



**MOBILE ADS**



## WHY DO YOU NEED TO USE THIS PLUGIN ?

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- Integrate easily all supported advertisers simply by importing their SDK, no other settings are required. It is not mandatory to integrate all/any of the supported advertisers to work.
- Load ad from any ad platform using the same line of code.
- Customizable mediation policy by using either order mediation or percent based mediation. You can select independent type of mediation for each type of ad (banner, interstitial, rewarded video).
- Read mediation config file from an external server of choice to allow the ad display order to be changed without uploading a new build to the store.
- Works for Android/iOS/Windows Store without any additional Unity setup.
- Built in Remove Ads functionality.
- GDPR, ATT, COPPA, CCPA Compliant.
- Compatible with Playmaker, Bolt and Game Flow



## CURRENTLY SUPPORTED ADVERTISERS

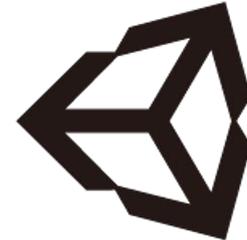
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AdMob



Audience  
Network



unityAds

mopub



Vungle



APPLOVIN  
**MAX**



**ADCOLONY**

Chartboost



## GDPR COMPLIANCE

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Our plugin does not collect any personal information only selected advertisers collect personal information about users. Here is a list of how any advertiser deals with personal user data and what you have to do to be compliant with GDPR:

### **Unity Ads**

Versions 2.0 and above will automatically present users with an opportunity to opt-out of targeted advertising, with no implementation needed from the publisher. On a per-app basis, the first time a Unity ad appears, the user will see a banner with the option to opt-out of behaviorally targeted advertising. Thereafter, the user can click an information button to receive the opt-out again.

**No specific action needed.**

### **Vungle**

Vungle will display a consent dialog before playing an ad for a European user, and will remember the user's consent or rejection for subsequent ads.

**No specific action needed.**

### **Admob, AdColony, AppLovin, Heyzap, MoPub, IronSource**

All require that implementation of getting user consent for receiving targeted ads to be made by publisher in his application and then to be sent to their SDK(Admob, AdColony, AppLovin Heyzap, MoPub, IronSource).

If the application user does not accept the compliance they will keep serving ads but it will not be targeted anymore.

**Getting consent from the user is needed to display ads in order to be compliant with GDPR.**

### **Chartboost**

Chartboost requires that implementation of getting user consent for receiving targeted ads to be made by publisher in his application and then sent to Chartboost SDK.

If the application user does not accept the compliance Chartboost SDK will not provide any Ads.

**Getting consent from the user is needed to display ads in order to be compliant with GDPR.**

### **Facebook Audience Network**

**For Facebook no action is required, they deal with GDPR from Facebook app.**

But keep in mind this:

- The user has to have logged into Facebook within the last 30 days on that particular device to be able to see live ads.
- The user has to have consented to targeted ads from within the Facebook apps in order to see live ads.

For detailed implementation see section **Usage Guide**.



## APP TRACKING TRANSPARENCY (ATT) iOS 14.5

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iOS 14.5 and above requires publishers to obtain permission to track the user's device across applications. This device setting is called App Tracking Transparency, or ATT.

All the setup required is done inside the Settings Window as follows:

- Check **Enable iOS Tracking**.
- **Hit Import Required iOS Packages** or manually install the **iOS 14 Advertising Support** package from Package Manager.
- Insert your display text in the box provided. This text will be displayed on the device.
- Hit **Save**

More information can be found on Unity website:

<https://unityads.unity3d.com/help/monetization/ios14>

Enable iOS Tracking

iOS 14.5 and above requires publishers to obtain permission to track the user's device across applications. This device setting is called App Tracking Transparency, or ATT.

Hit import required packages to enable this functionality.

Import Required iOS Packages

This text will be presented to the user in the confirmation popup that will be automatically displayed:

We will use your data to provide a better and personalized ad experience.

Allow "MobileAds" to track your activity across other companies' apps and websites?

We will use your data to provide a better and personalized ad experience.

Ask App Not to Track

Allow



## COPPA COMPLIANCE

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COPPA (Children's Online Privacy Protection Act) is required if your app is directed to children under the age of 13. To be compliant with COPPA your app does not have to collect any user data.

Each ad publisher we support has his own way to deal with COPPA. some of them within dashboard and some of them required some in app setup. Here is a detailed description of what you should do to be compliant:

### Admob

Official documentation can be found here:

<https://support.google.com/admob/answer/6223431?hl=en>

We do all that for you, just have to check the box in our Settings Window:

|   |  |
|---|--|
| <input checked="" type="checkbox"/> Admob Ads - Supports mediation of all other ads |  |
| Android   | <input checked="" type="checkbox"/>    |
| Banner ID   | ca-app-pub-9463523453603371/8876116469 |
| Interstitial ID   | ca-app-pub-9463523453603371/8731798240 |
| Rewarded Video ID   | ca-app-pub-9463523453603371/2577343567 |
| Directed for children   | <input checked="" type="checkbox"/>    |
| iOS   | <input checked="" type="checkbox"/>    |
| Banner ID   | ca-app-pub-9463523453603371/2710427661 |
| Interstitial ID   | ca-app-pub-9463523453603371/4161997845 |
| Rewarded Video ID   | ca-app-pub-9463523453603371/6486021143 |
| Directed for children   | <input checked="" type="checkbox"/>    |

## **AdColony**

Official documentation can be found here:

<http://support.adcolony.com/customer/en/portal/articles/1211853-coppa-f-a-q->

All is done from dashboard, no action required from SDK.

