

AdWhirl Open Source SDK

Setup Instructions for iPhone



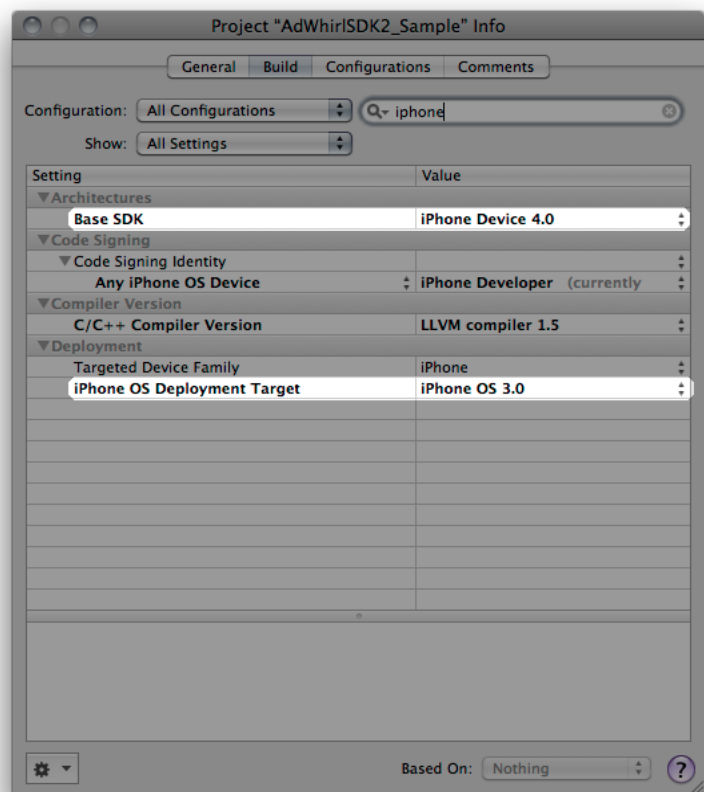
The AdWhirl Open Source SDK contains the code for your iPhone application to display ads from different ad networks. The instructions below assume that you are familiar with Xcode and understand how to change build settings and add frameworks to your Xcode projects.

Note: When adding files to your Xcode project, make sure "Copy items into destination group's folder (if needed)" is checked and use "Recursively create groups for any added folders".

Base SDK and Devices With Older OS Versions

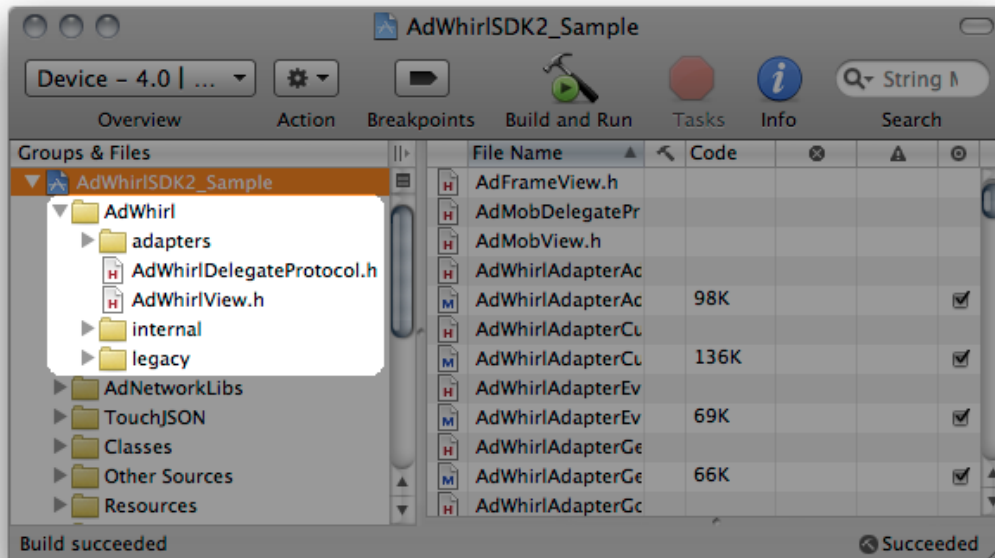
To be consistent with Apple's published best practices, you should set the "Base SDK" setting of your project to the latest iPhone SDK when possible. To support users with older iPhone OSes, set the "iPhone OS Deployment Target" setting to an earlier version. For example, if the latest iPhone SDK is 4.0 and you need to support users with iPhone SDK 3.0, set the "Base SDK" to "iPhone OS 4.0" and "iPhone OS Deployment Target" to "iPhone OS 3.0"

Note that as of June 2010, some ad network libraries may not work well with projects built with iPhone OS 4.0 . If you want to use those ad networks, you must still keep the Base SDK of your project to iPhone OS 3.x . For a list of ad network SDKs that are tested to work with iPhone OS 4.0, see the wiki page [AdNetworkSDKCompatibilityMatrix](http://code.google.com/p/adwhirl/wiki/AdNetworkSDKCompatibilityMatrix) in <http://code.google.com/p/adwhirl/wiki> .

