

Advertising SDK for Cocos2dx

1. iOS plugin integration

The Advertising SDK allows developers to support a lot of ads types including banner, interstitial, video, rewarded video, landing page and native ads.

1.1. Required frameworks

PWCore.framework

MobileCoreServices.framework

SystemConfiguration.framework

QuartzCore.framework

CoreTelephony.framework

MessageUI.framework

EventKit.framework

EventKitUI.framework

CoreMedia.framework

AVFoundation.framework

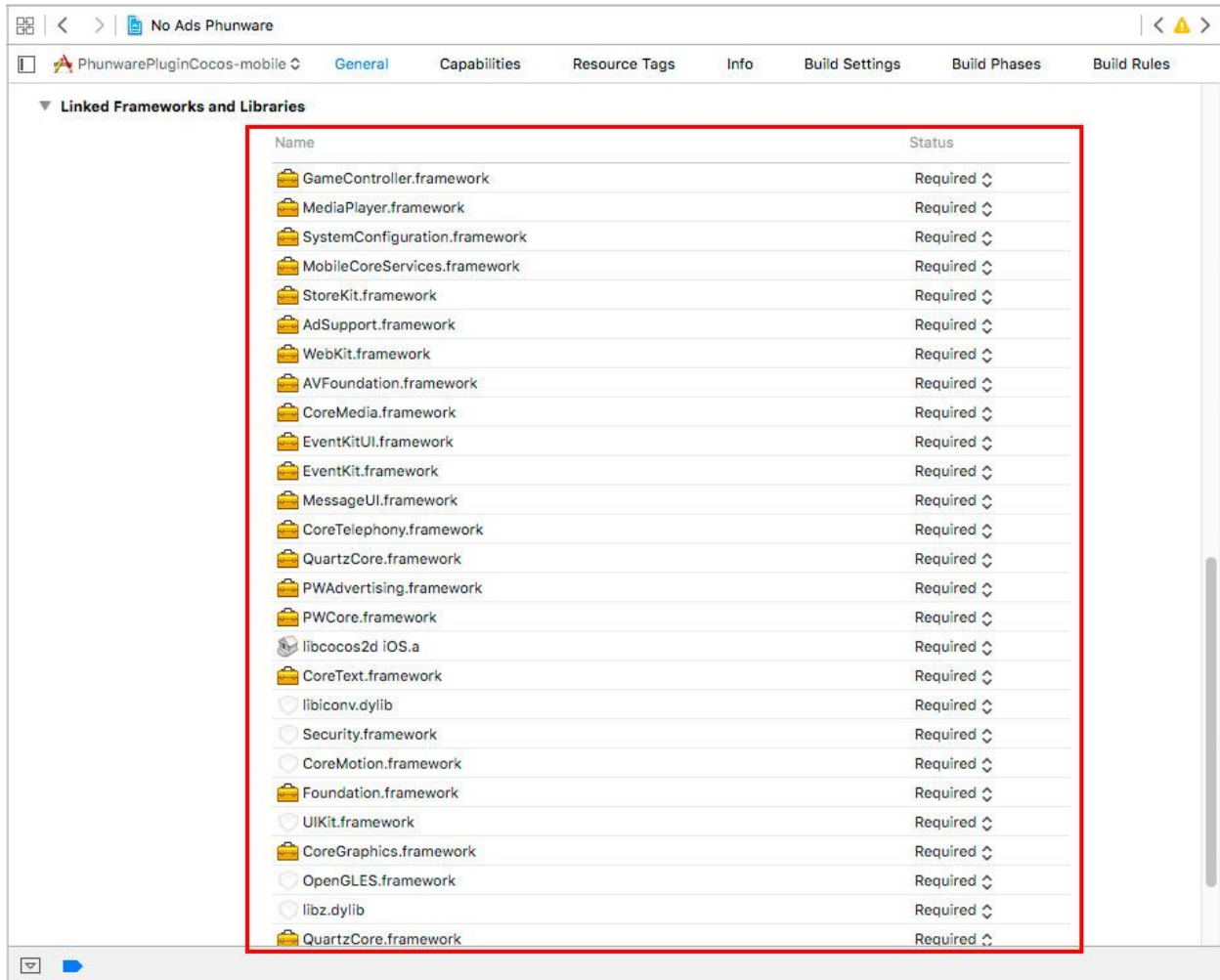
MediaPlayer.framework

AudioToolbox.framework

WebKit.framework

AdSupport.framework - enable support for IDFA

StoreKit.framework - enable use of SKStoreProductViewController, displays app store ads without leaving your app.



