

Mobile Development



OneSignal

#11 OneSignal Push Notification

Push Notification



- **Push Notification** is an alert message that pops up on a mobile device. Application publishers can send push notifications at any time; users don't have to be in the app or using their devices to receive them.
- Push Notification can do a lot of things; for example, it can show the latest sports scores, get a user to take an action, such as downloading a coupon, or let a user know about an event, such as a flash sale.



- **OneSignal** provides a simple interface to push notifications and email, letting content creators focus on quality user engagement instead of complex implementation.
- More information click: <https://onesignal.com>

How to Set Up React Native with OneSignal Notif



#1 Create Project

- Create React Native project:

```
$ react-native init namaProjek
```

```
$ cd namaProjek
```

- Install OneSignal package:

```
$ npm install react-native-onesignal
```

```
$ react-native link
```



#2 OneSignal App

- Sign-up & login to **OneSignal**, then **Add a New App**. On **Edit App** or **Settings**, choose **Google Android (Google Cloud Messaging)**. It will ask **Google Server API Key** and **Google Project Number**. Leave it blank for now!

The screenshot shows the 'Edit app RNnotif' interface in OneSignal. The 'Google Android (GCM) Configuration' section is active. It includes a link to 'Generate a Google Server API Key' and a note to 'Read the documentation to learn how to fill in the fields below.' The 'Google Server API Key' field is highlighted with a red box, showing an example key: 'AAAAeVHrnes:APA91bGpsKNmB5oNyz5c7BMPPeEtLSdonf1_EbjUrHBmd8'. The 'Google Project Number' field is also highlighted with a red box, showing an example number: '703322744261'. A sidebar on the right contains links for 'Select Platform', 'Configure Platform', 'Select SDK', and 'Install SDK'.



#3 Firebase FCM

- Sign-up & login to **Firestore**, then **Create a Project**. Go to **Settings**, on tab **Cloud Messaging** you'll find your **Google Server API Key (Server Key)** and **Google Project Number (Sender ID)**.
- Then copy these codes to OneSignal. Click **Save**, choose **React Native SDK** & you'll get OneSignal App ID. Save it!

Settings

GENERALCLOUD MESSAGINGINTEGRATIONSSERVICE ACCOUNTSDATA PRIVACY

Project credentials

ADD SERVER KEY

Key	Token
Server key	AAAAma3mtIs:APA91bFca0moiBFuJyaNRLDq_xKo-fFxZRQpD1yrBZJR6pKPnpu-pfpyxlQGhkiDtT7cPDV8VvliVe94Sx-tDyIPfPglDt9zlluwdR-EHTTPYj1ie_MUUZMvyQlvxJ9GbkIEPJi3G6J
Legacy server key ?	AlzaSyA2TXRCOI5850mtsIGeGVM8r43PmUu0Aa4

Sender ID ?

660047574155



#4 Edit Manifest

- Add these lines on our Android Manifest
(`android/app/src/AndroidManifest.xml`)

```
. . .  
<uses-permission  
  android:name="android.permission.ACCESS_COARSE_LOCATION"/>  
  
<application . . . >  
  <activity  
    android:name=".MainActivity"  
    . . .  
    android:launchMode="singleTop">  
  . . .
```




#5 Edit Gradle

- Add these lines on your build.gradle (android/app/build.gradle)

```
...
android {
    ...
    defaultConfig {
        ...
        manifestPlaceholders = [
            onesignal_app_id: "xxxxxx",
            onesignal_google_project_number: "yyyyyy"
        ]
    }
}
```

xxxxxx: OneSignal App ID
yyyyyy: Firebase Sender ID



#6 Run React Native!

- On App.js, import OneSignal then run it!

```
import OneSignal from 'react-native-onesignal';
```

- After that, check your OneSignal account (on **Users** section) to see that our project is working. Done!



React Native SDK

Congratulations, your app is working! Click **Done** to exit.

Be sure to check out our documentation for troubleshooting or customizing features of our SDKs!

