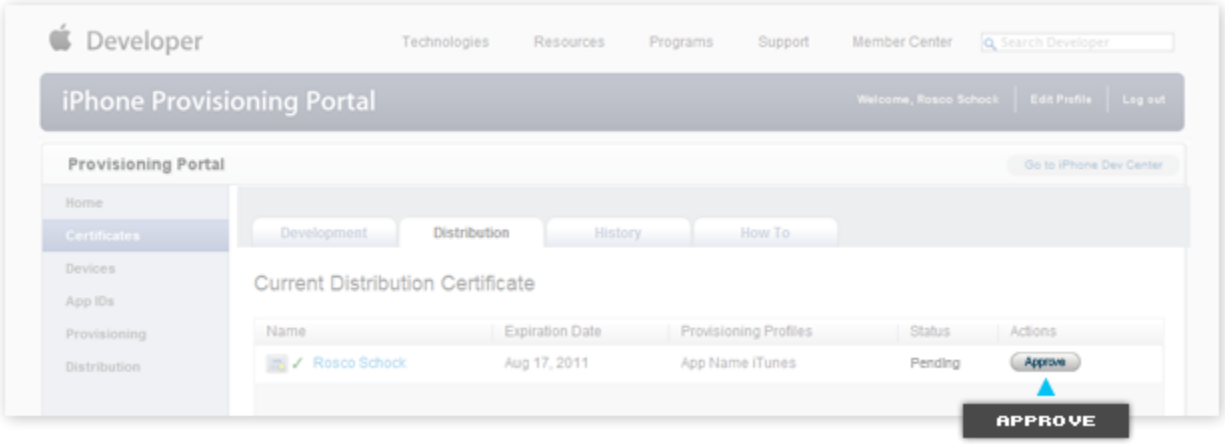
1. Log into your Apple Developer account and click the link to the Provisioning Portal. Click the "Certificates" link and then click the "Distribution tab. Click the "Request Certificate" button to start the certificate generation process.



2. At the bottom of the next screen, click the "Choose File" button. Navigate to the Certificate Signing Request you downloaded on the previous screen. Click the "Submit" button to request a certificate from Apple.



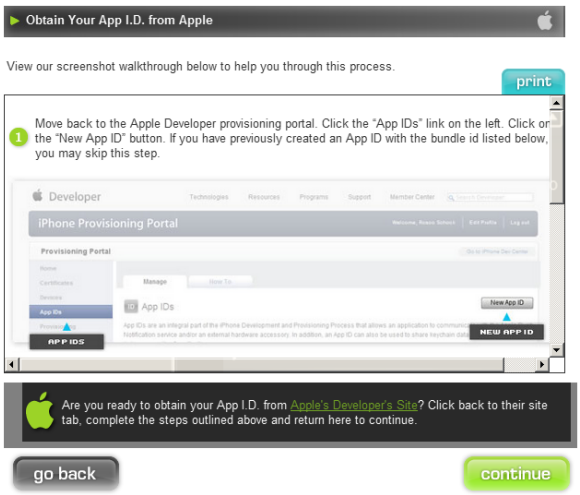
3. You may have to approve the new certificate request. If your certificate has the "Approve" button to the right, click "Approve" to finish the request.



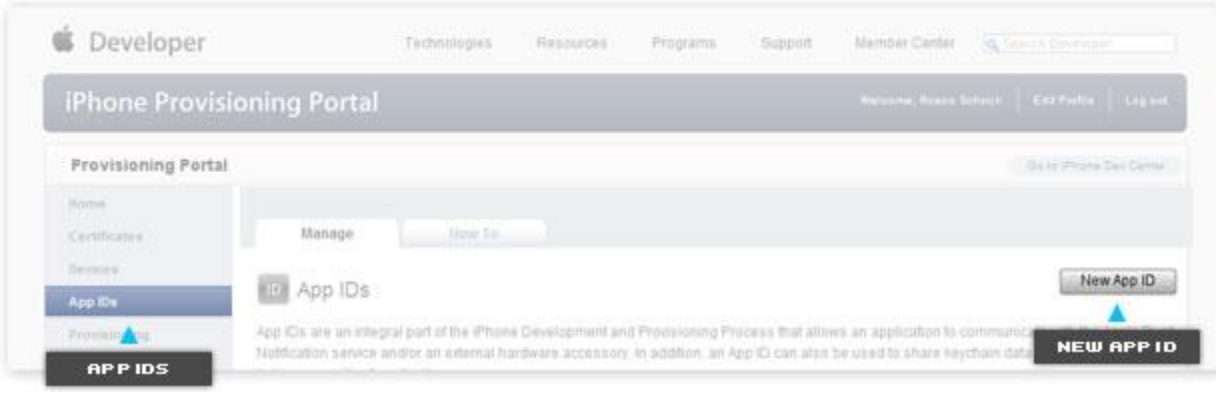
4. Once the certificate has been created, a "Download" button will appear to the right. You may have to refresh the screen until the certificate is available for download. Please take note that the certificate will be on the "Distribution" tab. Click "Download" to download your new certificate.