## **AppLovin**

Official documentation can be found here:

<https://dash.applovin.com/docs/integration#androidUnityPrivacySettings>

We do all that for you, just have to check the box in our Settings Window.

## **Chartboost**

Official documentation can be found here:

<https://answers.chartboost.com/en-us/zingtree> in section: Data, Privacy & GDPR -> Behavioral Targeting.

All is done from dashboard, no action required from SDK.

## **Facebook Audience Network**

Official documentation can be found here:

<https://developers.facebook.com/docs/audience-network/coppa/>

Additionally you have to check the directed for children check-box in our Settings Window.

## **Heyzap**

Official documentation can be found here:

<https://developers.heyzap.com/docs/faq>

Additionally you have to check the directed for children check-box in our Settings Window.

## **IronSource**

Official documentation can be found here:

<https://developers.ironsrc.com/ironsource-mobile/air/ironsource-mobile-privacy-policy/>

All is done from dashboard, no action required from SDK.

## **Unity Ads**

Official documentation can be found here:

<https://docs.unity3d.com/Manual/UnityAnalyticsCOPPA.html>

All is done from dashboard, no action required from SDK.

## **MoPub**

Official documentation can be found here:

<https://developers.mopub.com/publishers/ui/apps/>

All is done from dashboard, no action required from SDK.

## **Vungle**

You have to send an e-mail to Vungle team to enable COPPA for your app. It cannot be enabled from your dashboard.



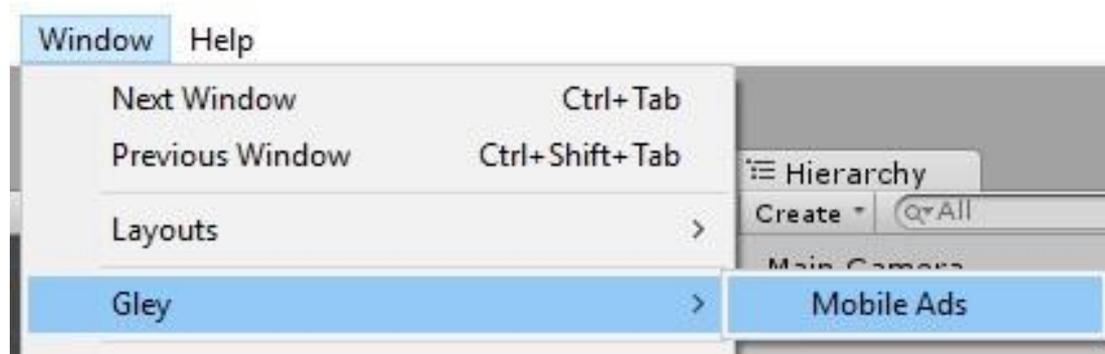
## SETUP GUIDE

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Step by step video tutorials available on our Youtube Channel:  
[https://www.youtube.com/channel/UCAhG0ta4P75E\\_24LR\\_qQ5hg](https://www.youtube.com/channel/UCAhG0ta4P75E_24LR_qQ5hg)

Import **GleyMobileAdsPlugin** into Unity.

Go to Window->Gley->Mobile Ads to open the plugin settings window.



Select the desired advertisers from the settings window using the checkbox.



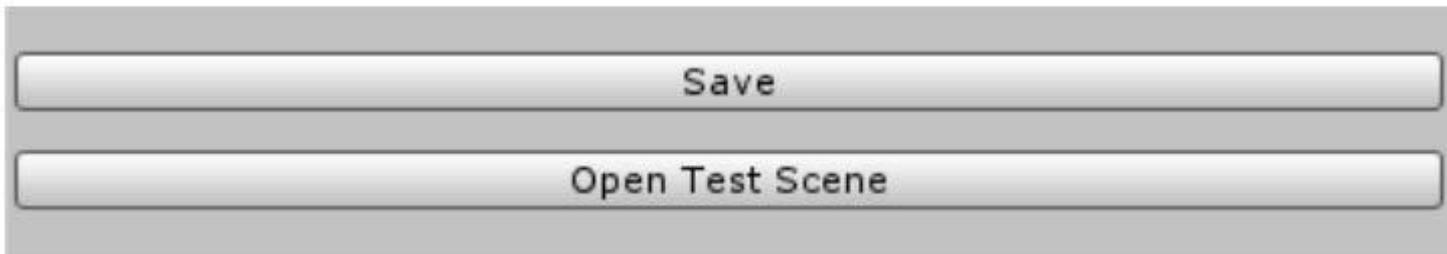
Select the desired platforms to build for(Android/iOS/Windows Store).

Add sdk keys for all your platforms of choice (Read the SDK provider documentation on how to obtain these keys).

|  |                                     |
|--|-------------------------------------|
| <input checked="" type="checkbox"/> <b>AdColony Ads</b>          |                                     |
| Android  | <input checked="" type="checkbox"/> |
| App ID   | <input type="text"/>                |
| Interstitial Zone ID   | <input type="text"/>                |
| Rewarded Zone ID   | <input type="text"/>                |
| iOS  | <input checked="" type="checkbox"/> |
| App ID   | <input type="text"/>                |
| Interstitial Zone ID   | <input type="text"/>                |
| Rewarded Zone ID   | <input type="text"/>                |
| <input type="button" value="Download AdColony SDK"/>             |                                     |
| You just need to import the SDK, no additional setup is required |                                     |

Download and import the selected advertiser SDK. No additional Unity setup is required.

Press the **Save** button for saving settings made in previous steps and all is done.





## ADVANCED SETUP

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If more than one advertiser is selected the mediation section will be displayed.

