# Du Ad SDK for Unity
# Access Guide

Du Unity SDK 1.0.1

Precondition: DAP SDK currently supports Unity versions 5.0b19 and upwards.

Content

# 1 Obtain Identity

This section describes the three IDs needed during **DU Ad Platform SDK** integration: APP ID, DAP Placement ID and Facebook Placement ID.

## 1.1 APP ID

A. Definition

APP ID is a unique identifier of a developer’s APP on **Du Ad Platform**. Each app has its own App ID.

B. Obtain method

Visit our official website http://ad.duapps.com and register your app on **Du Ad Platform**, the APP ID will be generated automatically.

C. Code

app_license

## 1.2 DAP Placement ID

A. Definition

DAP Placement ID is a unique identifier of an ad slot on **DAP (Du Ad platform).** Developers can create multiple DAP Placement IDs for one app.

B. Obtain method

Visit our official website http://ad.duapps.com and after registered your app, you can create the placement for your app.

C. Code

Pid

## 1.3 Facebook Placement ID

A. Definition

Facebook Placement ID is the unique identifier of an ad slot on Facebook audience network.

B. Obtain method

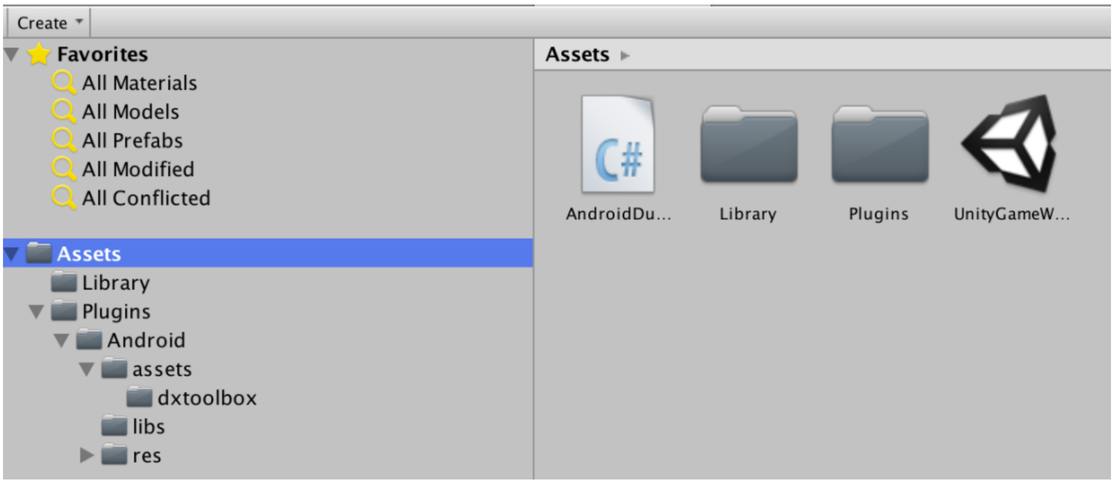
Visit Facebook Developers https://developers.facebook.com to apply it.

C. Code

Fbids

# 2 Load DAP SDK

Import our unitypackage DAPUnity.unitypackage into your Unity3D project.



# 3 Configure AndroidManifest.xml

You will need to configure the **AndroidManifest.xml** under directory ***Assets/Plugins/Android*** as follows:

1. Update the below **YOUR_PackageName** to yours. Please make sure the package name at here is exactly the same as the package name you filled on DAP (ad.duapps.com) when registering you app. Otherwise, it will fail to get ad from DAP.

