

# **Tencent Push Notification Service**

## **FAQs**

### **Product Documentation**



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# Contents

FAQs

iOS

Android

Flutter

Others

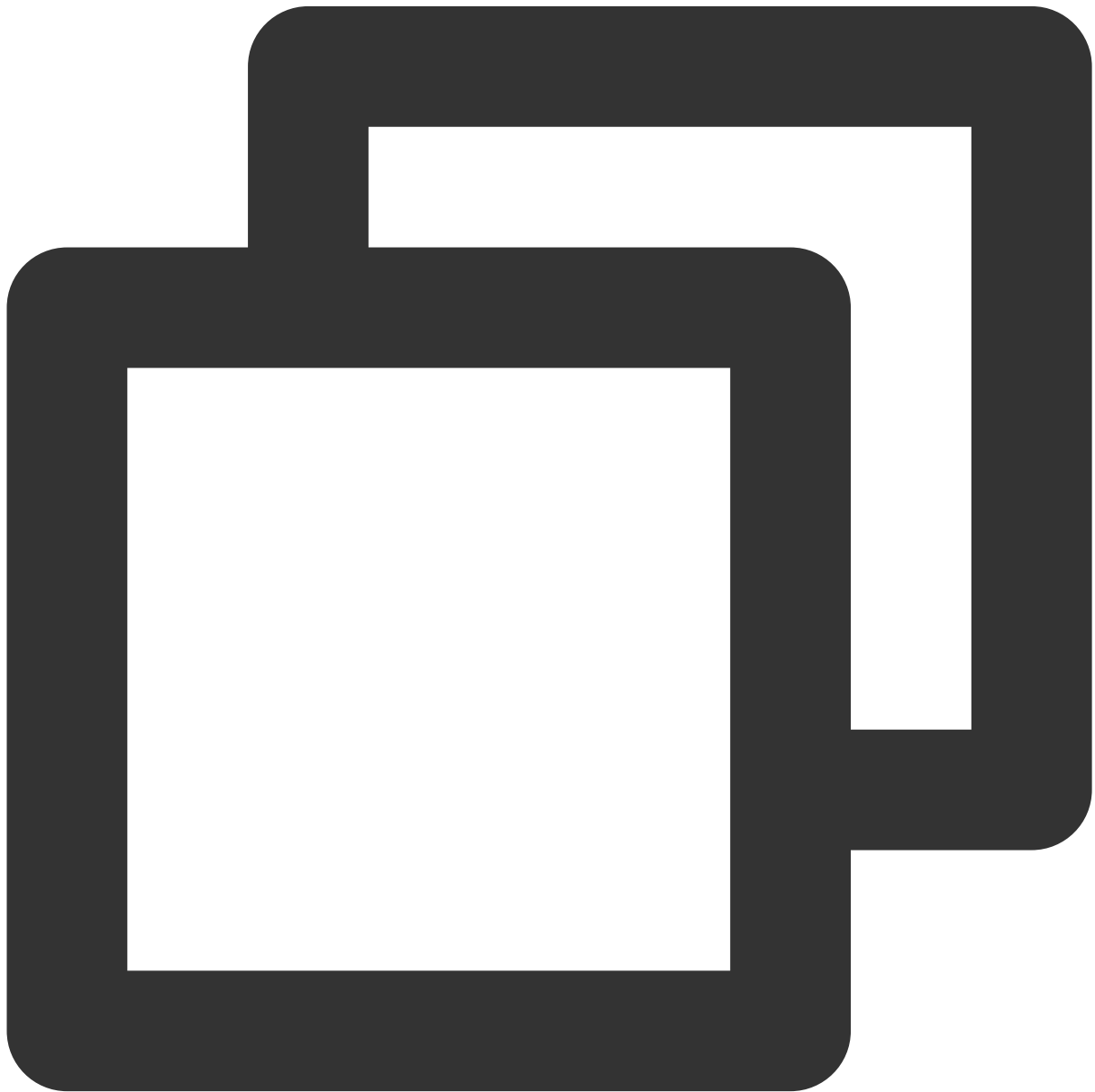
# FAQs

## iOS

Last updated : 2024-01-16 17:43:54

**What should I do when Xcode 13 for iOS 9 reports an error during compilation saying that it is unable to load `UserNotifications.framework` or start the archive package.**

Error message:



Dyld Error Message:

Dyld Message: Library not loaded: /System/Library/Frameworks/UserNotifications.framework

Solution: go to **Targets** > **Build Phases** > **Link Binary With Libraries** and set **UserNotifications.framework** to **Optional** or use an earlier version for packaging.

## Why is a development environment token considered as a production environment token in iOS? How do I deal with the issue?

If an application is installed in the Xcode development environment, and development environment messages are pushed through Tencent Push Notification Service, the following error messages are reported:

Error message reported when you query the token using the push troubleshooting tool in the Tencent Push Notification Service console

Error log recorded when you debug the Tencent Push Notification Service SDK in Xcode

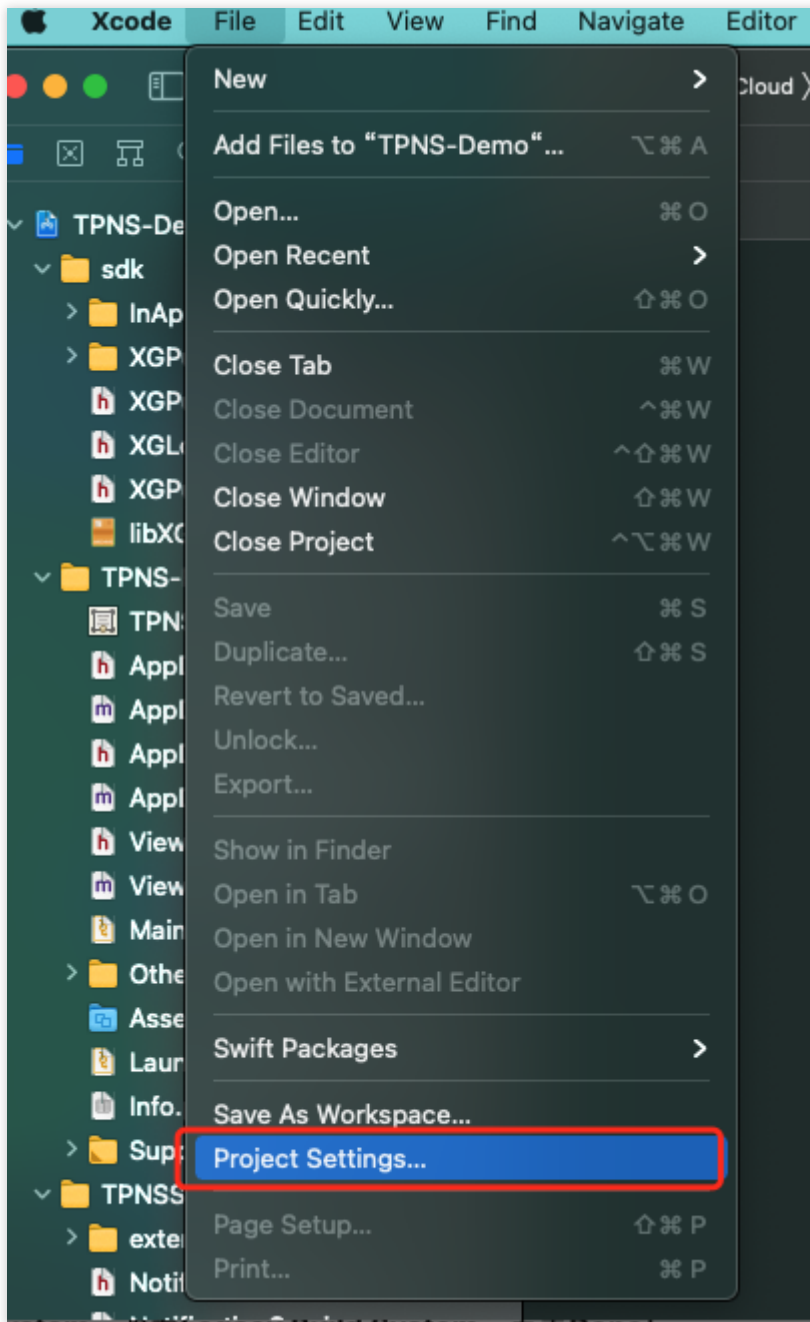


Missing Provisioning Profile - iOS Apps must contain a provisioning profile named  
The provisioning profile is missing. iOS apps must contain a provisioning profile n

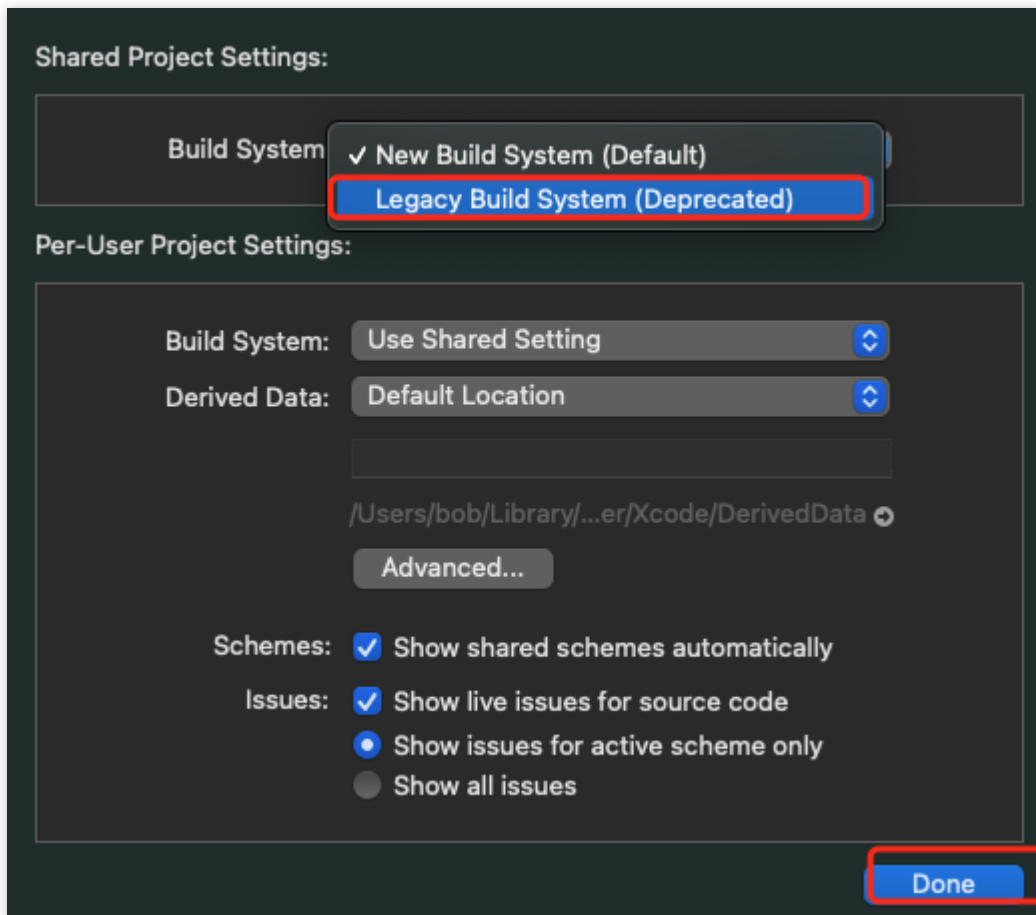
Error cause: the application package does not contain the `embedded.mobileprovision` configuration file, making the token environment unknown.