**Mediation Options**  
Select your preferred mediation policy for each ad type.

**Order Mediation:**  
Order SDKs by dragging them in the list. The SDK on the top of the list is shown first. If no ad is available for the first SDK the next SDK will be shown. And so on.

**Percent Mediation:**  
An add will be shown based on the percentages indicated next to the advertisers. The higher the percentage, the higher the number of ads will be shown from that provider. Adjust the sliders until you reach the percentage that you think is best for your app.

Unchecking the advertiser will not display any ad from that advertiser.

Banner Mediation:

Banner Advertisers - Percent Mediation

|                                     |        |      |                                  |                                 |
|-------------------------------------|--------|------|----------------------------------|---------------------------------|
| <input checked="" type="checkbox"/> | Heyzap | 63 % | <input type="range" value="72"/> | <input type="text" value="72"/> |
| <input checked="" type="checkbox"/> | Admob  | 36 % | <input type="range" value="41"/> | <input type="text" value="41"/> |

OrderList

Interstitial Mediation:

Interstitial Advertisers - Order Mediation

|   |                                     |            |          |
|---|-------------------------------------|------------|----------|
| = | <input checked="" type="checkbox"/> | AdColony   | Order: 1 |
| = | <input checked="" type="checkbox"/> | Admob      | Order: 2 |
| = | <input checked="" type="checkbox"/> | Chartboost | Order: 3 |
| = | <input checked="" type="checkbox"/> | Heyzap     | Order: 4 |
| = | <input checked="" type="checkbox"/> | Unity      | Order: 5 |
| = | <input checked="" type="checkbox"/> | Vungle     | Order: 6 |

**THERE ARE 2 OPTIONS:**

**Order Mediation**

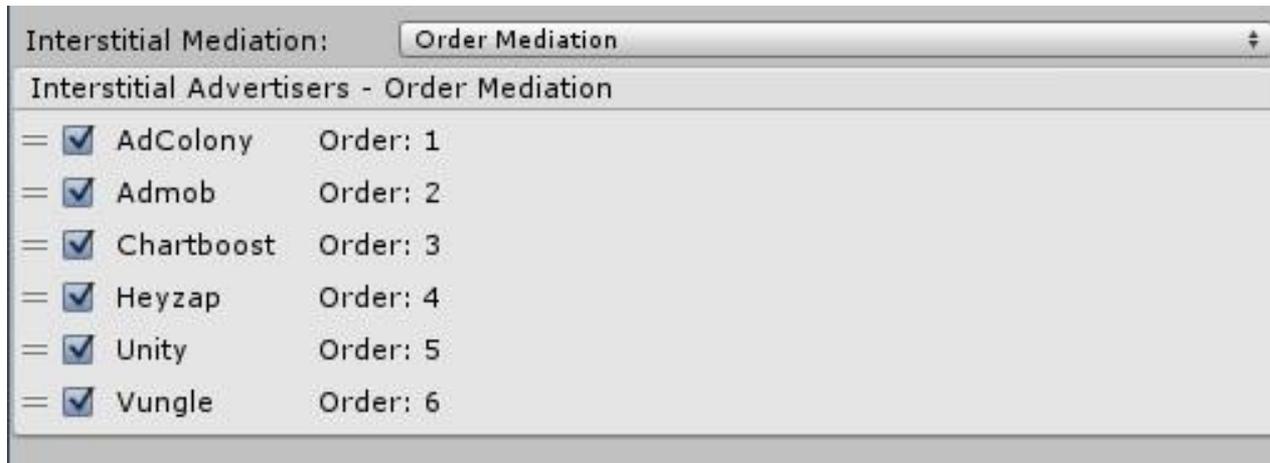
**Percent Mediation**



## ORDER MEDIATION

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- Select Order Mediation from the drop down list.
- Order SDKs by dragging them in the list on the desired position.
- The SDK on the top of the list is shown first.
- If no ad is available for the first SDK the an ad from the next SDK will be shown.
- And so on.



- To remove ads completely from an advertiser just uncheck the box.



## PERCENT MEDIATION

- Select Percent Mediation from the drop down list
- An add will be shown based on the percentages indicated next to the advertisers.
- A higher percentage means that a higher number of ads will be shown from that advertiser.
- Adjust the sliders until you reach the percentage that you think is best for your app.
- Press the **Order List** button to order the list based on slider settings.

Rewarded Mediation: Percent Mediation

Rewarded Video Advertisers - Percent Mediation

|                                     |            |      |  |    |
|-------------------------------------|------------|------|--|----|
| <input checked="" type="checkbox"/> | Heyzap     | 29 % |  | 68 |
| <input checked="" type="checkbox"/> | Admob      | 27 % |  | 64 |
| <input checked="" type="checkbox"/> | AdColony   | 18 % |  | 44 |
| <input checked="" type="checkbox"/> | Unity      | 16 % |  | 38 |
| <input checked="" type="checkbox"/> | Vungle     | 7 %  |  | 18 |
| <input type="checkbox"/>            | Chartboost | 0 %  |  | 0  |

OrderList

- To remove ads completely from an advertiser just uncheck the box.

Independent mediation policy can be set for each ad type (banner, interstitial, rewarded video)

The screenshot displays a configuration interface for ad mediation, organized into three main sections: Banner Mediation, Interstitial Mediation, and Rewarded Mediation. Each section allows for independent policy settings for various ad networks.

