

Setting up a Firebase Cloud Messaging client app in Unity

PUSH NOTIFICATIONS USING FIREBASE

First, Sign into Firebase using your Google account.

Step 1:

Create a Firebase project.

Before you can add Firebase to your Unity project, you need to create a Firebase project to connect to your Unity project.

Step 2:

Register your app with Firebase.

You can register one or more apps or games to connect with your Firebase project. If you're releasing your game on both iOS and Android, register both build targets of your Unity project with the same Firebase project.

- a. Go to the Firebase console.
- b. In the center of the project overview page, click the Unity icon (plat_unity) to launch the setup workflow.
- c. If you've already added an app to your Firebase project, click Add app to display the platform options.
- d. Select which build target of your Unity project that you'd like to register, or you can even select to register both targets now at the same time.

For iOS – Enter your Unity project's iOS ID in the iOS bundle ID field.

For Android – Enter your Unity project's Android ID in the Android package name field. The terms package name and application ID are often used interchangeably.

Make sure that you enter the ID that your app is actually using. You cannot add or modify this value after you register your app with your Firebase project.

- e. Click Register app.

Step 3:

Add Firebase configuration files-

Obtain your platform-specific Firebase configuration file(s) in the Firebase console setup workflow.

For iOS – Click Download GoogleService-Info.plist.

For Android – Click Download google-services.json.

Now, Open the Project window of your Unity project, then move your config file(s) into the Assets folder. Back in the Firebase console, in the setup workflow, click Next.

Step 4:

Add Firebase Unity SDKs

- For Unity Versions 2018 and above, Firebase can be integrated directly from the Package Manager>Windows without download the SDK.
Download the latest External Dependency Manager for Unity (EDM4U) from here:
<https://github.com/googlesamples/unity-jar-resolver/raw/master/external-dependency-manager-latest.unitypackage>
- Import the latest External Dependency Manager for Unity (EDM4U).

- The Unity Package Manager Resolver will prompt you to add the **Game Package Registry** by Google to your project. Select the registry and click the **Add Selected Registries button**. EDM4U adds the registry to Packages/manifest.json under your current Unity project folder.
- Go to **Package Manager>Windows** and add the Firebase products that you want to use in your app, in this case, the **Firebase Cloud Messaging package**.
- For an optimal experience with Firebase Cloud Messaging, we recommend enabling **Google Analytics in your project**.
- Back in the Firebase console, in the setup workflow, click Next. Your Unity project is registered and configured to use Firebase.

Step 5:

Initialize Firebase Cloud Messaging

Make a new C# script in Unity.

The Firebase Cloud Message library will be initialized when adding handlers for either the TokenReceived or MessageReceived events.

Upon initialization, a registration token is requested for the client app instance. The app will receive the token with the OnTokenReceived event, which should be cached for later use. You'll need this token if you want to target this specific device for messages.

In addition, you will need to register for the OnMessageReceived event if you want to be able to receive incoming messages.

The entire code looks like this:

```
using System.Collections;
using System.Collections.Generic;
using UnityEngine;

public class Manage : MonoBehaviour
{
    public void Start ()
    {

        Firebase.Messaging.FirebaseMessaging.TokenReceived += OnTokenReceived;
        Firebase.Messaging.FirebaseMessaging.MessageReceived += OnMessageReceived;

    }

    public void OnTokenReceived(object sender, Firebase.Messaging.TokenReceivedEventArgs token)
    {

        UnityEngine.Debug.Log("Received Registration Token: " + token.Token);
    }
}
```

```
}

public void OnMessageReceived(object sender,
Firebase.Messaging.MessageReceivedEventArgs e)
{

    UnityEngine.Debug.Log("Received a new message from: " +
    e.Message.From);

}
}
```

Step 6:

Go to Firebase console and scroll down to the **GROW** list on the left side, under Project overview.

Click on **Cloud Messaging**.

Select **Create a New Cloud Message**.

Enter the Notification Title and Description and Schedule the notification to the desired time. Select the bundle identifier using which you register the app in the Target Option.

Click on **Review and Publish**.

Your notification will be send to all the devices that have the client app installed!