Built-In Segments



All

1

View Users

How to Send Notification from OneSignal

2 Message

ENGLISH

TITLE

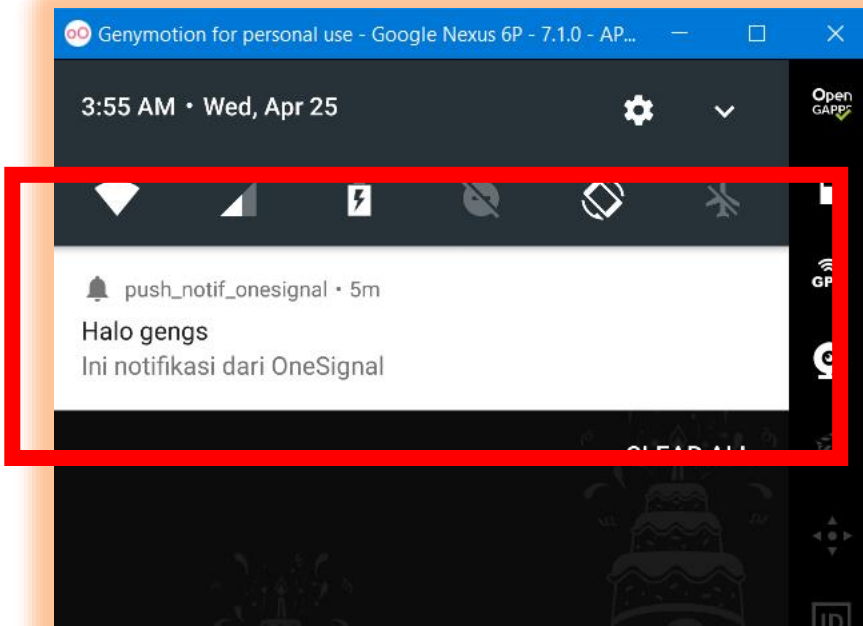
Halo gengs

MESSAGE

Ini notifikasi dari OneSignal

Sending Basic Message

- On Android emulator, quit from our app. It will run in background, then go back to **OneSignal**.
- On tab **Messages**, fill in the form on section **Message** (input Title & Message). Click **Confirm**, then simply click **Send Message**. See what's happened in our emulator!



Explore its Features!

3 Options

☒ Send to Google Android

CATEGORY

SOUND

LED COLOR

LOCKSCREEN VISIBILITY Always show the contents on the lockscreen.

SMALL ICON

ACCENT COLOR

LARGE ICON

BIG PICTURE

GROUP KEY

GROUP MESSAGE

BACKGROUND DATA ☐

1 Audience

- ☒ Send to Everyone
- ☐ Send to Particular Segment(s)
- ☐ Send to Test Device(s)

4 Schedule

- DELIVERY
- ☒ Begin sending immediately
 - ☐ Begin sending at a particular time

- PER-USER OPTIMIZATION
- ☒ Send immediately
 - ☐ Intelligent delivery (Recommended)
 - ☐ Optimize by user time zone

How to Send Notification from Our Own Back-end

*** Connecting OneSignal to Our Back-End ***



#1 Create Back-End Project

- Create a Node.JS project:

```
$ mkdir namaProjek
```

```
$ cd namaProjek
```

```
$ npm init
```

- Install OneSignal & Express package:

```
$ npm install express
```

```
$ npm install onesignal-node
```

#2 No Express Server.js

```
var OneSignal = require('onesignal-node');
var myClient = new OneSignal.Client({
  userAuthKey: 'abcdefghij',
  app: {appAuthKey: 'a1b2c3d4e5', appId: '1a2b3c4d5e'}
});

var firstNotification = new OneSignal.Notification({
  contents: {en: "Ini notifikasi dari OneSignal",}
});

firstNotification.setParameter('headings', {"en": "Hai"});
firstNotification.setIncludedSegments(['All']);
firstNotification.setExcludedSegments(['Inactive Users']);

myClient.sendNotification(firstNotification,
function (err, httpResponse, data) {
  if (err) {console.log('Ada yang salah...');}
  else {console.log(data, httpResponse.statusCode);}
});
```




#3 User Auth Key

- Get **userAuthKey** from OneSignal Account Management page (click on **Avatar profile**, then choose **Account & API Keys**).

User Auth Key

AUTH KEY

MzVmMTdkMTUtN2RjNC00NDBjLWExNTctMmQxZWQ0MmFkOWQ5

USER AUTH KEY

The User Auth key is used for adding or modifying apps.

Do not use these keys in your app.

Use by adding the header `Authorization: Basic KEY` for our REST API.



#4 App ID & App Auth Key

- To get **AppID** & **AppAuthKey**, go to your **OneSignal Application**, click **Settings** & choose **Keys & IDs**.

Keys & IDs

ONESIGNAL APP ID

c979b39a-9fc6-497d-b490-293a5a6353e5

REST API KEY

NTJkMmEyZmQtN2VjOS00ZGM3LTk2NTEtOTUyYmI1ZDhmMWJj

SECURITY

You may disable your app to prevent new and scheduled notifications from being delivered. Apps you manually disable can be instantly re-enabled at any time.

DISABLE APP



#5 Run All Project

- Run your latest React Native project (OneSignal package included):

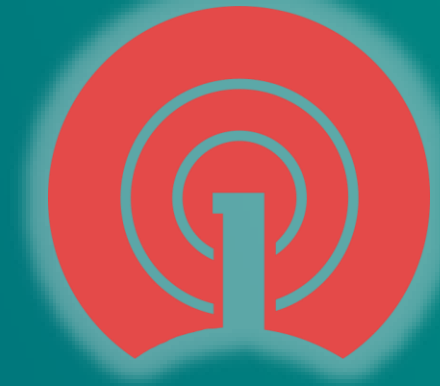
```
$ react-native run-android
```

- After that, run your apps on background. Then run your Server.js! It will send push notification from OneSignal immediately.

```
$ node Server
```

Express & OneSignal

express



Mobile Development



OneSignal

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