Screenshot 1. Add frameworks

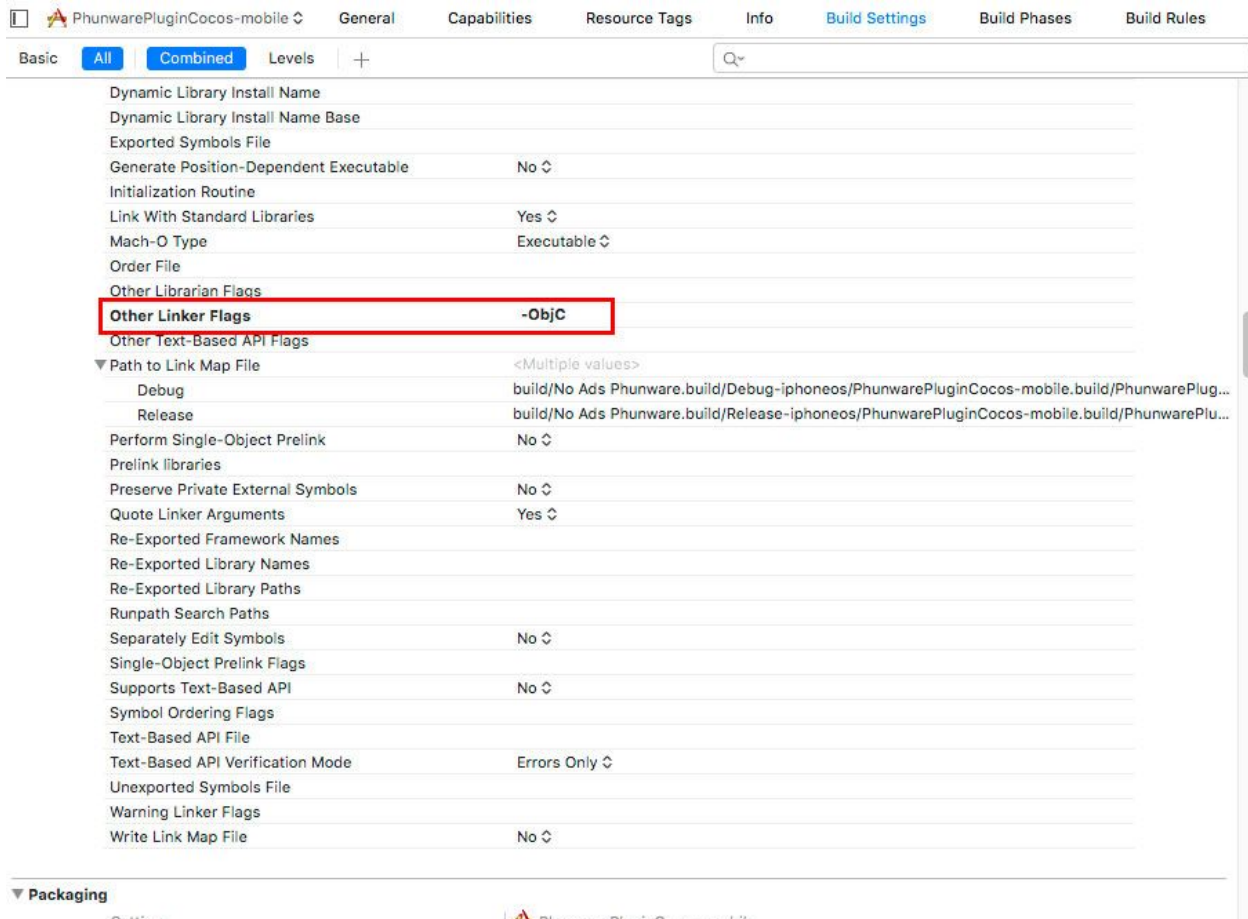
1.2. Optional frameworks

[*CoreLocation.framework*](#) -is optional and is used for geo-targeting ads. Apple mandates that your app have a good reason for enabling location services and will deny your app if location is not a core feature for your app.