Solution:

1. In the Xcode menu bar, choose **File > Project Settings**.



2. Set **Build System** to **Legacy Build System** and click **Done**.



3. Build the application again, and uninstall and reinstall it.
4. After successful registration, push messages to test the token.

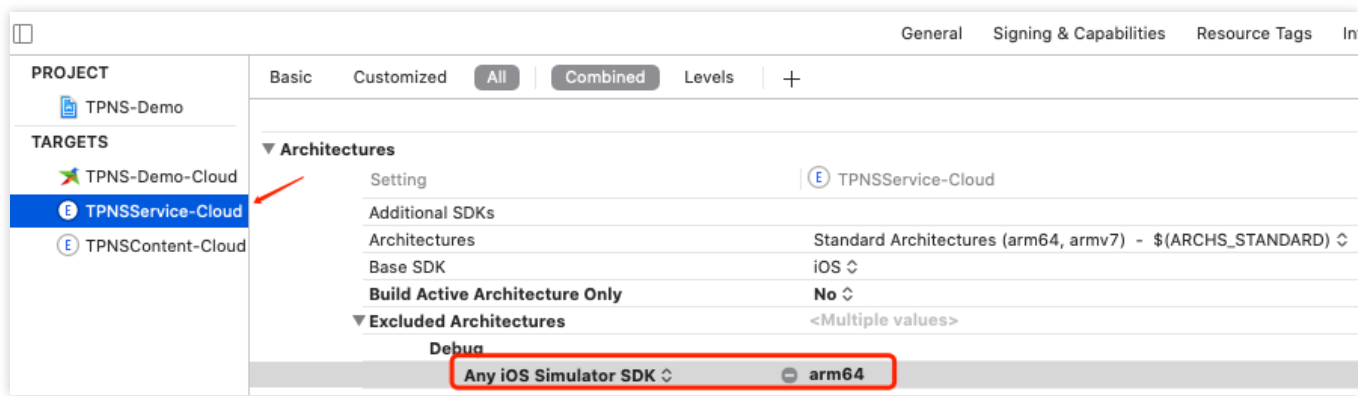
### Why can't pushes be received in an iOS build production environment?

1. Check whether the production environment meets the following testing conditions: the application is the ad-hoc/App Store build (with the release certificate "Production"), and the release certificate is uploaded and successfully verified.
2. Check whether the `bundle id` configured in the Xcode project matches the configured `Provision Profile` file and whether the `Provision Profile` file corresponding to the application has been configured with the message push capability.
3. Check whether the environment specified by the `aps-environment` field in the `embedded.mobileprovision` file is correct.

### What should I do if the error `building for iOS Simulator, but linking in object file built for iOS` is reported when the Xcode 12 simulator integrates with the notification extension plugin during the build?

You need to find the extension plugin target, click **Build Settings** > **Excluded Architectures**, and add the ARM64 instruction set, as shown in the following figure:





## What should I do if push certificate upload failed in the Tencent Push Notification Service console?

Convert the .p12 file of the push certificate into a .pem file and troubleshoot as follows:

1. Open the Terminal and go to the .p12 file directory.
2. Run the following command to generate a certificate ( `apns-dev-cert` is the name of the sample push certificate, which should be replaced with the name of your certificate).



```
openssl pkcs12 -clcerts -nokeys -out apns-dev-cert.pem -in apns-dev-cert.p12
```

3. Enter the password of the .p12 file.

4. Run the following command to convert the .pem certificate into text:



```
openssl x509 -in apns-dev-cert.pem -inform pem -noout -text
```

5. Check whether the certificate environment and corresponding Bundle ID match the application as shown below:

```
Certificate:
Data:
  Version: 3 (0x2)
  Serial Number: 2184588818800376199 (0x1e5137f4cce2f987)
  Signature Algorithm: sha1WithRSAEncryption
  Issuer: C=US, O=Apple Inc., OU=Apple Worldwide Developer Relations, CN=Apple Worldwide Developer
  Validity
    Not Before: Jul 15 11:05:45 2019 GMT
    Not After : Jul 14 11:05:45 2020 GMT
  Subject: UID=com.tencent.teg.duoduo, CN=Apple Development IOS Push Services: com.tencent.teg.duo
  Subject Public Key Info:
    Public Key Algorithm: rsaEncryption
```

## Why doesn't clicking a notification trigger a callback for the notification clicking event when the application is cold started?

1. Check the version of the Tencent Push Notification Service SDK. If it is v1.2.5.3 or earlier, you are recommended to upgrade it to v1.2.5.4 or later.
2. Check the timing for calling the Tencent Push Notification Service SDK initialization method. Currently, the Tencent Push Notification Service SDK initialization method needs to be called as soon as possible in the main thread of the application startup method to ensure that the Tencent Push Notification Service SDK is set as the proxy of the notification center in the first time.

## What should I do if an empty notification cannot pop up on devices on iOS 10 or below?

The `content` field cannot be empty if the RESTful API is called for push; otherwise, the notification will not pop up on devices on **iOS 10 or below**.

## Does Tencent Push Notification Service supports .p8 certificates?

A .p8 certificate has security risks. Although its validity is longer than that of a .p12 certificate, it has a wider push permission and scope. If leaked, it may cause more severe consequences. Tencent Push Notification Service recommends you use .p12 certificates to manage the push services of your applications separately. If you insist on using .p8 certificates, follow the steps below for application:

1. Go to the certificate page of the Developer center, select **Keys**, and click **+** to create a .p8 certificate.
2. Enter the certificate name (**Key Name**) and select the corresponding capability (APNs).

## Certificates, Identifiers & Profiles

[< All Keys](#)

### Register a New Key

Key Name

You cannot use special characters such as @, &amp;, \*, ', ", -, .

ENABLE	NAME	DESCRIPTION
<input checked="" type="checkbox"/>	Apple Push Notifications service (APNs)	Establish connectivity between your notification server and the Apple Notification service. One key is used for all of your apps. <a href="#">Learn more</a>
<input type="checkbox"/>	DeviceCheck	Access the DeviceCheck and AppAttest APIs to get data that your as: server can use in its business logic to protect your business while ma privacy. <a href="#">Learn more</a>
<input type="checkbox"/>	Media Services (MusicKit, ShazamKit)	Access the Apple Music catalog and make personalized requests for : users, and check audio signatures against the Shazam music catalog <span>ⓘ There are no identifiers available that can be associated with the key</span>
<input type="checkbox"/>	Sign in with Apple	Enable your apps to allow users to authenticate in your application wi ID. Configuration is required to enable this feature.
<input type="checkbox"/>	ClassKit Catalog	Publish all of your ClassKit app activities to teachers creating Handou Schoolwork. <a href="#">Learn more</a>
<input type="checkbox"/>	WeatherKit	Access the Apple Weather service.

3. Download the certificate (a .p8 certificate can be downloaded only once after creation).

### Download Your Key



After downloading your key, it cannot be re-downloaded as the server copy is removed. If you are not prepared time, click Done and download it at a later time. Be sure to save a backup of your key in a secure place.

Name: Key ID: A-

Services: Apple Push Notifications service (APNs)

### Why can't push messages be received?

Message push involves various associated modules, and exception in any steps can lead to message delivery failure. If message delivery failures occur, you are recommended to use the [Toolbox](#) for troubleshooting. Below are the most common issues:

### Client troubleshooting

Check the notification settings of the device

Go to **Notifications > App name** to check whether your app has enabled message push.

Check the network settings of the device

If there is a network issue, the client may fail to obtain the message-receiving token when registering for APNs. As a result, Tencent Push Notification Service cannot be used to push messages to specified devices.

If the device is not connected to the Internet, it cannot receive the message, even if the client has correctly obtained the token, registered it with the Tencent Push Notification Service backend, and the Tencent Push Notification Service server has successfully delivered the message. The message might be received if the device reconnects to the Internet within a short time, as APNs will retain the message for some time and deliver it again.

Check the SDK integration. After the SDK is integrated, please make sure that it can get the device token used to receive messages. For more information, please see [iOS SDK Integration Guide](#).

### Server troubleshooting

APNs server problem

The Tencent Push Notification Service server sends a message to an iOS device via APNs. If APNs fails, the Tencent Push Notification Service server will fail to request APNs to deliver the message to the device.

Tencent Push Notification Service server problem

The Tencent Push Notification Service server achieves message delivery through the collaboration of multiple feature modules. If an exception occurs in any of these modules, message push will fail.

### Push certificate troubleshooting

When the Tencent Push Notification Service server requests APNs to deliver the message, it needs to use two required parameters: the message push certificate and the device token. When pushing the message, please make sure that the message push certificate is valid. For more information on how to configure the message push certificate, please see [Acquisition of Push Certificate](#).

### What do I do if the error `no valid 'aps-environment' entitlement string found for application` is reported in terminal?

Check whether the bundle ID configured in the Xcode project matches the configured provisioning profile, and whether the provisioning profile corresponding to the app has been configured with the message push capability.

