CATSKNEAD

Android Sound Latency Fix Plugin

for Unity 4.6

Android Audio Fix Plugin provides an easy and flexible way to solve Unity sound delay bug on Android devices. From now you won't have to worry about high playback latency or low perfomance while playing sounds from Unity project on any Android device.

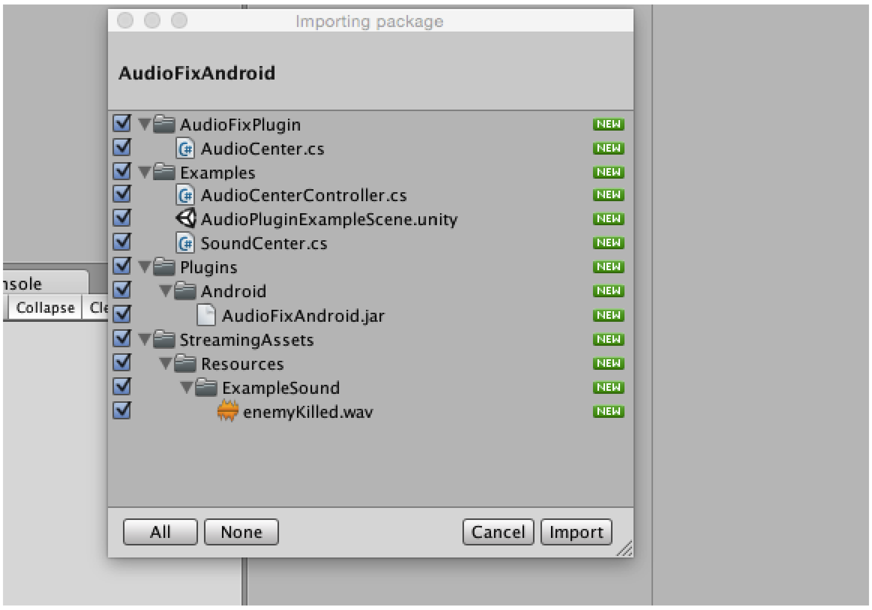
Main features:

- Play in-game sounds without any delay on Android devices
- Simplicity of usage
- Simultaneous playback of several sounds
- All kinds of Android built-in audio file formats are supported
- Plugin uses Android Sound Pool for managing and using sound files

Plugin is provided as a .unitypackage and is ready to use after importing. It contains all necessary assets and a demo scene with example of usage. You can see the difference between sound playback of Unity Engine and plugin by building apk of the project.

Here is quick step-by-step guide to using plugin:

1. Import android audio fix plugin package into your Unity project.

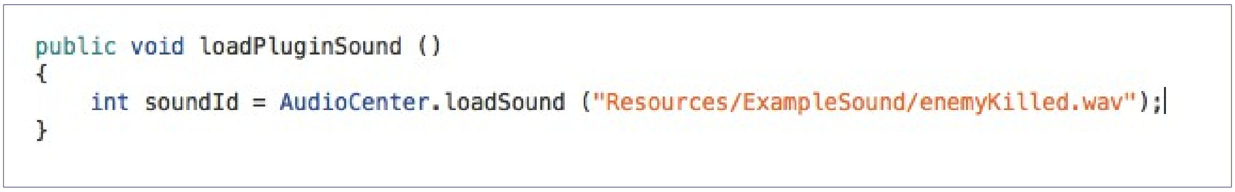


Importing package

AudioFixAndroid

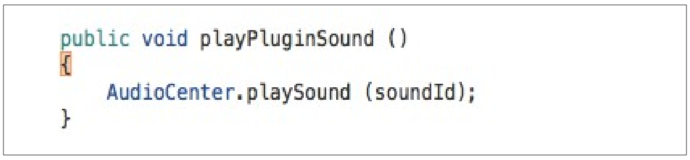
```
☑ ▼ AudioFixPlugin                         NEW
☑      AudioCenter.cs                      NEW
☑ ▼ Examples                               NEW
☑      AudioCenterController.cs            NEW
☑      AudioPluginExampleScene.unity       NEW
☑      SoundCenter.cs                      NEW
☑ ▼ Plugins                                NEW
☑    ▼ Android                             NEW
☑         AudioFixAndroid.jar              NEW
☑ ▼ StreamingAssets                        NEW
☑    ▼ Resources                           NEW
☑       ▼ ExampleSound                     NEW
☑            enemyKilled.wav               NEW
```

2. In order to play any sound on Android you have to load it and get it's id by using loadSound() method. As a parameter, specify sound file's destination folder and name (all audio files should be stored in Streaming Assets folder or it's subfolders).



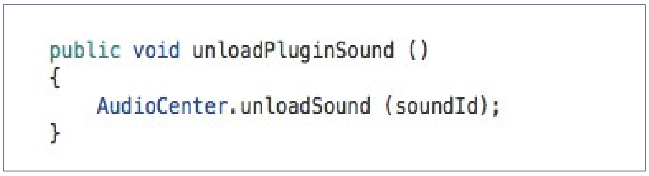
```
public void loadPluginSound ()
{
    int soundId = AudioCenter.loadSound ("Resources/ExampleSound/enemyKilled.wav");
}
```

3. Play sound using sound id, that you got after loading sound file



```
public void playPluginSound ()
{
    AudioCenter.playSound (soundId);
}
```

4. When used sound is no more needed you can unload it with appropriate method to save memory:



```
public void unloadPluginSound ()
{
    AudioCenter.unloadSound (soundId);
}
```

SOURCE CODE

```
package com.catsknead.androidsoundfix;

import android.content.Context;
import android.content.res.AssetFileDescriptor;
import android.media.AudioManager;
import android.media.SoundPool;
import android.util.Log;
import java.io.IOException;
import java.util.HashSet;

public class AudioCenter extends SoundPool {
    private Activity activity;
    private Set<Integer> soundsSet = new HashSet<Integer>();

    public AudioCenter( int maxStreams, Activity activity ) {
        super( maxStreams, AudioManager.STREAM_MUSIC, 0 );
        this.activity = activity;
        setOnLoadCompleteListener( new OnLoadCompleteListener() {
   @Override
   public void onLoadComplete( SoundPool soundPool, int sampleId, int status ) {
                soundsSet.add( sampleId );
            }
        } );
    }
    public void play( int soundID ) {
        if( soundsSet.contains( soundID ) ) {
            play( soundID, 1, 1, 1, 0, 1f );
        }
    }
    public void playSound( int soundId ) {
        if( ( !soundsSet.contains( soundId ) ) || ( soundId == 0 ) ) {
            Log.e( "SoundPluginUnity", "File has not been loaded!" );
            return;
        }
        final int sKey = soundId;
        activity.runOnUiThread( new Runnable() {
            public void run() {
                play( sKey );
            }
        } );
    }
    public int loadSound( String soundName ) {
        AssetFileDescriptor afd = null;
        try {
            afd = activity.getAssets().openFd( soundName );
        } catch( IOException e ) {
            Log.e( "SoundPluginUnity", "File does not exist!" );
            return -1;
        }
        int soundId = load( afd, 1 );
        soundsSet.add( soundId );
        return soundId;
    }
    public void unloadSound( int soundId ) {
        if( unload( soundId ) ) {
            soundsSet.remove( soundId );
        } else {
            Log.e( "SoundPluginUnity", "File has not been loaded!" );
        }
    }
}
```

Contacts

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