**Banner Mediation:** Set to **Percent Mediation**.  
Banner Advertisers - Percent Mediation:  
- Admob: 98 % (Slider at 64)  
- Heyzap: 1 % (Slider at 1)

**Interstitial Mediation:** Set to **Order Mediation**.  
Interstitial Advertisers - Order Mediation:  
- Unity: Order: 1  
- Vungle: Order: 2  
- Admob: Order: 3  
- AdColony: Order: 4  
- Chartboost: Order: 5  
- Heyzap: Order: 0

**Rewarded Mediation:** Set to **Percent Mediation**.  
Rewarded Video Advertisers - Percent Mediation:  
- AdColony: 36 % (Slider at 90)  
- Heyzap: 34 % (Slider at 84)  
- Unity: 16 % (Slider at 41)  
- Vungle: 9 % (Slider at 23)  
- Admob: 2 % (Slider at 7)  
- Chartboost: 0 % (Slider at 0)



## EXTERNAL FILE SETTINGS

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To be able to change the above settings outside the build (after the build was published to store) an external config file can be used.

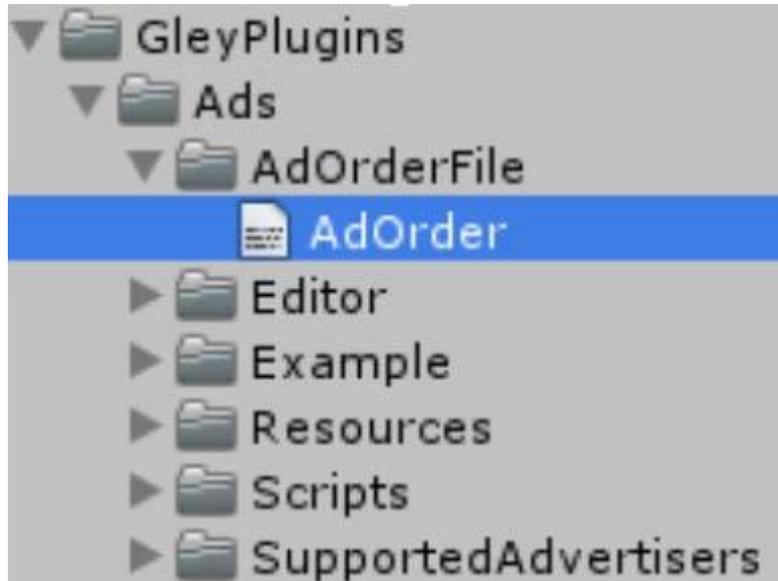
You can generate a settings file that can be uploaded to an external server and the plugin will automatically read the config from that file. This is usefull change the order of your ads without updating your build  
If you use Heyzap or Admob you can do exactly the same thing from their dashbord (recommended approach)

External Settings File url

Generate Settings File

Press the **Generate Settings File** button and all your settings will be saved in a .txt file that can be uploaded to any server and the URL of the file must be pasted in the text box above the button.

The .txt file is located in Assets/GleyPlugins/Ads/AdOrderFile/AdOrder.txt





## USAGE GUIDE

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### Debug Mode

If the debug mode is checked in the settings window, debug messages will be displayed on the screen.

### GDPR Compliance

(it is not required if just Unity and/or Vungle sdk`s are used, otherwise is mandatory for GDPR).

#### Call this before calling initialize the SDK

```
//check if the user was not already asked
if(Advertisements.Instance.UserConsentWasSet()==false)
{
    //display your custom popup to notify the user about targeted
    //advertisements with YES and NO options
    if(YES)
    {
        //means that user agrees with data processing
        Advertisements.Instance.SetUserConsent(true);
    }
    else
    {
        //user doesn't want to share his data
        Advertisements.Instance.SetUserConsent(false);
    }
}
```

### **Advertisements.Instance.SetUserConsent(bool consent);**

Sets and also stores(saves on device) the user answer so all ads from now on will be displayed Based on this settings.

The default setting (if is not set by the user) is true - will display targeted ads.

### **bool Advertisements.Instance.UserConsentWasSet();**

If true, user already gave his consent, do not bother him anymore.

### **GetUserConsent();**

Returns an enum(UserConsent) with 3 options: Unset, Accept, Deny representing the current consent state used by the SDK.

A detailed implementation can be found in TestAds.cs

## **Remove Ads**

### **Advertisements.Instance.RemoveAds(true);**

If parameter is true, no banner and interstitial ads will be shown, rewarded videos will work. You have to call this just once, then it will be saved and used accordingly.

You only need this method if you have an in app product that has remove ads functionality or other methods that permit to remove all ads from the game.

## **CCPA Consent**

### **Advertisements.Instance.SetCCPAConsent(bool consent);**

Sets and also stores(saves on device) the user answer so all ads from now on will be displayed Based on this settings.

The default setting (if is not set by the user) is true.

### **GetCCPAConsent();**

Returns an enum(UserConsent) with 3 options: Unset, Accept, Deny representing the current CCPA consent state used by the SDK.

## Initializing the SDK:

### **Advertisements.Instance.Initialize();**

This method must be called once at the launch of your project.

No prefabs need to be dragged into stage and no scripts needs to be attached to GameObjects.

## Display Banner ad:

### **Advertisements.Instance.ShowBanner(BannerPosition.BOTTOM);**

Supported banner positions are TOP and BOTTOM.

### **Advertisements.Instance.ShowBanner(BannerPosition.BOTTOM, BannerType.SmartBanner);**

Supported banner types are Banner, SmartBanner and Adaptive.

## Hide Banner ad:

### **Advertisements.Instance.HideBanner();**

## Show Interstitial ad:

//show interstitial based on your mediation settings

### **Advertisements.Instance.ShowInterstitial(InterstitialClosed);**

OR:

//show an interstitial from a specific advertiser

### **Advertisements.Instance.ShowInterstitial( GleyMobileAds.SupportedAdvertisers.AdvertiserName, InterstitialClosed);**

```
private void InterstitialClosed(string advertiser)
{
    Debug.Log("Interstitial closed from: "+ advertiser+" -> Resume Game ");
}
```

The InterstitialClosed callback method is called after an interstitial ad is closed.  
This callback is optional.