1.3. Build Settings flags

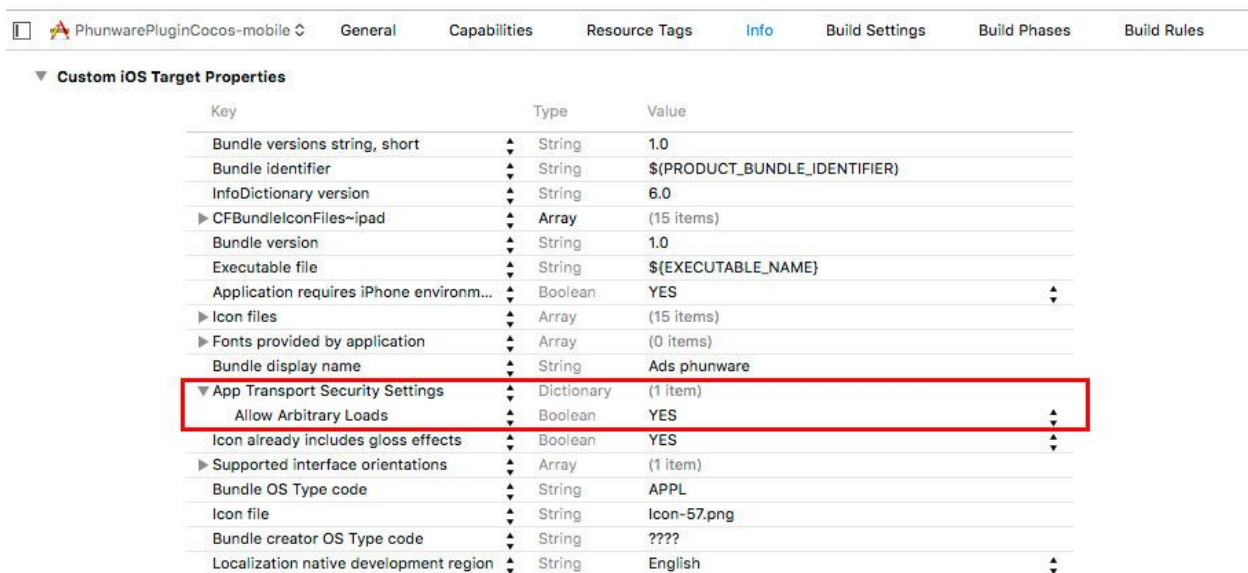
In the Build Settings for your target, you must include the following:

"Other Linker Flags:" -ObjC**



Screenshot 2. Linker flags setup

Also make sure that property "App Transport Security Settings -> Allow Arbitrary Loads" exists and set to "YES" in Target Properties.



Screenshot 3. Required target property

1.4. Required bundles

[PWAds.bundle](#) - includes files needed for media-rich advertisements that make use of device-specific features. It is included with this sample app.