### How does the client play the custom push message audio?

First, on the device development side, put the audio file in the `bundle` directory.

If you use the Tencent Push Notification Service console to create a push, enter the audio file name in **Advanced Settings** (the full path of the audio file is not required).

If you use RESTful APIs, set the `sound` parameter to the name of the audio file (the full path of the audio file is not required).

## Does iOS support offline retention of push messages?

Yes. If notifications are delivered when devices are offline (the persistent connection is interrupted due to a shutdown, airplane mode, or network exception):

For the vendor channel (APNs), only the last notification delivered is retained, for less than 24 hours.

For the Tencent Push Notification Service channel, the last three notifications delivered are retained, for 72 hours.

## Why is arrival data unavailable for iOS?

iOS 9.x and earlier versions do not provide an API to listen to the arrival of messages at the device. Therefore, arrival data can be collected.

iOS 10.0 and later versions provide the Service Extension API, which can be called by the client to listen to the arrival of messages. For more information, please see [Notification Service Extension](#).

## How do I create silent push with the Tencent Push Notification Service server SDK?

Set `content-available` to `1` and do not use `alert`, `badge`, or `sound`.

## What should I do if `DeviceToken` is not returned occasionally for registration or APNs' request for token fails in the development environment of iOS?

This problem is caused by instability of APNs. You can fix it in the following ways:

1. Insert a SIM card into the phone and use the 4G network.
2. Uninstall and reinstall the application, restart the application, or shut down and restart the phone.
3. Use a package for the production environment.
4. Use another iPhone.

## How do I expand the testing scope on iOS if the number of testing devices is limited?

1. Enterprise signature certificate

Apply for enterprise signature and push certificates and release your application as follows:

Use the enterprise signature certificate to build and release your application. Testers can download and install the application through the dedicated enterprise channel.

2. App Store signature certificate

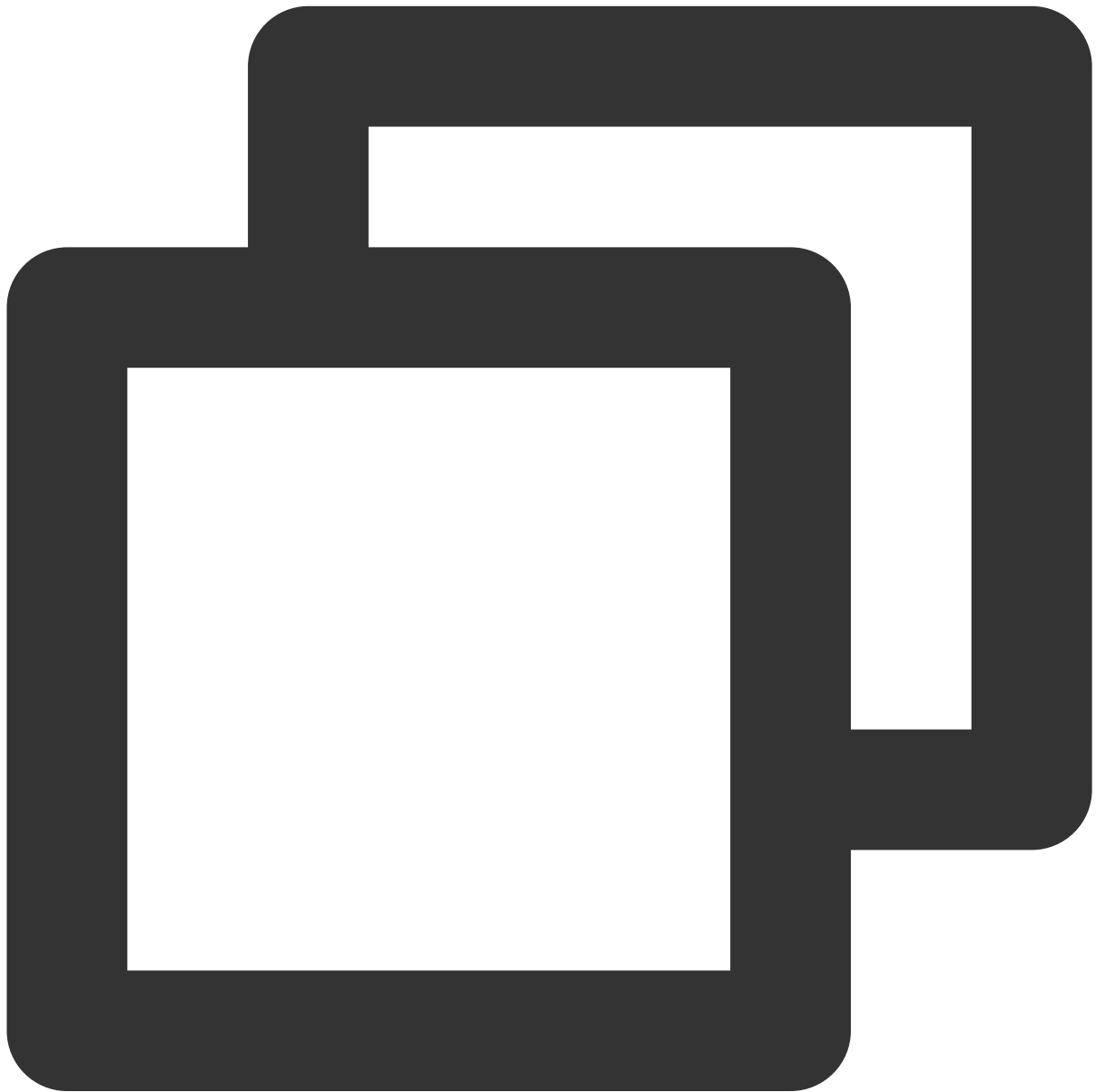
Use the current push certificate released on App Store as follows:

Release the preview version in TestFlight: upload the IPA package to [App Store Connect](#), use TestFlight to create a beta version, and set the list of testers (Apple IDs) for the specified version in TestFlight. Testers can download and install your application through the official **TestFlight** application on App Store.

## For iOS, how do I configure to change the badge number only without displaying the message?

When creating a push, you can use the API to specify the notification bar message type, leave the title empty, and only set `badge_type`. For more information, please see [Push API](#).

Sample:



```
{  
  "platform": "ios",  
  "audience_type": "token",  
  "environment": "dev",  
}
```



```
"token_list": [
  "05a8ea6924590dd3a94480fa1c9fc8448b4e"],
"message_type": "notify",
"message": {
  "ios": {
    "aps": {
      "badge_type": -2
    }
  }
}
```

### What should I do if my application reports the error **Crash: you can't call - sendResponse: twice nor after encoding it ?**

If your application integrates Tencent Push Notification Service SDK for iOS (1.2.7.2–1.2.5.4), uses the **Recall** feature of Tencent Push Notification Service, and implements the following system callback:



```
- (void)application:(UIApplication *)application didReceiveRemoteNotification:(NSDi
```

Then you may encounter this error. You can use the **override** feature to process sent messages.

**What should I do if Error Domain=NSCocoaErrorDomain Code=1001. APNs' request for a token failed is reported during Xcode debugging?**

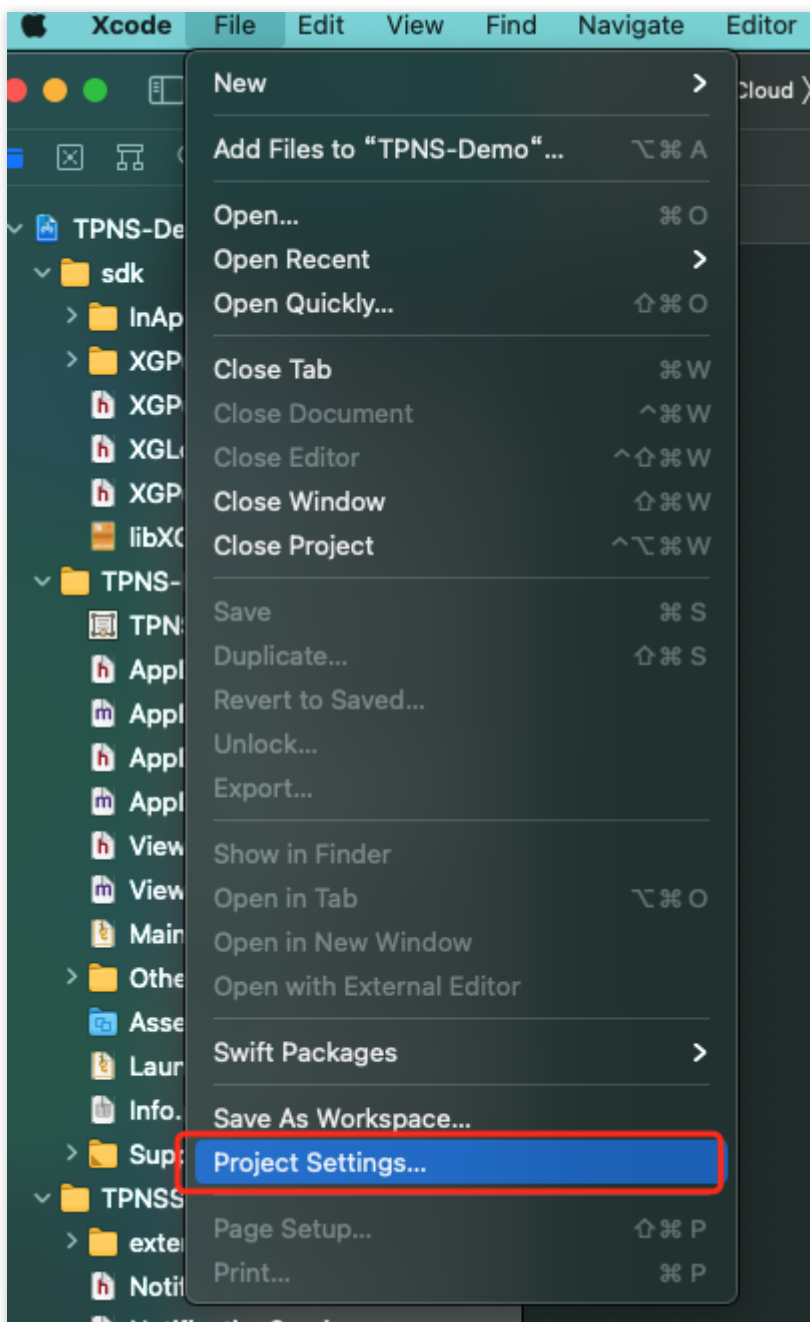
**Problem description:**

The following error is reported during Xcode debugging: "Error Domain=NSCocoaErrorDomain Code=1001. APNs' request for a token failed during Xcode debugging. -> Please resolve the problem as follows: use 4G network and