Next, you will be asked to upload the certification you downloaded from the iOS Developer site to the build process. Once you have entered the path to the document into the edit field, click *Continue*.

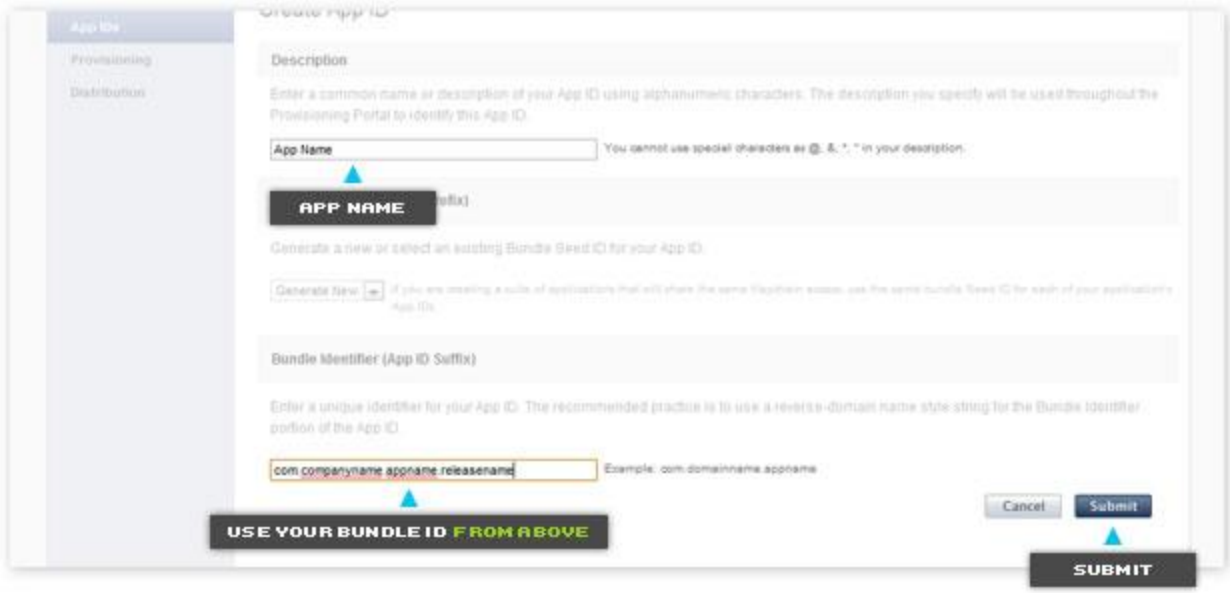
The following step walks you through creating an application ID on the iOS Developer site. Those directions are copied below. Click *Continue* once you have created the application ID to move on.



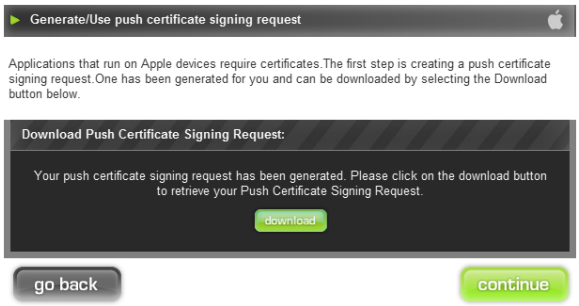
1 Move back to the Apple Developer provisioning portal. Click the "App IDs" link on the left. Click on the "New App ID" button. If you have previously created an App ID with the bundle id listed below, you may skip this step.



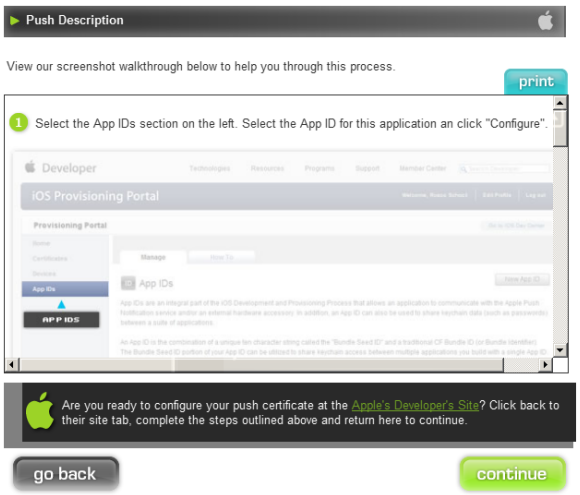
2 Enter in a description in the App Name field.