2. Replace the below **YOUR_DAP_APP_ID** with your APP ID (see Section 1.1)

```
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="YOUR_PackageName">
<application
. . .
<meta-data
    android:name="app_license"
    android:value="YOUR_DAP_APP_ID" />
. . .
<provider
    android:name="com.duapps.ad.stats.DuAdCacheProvider"
    android:authorities="YOUR_PackageName.DuAdCacheProvider"
    android:exported="false" />
. . .
</application>
</manifest>
```

3. Register the PACKAGE_ADDED Receiver in your AndroidManifest.xml. Otherwise, it might affect your monetization efficiency.

```
<receiver android:name="com.duapps.ad.base.PackageAddReceiver" >
   <intent-filter>
     <action android:name="android.intent.action.PACKAGE_ADDED" />
     <data android:scheme="package" />
    </intent-filter>
</receiver>
```

# 4 Obfuscate Code

**Please follow the below rules to obfuscate code. Otherwise, there might be exceptions at run time.**

A: Exclude classes of **DU Ad Platform SDK** when obfuscating;

```
-dontwarn com.duapps.ad.**
-keep class com.duapps.ad.**{*;}
```

B: Below classes can add to proguard configuration:

```
-keep class com.dianxinos.DXStatService.stat.TokenManager {
public static java.lang.String getToken(android.content.Context);
}
-keep public class * extends android.content.BroadcastReceiver
-keep public class * extends android.app.Activity
-keep public class * extends android.app.Application
-keep public class * extends android.content.ContentProvider

-keepnames @com.google.android.gms.common.annotation.KeepName class *
-keepclassmembernames class * {
       @com.google.android.gms.common.annotation.KeepName *;}
-keep class com.google.android.gms.common.GooglePlayServicesUtil {
     public <methods>;}

-keep class com.google.android.gms.ads.identifier.AdvertisingIdClient {
     public <methods>;}
-keep class
com.google.android.gms.ads.identifier.AdvertisingIdClient$Info {
     public <methods>;}
-keep class com.duapps.ad.banner.BannerListener { *; }
```

* **Note**: For more about obfuscation methods, please refer to the official Android obfuscation document at: *${ android-sdk }/tools/proguard/*

## 5 Initialization- Configure Json

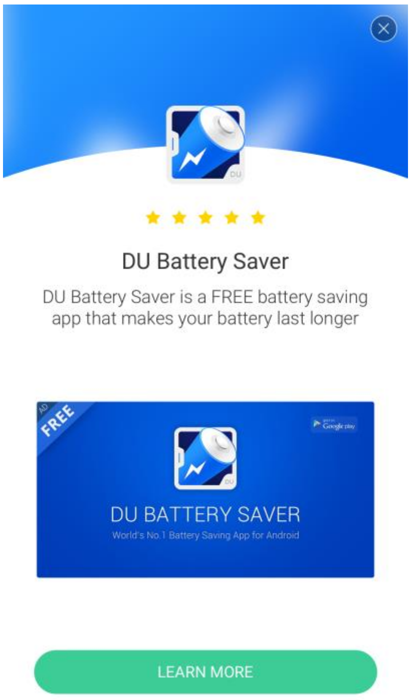
You will need to configure the **dxtoolbox.json** under ***Assets/Plugins/Android/assets/dxtoolbox*** directory as follows:

For **interstitial ads** and **banner ads**, please update PID (DAP PlacementID) in **“Native”** part to yours.
For offerwall, please update PID (DAP PlacementID) in **“offerwall”** part to yours. please make sure it’s Ad Format is selected as 『Offerwall』 during creation. Otherwise, it will fail to get ad.
For video ad, please update PID (DAP PlacementID) in **“video”** part to yours.

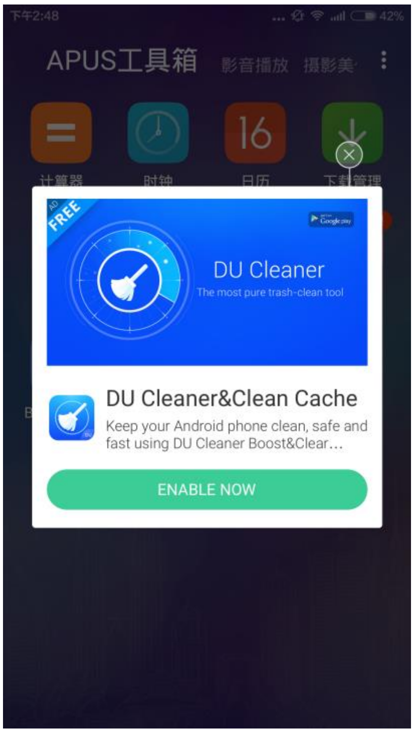
```
{
    "native": [
        {
            "pid": "YOUR_DAP_PLACEMENT_ID(for interstitial ad)"
        },
        {
            "pid": "YOUR_DAP_PLACEMENT_ID(for Banner ad)"
        }
     ],
     "offerwall": [
          {
            "pid": "YOUR_DAP_PLACEMENT_ID(for Offerwall)"
          }
     ],
    "video": [
         {
        "pid": "YOUR_DAP_PLACEMENT_ID(for video)"
          }
      ]
}
```