Screenshot 4. Bundles to copy

1.5. Changes in source code

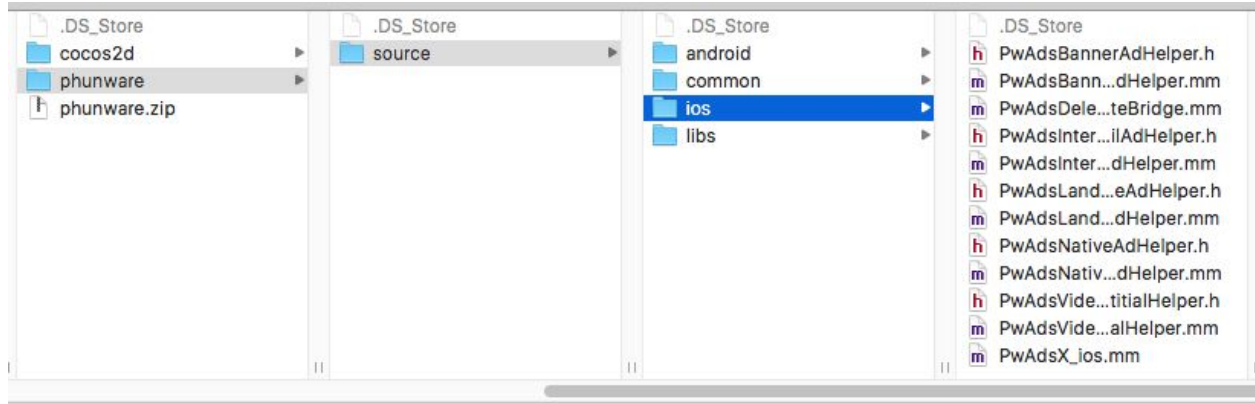
In your `AppController.m` file you need to init `PWAdsAppTracker`:

```
#import <PWAdvertising/PWAdsAppTracker.h>
...
- (BOOL)application:(UIApplication *)application didFinishLaunchingWithOptions:(NSDictionary *) launchOptions
{
    ...
    PWAdsAppTracker *appTracker = [PWAdsAppTracker sharedAppTracker];
    [appTracker reportApplicationOpen];
    return YES;
}
```

1.6. Add required files

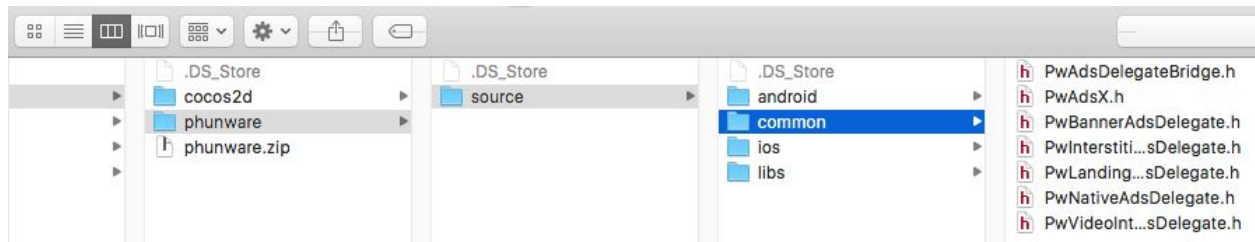
Also you need to add a few files to the project. You may find them in folders:

`$ExampleProjectPath/external/phunware/source/ios`



Screenshot 5. iOS files list

[\\$ExampleProjectPath/external/phunware/source/common](#)



Screenshot 6. Common headers list

The list of source files:

[PwAdsDelegateBridge.h](#)
[PwBannerAdsDelegate.h](#)
[PwInterstitialAdsDelegate.h](#)
[PwLandingPageAdsDelegate.h](#)
[PwNativeAdsDelegate.h](#)
[PwRewardedVideoAdsDelegate.h](#)
[PwVideoInterstitialAdsDelegate.h](#)

[PwAdsDelegateBridge.mm](#)
[PwAdsBannerAdHelper.h](#)
[PwAdsBannerAdHelper.mm](#)
[PwAdsInterstitialAdHelper.h](#)
[PwAdsInterstitialAdHelper.mm](#)
[PwAdsLandingPageAdHelper.h](#)
[PwAdsLandingPageAdHelper.mm](#)
[PwAdsRewardedVideoHelper.h](#)
[PwAdsRewardedVideoHelper.mm](#)
[PwAdsVideoInterstitialHelper.h](#)
[PwAdsVideoInterstitialHelper.mm](#)
[PwAdsX_ios.mm](#)

PwAdsX.h
PwAdsNativeAdHelper.h
PwAdsNativeAdHelper.mm

2. Ads usage

The Main ads class is PwAdsX. It is singleton class. To get instance of this class you should call atatic method PwAdsX::sharedPwAdsX().

