Avazu Native Ad SDK Setup for iOS

Date	Version	Description	Developer
2015.03.12	v1.0.0	First Version	曹诗聪
2015.03.25	v1.0.1	Optimization and issue fix	曹诗聪
2015.03.27	v1.0.2	Sample Project Optimization	曹诗聪
2015.05.22	v1.1.0	Change Server	曹诗聪
2015.07.03	v1.2.0	Add C2S API	曹诗聪
2015.07.06	v1.2.1	Add Parameter to get creative picture data	曹诗聪

1.Introduction

1.1 What the SDK can provide

Avazu ADSDK can provide following functions in your mobile iOS App:

• Show Single Banner (Recommended size: 320 * 100)

• Show Transparent Banner (Recommended size: 410* 100)

• Show Banner App Wall

• Show Single Line Button APP Wall

• Show Multiple Line Button APP Wall

For the ad types, the appearance and size of the ad are fully customizable with our function provided in the SDK.

1.2 Compatibility

The minimum runtime OS requirement is iOS 6.0, or higher, iOS 8.x is fully supported.

1.3 Development environment

Operation System：macosx lion, or higher
Development Tool：Xcode 5.0, or higher

2.Configuration

2.1 Traffic Source ID

Make sure you are have registered Avazu APX account and have a valid Traffic Source ID for display.

2.2 Adding the SDK to your project

• libAvazuAdSDK.a

• AvazuADView.h

2.3 Adding Frameworks

For the SDK to work correctly , adding some frameworks to your Xcode project is required.

The frameworks required to compile the AvazuADSDK library are given below:

• CoreTelephony.framework

• UIKit.framework

• Foundation. framework

• AdSupport. framework

▼ **Link Binary With Libraries (5 items)**   ×

Name	Status
💼 CoreTelephony.framework	Required ↕
📦 libAvazuAdSDK.a	Required ↕
💼 UIKit.framework	Required ↕
💼 Foundation.framework	Required ↕
💼 AdSupport.framework	Required ↕
+ —	Drag to reorder frameworks

2.4 Adding Linker Flag

Add the -ObjC flag to the Other Linker Flags

▼ Linking	
Setting	🅰 AvazuDemo
Link With Standard Libraries	Yes ◇
Other Linker Flags	-ObjC
Quote Linker Arguments	Yes ◇

3. Show AD

AvazuADSDK provide 5 different types of ads, which include single banner, banner app wall, transparent banner, single line button App wall and multiple-line button App wall.

As a developer, you can simply create these advert type with one interface: AvazuADView, it is simply a UIView subclass displaying HTML5 ads that respond to user touch. It is easy to create AvazuADView in code.

To get a valid ad, please perform one of following two methods:

3.1 Creating AvazuADView by code

3.1.1 Creating AvazuADView by code

Assuming you already had a appropriate Traffic Source ID, and you will use it to create the instance every time , so make sure the Traffic Source ID is valid, or AvazuADSDK will fail to load the ads.

Follow the below steps:

1. Import the AvazuADView.h file.
2. Declare a instance in the header file. Your header file should look like this:

```
#import <UIKit/UIKit.h>
#import "AvazuADView.h"

@interface ViewController : UIViewController <AvazuADViewDelegat
@property (strong, nonatomic) AvazuADView *adView;
@end
```

3. Create an AvazuADView instance using the following method:

```
self.adView = [[AvazuADView alloc]
initWithFrame:adFrame
adType:AVAZU_SINGLE_BANNER
sourceID:@"input your Traffic Source ID here"];
```

4. After creating an adView instance, set the delegate property
of AvazuADView as your view controller before loading the ad. This is so that you
will be notified about success or failure.