## 6 Request DAP Interstitial Ad

A sample of full screen interstitial ad and half screen interstitial ad



DU Battery Saver is a FREE battery saving app that makes your battery last longer



Keep your Android phone clean, safe and fast using DU Cleaner Boost&Clear…

## 6.1 Construction

- **Interface Instruction:**

  public InterstitialAd (int type, int pid)

| Parameters | Description |
|---|---|
| **int type** | Interstitial type:<br>**TYPE_NORMAL:** for half screen interstitial<br>**TYPE_FULL_SCREEN:** for full screen interstitial |
| **int pid** | Your DAP placement ID for interstitial |

- **Code Sample:**

```
InterstitialAd interstitialAd = new InterstitialAd (InterstitialAd.TYPE_FULL_SCREEN, INTERSTITIAL_PID);
```

## 6.2 Set callback for interstitial ad

Please follow the below instructions to set the callback.

```
    interstitialAd.InterstitialAdReceive = delegate() {

    Debug.Log ("InterstitialAdReceive");
    interstitialAd.ShowAd ();
  };
```

```
interstitialAd.InterstitialAdPresent = delegate() {
    Debug.Log ("InterstitialAdPresent");
};
interstitialAd.InterstitialAdClicked = delegate() {
    Debug.Log ("InterstitialAdClicked");
};
interstitialAd.InterstitialAdDismissed = delegate() {
    Debug.Log ("InterstitialAdDismissed");
};
interstitialAd.InterstitialAdError = delegate(int errorCode) {
    Debug.Log ("InterstitialAdError : " + errorCode);
};
```

- **Error Code:**

| Constants | Error Code | Description |
|---|---|---|
| *NETWORK_ERROR_CODE* | 1000 | Client network error |
| *NO_FILL_ERROR_CODE* | 1001 | No Ad data retrieved |
| *LOAD_TOO_FREQUENTLY_ERROR_CODE* | 1002 | Too many interface requests |
| *IMPRESSION_LIMIT_ERROR_CODE* | 1003 | Reach the daily impression limit |
| *SERVER_ERROR_CODE* | 2000 | Server error |
| *INTERNAL_ERROR_CODE* | 2001 | Network error |
| *TIME_OUT_CODE* | 3000 | Retrieve Ad data timed out |
| *UNKNOW_ERROR_CODE* | 3001 | Unknown error |

## 6.3 Pre-load interstitial ad

Use the FillAd() to pre-cache ad in advance for faster loading the ad when using LoadAd (). **Suggestion**: Use the FillAd() at the page before the ad showing page. **Please Note:**Ad data will be cached in client device’s memory. Since SDK only caches the image’s URL address not the image data, the cache size is small.

- **Code Sample:**

```
interstitialAd.FillAd ();
```

## 6.4 Load interstitial ad

***Note:** Please set callback for interstitial ad before calling LoadAd ().

- **Code Sample:**

```
interstitialAd.LoadAd ();
```

## 6.5 Show interstitial ad

***Note:** Please call ShowAd () in callback- InterstitialAdReceive to make sure the ad could be shown successfully. Please see section 6.2.