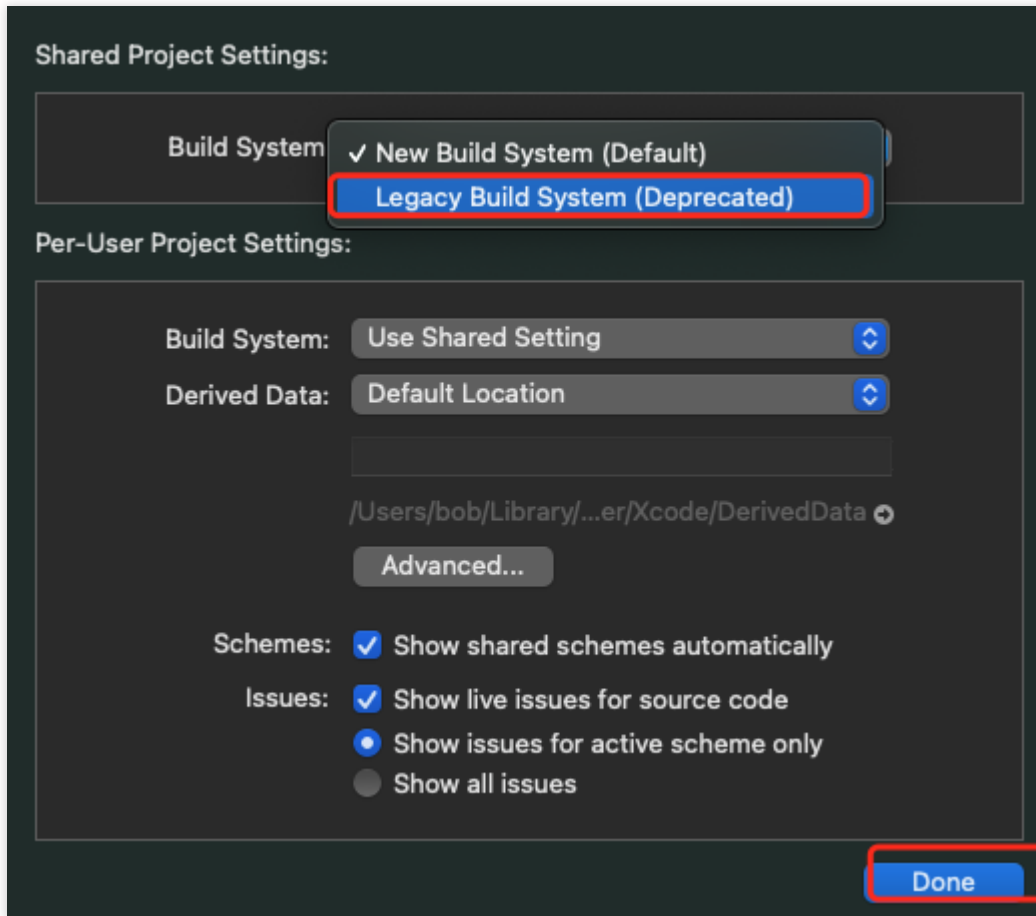
restart the phone. If the problem persists after the phone is restarted for multiple times, you are recommended to use another phone for testing." However, the problem persists after I fixed the problem as instructed.

### Troubleshooting process:

1. Use a relevant method in the Tencent Push Notification Service SDK to avoid running at the same time as other methods for registering remote notifications.
2. Change Xcode's build system to the legacy build system to see if there is any repeated class definition caused by repeated import of the static library. The procedure is as follows:
  - 2.1 In the Xcode menu bar, choose **File > Project Settings**.



2.2 Set **Build System** to **Legacy Build System** and click **Done**.



2.3 Compile again. If a compilation error occurs, make modifications accordingly.

## Why no message arrival data is reported after a message is delivered successfully?

### Troubleshooting process: Message delivered via the APNs channel:

1. Check whether the notification service extension plugin is configured ([details](#)). If the plugin is not configured, arrival data cannot be reported.
2. It could be that the arrival event failed to be collected but the message has actually been sent to the mobile phone (the actual push effect is not affected). Check whether the mobile phone network is normal or whether APNs delivery was delayed.

### Message delivered via the Tencent Push Notification Service channel:

Possible case 1: The Tencent Push Notification Service backend delivered the message via the Tencent Push Notification Service channel when the link between the Tencent Push Notification Service SDK and the backend was actually disconnected. As a result, the message failed to reach the device.

Possible case 2: No arrival data was reported but the message actually reached the device (the actual push effect is not affected).

# Android

Last updated : 2024-01-16 17:43:54

## Why was the Implicit PendingIntent Vulnerability error reported when I published my application on Google Play?

1. The Tencent Push Notification Service SDK uses an implicit PendingIntent in `TPushAlarmManager.set` in the code to trigger SDK internal heartbeats.

You can address the issue by referring to Google's [Remediation for Implicit PendingIntent Vulnerability](#). The following self-check has been performed for the SDK:

- The `setAction` used is a static broadcast action declared by the SDK and poses no exposure risk.
- The target of the PendingIntent is the SDK's internal static broadcast action, and the broadcast permission declared by SDK has been added.

2. Google's documentation mentions the following: "Fixing this issue is recommended but not mandatory. The publication status of your app will be unaffected by the presence of this issue."

The current PendingIntent used by Tencent Push Notification Service is a trusted and secure PendingIntent, and Google claimed that the issue will not affect the publication of your application. You can ignore this message and continue to publish your application.

## How do I set a custom ringtone?

You can set a custom ringtone by creating a notification channel.

- Create a notification channel for a specified custom ringtone file by calling the API encapsulated in Tencent Push Notification Service or the Android native API. For more information, see the **Creating a notification channel** section in [API Documentation](#).
- Call the push Restful API of Tencent Push Notification Service and specify the same notification channel `n_ch_id` for push. For a vendor channel, you must specify the vendor channel ID, such as `hw_ch_id` for the Huawei channel and `xm_ch_id` for the Mi channel.

### Note:

Currently, only Huawei, Mi, FCM, and Tencent Push Notification Service channels support custom ringtones. For some vendor channels, before using the push channels of some vendors, you need to apply for notification classification permissions. For details and application steps, see [Vendor Message Classification Feature Use Instructions](#).

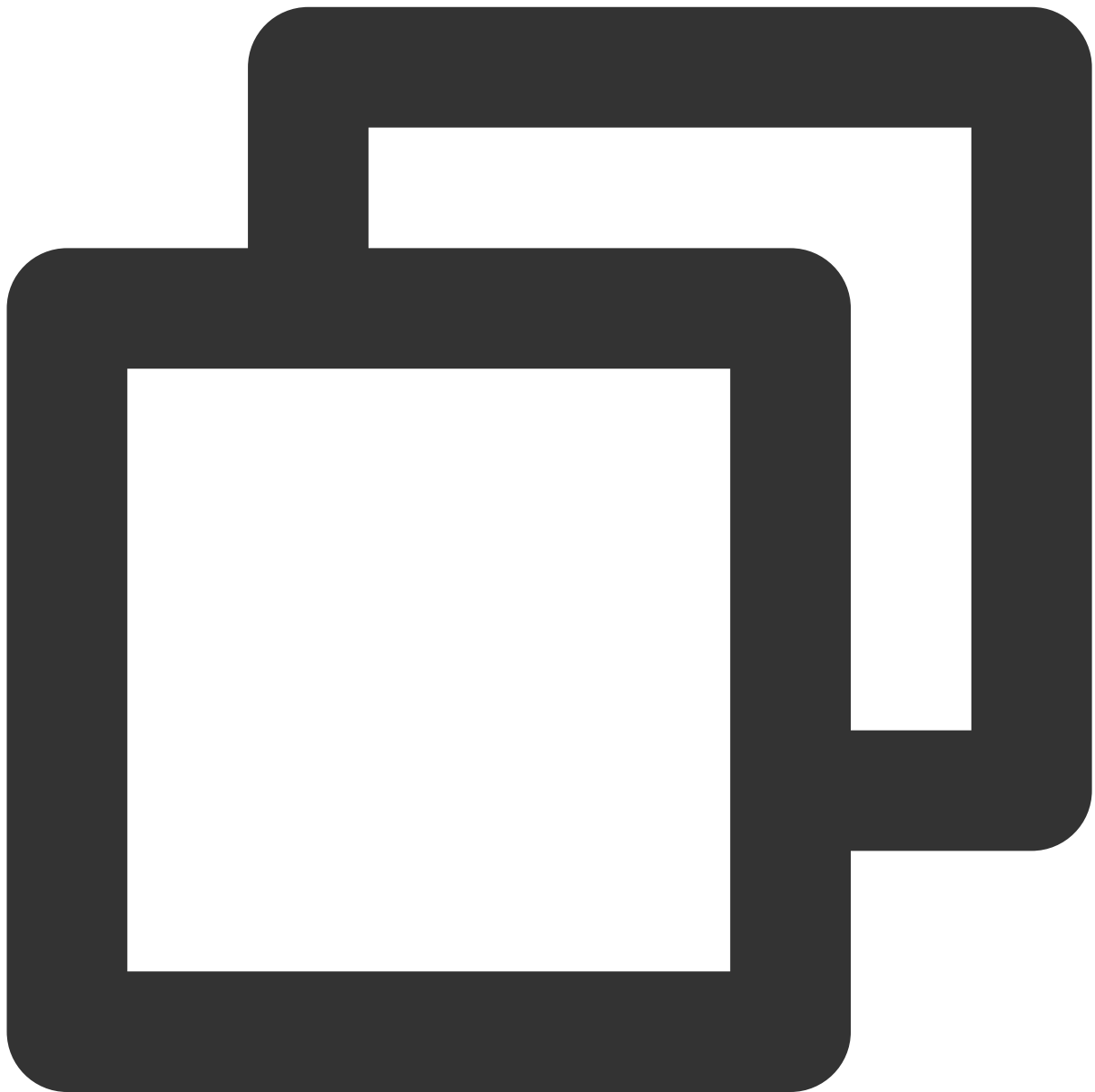
For Huawei push channel, if you select China as the data processing location when you apply for the Huawei push service for your application in the Huawei push console, the channel customization feature is no longer applicable to your application. That is, you cannot use the notification channel capability to customize notification ringtones. For more information, see [Notification Channel Customization](#).