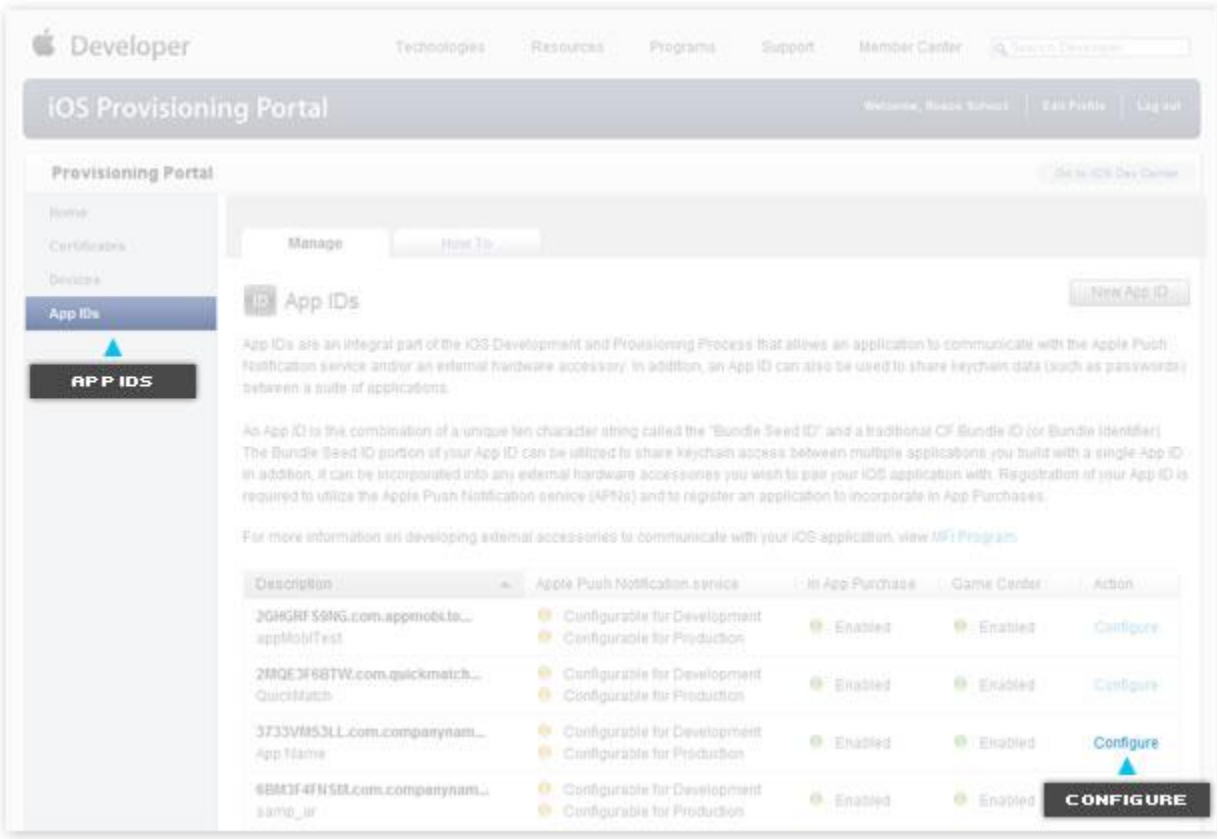
Next you'll be directed to download a signing request in order to upload it to the iOS Developer site in order to create a Push Certificate. Download that here and click *Continue.*



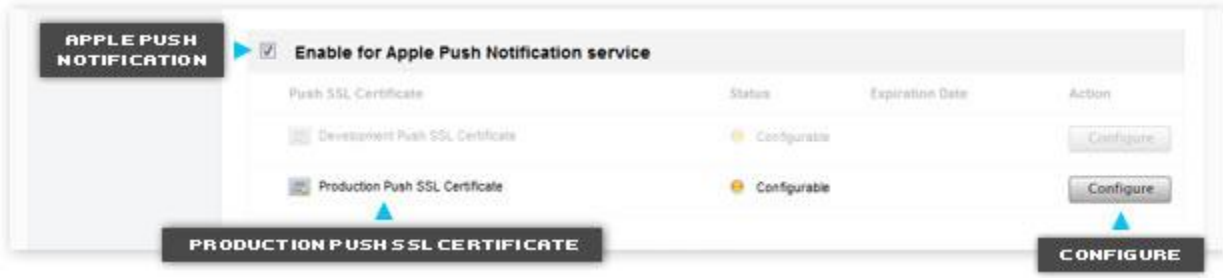
Follow the directions on the iOS Developer Site to upload the signing request and download the Push Certificate. Those directions are copied below. Click *Continue* once you have created the Push Certificate to move on.