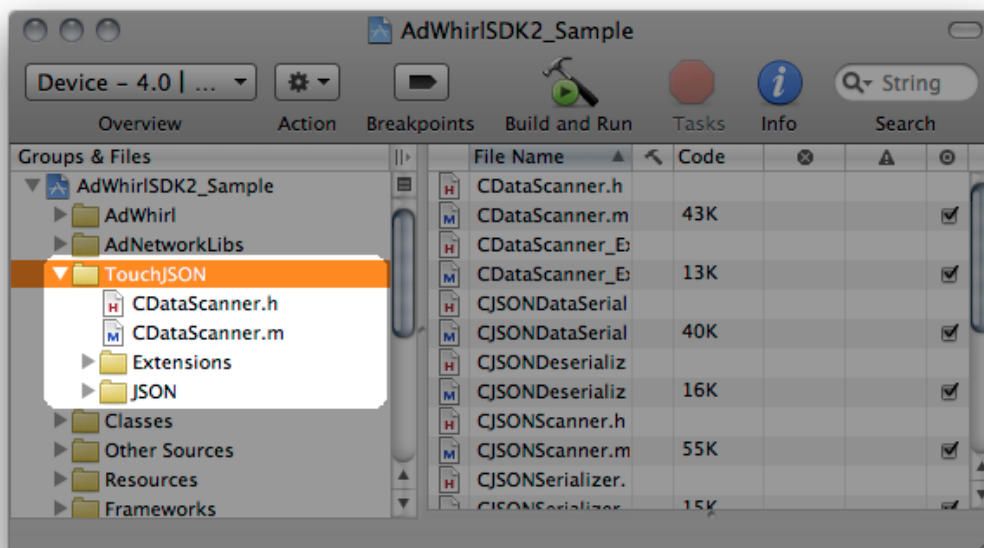


Setting up the AdWhirl SDK

1. Add the AdWhirl folder from the AdWhirl SDK into your project. In the AdWhirl folder, you'll find two files (AdWhirlDelegateProtocol.h, AdWhirlView.h) and three folders (adapters/, internal/, legacy/).