## How do I disable the session keep-alive feature of Tencent Push Notification Service?

To disable the feature, call the following API in `onCreate` of `Application` or `LauncherActivity` during application initialization and pass in `false` :

**Note:**

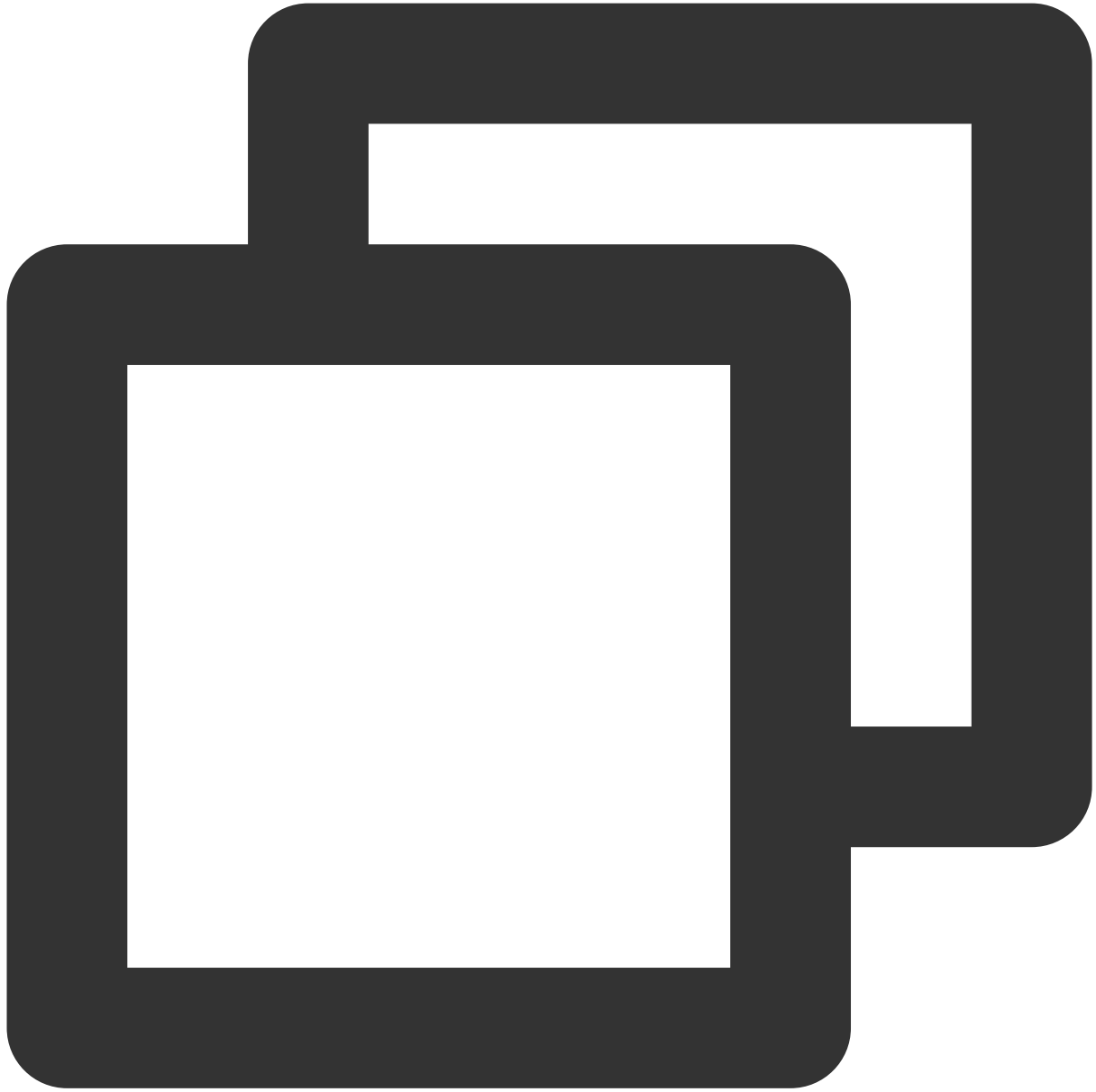
The session keep-alive feature can be disabled only in SDK v1.1.6.0 or later. In SDKs earlier than v1.1.6.0, the feature is enabled by default and cannot be disabled.



```
XGPushConfig.enablePullUpOtherApp(Context context, boolean pullUp);
```

If you use Gradle automatic integration, configure the following node under the `<application>` tag of the `AndroidManifest.xml` file of your application, where `xxx` is a custom name. For manual integration, modify

node attributes as follows:



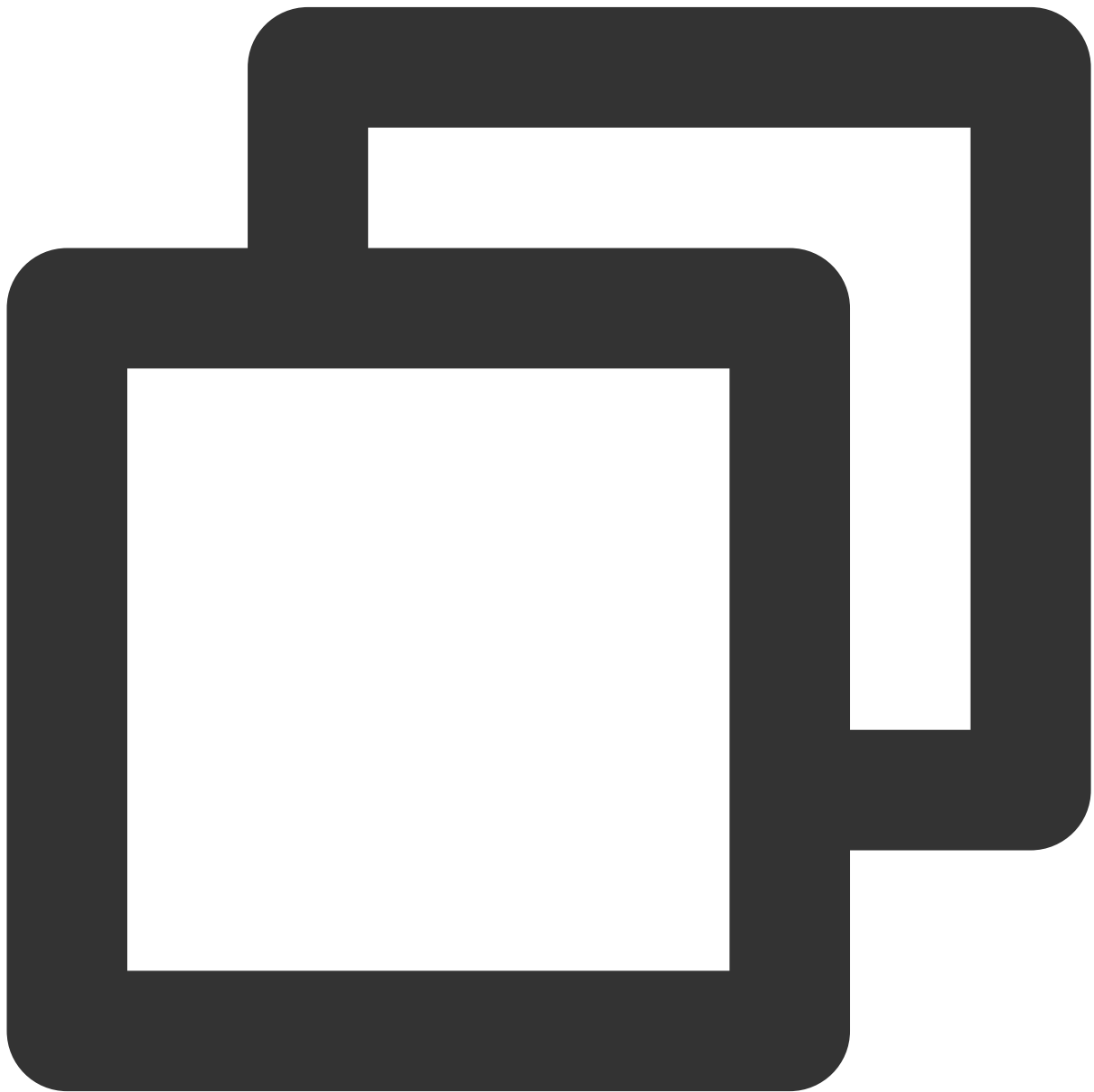
```
<!-- Add the following node to the `AndroidManifest.xml` file of your application,
<!-- To disable the feature of keep-alive with Tencent Push Notification Service, c
<provider
    android:name="com.tencent.android.tpush.XGPushProvider"
    tools:replace="android:authorities"
    android:authorities="application package name.xxx.XGVIP_PUSH_AUTH"
    android:exported="false" />
```

If the following log is printed in the console, the session keep-alive feature has been disabled: `I/TPush:`

```
[ServiceUtil] disable pull up other app
```

## How do I configure not to automatically enable the push service at the first start of the application after installation?

For the scenario where the user agrees to the Terms of Service and Privacy Policy, you can add the following node to the `AndroidManifest.xml` file, so that the push service is not automatically enabled at the first start of the application after installation until the push service registration API `XGPushManager.registerPush()` is called:



```
<meta-data
```



```
android:name="XG_SERVICE_PULL_UP_OFF"  
android:value="true" />
```

## Does the Tencent Push Notification Service SDK support push from HarmonyOS?

HarmonyOS is fully compatible with the Android SDK, so HarmonyOS users can use the push feature normally.

## Do vendor push services need to be launched in application markets before they can be enabled?

Vendor	Need to Be Launched to Application Markets
Mi	Yes. You need an enterprise developer account to enable Mi Push. For details, see <a href="#">here</a> .
Meizu	No. You only need an individual developer account to enable Meizu Push. For details, see <a href="#">here</a> .
FCM	No. You only need an individual developer account to enable FCM Push.
Huawei	No. You only need an individual developer account to enable Huawei Push. For details, see <a href="#">here</a> .
OPPO	Yes. You need an enterprise developer account to enable OPPO PUSH. For details, see <a href="#">here</a> .
vivo	Yes. You need an enterprise developer account to enable vivo Push. For details, see <a href="#">here</a> .