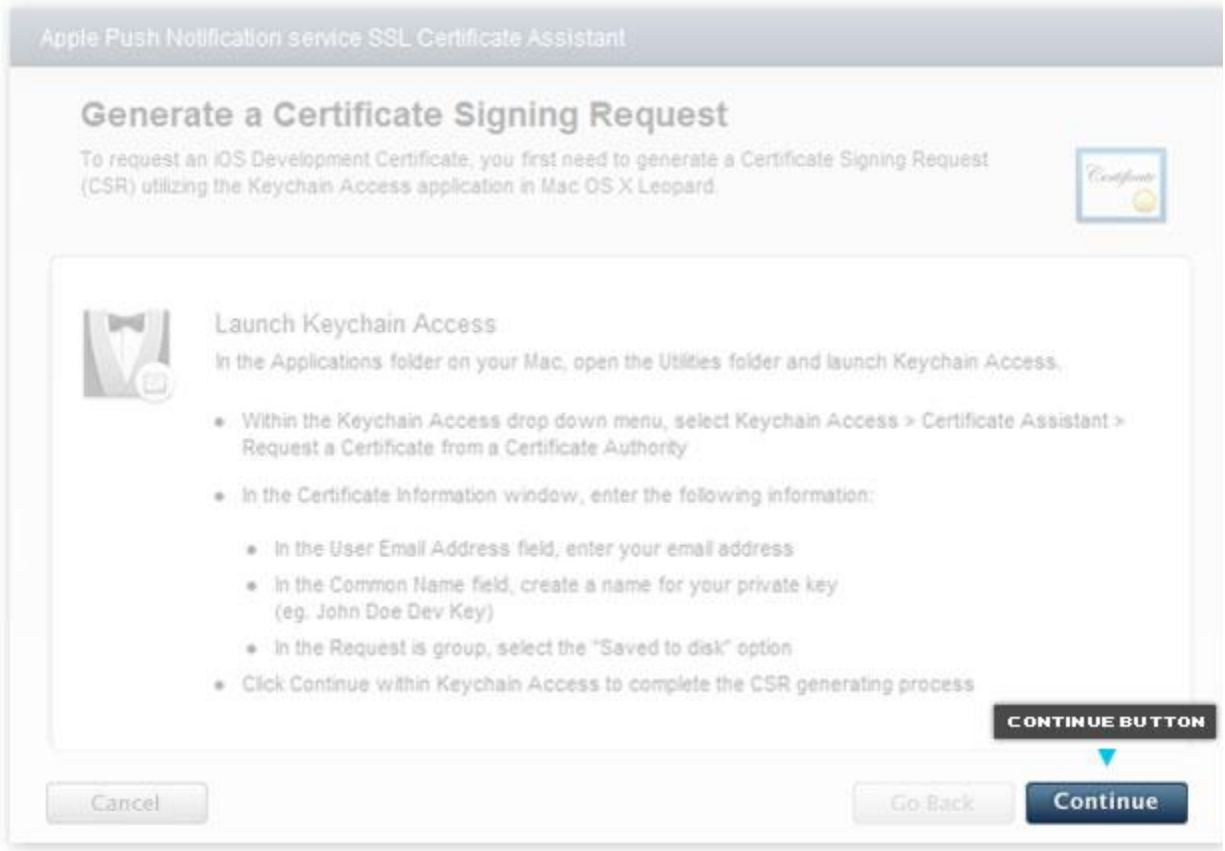
1 Select the App IDs section on the left. Select the App ID for this application an click "Configure".



