

# AdFalcon iOS SDK 2.5.0 Developer's Guide

**AdFalcon Mobile Ad Network** 

**Product of** 

**Noqoush Mobile Media Group** 



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## 1 Introduction

AdFalcon iOS SDK Integration guide contains all the information needed by iOS developers to integrate with AdFlacon Network. The guide will also show examples and code snippets on how to perform the integration.

#### **OS version support**

iOS SDK supports iPhone and iPad platforms utilizing **iOS version 6.0** to the latest iOS version.

#### In the zip file

You will find the following files within the iOS SDK folder:

- ADFAdView.h
- ADFAdViewDelegate.h
- ADFUserInfo.h
- ADFTargetingParams.h
- ADFInterstitialAd.h
- ADFInterstitialAdDelegate.h
- libAdFalconSDK2.4.0.a



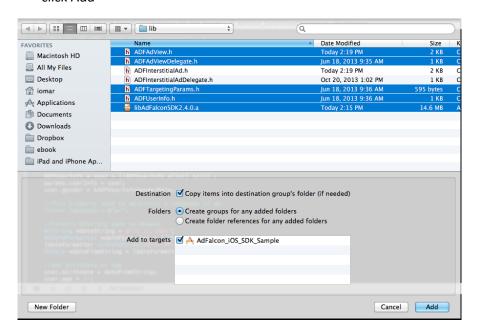
### 2 Banner Ad Integration Steps

This section describes how to integrate with the AdFalcon's iOS SDK in order to consume the services available by the network.

In order to integrates with the SDK, please perform the following steps:

#### Step 1: Add headers and library

- 1. Create a folder for AdFalconSDK in your project
- 2. Right click at the folder and select from submenu Add Files to "Project name"...
- 3. Navigate to AdFalcon iOS SDK Bundle folder (where the SDK files are stored)
- 4. Select from the file pane the following headers and library:
  - ADFAdView.h
  - ADFAdViewDelegate.h
  - ADFUserInfo.h
  - ADFTargetingParams.h
  - libAdFalconSDK2.5.0.a
- 5. Mark "Copy items into destination group's folder of needed" as checked then click Add



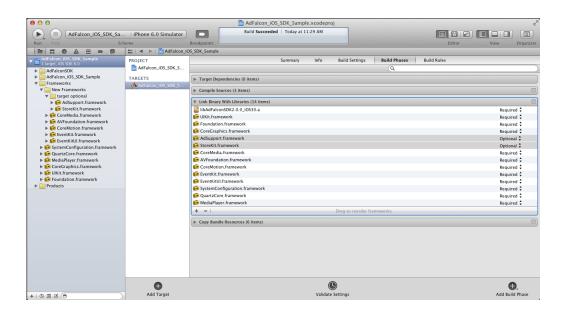
#### Step 2: Add frameworks

You have to add the below frameworks to your project's target libraries

- QuartzCore.framework
- MediaPlayer.framework
- CoreGraphics.framework
- SystemConfiguration.framework
- CoreMedia.framework
- AVFoundation.framework
- CoreMotion.framework
- EventKit.framework



- EventKitUI.framework
- AdSupport.framework
- StoreKit.framework (Optional)



#### **Step 3: Adding Banner Ads**

- 1. Add ADFAdView to the view controller header file
  - 1. Import ADFAdView.h in your .h file .
  - 2. declare ADFAdView instance.

Below is an example of how the header should look like:

```
#import "ADFAdView.h"

@interface AdFalcon_iOS_SDK_iPhone_SampleViewController: UIViewController{
    ADFAdView * adView;
}
```

2. Add the following code snippet to viewDidLoad method

```
//initialize ADFalcon view and set size of the view base on ad unit size
adView = [[ADFAdView alloc] initWithFrame:CGRectMake(0, 0, 320, 50)];

//Enable or disable testing mode
adView.testing = YES;

//initialize AdFalcon view and loading ads
[adView

initializeWithAdUnit:kADFAdViewAdUnitSizeAutoBanner //set the ad unit size
siteId:@"Your Site ID"

params:nil //Optional set user information
rootViewController:self //rootViewController
```



```
enableAutorefresh:YES //Enable or disable auto refresh
delegate:nil //Optional
];
//Add AdFalcon view
[self.view addSubview:adView];
```

**Note:** In case you are overriding the [UIViewController loadView] to programmatically draw your view, ensure that AdFalcon view is initialized after completing loading the UIViewController's view.