2.1. Banner Ads Integration

To show banner ads in an application, the following part of the code needs to be added:

```
#include "PwAdsX.h"
...
{
    PwAdsX::sharedPwAdsX()->showBannerAd(isTestMode);
}
```

And to hide banner ads you need to call:

```
#include "PwAdsX.h"
...
{
    PwAdsX::sharedPwAdsX()->hideBannerAd();
}
```

If you want to receive banner ads callbacks from plugin you need to inherit from PwBannerAdsDelegate, and inherited object should be transferred to the plugin.

```
#include "PwBannerAdsDelegate.h"
...
{
    PwAdsX::sharedPwAdsX()->setBannerDelegate(this);
}
```

2.2. Native Ads Integration

To show native ads in an application, the following part of the code needs to be added:

```
#include "PwAdsX.h"
```

```

...
{
    PwAdsX::sharedPwAdsX()->showNativeAd(isTestMode);
}

```

And to hide native ads you need to call:

```

#include "PwAdsX.h"
...
{
    PwAdsX::sharedPwAdsX()->hideNativeAd();
}

```

If you want to receive native ads callbacks from plugin you need to inherit from PwNativeAdsDelegate, and inherited object should be transferred to the plugin.

```

#include "PwNativeAdsDelegate.h"
...
{
    PwAdsX::sharedPwAdsX()->setNativeDelegate(this);
}

```

2.3. Video Interstitial Ads Integration

To show video interstitial ads in an application, the following part of the code needs to be added:

```

#include "PwAdsX.h"
...
{
    PwAdsX::sharedPwAdsX()->showVideoInterstitialAd(isTestMode);
}

```

If you want to receive video interstitial ads callbacks from plugin you need to inherit from PwVideoAdsDelegate, and inherited object should be transferred to the plugin.

```

#include "PwVideoAdsDelegate.h"
...
{
    PwAdsX::sharedPwAdsX()->setVideoDelegate(this);
}

```

2.4. Rewarded Video Ads Integration

To show rewarded video ads in an application you need at first load it:

```
#include "PwAdsX.h"
...
{
    PwAdsX::sharedPwAdsX()->loadRewardedVideoAd(isTestMode);
}
```

And then the following part of the code needs to be added to show rewarded video ad:

```
#include "PwAdsX.h"
...
{
    PwAdsX::sharedPwAdsX()->showRewardedVideoAd(isTestMode);
}
```

If you want to receive rewarded video callbacks from plugin you need to inherit from PwRewardedVideoAdsDelegate, and inherited object should be transferred to the plugin.

```
#include "PwVideoAdsDelegate.h"
...
{
    PwAdsX::sharedPwAdsX()->getRewardedVideoDelegate(this);
}
```

2.5. Interstitial Ads Integration

To show interstitial ads in an application, the following part of the code needs to be added:

```
#include "PwAdsX.h"
...
{
    PwAdsX::sharedPwAdsX()->showInterstitialAd(isTestMode);
}
```

If you want to receive interstitial ads callbacks from plugin you need to inherit a class from PwInterstitialAdsDelegate, and inherited object should be transferred to the plugin.

```
#include "PwInterstitialAdsDelegate.h"
...
```



```
{  
    PwAdsX::sharedPwAdsX()->setInterstitialDelegate(this);  
}
```

2.6. Landing Page Ads Integration

To show landing page ads in an application, the following part of the code needs to be added:

```
#include "PwAdsX.h"  
...  
{  
    PwAdsX::sharedPwAdsX()->showLandingPageAd(isTestMode);  
}
```

If you want to receive landing page ads callbacks from plugin you need to inherit a class from PwLandingPageAdsDelegate, and inherited object should be transferred to the plugin.

```
#include "PwLandingPageAdsDelegate.h"  
...  
{  
    PwAdsX::sharedPwAdsX()->setLandingPageDelegate(this);  
}
```