### Show Rewarded Video ad:

```
//show rewarded video based on your mediation settings  
Advertisements.Instance.ShowRewardedVideo(CompleteMethod);
```

OR:

```
//show an rewarded video from a specific advertiser  
Advertisements.Instance.ShowRewardedVideo(  
GleyMobileAds.SupportedAdvertisers.AdvertiserName, CompleteMethod);
```

```
private void CompleteMethod(bool completed, string advertiser)  
{  
    Debug.Log("Closed rewarded from: "+advertiser+" -> Completed " + completed);  
    if(completed == true)  
    {  
        //give the reward  
    }  
    else  
    {  
        //no reward  
    }  
}
```

The complete callback method is called after the rewarded video ad is closed.

### Check if ads are ready to be displayed:

```
bool Advertisements.Instance.IsInterstitialAvailable();
```

```
bool Advertisements.Instance.IsRewardVideoAvailable();
```

### Check if a banner is on screen:

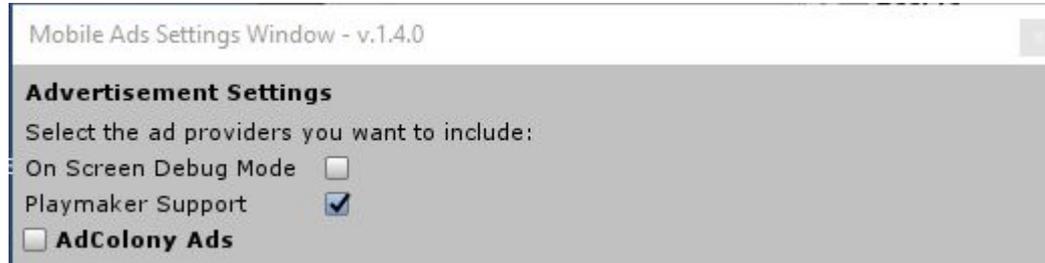
```
bool Advertisements.Instance.IsBannerOnScreen();
```



## Playmaker Support

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- To be able to use Playmaker actions, **Playmaker Support** must be enabled from Settings Window:



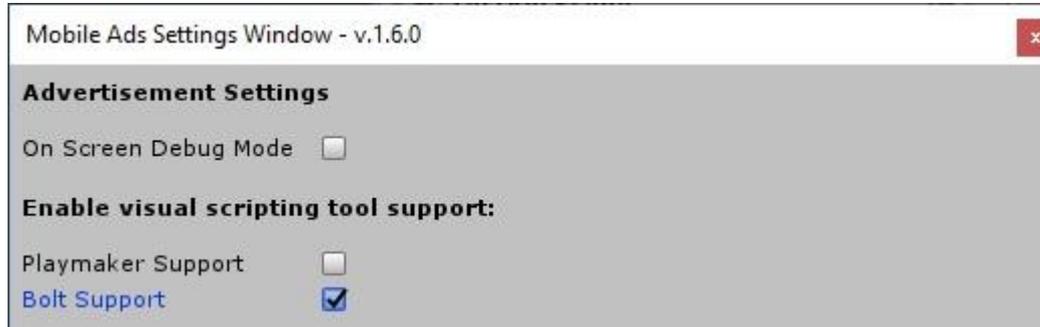
- To initialize the SDK you have to drag and drop the **InitializeGleyAds** on your first scene of the project
- The prefab is located in: **GleyPlugins/Ads/PlayMakerSupport/Prefabs/InitializeGleyAds**
- Playmaker supports the following actions:
  - **SetConsentToYes**
  - **SetConsentToNo**
  - **UserConsentWasSet**
  - **ShowBanner**
  - **HideBanner**
  - **IsInterstitialAvailable**
  - **ShowInterstitial**
  - **IsRewardedVideoAvailable**
  - **ShowRewardedVideo**
  - **RemoveAds**
- A step by step integration tutorial is available on our Youtube channel:  
<https://youtu.be/wBZ0njSWQKE>



## Bolt Support

---

- To be able to use Bolt actions, **Bolt Support** must be enabled from Settings Window:



- All supported bolt actions are located inside **MobileAdsBoltSupport**:
- The following actions are supported:
  - **SetConsentToYes**
  - **SetConsentToNo**
  - **UserConsentWasSet**
  - **ShowBanner**
  - **HideBanner**
  - **ShowInterstitial**
  - **ShowRewardedVideo**
  - **RemoveAds**
- A step by step integration tutorial is available on our Youtube channel:  
<https://youtu.be/Qupbc1UzK-Q>



## Game Flow Support

---

- To be able to use Game Flow actions, **Game Flow Support** must be enabled from Settings Window:



- The following actions are supported:
  - **InitializeGleyAds**
  - **SetConsentToYes**
  - **SetConsentToNo**
  - **UserConsentWasSet**
  - **ShowBanner**
  - **HideBanner**
  - **IsInterstitialAvailable**
  - **ShowInterstitial**
  - **IsRewardedVideoAvailable**
  - **ShowRewardedVideo**
  - **RemoveAds**
- A step by step integration tutorial is available on our Youtube channel:  
<https://youtu.be/3oNI1X725s8>