5. Add your adView to the main view before loading the ad.

6. Setup the adView according to your requirement, we will discuss this in detail
in chapter 3.1.2.

7. load the ad using this method: [self.adView loadAD]

Your viewcontroller class should look like below:

```
- (void)viewDidLoad {
    [super viewDidLoad];
    CGRect adframe = CGRectMake(0.0, 0.0, 320.0, 100.0);
    self.adView = [[AvazuADView alloc]
    initWithFrame:adframe
    adType:AVAZU_SINGLE_BANNER
    sourceID:@"1234"];
    self.adView.delegate = self;
    [self.view addSubview:self. adView];
    //Insert Customized Adview setup here
    [self.adView loadAD];
}
```

8. We recommend that you set the delegate to nil in the dealloc method of
your ViewController, or at any time when you are releasing the adView.

```
- (void)dealloc {
    self.adView.delegate = nil;
}
```

3.1.2 Choosing a supported ADtype

Select the ADtype value from the following set of values declared in

the AvazuADView method:

AdType	Value	Variable Name
Single Banner	9	AVAZU_SINGLE_BANNER
Banner App Wall	10	AVAZU_BANNER_APPWALL
Transparent Banner	11	AVAZU_TRANSPARENT_SINGLE_BANNER

Single Line Button App Wall	12	AVAZU_SINGLE_BUTTON_APP_WALL
Multiple Line Button App Wall	13	AVAZU_MULTIPLE_BUTTON_APP_WALL

3.1.3 Setting customized Adview

AvazuADSDK support fully customization for different AD types, to apply the customized settings, you just to need one line code like:

```
self. adView.isNeedIcon = 0;
```

1. Setting customized Ad Elements

Variable Name	Type	Default Value	Usage
isNeedIcon	BOOL	1	Show app's icon or not in adview
isNeedTitle	BOOL	1	Show app's title or not in adview
isNeedCat	BOOL	1	Show app's category or not in adview
isNeedSize	BOOL	1	Show app's size or not in adview
isNeedRating	BOOL	1	Show app's rating or not in adview
isNeedInstallButton	BOOL	1	Show install button or not in adview
isNeedReviewNumber	BOOL	1	Show app's review number or not in adview
isNeedLoadingIndicator	BOOL	1	Show loading indicator or not when loading ad

2. Setting customized Ad Color

Variable Name	Type	Default Value	Usage
blockBackColor	NSString	null	set the background color of ad block
appTitleColor	NSString	null	set the font color for the app's title
buttonBackColor	NSString	null	set the background color of install button
buttonTextColor	NSString	null	set the font color of install button
mainBackColor	NSString	null	set the background color of appeal

Note: When setting AD color, All color value must be a NSString started with "#" followed by 6 hexadecimal RGB digitals. For example, #FFFFFF represents for white color while #000000
represents for color black.

3. Setting App count

Variable Name	Type	Default Value	Usage

appCount	INT	1	设置广告中出现的应用数量

Note: appCount is required for these ad types:
Banner App Wall, Single Line Button App Wall and Multiple Line Button App Wall.

4. Setting Transparency Ratio For Transparent Banner

Variable Name	Type	Default Value	Usage
transparentBannerAlpha	INT	0	设置透明广告的透明度

Note: transparentBannerAlpha is required only for Transparent Banner, and the value should be set between 0 (completely transparent) and 100 (completely opaque).

You can find the sample code to generate a customized Banner App wall below:

```objc
- (void)viewDidLoad {
    [super viewDidLoad];
    CGRect adframe = CGRectMack(0.0, 0.0, 320.0, 100.0);
    self.adView = [[AvazuADView alloc]
    initWithFrame:adframe
    adType:AVAZU_BANNER_APPWALL
    sourceID:@"1234"];
    self.adView.delegate = self;
    [self.view addSubview:self. adView];
    self.adView.isNeedSize = 0;
    self.adView.isNeedReviewNumber = 0;
    self.adView.appCount = 4;
    [self.adView loadAD];
}
```

3.2 Creating AvazuADView by Interface Builder

You can also create AvazuADView in your UIViewController by Interface Builder as follows:

1. In xib or storyboard, create an UIview with proper frame size to fit the adType you choose.

2. In the identity inspector in the top right corner, set Custom Class to AvazuADView.

3. Open assistant editor, create an IBOutlet instance for the view in your viewcontroller.h file through Ctrl Drag.

4. Setting constraint for the view through auto layout.

5. Load ad by adding following code in your viewcontroller.m file:

```
- (void)viewDidLoad {
    [super viewDidLoad];
    self.sourceID=@"6395";
    self.adView.adType = AVAZU_SINGLE_BANNER;
    self.adView.delegate = self;
    [self.adView loadAD];
}
```

Note: For creating AvazuADview by Interface Builder, it will call init method automatically, so before call method loadAD, you must set adType and sourceID, or it will fail to load the ad.