**Note:** Ensure Test Mode Parameter is set to false before uploading your application to Apple store.

Note: to know more about ad unit size go to ADFAdViewAdUnitSize

#### **Ads Options**

#### Tracking Ad Lifecycle Events – ADFADViewDelegate

AdFalcon iOS SDK provides ability to track Ad lifecyle events, follow the procedure below to listen to the Ad lifecycle events

• Import the ADFADViewDelegate.h protocol to your header as the below:

```
#import "ADFAdViewDelegate.h"

@interface XViewController: UIViewController<ADFAdViewDelegate> {
}
```

Add the below ADFADViewDelegate's methods to your source file as the below

```
-(void)adViewWillLoadAd:(ADFAdView*) adView
-(void)adViewDidLoadAd: (ADFAdView*) adView
-(void)adView: (ADFAdView*) adView didFailWithCode:(int) code message:(NSString*) message
 switch (code) {
    case kADFAdViewErrorNoAdAvailabe:
      // No Ad Availabe
      break;
    case kADFAdViewErrorInvalidParam:
      // Invalid Param send to server
    case kADFAdViewErrorMissingParam:
      // Missing Param send to server
      break;
    case kADFAdViewErrorCommunication:
      //Communication with server failed or no internet
      break;
    default:
      break;
-(void)adViewWillPresentScreen: (ADFAdView*) adView
```



```
-(void)adViewDidPresentScreen: (ADFAdView*) adView
{
}
-(void)adViewWillDismissScreen: (ADFAdView*) adView
{
}
-(void)adViewDidDismissScreen: (ADFAdView*) adView
{
}
-(void)applicationWillTerminate:(UIApplication *)application
{
}
-(void)applicationWillEnterBackground:(UIApplication *)application
{
}
```

Assign your delegate object to ADFAdView object as the below:

```
[adView
initializeWithAdUnit:kADFAdViewAdUnitSizeAutoBanner //set the ad unit size
siteId:@"Your Site ID"

params:nil //Optional set user information
rootViewController:self //rootViewController
enableAutorefresh:YES //Enable or disable auto refresh
delegate:self //Optional
];

OR
adView.delegate = self;
```

#### **Select Ad Unit Size**

Use the below enum table to select the needed ad unit size

| Er | num                          | Description  | Size      | Devices |
|----|------------------------------|--|-----------|---------|
| kA | DFAdViewAdUnitSizeAutoBanner | The server will return the best banner ad based on the screen size and device type |           | All     |
| kA | DFAdViewAdUnitSize320x50     | Standard   | 320 x 50  | All     |
| kA | DFAdViewAdUnitSize300x250    | Medium Rectangle   | 300 x 250 | All     |
| kA | DFAdViewAdUnitSize468x60     | Full Banner  | 468 x 60  | Tablet  |
| kA | DFAdViewAdUnitSize728x90     | Leaderboard  | 728 x 90  | Tablet  |
| kA | DFAdViewAdUnitSize120x600    | Skyscraper   | 120 x 600 | Tablet  |

#### Refresh Ad

Use the below methods to enable, pause, resume or force refresh Ad.