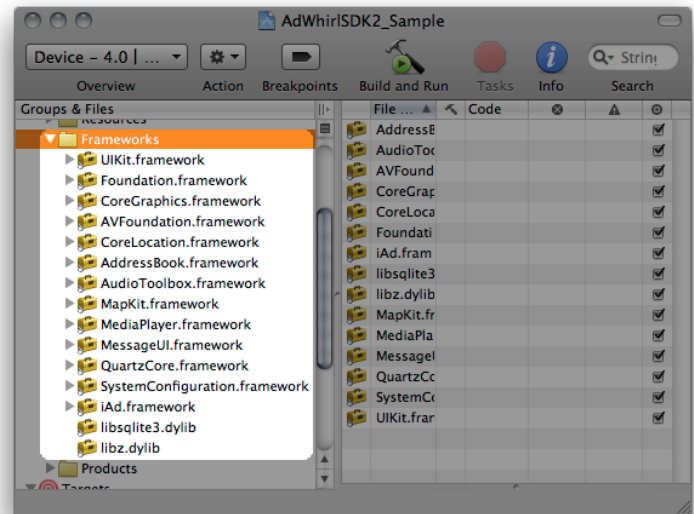


2. Add TouchJSON into your project.



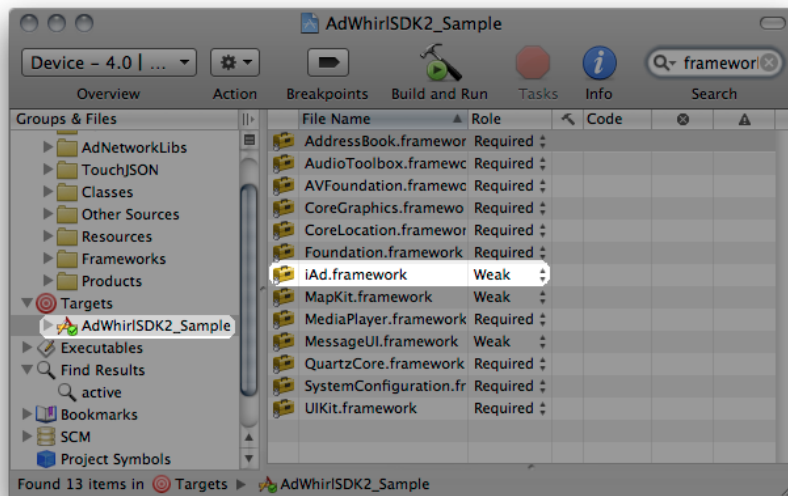
3. Add the supporting frameworks required by all of the supported ad networks. The frameworks will not affect the size of your executable unless they are used by ad network libraries that you integrate.

- AddressBook.framework
- AudioToolbox.framework
- AVFoundation.framework
- CoreLocation.framework
- MapKit.framework
 - weak-linked for OS 2.X support
- MediaPlayer.framework
- MessageUI.framework
 - weak-linked for OS 2.X support
- QuartzCore.framework
- SystemConfiguration.framework
- iAd.framework
 - required for iAd, weak-linked for OS 3.X support
- libsqlite3.dylib
- libz.dylib



UIKit.framework, Foundation.framework and CoreGraphics.framework should be included in your project by default.

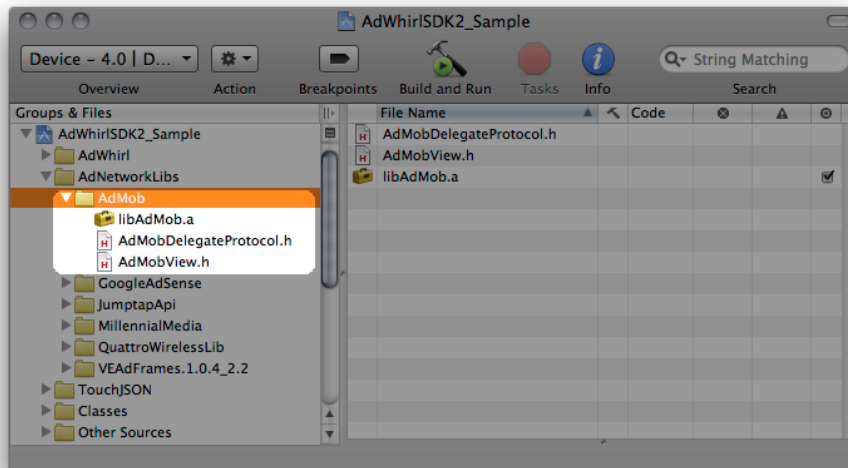
Some frameworks may need to be weak-linked to support older iPhone OSes. You can weak-link a framework by selecting your application's target, on the left pane, change the Role of the framework from "Required" to "Weak".



4. Add the ad network libraries. All of the ad network libraries are optional. You do not have to integrate an ad network if you do not want to run their ads, or do not have access to their SDK.

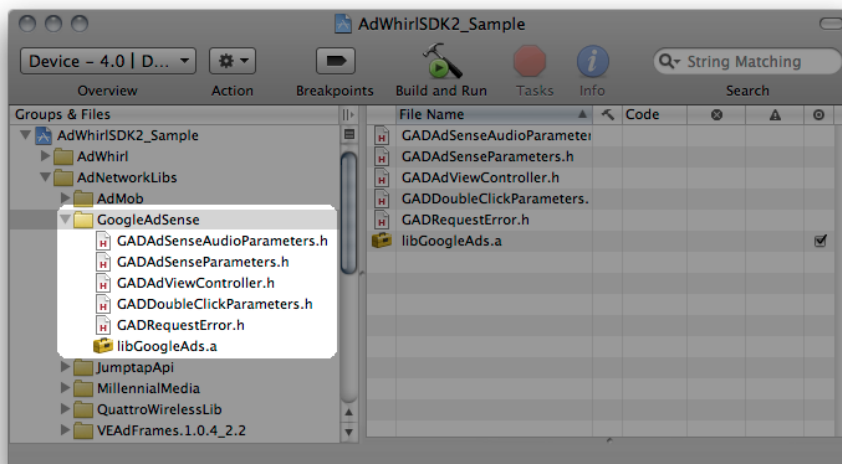
- **AdMob**

- Download the AdMob SDK from <http://www.admob.com/> . AdMob provides a universal binary for all iPhone SDK versions.
- Drag the AdMob/ folder into your Xcode project (containing AdMobDelegateProtocol.h, AdMobView.h and libAdMob.a)