## EXAMPLES

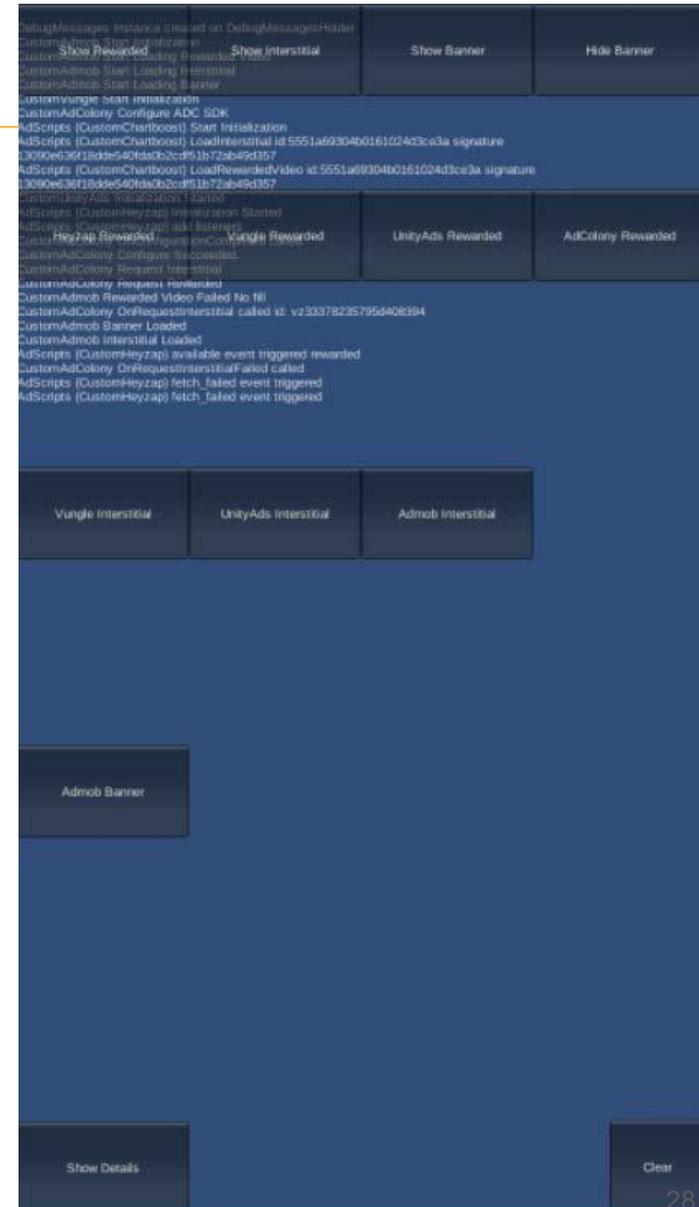
The test scene can be opened by pressing the “**Open Test Scene**” button or by going to:

**Assets/GleyPlugins/Example/TestAdsScene.unity**

Check the **TestAds.cs** for a complete implementation of the plugin.

### How the test scene works:

If an ad is available a button corresponding to that type of ad will be shown, if you press it, the corresponding ad will be displayed.





## ADVERTISER SDK SPECIFIC SETTINGS/ERRORS

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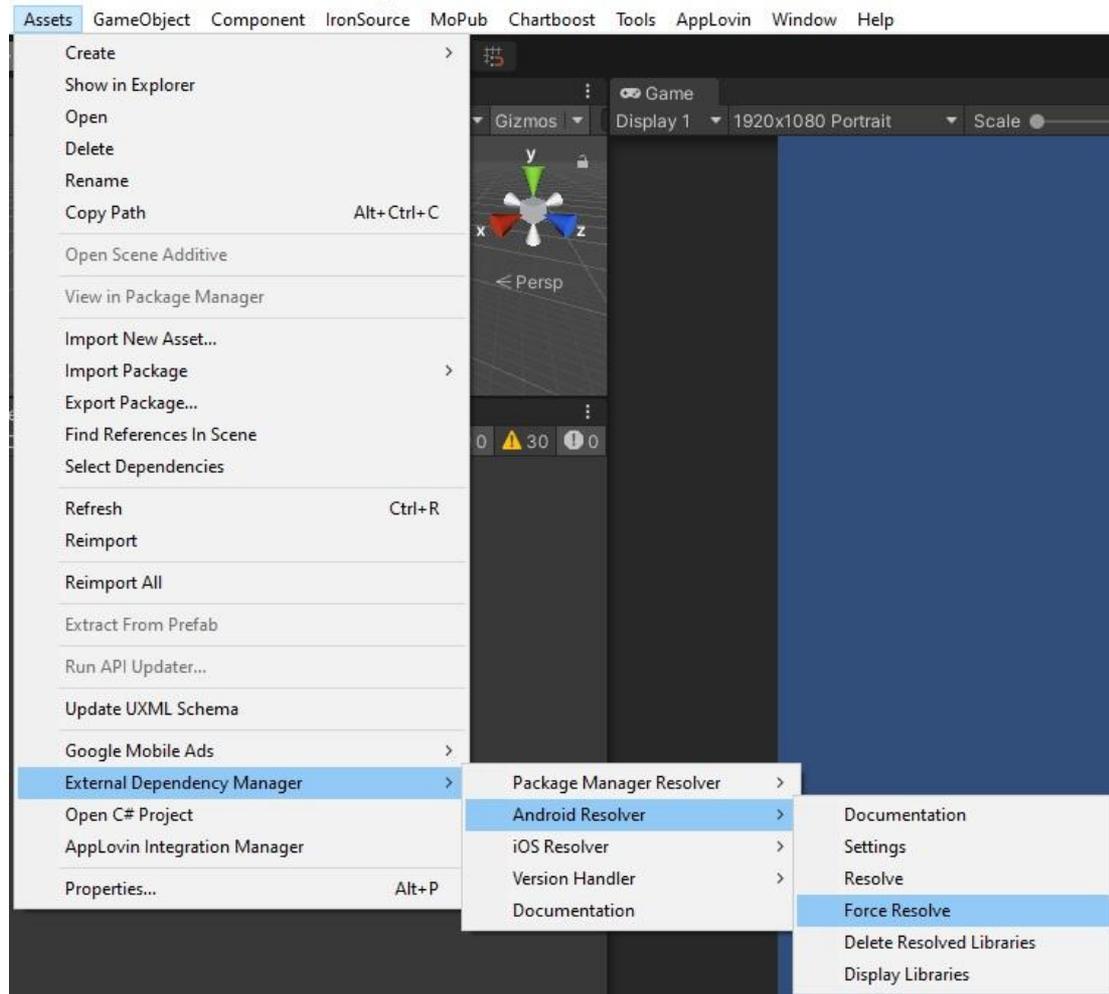
**AdColony** (tested with Version: 4.7.0)