| Mathad | Description |
|--------|-------------|
| Method | Describtion |



| -(void) initializeWith AdUnit:(ADFAdViewAdUnitSize) adUnit siteId: (NSString*) siteId userInfo: (ADFUserInfo*) userInfo rootViewController: (UIViewController*) rootViewController enableAutorefresh: (BOOL) enableAutorefresh delegate: (NSObject <adfadviewdelegate>*) delegate;</adfadviewdelegate> | Enable or disable auto refresh ad  |
|--|--|
| -(void) pauseAutoRefresh;  | Will pause auto refresh timer which is responsible for getting new ad the ad after a certain period has elapsed. |
| -(void) resumeAutoRefresh;   | Will resume the auto refresh timer which responsible for getting new ad after a certain period has elapsed.      |
| -(void) refreshAd;   | Will get a new ad from AdFalcon.   |



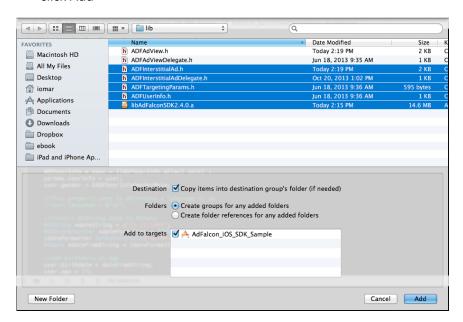
## 3 Interstitial Ad Integration Steps

This section describes how to integrate with the AdFalcon's iOS SDK in order to consume the services available by the network.

in order to integrates with the SDK, please perform the following steps:

#### **Step 1: Add headers and library**

- 1. Create a folder for AdFalconSDK in your project
- 2. Right click at the folder and select from submenu Add Files to "Project name"...
- 3. Navigate to AdFalcon iOS SDK Bundle folder (where the SDK files are stored)
- 4. Select from the file pane the following headers and library:
  - a) ADFUserInfo.h
  - b) ADFTargetingParams.h
  - c) ADFInterstitialAd.h
  - d) ADFInterstitialAdDelegate.h
  - e) libAdFalconSDK2.4.0.a
- Mark "Copy items into destination group's folder of needed" as checked then click Add



#### **Step 2: Add frameworks**

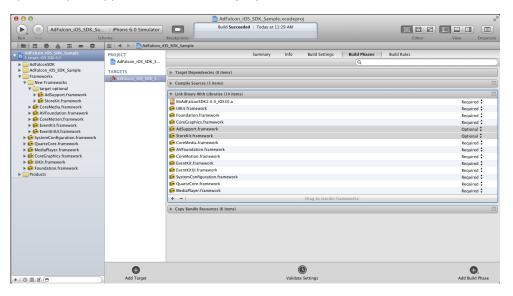
You have to add the below framworks to your project's target libraries

- QuartzCore.framework
- MediaPlayer.framework
- CoreGraphics.framework
- SystemConfiguration.framework
- CoreMedia.framework
- AVFoundation.framework
- CoreMotion.framework
- EventKit.framework
- EventKitUI.framework



- AdSupport.framework (Optional)
- StoreKit.framework (Optional)

**Note:** You have to mark (AdSupport and StoreKit) as 'optional' because they are just compatible with the iOS6 and above versions. In case you do not mark them as optional, your app will not run successfully in the older iOS (iOS4.x, iOS5.x).



#### Step 3: Add ADFAdView to the view controller header file

- 1. Import ADFInterstitialAd.h and ADFInterstitialAdDelegate.h in your .h file .
- 2. implement ADFInterstitialAdDelegate protocol and declare ADFInterstitialAd instance.

Below is an example of how the header should look like:

```
#import "ADFInterstitialAdDelegate.h"
#import "ADInterstitialView.h"

@interface AdFalcon_iOS_SDK_iPhone_SampleViewController: UIViewController<ADFInterstitialAdDelegate> {
    ADFInterstitialAd * adfInterstitial;
}
```

#### Step 4: Add ADFAdView to the view controller implementation

1. Add the following code in viewDidLoad method

```
//initialize ADFInterstitialAd adfInterstitial = [[ADFInterstitialAd alloc] init];

//If you want to use test mode adView.testing = YES;

//load new interstitial [adfInterstitial WithSiteID: @"Your site ID" delegate:self];
```