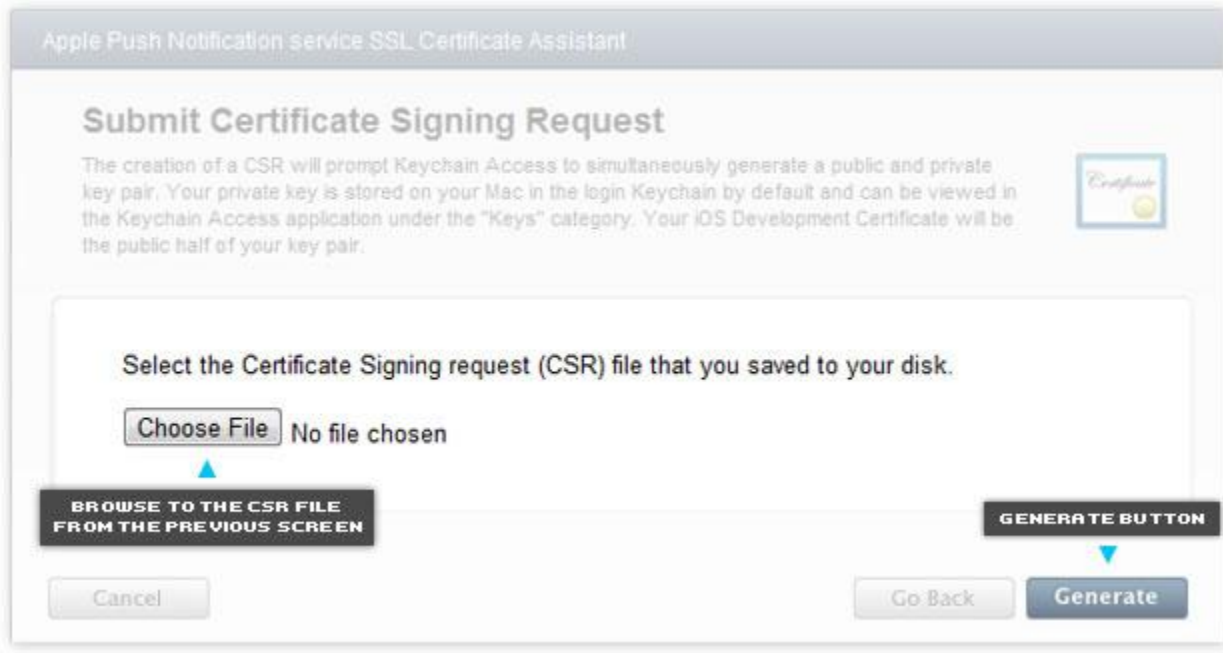
2 Select "Configure to the right of "Production Push SSL Certificate".



3 Click the "Continue" button.



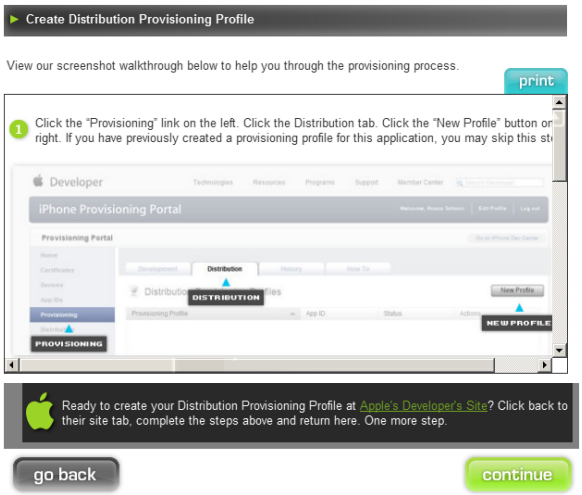
4 Select the certificate signing request you have just downloaded on the previous screen by selecting "Choose File". Click the "Generate" button.



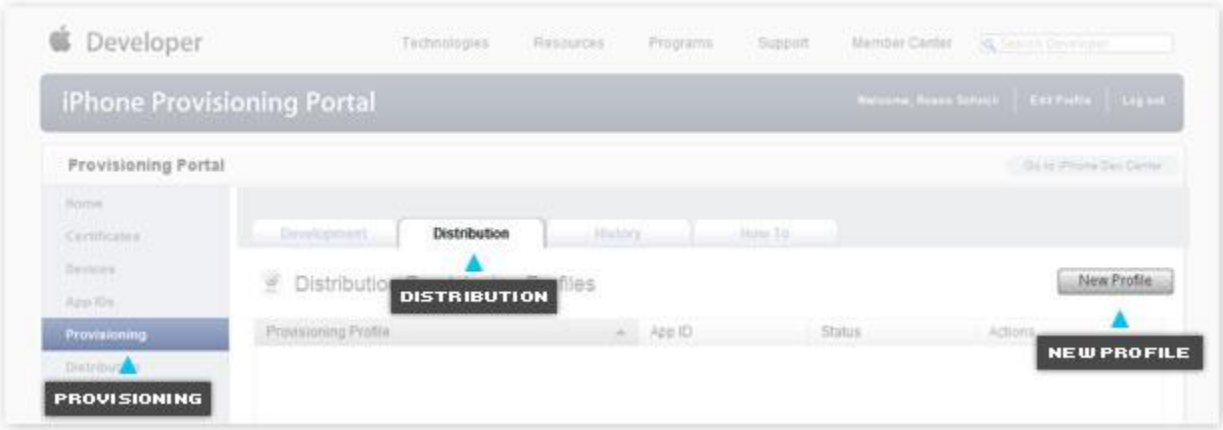
5 Once Apple has completed generating the push certificate, click the "Download" button to retrieve the file.