## What should I do if "the application contains unused permission strings" is reported after the vivo channel is integrated?

After you integrate the push services of the vivo channel, certain security detection tools may prompt that "the application contains unused permission strings". Details are as follows:

Cause: vivo channel push SDK v2.3.4

Class file involved: `com.vivo.push.util.z` ; sensitive permission string involved:

```
android.permission.GET_ACCOUNTS
```

### Note:

Inspection found that the problem still persists in the vivo channel push SDK v3.0.0.3.

The defective code is from the vivo channel push SDK. The Tencent Push Notification Service team is unable to change the code and has reported it to vivo. vivo replied that the relevant static fields are the legacy code of the SDK and are not actually used, and they will schedule to fix the problem as soon as possible. The following are quick solutions for your reference:

Solution 1 (recommended): Add the [Privacy Policy](#) to the App Privacy Statement.

Solution 2 (not recommended): Remove vivo-related JAR packages, which will make the vivo channel unavailable.

## What is the Tencent Push Notification Service channel?

The Tencent Push Notification Service channel deeply relies on the Tencent Push Notification Service, and messages can be delivered only when the Service is online (maintaining a persistent connection with the backend server). Thus, the actual delivery of this channel is generally lower than that of a vendor channel.

If you need to implement offline push, we recommend you integrate a vendor channel. For more information, see [here](#).

## Why pushes cannot be received after the application is closed?

Currently, almost all third-party push services cannot guarantee that the pushes can be received after the application is closed. This problem arises from the restrictions of the mobile phone's custom ROM on the Service. All pushes through the Tencent Push Notification Service channel can be delivered only when the Service maintains a persistent connection with the backend server. After the Service is terminated, whether to restart it depends on the system settings, security programs, and user operations.

After the Service is disconnected from the server, messages delivered to the device will become offline messages and can be retained for up to 72 hours. If there are multiple offline messages, only the latest three can be retained on the device. If messages pushed when the application is closed cannot be received after the application is launched again, check whether the `XGPushManager.unregisterPush\\(this\\)` API has been called.

If you have already integrated a vendor channel, but pushes still cannot be received offline, use the [troubleshooting tool](#) to check whether the token has been successfully registered with the vendor, and if not, troubleshoot as instructed in [Troubleshooting Vendor Channel Registration Failures](#).

QQ and Weixin are in the system-level application allowlist, and their services will not be terminated but survive on the backend after they are closed, so the user can still receive messages.

## Why does device registration fail?

Data sync for newly created applications will take about one minute. During this period, the registration may return the error code 20. You can try again later.

**Incorrect parameter:** Check whether `Access ID` and `Access Key` are correctly configured. Common errors include misuse of `Secret key` instead of `Access Key` or spaces before and/or after `Access Key`.

**Registration error:** If the console returns an error code such as 10004, 10002, or 20, see [Error Code](#).

**No callback after registration:** Check the current network condition. We recommend you test with a 4G network, because the bandwidth of the Wi-Fi used by many users may be insufficient.

**Nubia phones:** Models released in the second half of 2015 and in 2016 cannot be registered, including Nubia Z11 series, Nubia Z11S series, and Nubia Z9S series.

## Why can't pushes be received after successful registration?

Perform automated troubleshooting with the troubleshooting tool as instructed [here](#). General errors include the following:

Check whether the current app package name is the same as that entered when the application is registered, and if not, you are recommended to enable multi-package name push.

Check whether the mobile network has any exceptions: switch to 4G network for testing.

Push messages include **notification bar message** and **in-app message** (passthrough message). A notification bar message can be displayed in the notification bar, while an in-app message cannot.

Confirm that the phone is in the normal mode. Some phones may have restrictions on network and activity of the

Tencent Push Notification Service process in the backend when in the Low Power or Do Not Disturb mode.

Check whether the notification bar permission is granted on the phone. For some OPPO and vivo phones, the notification bar permission has to be granted manually.

### Why can't pushes be received on a Nubia phone?

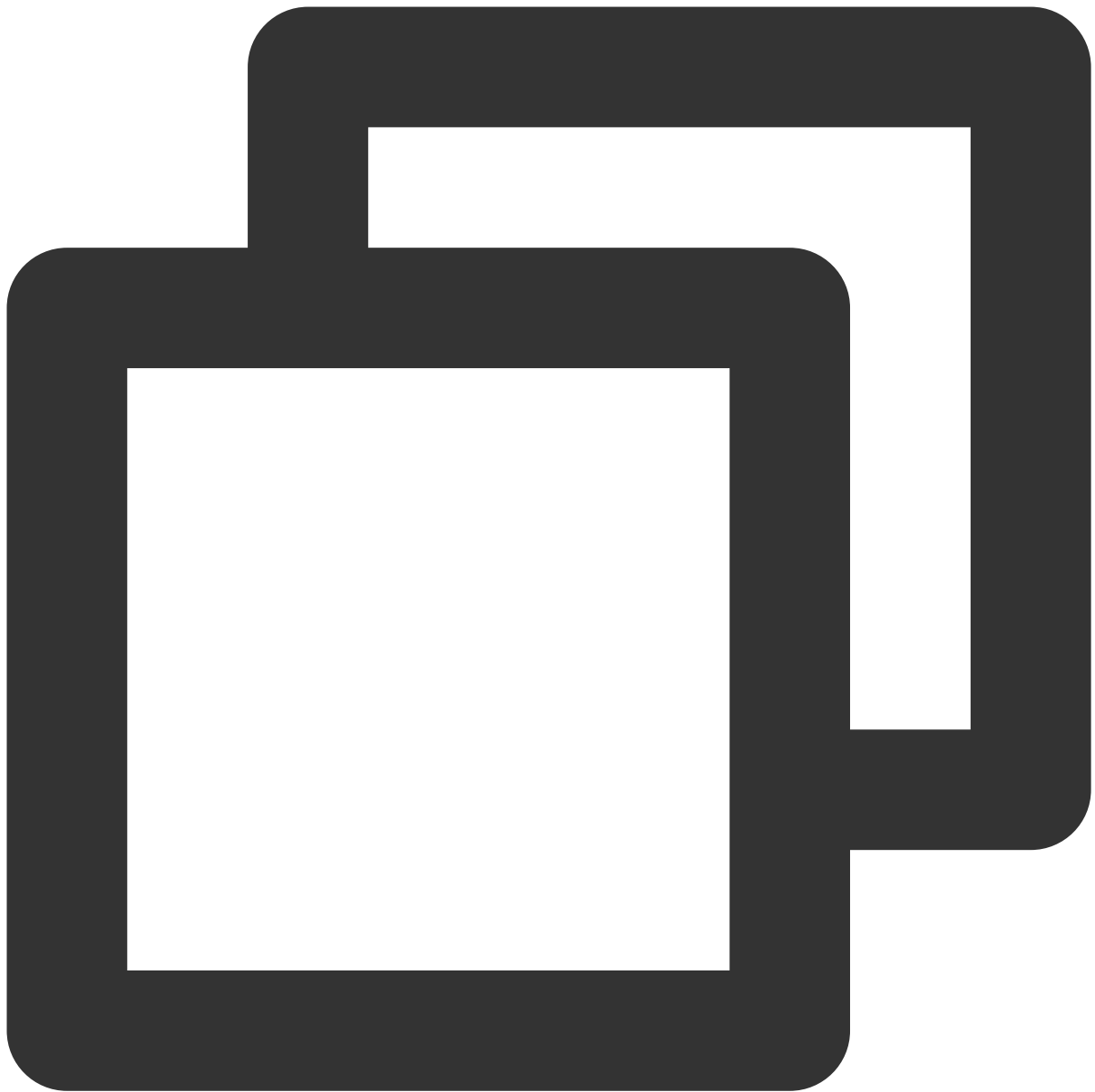
Tencent Push Notification Service is not available on Nubia phones released after 2015, because the new version of Nubia operating system added a super power-saving feature that kills background processes quickly and prevent the Service from being started, resulting in failures of registration with Nubia phones.

### I installed Huawei Mobile Service on a non-Huawei phone and integrated the Tencent Push Notification Service SDK with my application, but this made Huawei Push and other components fail. How do I fix this problem?

From SDK v1.1.6.3, in order to avoid **the situation where push services of other vendors auto-start and transfer user data on the background on a phone**, push service components of other vendors will be disabled on the phone.

Huawei uses some common components for different features such as account, game, and push. Disabling the push component by Tencent Push Notification Service may make other service features unable to start on a non-Huawei phone. To disable this disablement feature, configure the following:

Add the following node configuration under the `application` tag of the `AndroidManifest.xml` file, uninstall the application, and reinstall it.



```
<meta-data
    android:name="tpns-disable-component-huawei-v2"
    android:value="false" />
<meta-data
    android:name="tpns-disable-component-huawei-v4"
    android:value="false" />
```

## How do I set a message click event?

You can redirect subscribers who click your notification to a specified in-app page, HTML5 page, or Deeplink to meet your needs in different use cases. For more information, please see [Notification Tap-to-Redirect](#).