**Note:** If more information are available about the user, then it is recommended that you call the method below instead and pass the user information in ADFTargetingParams parameter in the same way this is handled in the Standard Banner Ad.

```
-(void) loadInterstitialWithSiteID:(NSString*) siteID testing:(BOOL) testing delegate:(NSObject<ADFInterstitialAdDelegate> *) delegate params:(ADFTargetingParams*) params;
```

2. Add the following required delegate methods for the <u>ADFInterstitialAdDelegate</u> protocol.

```
-(void)adfInterstitialDidLoadAd: (ADFInterstitialAd*) adfInterstitial{
       [adfInterstitial presentFromRootViewController:self]
-(void)adfInterstitialDidDismissScreen: (ADFInterstitialAd*) adfInterstitial{
-(void)adfInterstitial: (ADFInterstitialAd*) adfInterstitial didFailWithErrorCode:(int) code
message:(NSString*)message{
    switch (code) {
         case kADFAdViewErrorNoAdAvailabe:
           // No Ad Availabe
           break;
         case kADFAdViewErrorInvalidParam:
           // Invalid Param send to server
           break:
         case kADFAdViewErrorMissingParam:
           // Missing Param send to server
           break;
         case kADFAdViewErrorCommunication:
           //Communication with server failed or no internet
           break;
         default:
           break;
}
```



# 4 Appendix

#### **ADFAdView Class**

This is the main class and it extends UIView. This Class is responsible for gathering all the needed information to get an ad from AdFalcon network and rendering it on the device.

The properties of the ADFADView Class are:

| Property  | Description   |
|---|---|
| int refreshDuration   | Refresh duration in seconds   |
| NSObject <adfadviewdelegate> * delegate</adfadviewdelegate> | Delegate of AdFalcon view   |
| BOOL testing  | The property is used to inform AdFalcon network that the application is under the testing mode rather than production mode. |
| BOOL logging  | Enable logging  |
| ADFTargetingParams targetingParams                          | This property is used to hold the extra information about the current user of App.  |

#### The methods of the ADFADView Class are:

| Method  | Description   |
|---|---|
| -(void) initializeWith AdUnit:(ADFAdViewAdUnitSize) adUnit siteId: (NSString*) siteId userInfo: (ADFUserInfo*) userInfo rootViewController: (UIViewController*) rootViewController enableAutorefresh: (BOOL) enableAutorefresh delegate: (NSObject <adfadviewdelegate>*) delegate</adfadviewdelegate> | Will initialize the AdFalcon view and load the ad.  All the parameters are required except  "delegate" which can be null. |
| -(void) pauseAutoRefresh;   | Will pause auto refresh timer which is responsible for getting new ad the ad after a certain period has elapsed.          |
| -(void) resumeAutoRefresh   | Will resume the auto refresh timer which responsible for getting new ad after a certain period has elapsed.               |
| -(void) refreshAd   | Will get a new ad from AdFalcon.  |



#### **ADFAdViewDelegate Protocol**

AdFalcon SDK provides a protocol called ADFAdViewDelegate that is responsibles for providing feedback from AdFalcon SDK. This protocol contains nine optional delegate methods which are called upon the following events:

- When an error occurs
- Before and After an ad is loaded
- Before and After ad click action screen is displayed
- Before and After ad click action screen is closed
- Application will go to background mode and
- Application will terminate.

The methods of the ADFADViewDelegate Class are:

| Method   | Description  |
|--|--|
| -(void)adViewWillLoadAd:(ADFAdView*) adView;   | Will be called before the ad is being loaded.                      |
| -(void)adViewDidLoadAd: (ADFAdView*) adView;   | Will be called after the ad has been loaded                        |
| -(void)adView: (ADFAdView*) adView didFailWithCode:(int) code message:(NSString*) message; | Will be called when an error has occured during loading an ad.     |
| -(void)adViewWillPresentScreen: (ADFAdView*) adView;                                       | Will be called before the ad click screen is displayed.            |
| -(void)adViewDidPresentScreen: (ADFAdView*) adView;  | Will be called after the ad click screen is displayed.             |
| -(void)adViewWillDismissScreen: (ADFAdView*) adView;                                       | Will be called before the ad click screen is dismissed.            |
| -(void)adViewDidDismissScreen: (ADFAdView*) adView;  | Will be called after the ad click screen is dismissed.             |
| -(void)applicationWillTerminate:(UIApplication *)application;                              | Will be called before the Application is terminated.               |
| -(void)applicationWillEnterBackground:(UIApplication *)application;                        | Will be called before the Application enters into background mode. |