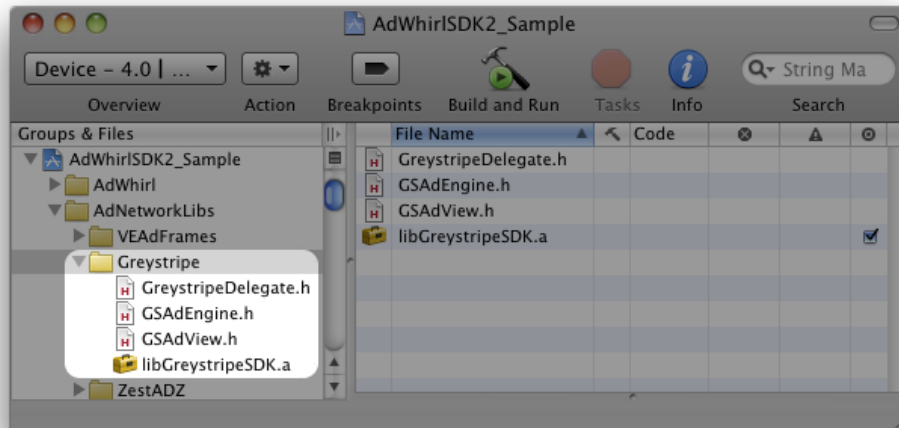
- **Google AdSense**

- Get your Google AdSense library from Google. There should be a universal binary for all iPhone SDK versions.
- Drag the Library/ folder into your Xcode project (containing GADAdSenseParameters.h, GADAdViewController.h, GADRequestError.h, libGoogleAds.a)
- Make sure you implement the methods `googleAdSenseCompanyName`, `googleAdSenseAppName` and `googleAdSenseApplicationAppleID` in your `AdWhirlDelegate`.



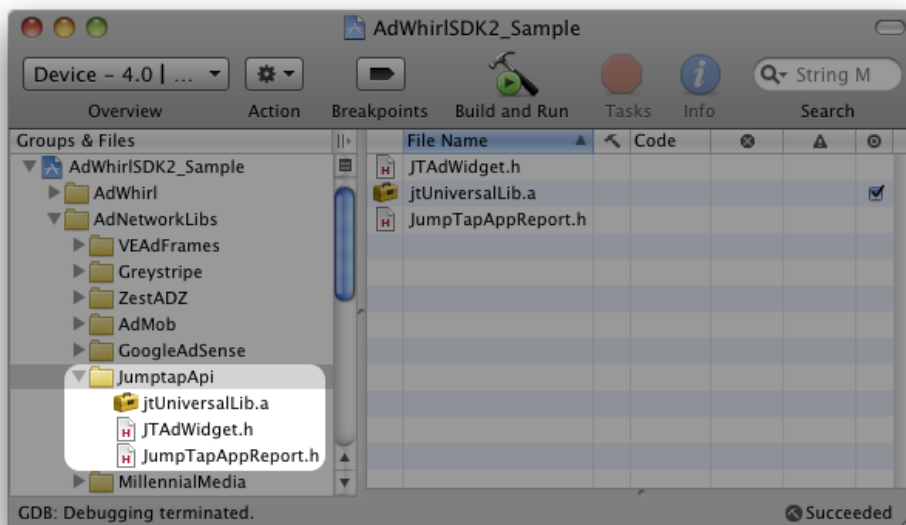
- **Greystripe**

- i. Register with Greystripe and download the Greystripe SDK from <http://developer.greystripe.com>.
- ii. Register your application on the Applications tab and copy the Application Identifier to your AdWhirl Ad Network Settings.
- iii. Drag the `libGreystripeSDK.a`, `GSAdEngine.h`, `GSAdView.h`, and `GreystripeDelegate.h` files to your project.