- **Code Sample:**

```
interstitialAd.InterstitialAdReceive = delegate() {
    Debug.Log ("InterstitialAdReceive");
    interstitialAd.ShowAd ();
};
```

## 6.6 Destroy interstitial ad

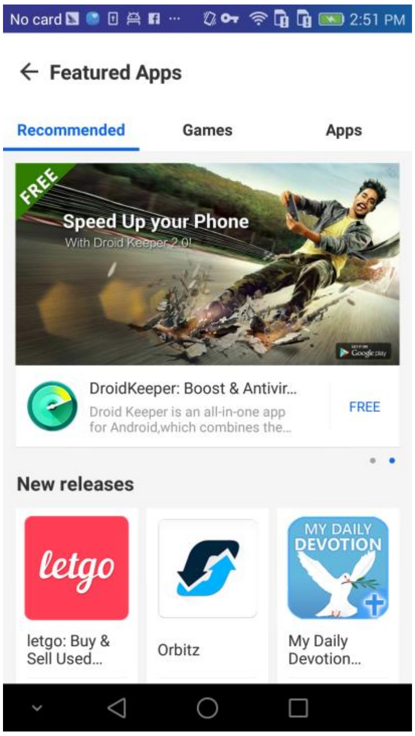
- **Code Sample:**

Please use this interface in **OnApplicationQuit()**.

```
void OnApplicationQuit ()
 {
   Debug.Log ("OnApplicationQuit");
   If(interstitialAd != null)
        {
            interstitialAd.Dispose ();
        }
}
```

# 7 Request DAP offerwall

A sample of offerwall



## 7.1 Construction

- **Interface Instruction:**

```
public OfferwallAd  (int pid)
```

| Parameters | Description |
|---|---|
| **int pid** | Your DAP placement ID for offerwall |

- **Code Sample:**

```
OfferwallAd  offerwallAd = new OfferwallAd (YOUR_DAP_PLACEMENT_ID);
```

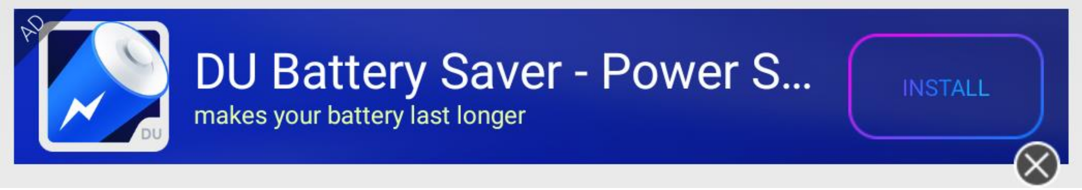
## 7.2 Show offerwall

- **Code Sample:**

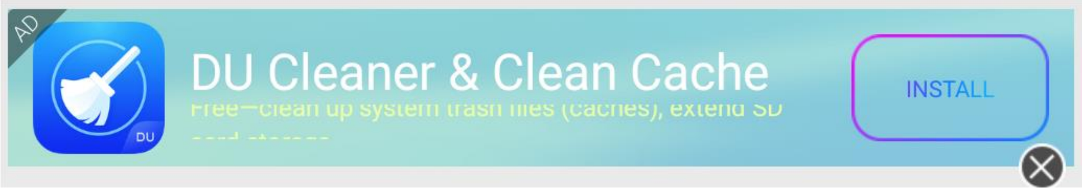
```
offerwallAd.Show ();
```

# 8 Request DAP banner

A sample of banner ad (blue background)



A sample of banner ad (green background)



## 8.1 Construction

- **Interface Instruction:**

**public** BannerAd (int pid, int cacheSize, int bgStyle, int closeStyle, int positionStyle)

| Parameters | Description |
|---|---|
| **int pid** | Your DAP placement ID for banner |
| **int cachesize** | The number of cached banner ads |
| **bgStyle** | Set banner background color:<br>**BG_TYPE_BLUE：** for blue background;<br>**BG_TYPE_GREEN:** for green background; |
| **closeStyle** | Set the position of close button:<br>**CLOSE_TYPE_BOTTOM:** bottom right corner;<br>**CLOSE_TYPE_TOP:** top right corner; |
| **positionStyle** | Set the position of banner:<br>**POSITION_TYPE_BOTTOM:** bottom right corner;<br>**POSITION _TYPE_TOP:** top right corner; |

- **Code Sample:**

```
BannerAd bannerAd = new BannerAd (YOUR_DAP_PLACEMENT_ID, 5, BannerAd.BG_TYPE_BLUE, BannerAd.CLOSE_TYPE_
```