#### **ADFInterstitialAd Class**

This Class is responsible for gathering all the needed information to get an interstitial ad from AdFalcon network and presenting it on the device.

The properties of the ADFInterstital Class are:

| Property  | Description   |
|---|---|
| NSObject <adfinterstitialaddelegate> * delegate</adfinterstitialaddelegate> | This property is <u>required.</u> It is used to pass a reference to the class implementing AdFalcon |



|                                      | interstitial delegate.   |
|--------------------------------------|--|
| NSString * siteId                    | This property is <u>required</u> . Represents the Id of App.   |
| BOOL testing                         | The property is used to inform AdFalcon network that the application is under the testing mode rather than production mode. Before releasing your application ensure this is set to false. |
| BOOL is Ready To Present             | The value is true when the ad is loaded successfully and ready to be presented otherwise will be false.  |
| ADFTargetingParams * targetingParams | This property is used to hold the extra information about the current user of App.   |
| BOOL logging                         | Enable logging   |

#### The methods of the ADFADView Class are:

| Method  | Description   |
|---|---|
| -(void) loadInterstitial;   | Used to load new interstitial Ad but before using this method you must fill the required properties.  |
| -(void) loadInterstitialWithSiteID:(NSString*) siteID delegate:(NSObject <adfinterstitialaddelegate> *) delegate;</adfinterstitialaddelegate>   | Used to load new interstitial Ad with required parameters.  |
| -(void) loadInterstitialWithSiteID:(NSString*) siteID testing:(BOOL) testing delegate:(NSObject <adfinterstitialaddelegate>*) delegate params:(ADFTargetingParams*) params;</adfinterstitialaddelegate> | Used to load new interstitial Ad with all possible parameters including additional user information.  |
| -(void) presentFromRootViewController:(UIViewController*) rootViewController;   | Used to present the loaded interstitial from specified root view controller.  You should not call this method before the interstitial is loaded successfully. So we recommended to call this method when The Interstitial fires adfInterstitialDidLoadAd delegate's method. |

#### **ADFInterstitialAdDelegate Protocol**

AdFalcon SDK provides a protocol called ADFInterstitialAdDelegate that is responsible for providing feedback from interstitial view. This protocol contains delegate methods which are called upon the following events:

- When an error occurs
- Before and After an ad is loaded
- Before and After interstitial is displayed
- Application will go to background mode and will be terminated.



#### The methods of the ADFADViewDelegate Class are:

| Method   | Description   |
|--|---|
| -(void)adfInterstitialDidLoadAd: (ADFInterstitialAd*) adfInterstitial;   | Required delegate method and will be called after the ad has been loaded.                     |
| -(void)adfInterstitialDidDismissScreen: (ADFInterstitialAd*) adfInterstitial;  | Required delegate method and will be called after the interstitial screen has been dismissed. |
| -(void)adfInterstitial: (ADFInterstitialAd*) adfInterstitial didFailWithErrorCode:(int) code message:(NSString*)message; | Required delegate method and will be called when an error has occured during loading an ad.   |
| -(void)adfInterstitialWillPresentScreen: (ADFInterstitialAd*) adfInterstitial;   | Optional. Will be called before the interstitial screen is presented.                         |
| $\hbox{-(void)} adfInterstitial Will Dismiss Screen: (ADFInterstitial Ad *) adfInterstitial; \\$                         | Optional. Will be called before the interstitial screen is dismissed.                         |
| -(void)adfInterstitialAppWillTerminate:(ADFInterstitialAd*) adfInterstitial;   | Optional. Will be called before the Application is terminated.                                |
| - (void)adfInterstitialAppWillEnterBackground:(ADFInterstitial Ad*) adfInterstitial;                                     | Optional. Will be called before the Application enters into background mode.                  |

#### **ADFUserInfo Class**

The ADFUserInfo Class contains all the needed parameters about the user of application.