### What notification event callbacks do vendor channels support?

Callback	Arrival Callback	Click Callback
Mi	Not supported	Supported
Meizu	Not supported	Supported
FCM	Not supported	Supported
Huawei	Not supported	Supported
OPPO	Not supported	Supported
vivo	Not supported	Supported

#### Note:

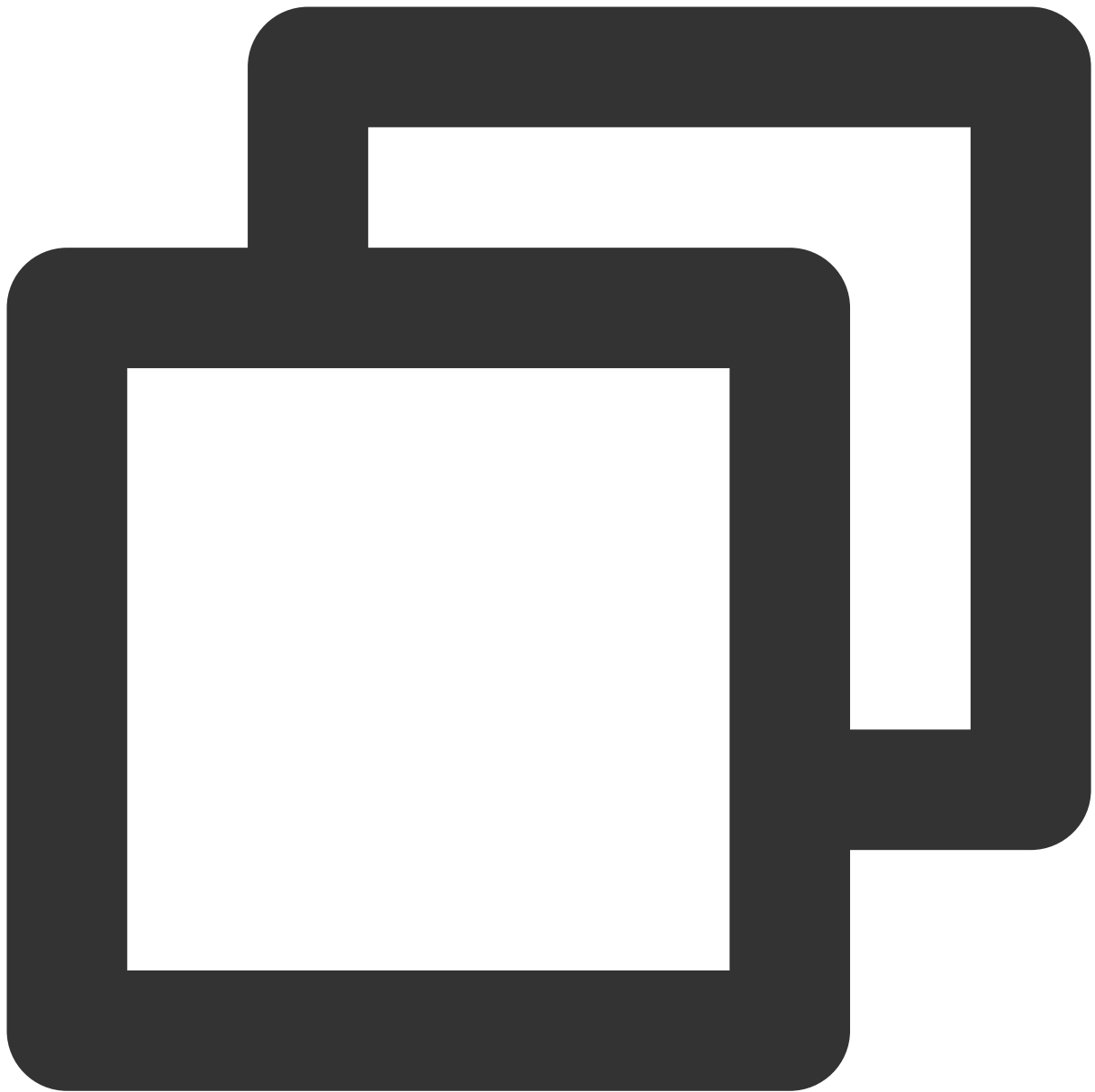
Click callback of vendor channels is supported by SDK v1.2.0.1 and later. Legacy versions support this feature only for Huawei, Mi, Meizu, and vivo.

### Why `title` and `content` obtained by `onNotificationClickedResult` and `onNotificationShownResult` are empty when the application is closed?

To obtain the `title` and `content` of the offline push via a vendor channel, concatenate `title` and `content` parameters to the `intent uri` of notification tap-to-redirect, and obtain them after notification tap-to-redirect. See [Notification Tap-to-Redirect](#) for details.

### How do I fix the problem of null `other push Token` that occurs during debugging after my application is integrated with a vendor channel?

Check whether the application operation logs contain information similar to the following:



```
[OtherPushClient] handleUpdateToken other push token is : other push type: huawei
```

Such log information means that your application failed to register with the vendor channel. In that case, get the return code for vendor channel registration failure to locate and troubleshoot the problem. For more information, see [Troubleshooting Vendor Channel Registration Failures](#).

### How do I adapt small icons?

ROMs running native Android 5.0 or later will process the small icon of an application and add a layer of color if

`target sdk` is greater than or equal to 21, making the icon gray.

If you want to display it as colored, you can set `target_sdk` to a value smaller than 21. If you don't want `target_sdk` to be below 21, you can rename a small .png image with a transparent background to `notification_icon.png` (the filename must be unique) and place it in the `drawable` directory; in this way, the small icon will be displayed as gray (but shaped).

Starting from Tencent Push Notification Service SDK v1.2.2.0 for Android, the `notification_icon.png` small icon resource will only take effect directly on Google Pixel phones by default. To achieve such small icon effect for custom notifications on other phones, you need to specify the resource filename (without the extension) as the value of the `message.android.small_icon` field in the push API. In addition, the custom notification small icon supports solid colors by specifying the decimal value of an RGB color as the value of the `message.android.icon_color` field in the push API.

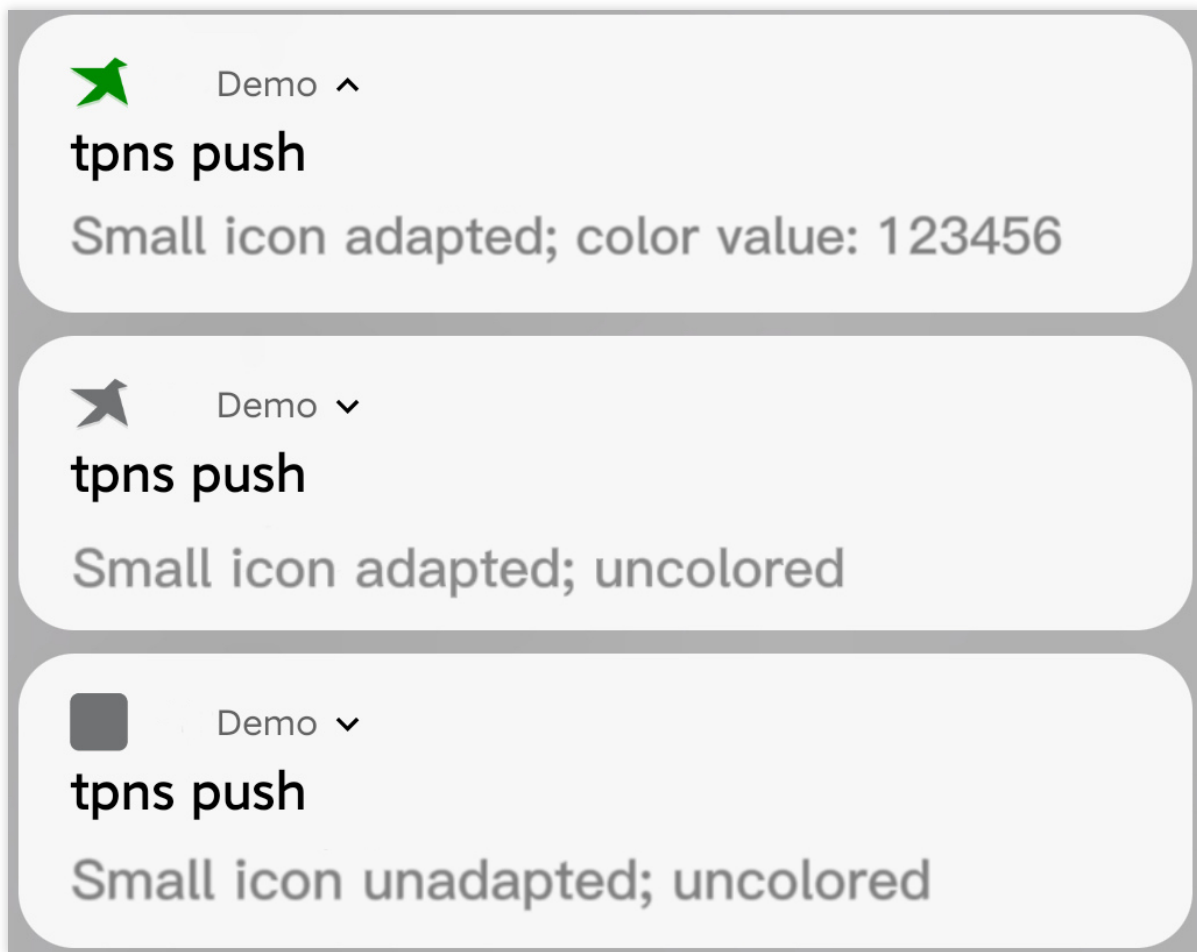
Below is an example of push API fields, where `icon_color: 123456` indicates the RGB color #01e240:



```
{
  "message": {
    "android": {
      "small_icon": "notification_icon",
      "icon_color": 123456
    }
  }
}
```

The display effect after adaption is as shown below. [We recommend you draw an icon based on the demo logo.](#)



**Note:**

The small icon must be a PNG image with an alpha channel.

The background must be transparent.

Do not leave too much padding around the icon.

We recommend you use an image with dimensions of 46x46, as smaller images will be blurry, while larger images will be automatically scaled down.