**Go to menu bar: Assets->External Dependency Manager->Android Resolver -> Force Resolve**

## Admob (tested with version 6.1.2)

**To receive live ads make sure your payment details are filled in your Admob account and your app is signed with your release key. Publish your app on Google Play on a test track to receive live Admob ads.**

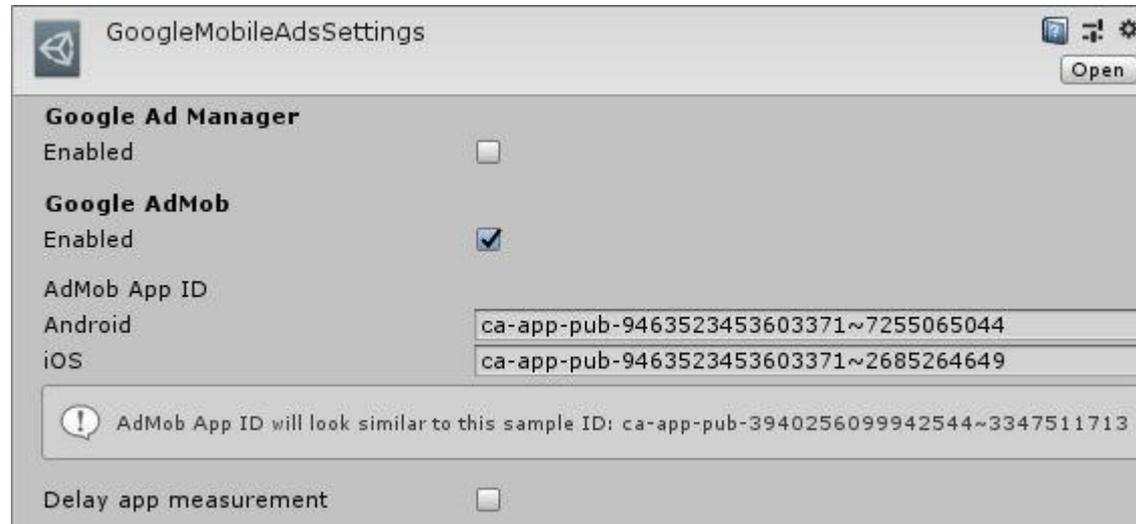
Go to menu bar: Assets->External Dependency Manager->Android Resolver -> Force Resolve



## Admob

### If your app crashes at right after start:

Go to menu bar: Assets->Google Mobile Ads ->Settings



If your app id is empty:

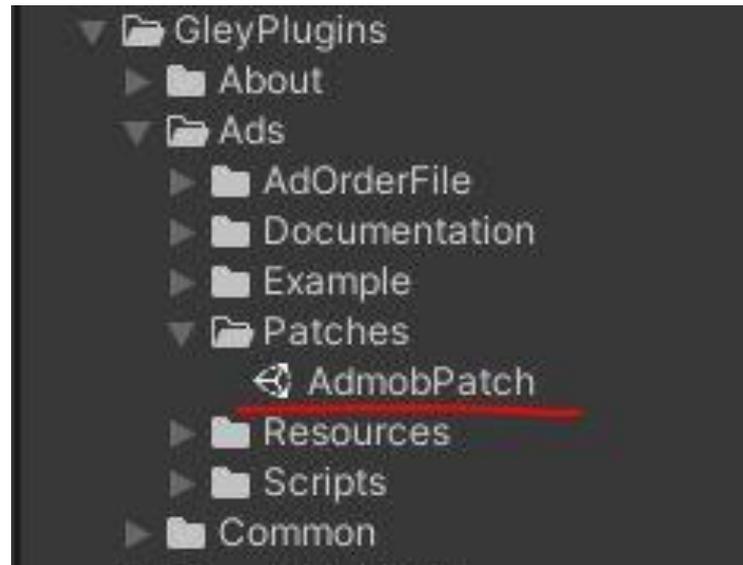
- Go to Window -> Gley -> Mobile Ads
- Make sure your app id is set in there.
- Hit save and close the window.
- Now you should see your app ID in Assets->Google Mobile Ads ->Settings

## Admob

If you get this error or another error that contains **Admob Patch**:

```
Assets\GleyPlugins\Ads\Scripts\Editor\SettingsWindow.cs(125,25): error CS0234: The type or namespace name 'GleyAdmobPatch' does not exist in the namespace 'GoogleMobileAds.Editor' (are you missing an assembly reference?)
```

Install the **Admob Patch** located here:



## Admob iOS (tested with version 6.1.2)

If this error occurs when building xCode project:

```
ld: library not found for -lPods-Unity-iPhone
clang: error: linker command failed with exit code 1 (use -v to see invocation)
```

Library not found for -lPods-Unity-iPhone

 Linker command failed with exit code 1 (use -v to see invocation)

 Activity Log Complete 2018/5/24 下午9:07  
1 error, 6 warnings

You probably you don` t have cocoapods installed.  
To install it you need to follow this instructions:

- open Terminal on your mac
- run the following command:
- `sudo gem install -n /usr/local/bin cocoapods`
- enter your password when required
- wait for the installation to finish
- run the following command:
- `pod install`
- after installation is complete build again your project with Unity
- open xcode project but from the `.xcworkspace` file
- run on your device and it should display Admob Ads.