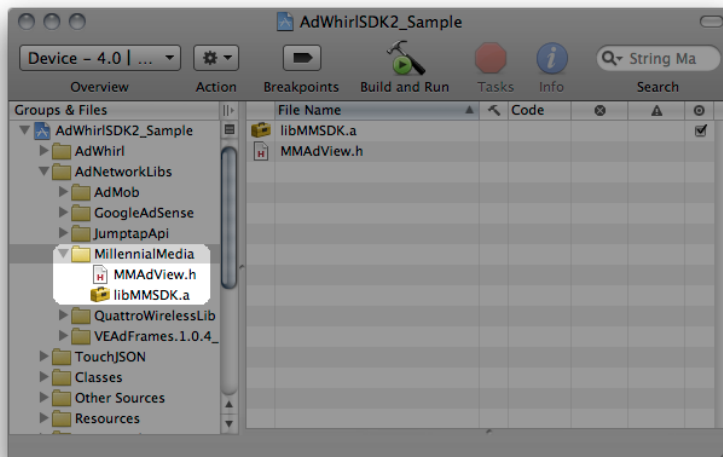


- **Jumptap**

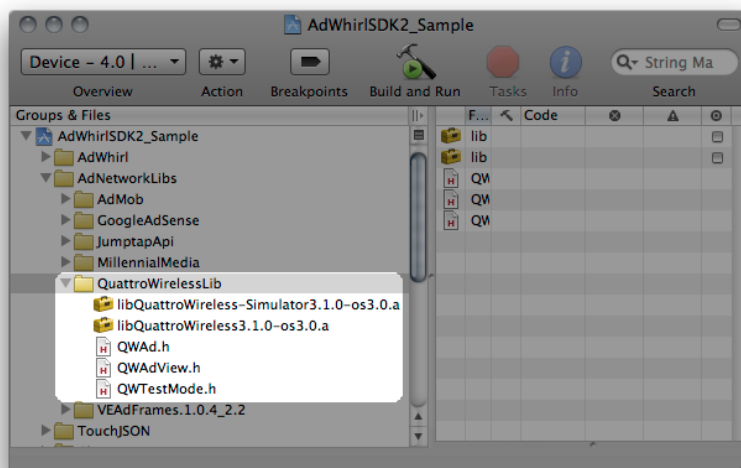
- i. Download the JumpTap SDK from https://support.jumptap.com/index.php/iphone_library_integration#Downloading_the_library.
- ii. Drag the JumptapApi/ folder into your Xcode project (containing the the files jtUniversalLib.a, JTAdWidget.h and JumpTapAppReport.h).
- iii. If you've used Jumptap before AdWhirl iPhone SDK 2.5.0, read the following:
 - a. Remove the old Jumptap Library Search Paths. Right click your primary target -> Get Info -> Build tab. Double click on the value for "Library Search Paths". Remove the older, JumptapApi that contains \$(PLATFORM_NAME)
 - b. Make sure you set SiteID and SpotID in adwhirl.com, in addition to PublisherID. SiteID and SpotID support in the AdWhirl server is added for AdWhirl iPhone SDK 2.5.0 or later.



- **iAd**
 - Include the framework iAd.framework in your project. See step 3 above
- **Millennial Media**
 - Download the Millennial Media SDK from <http://developer.millennialmedia.com/> . Millennial Media provides a universal binary for all iPhone SDK versions.
 - Drag the `Public/` folder into your Xcode project (containing the files `MMAView.h` and `libMMSDK.a`).

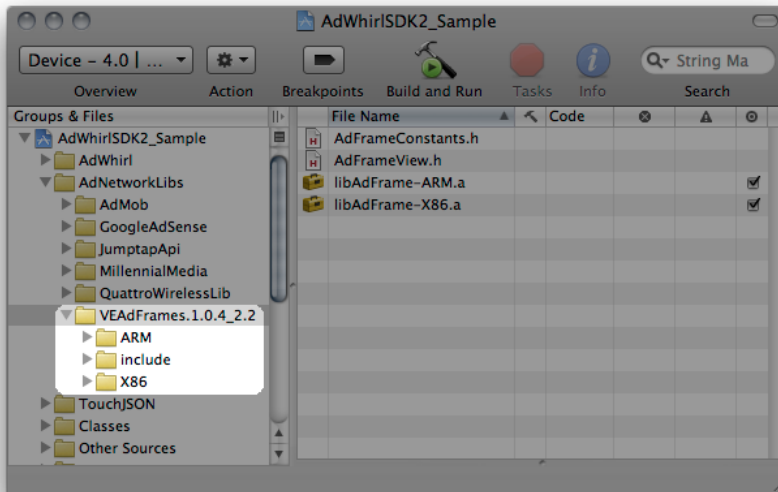


- **Quattro Wireless**
 - Download the Quattro Wireless SDK from <http://www.quattrowireless.com/> .
 - Drag the `QuattroWirelessLib/` folder into your Xcode project (containing the files `libQuattroWireless-Simulator3.1.0-os3.0.a`, `libQuattroWireless3.1.0-os3.0.a`, `QWTestMode.h`, `QWAd.h`, `QWAdView.h`. Exact names of `.a` files may be different depending on the version you downloaded).