Upload the Push Certificate and click *Continue.*

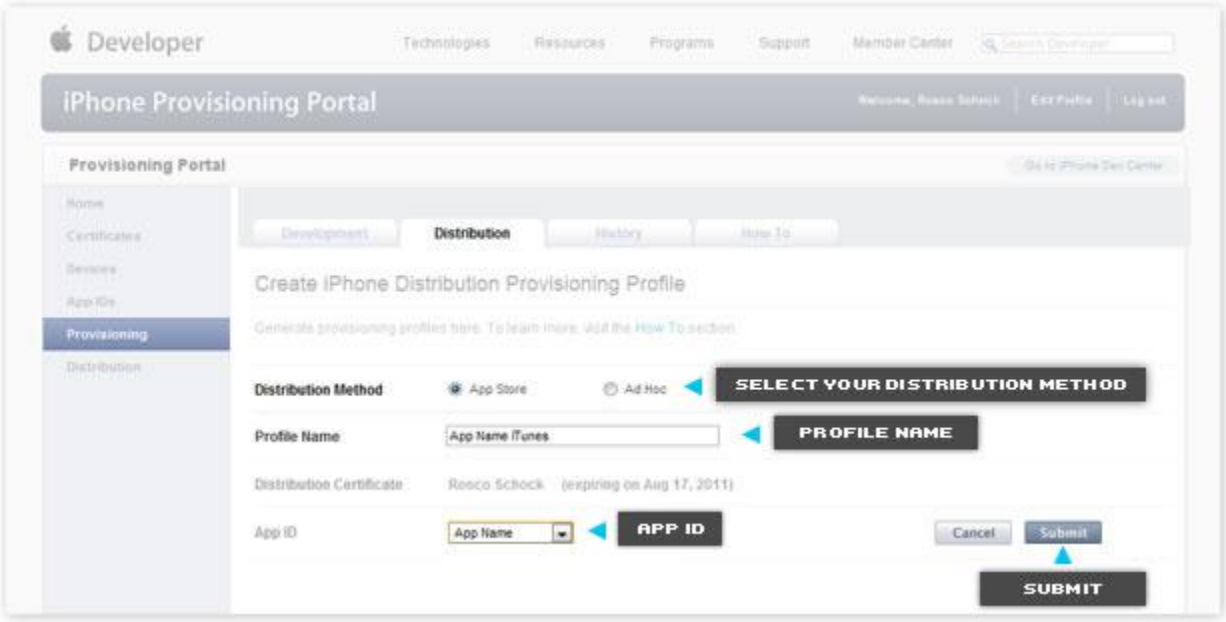
Finally, the build process will lead you through creating a Distribution Provisioning Profile. Those directions are copied below. Click *Continue* once you have created the Distribution Provisioning Profile to move on.



1. Click the "Provisioning" link on the left. Click the Distribution tab. Click the "New Profile" button on the right. If you have previously created a provisioning profile for this application, you may skip this step.

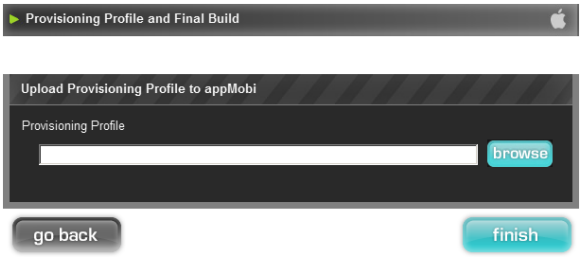


2. Select your distribution method. If this is a "Distribution" build select "App Store". If this is an "Adhoc" build select "Ad hoc". Enter in a profile name to uniquely identify this provisioning profile and select the App ID you created on the previous screen.



3 Once the provisioning profile has been created, a “Download” button will be displayed on the right. You may have to refresh the screen until the provisioning profile has been created by Apple. Once the provisioning profile is available, click “Download” to download.

Upload the Distribution Provisioning Profile, and click *Finish* to submit your build to the cloud.