## AppLovin MAX (tested with version 4.3.12)

For **iOS** in xCode you have to add you SDK key to your info.plist:

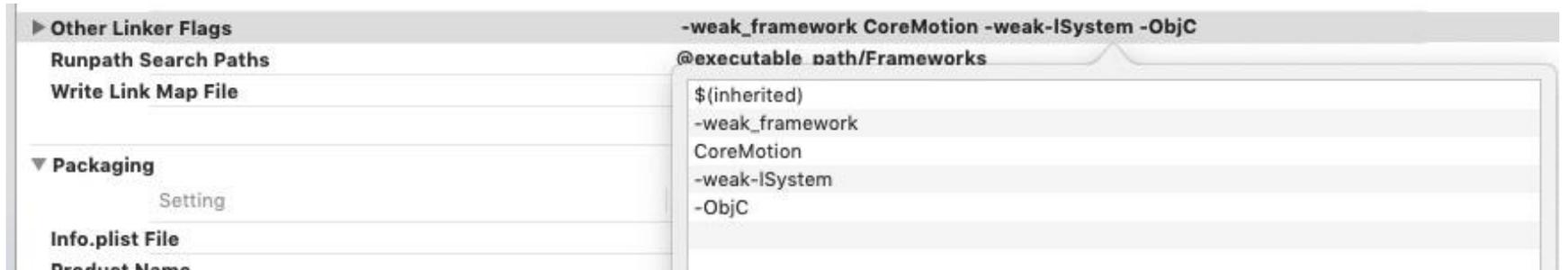
- Create a string property named **AppLovinSdkKey** and add your SDK key as a value like in the screenshot below:



The screenshot shows the Xcode interface for editing the Info.plist file. The breadcrumb path is Unity-iPhone > Info.plist > No Selection. The main content area displays a table of key-value pairs for the Information Property List.

| Key                       | Type       | Value  |
|---------------------------|------------|--|
| Information Property List | Dictionary | (27 items)   |
| AppLovinSdkKey            | String     | ZShGR5ndD6rqdLgXw4Xwzg2wZToDpdoM5UdWZP8oV-c7JHfEMC9JtBERk0eWdRukwWEUwNHQLu |

Add **-ObjC** flag to Other Linker Flags in xCode Build Settings:



**MoPub** (tested with version 5.17.0)

**Go to menu bar: Assets->Play Service Resolver->Android Resolver ->Force Resolve**

**IronSource** (tested with version 7.1.12)

ironSource SDK requires the following libraries:

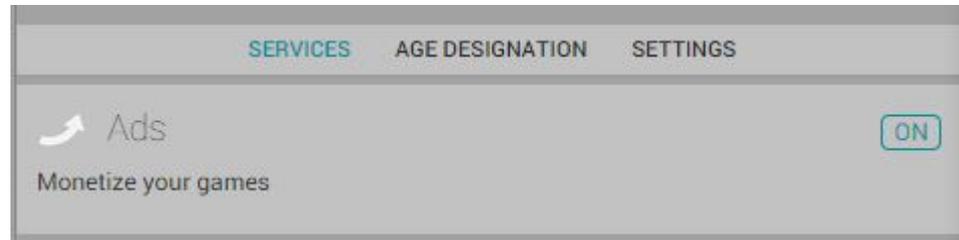
- **google play services Basement**
- **google play services Identifier**

If they are not in your project you can download them from here:

<https://drive.google.com/open?id=1LF7gKNA1udpxMRibJrTAU9qt08j7Vmew>

**Unity** (tested with version 3.7.5)

**If your app crashes when showing an ad make sure Unity Ads are enabled from Services Window.**



## **Vungle** (tested with version 6.10.3.0)

Requires minSdkVersion 27 for build -> **Update your Android SDK**

If your app does not build:

**Delete Assets/Plugins/Android/androidx.core.core-1.0.0**

If this error occurs:

Trying to merge incompatible

/manifest/uses-permission[@name=android.permission.WRITE\_EXTERNAL\_STORAGE] element:

**Go to Assets/Plugins/Android/Vungle\_lib/AndroidManifest and delete this from manifest:**

**<uses-permission**

**android:name="android.permission.WRITE\_EXTERNAL\_STORAGE"android:maxSdkVersion="18"/>**

## **Vungle Windows** (tested with version 6.7.1)

Requires some additional setup. See official Vungle documentation

<https://support.vungle.com/hc/en-us/articles/115000820512>

## **Facebook Audience Network** (tested with version 6.4.0)

If you want to use Facebook bidding it does not work only if you using it with a mediation partner from the supported list.

Please read the Audience Network documentation for more informations:

<https://developers.facebook.com/docs/audience-network/bidding/partner-mediation>

**The ads are only showing in build not in Unity editor.**

-  **Make sure that internet connection is available.**
-  **Make sure that the device date is correct.**
-  **Make sure your app is signed with your release key and published on the store in a test track.**