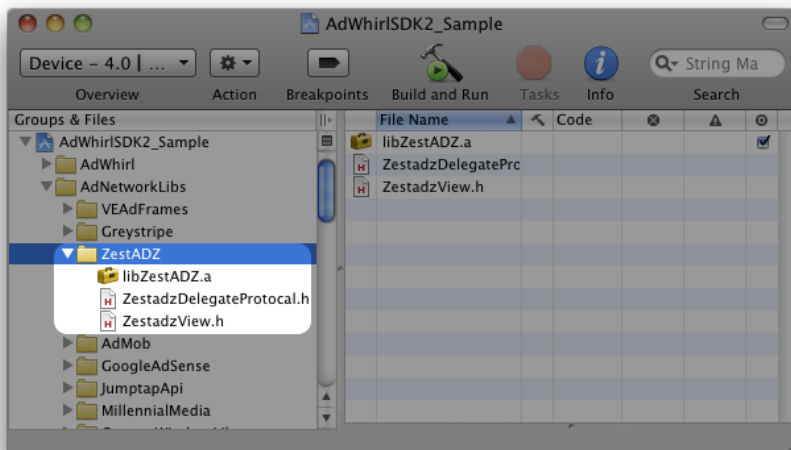
- **VideoEgg**

- Download the VideoEgg SDK from <http://www.videoegg.com/> .
- Drag the appropriate `VEAdFrames/` folder under the `lib/` folder into your project (containing the folders `ARM/`, `X86/`, and `include/`).
- To avoid build errors, remove `AdFrameView.o` from under the `ARM/` and `X86/` folders. Rename `libAdFrame.a` in each directory to include the architecture in the file name, such as `libAdFrame-ARM.a` and `libAdFrame-X86.a` .

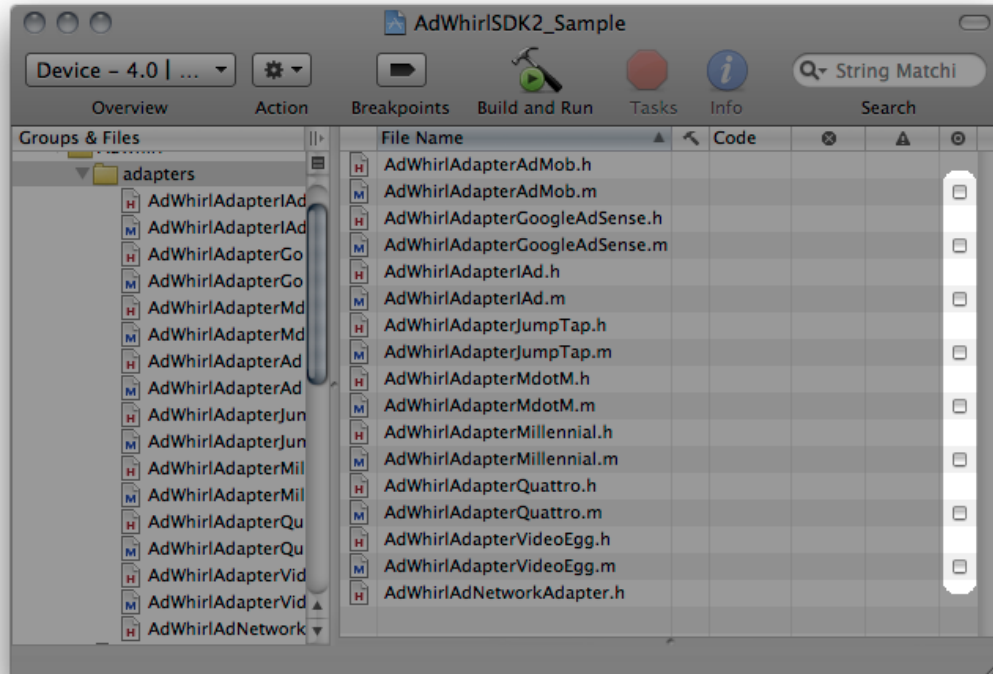


- **ZestADZ**

- Download the ZestADZ SDK from http://zestadz.com/static/iphone_sdk . ZestADZ provides a universal binary for all iPhone SDK versions.
- Drag the `ZestADZ/` folder into your Xcode project (containing `ZestadzDelegateProtocol.h`, `ZestadzView.h` and `libZestADZ.a`)

