Du Video SDK for Android

Access Guide

Du Video SDK 1.0.2

Contents

Precondition:

Du Video SDK currently supports Android 4.0 API level 14 (included) plus system versions.

Currently DU_Video_SDK_v1.0 must rely on DU Ad Platform_SDK CW1.0.9.9 or HW1.1.0.0 (included) plus SDK version.

1. Obtain Identity

Please refer to the **chapter 3** in HW or CW version of DUADplatform SDK Access Guide to obtain necessary identities.

When applying for the DAP Placement ID , please make sure the app format you choose is 【Video】.

2. Load SDK and Configuration

2.1 Load DU Ad Platform SDK

Please refer to the **chapter 4.1** in HW or CW version of DUADplatform SDK Access Guide to load DU SDK.

For accessing Du Video the below operations are needed.

1) Copy the **DuVideoSdk-xxxx-release.aar** to your Android Project, under the *libs* directory in root directory

2) Then configure build.gradle：

```
repositories {
    flatDir {
        dirs 'libs'
    }
}
dependencies {
    compile fileTree(include: ['*.jar'], dir: 'libs')
    compile(name: 'DuappsAd-xW-xxx-release', ext: 'aar')     // Du Video SDK must
rely on DU AD SDK
    compile(name: 'DuVideoSdk-xxx-release', ext:'aar')
    compile 'com.android.support:palette-v7:23.4.0'    // the version(23.4.0) can be
decided based on your project, suggest to use 21 plus version.
    //If get crash because of this dependency, please change it to below:
    //compile ('com.android.support:palette-v7:23.4.0'){transitive = false}
}
```

2.2 Configure AndroidManifest.xml

Please refer to the chapter 4.1 in HW or CW version of DUADplatform SDK Access
Guide to configure AndroidManifest.xml

A. Add a user-permission element to the manifest. For accessing Du Video, except
    the basic permissions:

```
<uses-permission android:name="android.permission.INTERNET" />
<uses-permission android:name="android.permission.ACCESS_NETWORK_STATE" />
```

Additional needed permissions is as below：

```
<uses-permission android:name="android.permission.ACCESS_WIFI_STATE" />
```

2.3   Obfuscate Code

Please refer to the **chapter 4.3** in HW or CW version of DUADplatform SDK Access
Guide to Obfuscate Code.

```
-dontwarn com.duapps.ad.**

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

-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.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>;}
```

3. Initialization

Please refer to the chapter 5 in HW or CW version of DUADplatform SDK Access
Guide to finish SDK initialization.

For accessing Du Video, please add a "video" tag in Json, and input your corresponding
placement ID. Please note that: currently SDK only supports one PID for video ad for
each package name.

```
{
    "video": [
      {
      "pid": "YOUR_DAP_PLACEMENT_ID"
      }
    ]
```

```
    }
```

- **Method：**

Add a call to **DuVideoAdSDK.init()** from onCreate in your Application class.

Please make sure you call **DuAdNetwork.init()** for DUAd SDK in advance. (see chapter 5 in HW or CW version of DUADplatform SDK)

- **Interface Instruction：**

public static void init(Context context，String pidsJson);

Parameters	Description
Context context	Activity Context
String pidsJson	DAP Placement ID

- **Code Sample：**

```
/**
 * Initialization Du Video SDK
 * @param context Application Context
 * @param pidsJson configure json
 */
DuAdNetwork.init((Application) getApplicationContext(),pidsJson);
DuVideoAdSDK.init((Application) getApplicationContext(),pidsJson);
```

4. Reward Video ad

Figure 1: A sample of DU Video Ad （playing page and download page）

4.1 Get video ad instance

- **Interface Instruction:**

public DuVideoAdsManager. getVideoAd (Context context, int pid);

Parameters	Description
Context context	ACTIVITY CONTEXT
int pid	DAP placement ID *** Note:** The PID used for video Ad need to be added into "video" part JSON during initialization, see *Section 3*.

- **Code Sample:**

```
// Declare Du video ad object
DuVideoAd duVideoAd;
// Get Du video ad instance
duVideoAd = DuVideoAdsManager.getVideoAd(this, YOUR_PID);
```

4.2 Set listener of video ad

- **Interface Instruction:**

public void setListener(DuVideoAdListener listener);

Parameters	Description
DuVideoAdListener listener	Abstract class of listener

Callback function returns:

1) public void onAdPlayable()

Retrieve video ad successfully, so interface playAd() could be called then.

2) public void onAdError(AdError error)

Retrieve video ad failed. see below 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

3) public void onAdStart ()

Video started to play.

4) public void onAdEnd(AdResult result)

Video had completed playing.

Parameters	Description
AdResult result	To see if user clicked the CallToAction button public boolean isCallToActionClicked(); To see if user finished watching the complete video

	public boolean isSuccessfulView();

- **Interface Instruction:**

  public void addListener (DuVideoAdListener listener);

- **Interface Instruction:**

  public void removeListener (DuVideoAdListener listener);

- **Interface Instruction:**

public void clearListener();

*Note: it is for clearing all the listeners.

4.3 Load video ad

This interface only needs to be called once. The video ad retrieving process is asynchronous. Please set the listener of video ad before calling load().

Notice：Video files need long time to load, so we highly recommended you set the listener and call load() after getting video ad instance

- **Interface Instruction:**

public void load();

4.4 To see if there is playable video ad

- **Interface Instruction:**

public boolean isAdPlayable();

Return value	Description
Boolean isPlayable	If there is playable video ad, then return "true" Otherwise, then return "false"

4.5 Play video ad

Play video ad when there is playable video ad.

The video ad will be automatically rotated based on device's screen orientation.

- **Interface Instruction:**

public void playAd(Activity activity);

public void playAd(Context context);

```
If (duVideoAd.isAdPlayable())
{
        duVideoAd.playAd(this);
}
or
If (duVideoAd.isAdPlayable())
{
        duVideoAd.playAd(mContext);
}
```