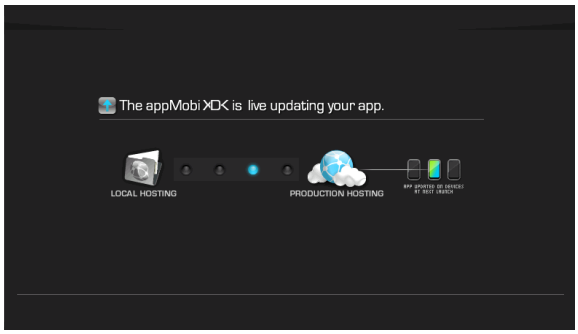


The cloud build system will take up to 90 seconds to create your build. If there were any problems with the build process, you'll be notified on screen. Otherwise, you'll go to a screen that features a button to download the binary (as well as a link to the Distribution Provisioning Profile in the case of an adhoc build).

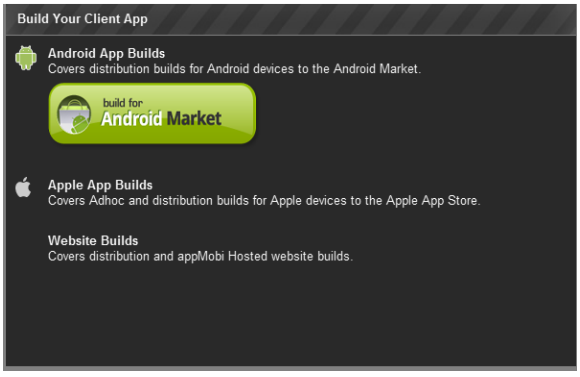
Building an Android Binary

Once you are ready to create an actual .APK file for your Android device, open the XDK to your application and click the *Build for App Store* icon (pictured to the right) that is found across the top of the XDK.

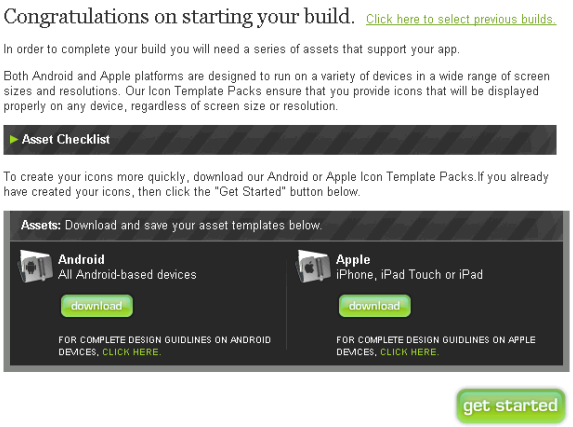
The XDK will immediately copy your application to the cloud to incorporate it into a binary build.



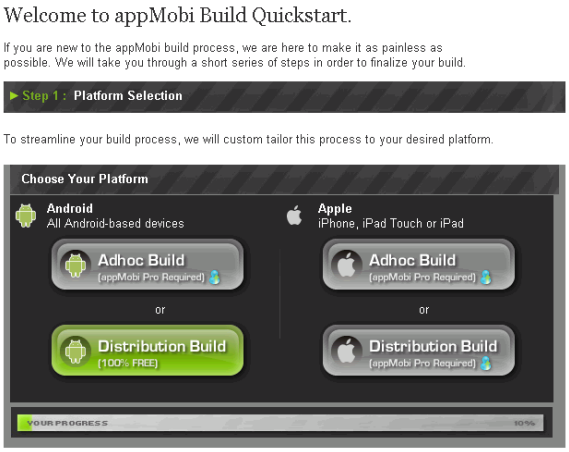
Once your application has been copied to the cloud, the XDK will take you to the build process.



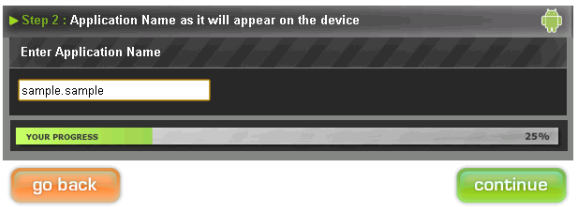
The first screen of the build process gives you the option to download sample images. Download and uncompress the images for the Android build. Click the *get started* button to continue with the process.



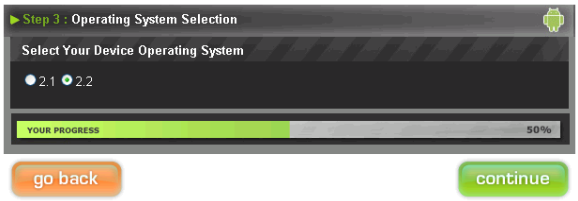
The next screen gives you a choice of what type of build you would like to do. For the time being, free accounts only allow you to build Android release binaries. Click the *Android Distribution Build* button to continue.