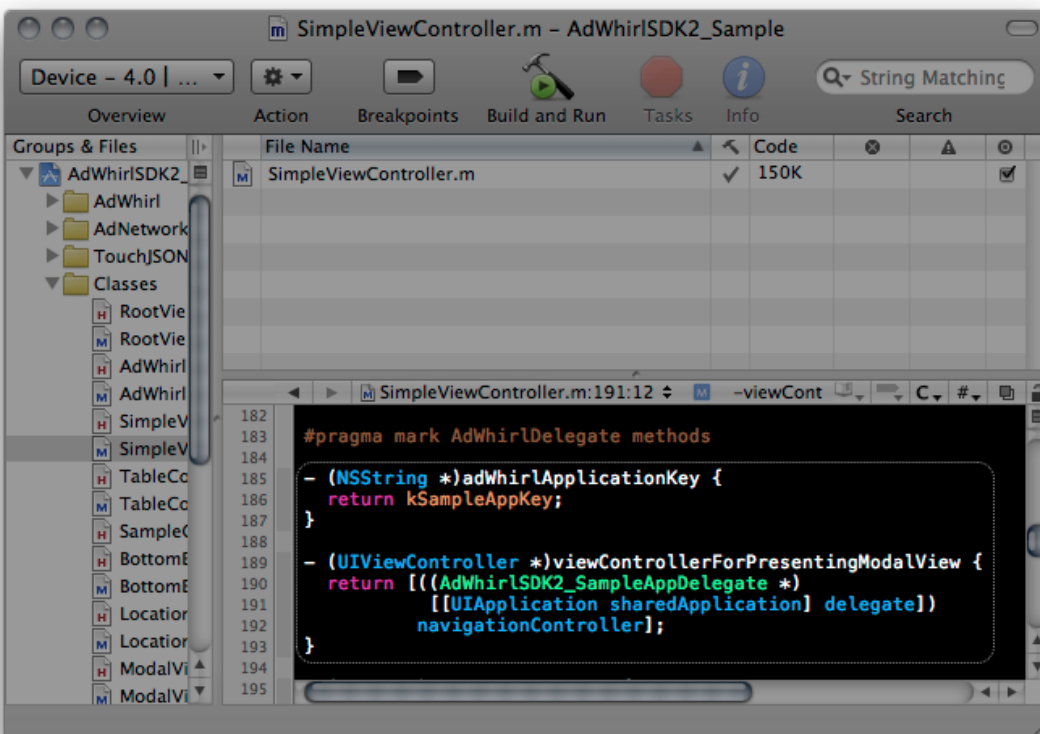


5. Remove the ad network adapters that you don't use. Under the `adapters/` group, you must uncheck the ad network adapters for ad networks that you did not integrate in step 4, or your project will not compile. In the extreme case, you can uncheck all `.m` files under `adapters/`. In which case your app can only run House Ads, Generic Notifications and Events.



6. Implement the required AdWhirlDelegate methods in your code. You must implement the `adWhirlApplicationKey` method to return your AdWhirl application key. You must also implement the `viewControllerForPresentingModalView` method so click-through modal views are displayed properly.

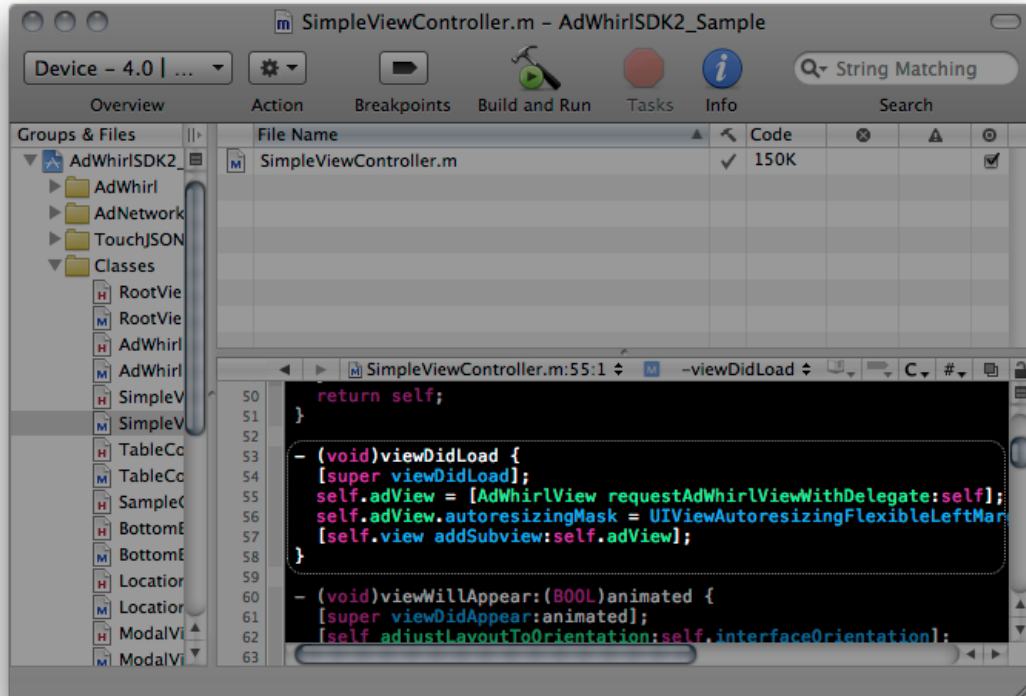
See the comments in `AdWhirlDelegateProtocol.h` for optional methods to implement. You may need to implement extra delegate methods for some ad networks to operate properly.