The parameters of the ADFUserInfo Class are:

| Language No The language of the ar, en requested ad in ISO 639-1 language codes format (Two Letters code);         |  |
|--|--|
| Postal No A parameter 11121 code containing the user's postal/ZIP code   |  |
| Area code No A parameter 06 containing the user's area code  |  |
| Age No A parameter 27 containing the user's age  |  |
| Gender No A parameter kADFUserInfoGenderNone containing the user's kADFUserInfoGenderMale kADFUserInfoGenderFemale |  |



|                                     |    | gender   |                |
|-------------------------------------|----|--|----------------|
| Country<br>code                     | No | County code of the end user in ISO 3166-1 alpha-2 format code (two-letter code)  | JO, SAetc.     |
| Birthdate                           | No | Birthdate of application user in format dd.MM.yyyy   | 21.11.1984     |
| Location:<br>Latitude,<br>Longitude | No | The geolocation information of the device. The location information is divided into two double values; latitude and longitude. | 35.658, 34.641 |

#### **ADFTargetingParams Class**

The ADFTargetingParams Class contains all the needed parameters about any given user and application in order to help adFalcon network to send most related and targeted ads to the user and application. All parameters are optional.

The parameters of the ADFTargetingParams Class are:

| userInfo No A class containing <u>ADFUserInfo</u> information about the user of  |  |
|--|--|
| application  |  |
| Keywords No  A list conataining ex. sport, new keywords in comma lifestyle,et separated format.  AdFalcon's ads selector engine will search for ads containing these keywords. |  |
| Additional No A map of keys and Info values to add   |  |



additional parameters.

#### ADFAdViewAdUnitSize Enum

ADSAdViewAdUnitSize Enum defines the ad units supported by the AdFalcon iOS SDK

| Enum                           | Description  | Size      | Devices |
|--------------------------------|--|-----------|---------|
| kADFAdViewAdUnitSizeAutoBanner | The server will return the best banner ad based on the screen size and device type |           | All     |
| kADFAdViewAdUnitSize320x50     | Standard   | 320 x 50  | All     |
| kADFAdViewAdUnitSize300x250    | Medium<br>Rectangle  | 300 x 250 | All     |
| kADFAdViewAdUnitSize468x60     | Full Banner  | 468 x 60  | Tablet  |
| kADFAdViewAdUnitSize728x90     | Leaderboard  | 728 x 90  | Tablet  |
| kADFAdViewAdUnitSize120x600    | Skyscraper   | 120 x 600 | Tablet  |

#### **ADFAdViewError Enum**

| Enum                                   | Description   |  |
|--|---|--|
| kADFAdViewErrorInternalServer          | is an error that's happened within the web server attempting to get you an ad. It's typically a server-side problem out of your control |  |
| kADFAdViewErrorNoAdAvailabe            | no ad available in AdFalcon stores  |  |
| kADFAdViewErrorInvalidParam            | There is a parameter has invalid value  |  |
| k ADFAdView Error Missing Param        | You have missed to fill required parameter  |  |
| kADFAdViewErrorGenericSDK              | An error happened within the SDK during attempting to load or render an ad.   |  |
| kADFAdViewErrorCommunication           | No connection available to the internet.  |  |
| kADFAdViewErrorInterstitialAlreadyUsed | An error happened when application try to reuse Interstitial  |  |
|  |   |  |



# **5 More Information:**

You can find more information in the sample project within the downloaded zip file.

For any SDK integration queries, please send us anemail to <a href="mailto:support@adfalcon.com">support@adfalcon.com</a> along with your login id.