You can still customize your ad as we discussed in Chapter 3.1.3.

```
- (void)avazuADViewLoadAdSucess:(AvazuADView *)adview
{
    NSLog(@"avazuADViewLoadAdSucess");
}

- (void)avazuADView:(AvazuADView *)adview
didFailToReceiveAdWithError:(NSError *)error
{
    NSLog(@"avazuADViewLoadAdFail");
    NSLog(@"error:%@", error);
}
```

4. Implementing the delegate

If you need ad status callbacks, implement the delegate property of the AvazuADView. The user can perform necessary action on receiving callback.

5. C2S Interface

You can fetch ad data through C2S interface by adding the following code to the viewDidLoad function in your ViewController:

```objc
- (void)viewDidLoad {
    [super viewDidLoad];
    //initialize
    self.nativdAd = [[AvazuNativeAd alloc] init];
    //set delegate
    self.nativdAd.delegate = self;
    //load ad
    [self.nativdAd loadNativeAdWithSourceId: @"15353"
                            excludePackages: @""
                                limitNumber: 10
                                     incent: 0
                                  creatives: 1
     ];


    //and so on adjust your view size according to your needs
}
```

Parameter Description:

Source ID: Traffic Source ID

excludePackages:The campaign_id of ad which you want exclude, it is useful to avoid displaying repeat ads when page changing . You can input "" when no exclude needs. If there are multiple ads needs to be excluded, you are required to divide the campaign by ",".For example: "6184, 3241".

limitNumber: The maximum ad number you want to get

incent: Whether incent or non-incent ads should be returned.

    0 => Non-incent ads only (Default)

    1 => Incent ads only

     2 => All ads (incent and non-incent)

creatives: If specified (i.e., creatives=1), images of various sizes will be returned.
        Default is "0", meaning no image will be returned.

Below you can find the available image size:

Size	Description
320x50	Banner
320x480	Phone Fullscreen
480x320	Phone Fullscreen Landscape
1024x768	Tablet Fullscreen
768x1024	Tablet Fullscreen Landscape 300x250 - Medium
728x90	Leaderboard
160x600	Skyscraper
1200x627	Content Stream Image

Then, adding the delegate to your ViewController and handle the the callback of the ad fetching result

```
#pragma avazuNativeDelegate

- (void)avazuGetRawdataFailWithError:(NSError *) error
{
    NSLog(@"avazuADViewLoadAdFail");
    NSLog(@"error:%@", error);
}
- (void)avazuGetRawdataSuccess:(NSArray *)dataArray
{
    NSLog(@"avazuADViewLoadAdSuccess");
    NSLog(@"dataArray:%@", [dataArray description]);
}
```

dataArray is the array that contains the ad data, and you can find its data structure below:

Parameter	Description
campaignid	campaignid The campaign ID of the ad
payout	The payout of one app installation for this ad in USD
pkgname	The package name of the app
title	The title of the app
description	The description of the app

icon	The URL of the app icon (a png image with the size of 100x100)
appcategory	The category of the app
apprating	The rating of the app (0-5 stars)
appreviewnum	The review number of the app
appinstalls	The installation number of the app
appsize	The package file size of the app
creatives	The sizes and URLs of ad images
countries	The targeting countries of the ad in the format of ISO-3166-1 standard. Multiple countries are separated by "l". For example, "USIMY"
os	The targeting operating system of the ad. ios=iOS app android=Android app
minosv	The minimum OS version allowed by the ad. The format is [main_version].[minor_version], e.g., "1.2" (meaning OS version of 1.2 and above are allowed).
connectiontype	The targeting connection type of the ad. wifi => Only WiFi network is allowed 3g => Only carrier networks (2G/3G/4G) are allowed all => All kinds of networks are allowed
devicetype	The targeting device type of the ad. phone => Only phones are allowed tablet => Only tablets are allowed all => All kinds of devices are allowed
incent	Whether it is an incent ad or not. yes => Incent ad no => Non-incent ad
clkurl	The click URL of the ad