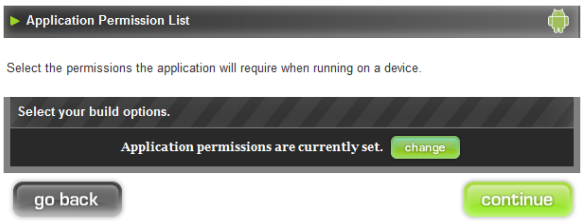
The build process allows you to name the application as it will ultimately appear once it is installed on the device. Enter that name here and click *continue* to move on.



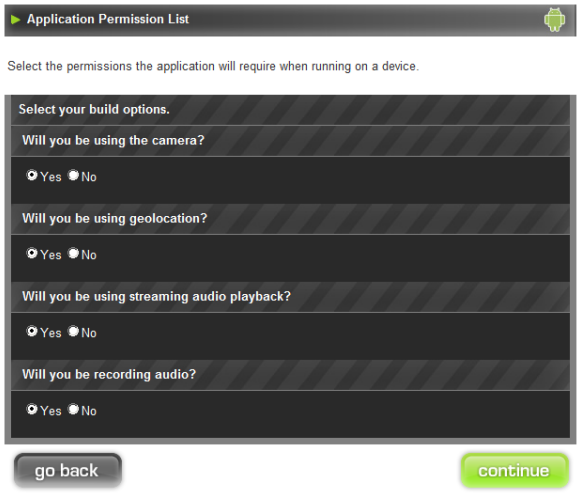
Choose the minimum Android operating system version you would like the application to run on. If you aren't sure which to choose, choose *2.1* and click *continue* to move on.



Next the build process will ask you if you would like to alter the build permissions for the application. By default, appMobi applications are built with permissions to all functionalities of the device. You can alter these build permissions by clicking *change* on this build screen.



The build process will then ask you a list of questions that will modify the application's permissions. Answer the questions appropriately to allow all the functionalities required by your application while removing any permissions that are unused.



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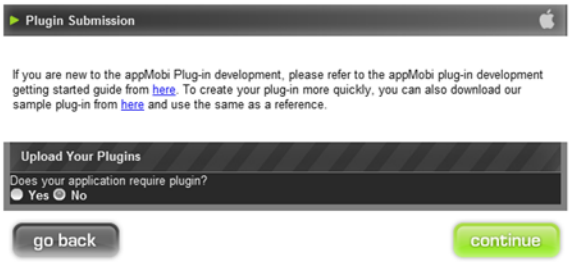
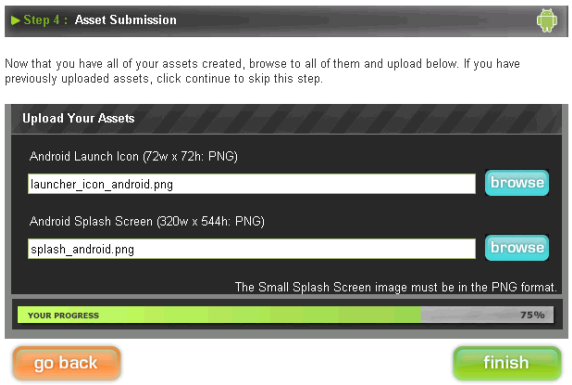
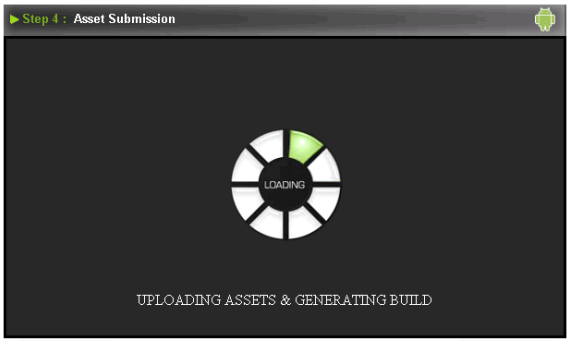
Otherwise, just click Continue.



The next screen asks you to upload images for the application to use as its icon and splash page (the image that shows full screen as the application loads). Use the example images that you downloaded and uncompressed earlier in the build process.



You'll see a screen like this as the binary is built in the cloud.



Once your binary is built, download it from the web by clicking the *Download Build* button. Transfer the .APK file to your Android device by copying it over its wired connection or emailing it to your device. Once you have the file on the device, select it to install the test application.