If you have integrated with AdWhirl before the open source version (pre 2.0.0) and have implemented `ARRollerDelegate`, you will have to implement the extra required delegate method `viewControllerForPresentingModalView`. You can leave the rest of your implemented delegate methods intact as they have been defined to be the same as the equivalent `AdWhirlDelegate` methods. However we suggest that you replace your method names with the `adWhirl`-prefixed ones. Please see `ARRollerProtocol.h` under the `legacy/` directory for a list of method name mappings.

7. Request an AdWhirlView in your code and add it to your view hierarchy. For example:

```
AdWhirlView *awView = [AdWhirlView requestAdWhirlViewWithDelegate:self];  
[self.view addSubview:awView];
```



Best Practices

Differing Ad Network Sizes

The ads from different ad networks may come in multiple sizes. For example, AdMob's banner is 320x48, and Millennial Media's banner is 320x53 . The default size of the AdWhirlView banner is 320x50 . To avoid unsightly borders or cutting off some part of the banner, you can adjust the sizes of AdWhirlView and surrounding views so the size of and spaces allocated for the AdWhirlView fits exactly the ad network's banner. You can obtain the actual size of the ad network by invoking the `actualAdSize` method of the AdWhirlView object. It is best to do so in the delegate method `adWhirlDidReceiveAd:` or `adWhirlDidAnimateToNewAdIn:` , like the following example:

```
- (void)adWhirlDidReceiveAd: (AdWhirlView *)adWhirlView {
    [UIView beginAnimations:@"AdResize" context:nil];
    [UIView setAnimationDuration:0.7];
    CGSize adSize = [adView actualAdSize];
    CGRect newFrame = adView.frame;
    newFrame.size.height = adSize.height; // fit the ad
    newFrame.size.width = adSize.width;
    newFrame.origin.x = (self.view.bounds.size.width - adSize.width)/2; // center
    adView.frame = newFrame;
    // ... adjust surrounding views here ...
    [UIView commitAnimations];
}
```

You can wrap the frame adjustments in an animation so the user experience is less jarring.

Handling Device Orientation

Some ad networks, notably iAd, may display a different sized banner depending on the device's orientation. If your app allows orientations other than portrait, you will have to:

- Invoke the `rotateToOrientation:` method of the `AdWhirlView` object whenever the orientation of the device changes, typically in your controller's `shouldAutorotateToInterfaceOrientation:` or `willRotateToInterfaceOrientation:duration:` method.
- Optionally implement the method `adWhirlCurrentOrientation` in your `AdWhirlDelegate` if your user interface's notion of orientation differs from `[UIDevice currentDevice].orientation`. This can happen when you rotate your views manually.
- Resize the `adWhirlView` and adjust your user interface after you receive an ad in `adWhirlDidReceiveAd:` and right after you invoke `rotateToOrientation:` when your view rotates.

```
- (void)adjustAdSize {  
    // ... adjust the frame of the AdWhirlView and surrounding views ...  
}  
  
- (void)willRotateToInterfaceOrientation:(UIInterfaceOrientation)newOrientation  
    duration:(NSTimeInterval)duration {  
    [super willRotateToInterfaceOrientation:newOrientation  
        duration:duration];  
    [self.adWhirlView rotateToOrientation:newOrientation];  
    [self adjustAdSize];  
}  
  
- (void)adWhirlDidReceiveAd:(AdWhirlView *)adWhirlView {  
    [self adjustAdSize];  
}
```

Build Warnings

To avoid build warnings (it is useful to have "Treat Warnings as Errors" turned on), you can uncheck static libraries from the target that are not the same architecture as those that you are building. This applies to cases where the ad network has separate binaries for the Simulator and the Device.