## 8.2 Set callback for banner ad

Please follow the below instructions to set the callback. Error message see 6.2

```
        bannerAd.BannerAdLoaded = delegate() {
    Debug.Log ("BannerAdLoaded");
```

```
        };
        bannerAd.BannerAdError = delegate(string errorMessage) {
            Debug.Log ("BannerAdError : " + errorMessage);
        };
```

## 8.3 Load Banner ad

- **Code Sample:**

```
bannerAd.LoadAd ();
```

## 8.4 Destroy Banner ad

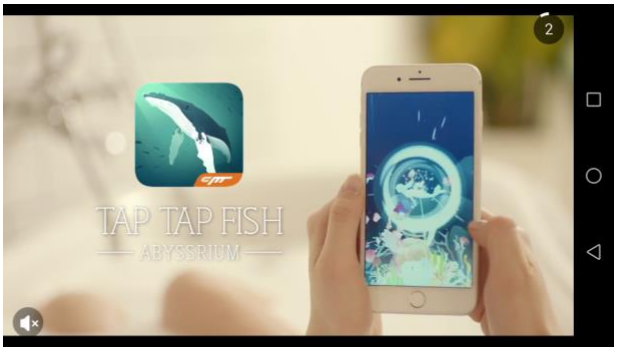
Please use this interface in **OnApplicationQuit()**.

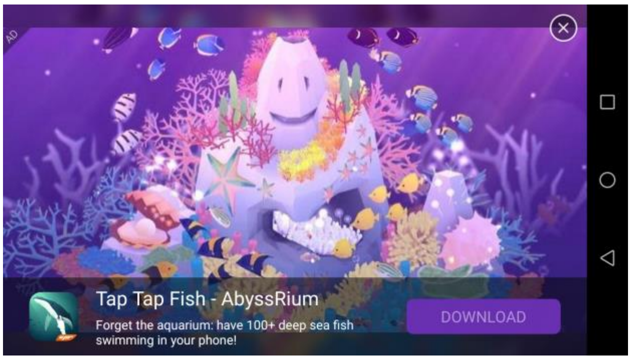
- **Code Sample:**

```
void OnApplicationQuit ()
 {
   Debug.Log ("OnApplicationQuit");
   If( bannerAd != null)
        {
              bannerAd.Dispose ();
       }
}
```

# 9 Request DAP video

A sample of DU Video Ad （playing page and download page）





Tap Tap Fish - AbyssRium

Forget the aquarium: have 100+ deep sea fish swimming in your phone!

## 9.1 Construction

- **Interface Instruction:**

  **public** VideoAd (int pid)

| Parameters | Description |
|---|---|
| **int pid** | Your DAP placement ID for video ad |

- **Code Sample:**

```
VideoAd videoAd = new VideoAd (YOUR_DAP_PLACEMENT_ID);
```

## 9.2 Set callback for video ad

Please follow the below instructions to set the callback. Error message see 6.2

```
         videoAd.VideoAdEnd = delegate(bool isSuccessfulView, bool isCallToActionClicked) {
         Debug.Log ("isSuccessfulView : " + isSuccessfulView + ", isCallToActionClicked : " + isCallTo
ActionClicked);
    };
    videoAd.VideoAdError = delegate(string errorMessage) {
      Debug.Log ("errorMessage : " + errorMessage);
    };
    videoAd.VideoAdPlayable = delegate() {
      Debug.Log ("VideoAdPlayable");
    };
    videoAd.VideoAdStart = delegate() {
      Debug.Log ("VideoAdStart");
    };
```

## 9.3 Load Banner ad

- **Code Sample:**

```
videoAd.LoadAd ();
```

## 9.4 If playable

To see if there is playable video ad.

- **Code Sample:**

```
videoAd.IsAdPlayable ();
```

## 9.5 Play video ad

- **Code Sample:**

```
videoAd.PlayAdVideo ();
```

## 9.6 Destroy Banner ad

Please use this interface in **OnApplicationQuit()**.

- **Code Sample:**

```
void OnApplicationQuit ()
 {
   Debug.Log ("OnApplicationQuit");
   If( bannerAd != null)
        {
              videoAd.Dispose ();
       }
}
```