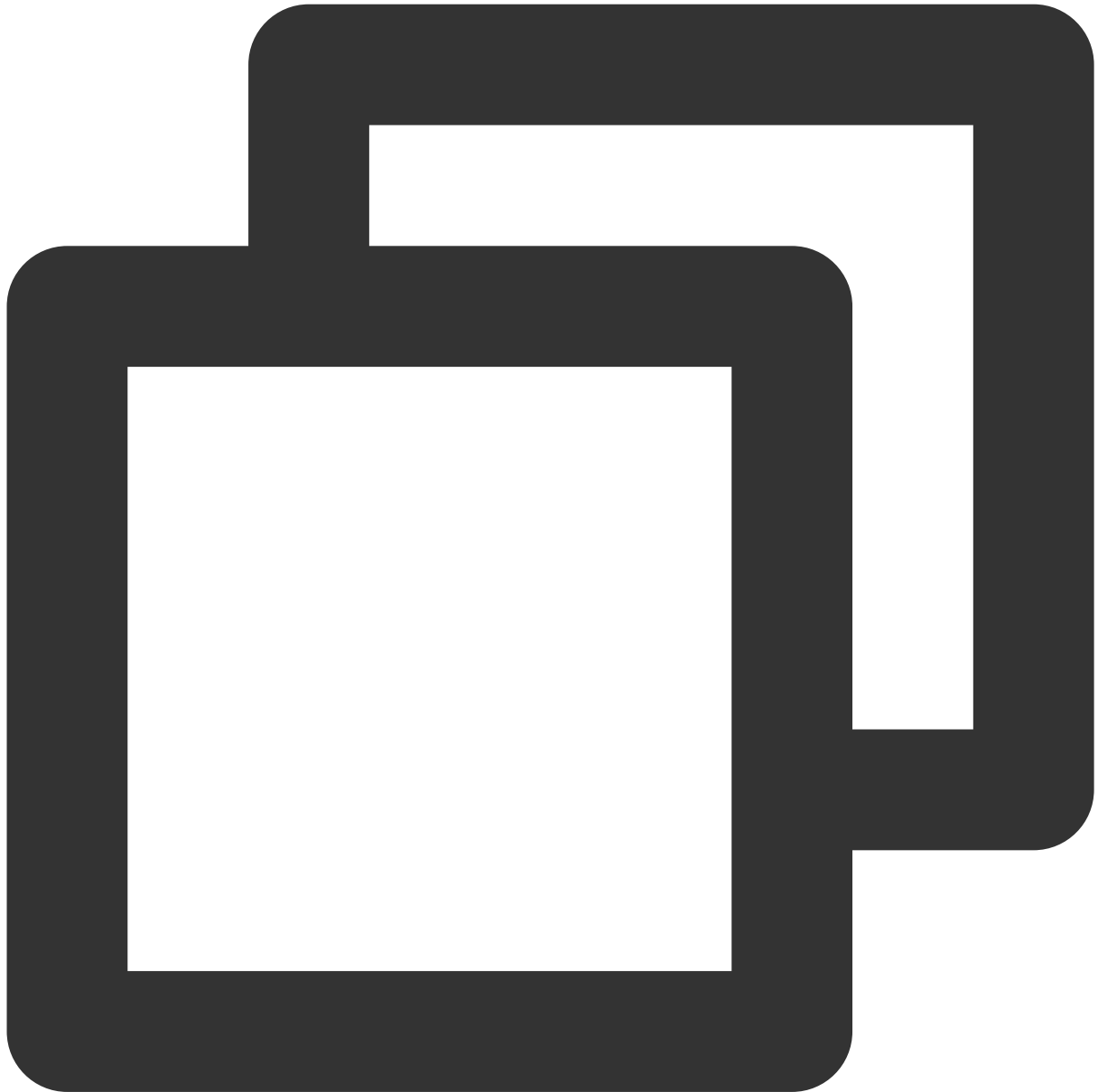
**Why can't messages be displayed in the notification bar after arriving at mobile phones on Meizu Flyme 6.0 or earlier?**

1. Manual integration is used on Meizu phones on Flyme 6.0 and earlier.
2. Automatic integration is used on Meizu phones on Flyme 6.0 and earlier, but the version of the used Tencent Push Notification Service SDK for Android is earlier than 1.1.4.0.

In the above two cases, you need to place an image exactly named `stat_sys_third_app_notify` in the `drawable` folders named at different resolutions. You can get the image from the `flyme-notification-res` folder under `meizu` of [Tencent Push Notification Service Android SDK](#).

## How do I fix the exception that occurs when I use quick integration in the console?

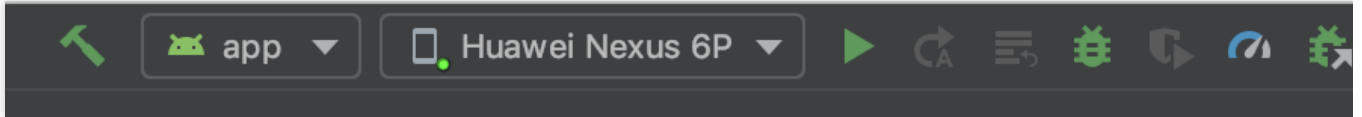
1. If an exception occurs during integration, set the `debug` field in the `tpns-configs.json` file to `true` and run the following command:



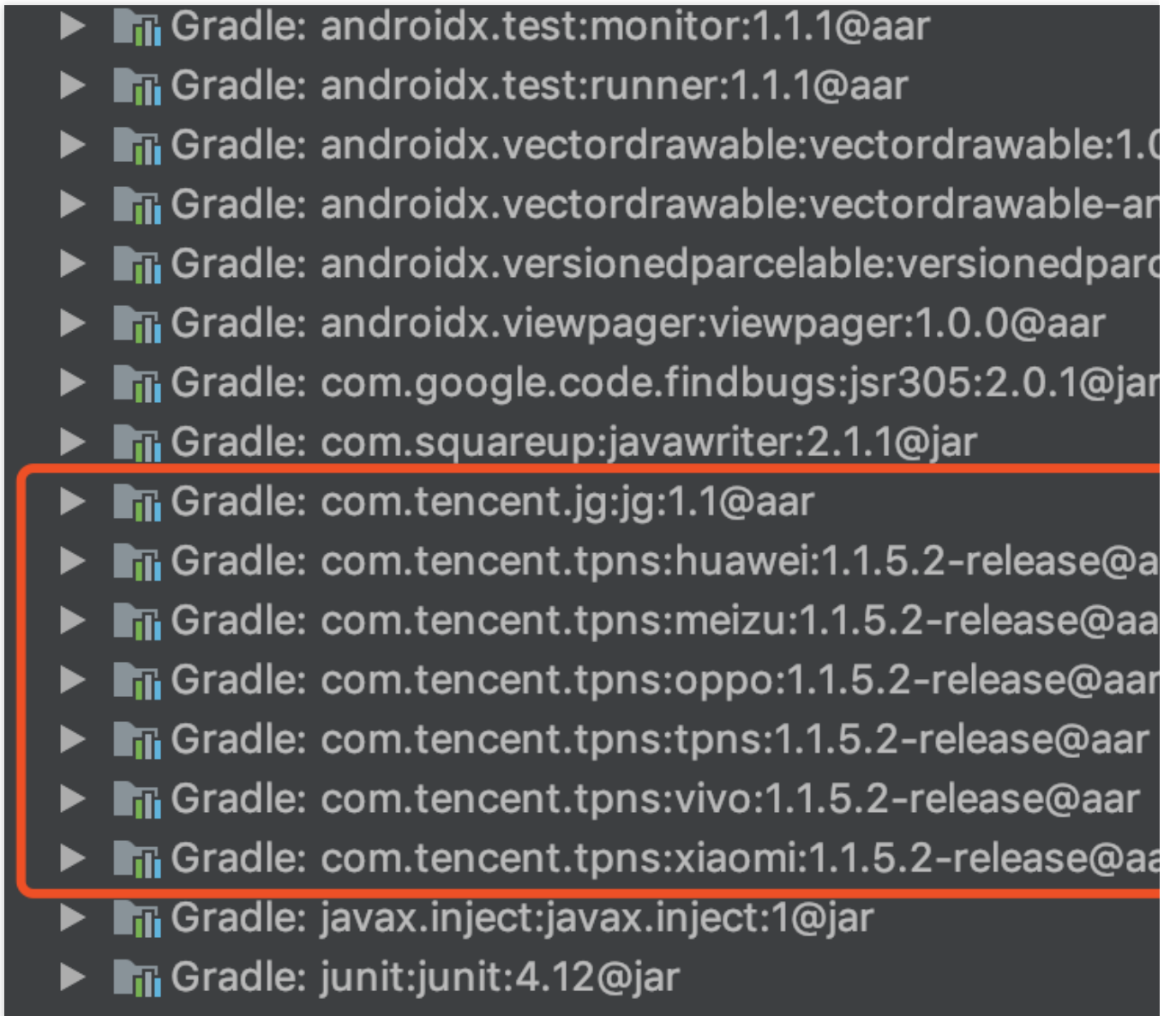
```
./gradlew --rerun-tasks :app:processReleaseManifest
```

Then, analyze with the `TpnsPlugin` keyword.

2. Click the **sync projects** icon.



3. Check whether relevant dependencies exist in **External Libraries** of the project.



### How do I convert Android extension library v4 to AndroidX?

Add the following attributes to the `gradle.properties` file of the AndroidX project:



```
android.useAndroidX=trueandroid.enableJetifier=true
```

**Note:**

`android.useAndroidX=true` : to enable AndroidX for the current project.

`android.enableJetifier=true` : to migrate the dependency package to AndroidX.

**What should I do if "the application transferred information over HTTP in plaintext" is reported for vendor channel push SDKs?**

After you integrate the push services of various vendor channels, certain security detection tools may prompt that "the application transferred information over HTTP in plaintext". HTTP addresses involved are as follows:

1. Mi Push SDK: <http://new.api.ad.xiaomi.com/logNotificationAdActions>, <http://resolver.msg.xiaomi.net/psc/?t=a>
2. Meizu Push SDK: <http://norma-external-collect.meizu.com/android/exchange/getpublickey.do>, <http://norma-external-collect.meizu.com/push/android/external/add.do>

All the above HTTP URLs are from the push SDKs of relevant vendors. The Tencent Push Notification Service team is unable to clarify their purposes or control their behaviors, but is actively contacting them and promoting the adoption of transfer over HTTPS. Currently, you should evaluate and choose whether to continue to use the above vendors' push services.

### What should I do if Android v4.4.4 reports a compiling error?

If the number of loaded methods in the project exceeds 65,000, please create subpackages for the project.

### What should I do if I specified the redirection action as opening an `Activity` page, but the redirection fails frequently?

On some phones, redirection upon click on the notification bar may experience permission issues.

Solution: In `androidManifest.xml`, add `android:exported="true"` to the `Activity` page to be opened.

### Can the registration method be created in a thread?

The registration method can be called anywhere, but `applicationContext` must be input.

### Can I use the FCM channel without Google services installed on my phone?

No. Google services and a network with normal access to Google are necessary for using the FCM channel.

### What clusters is the FCM channel applicable to?

The FCM channel is applicable to clusters in Hong Kong (China) and Singapore.

### Why "no message arrival data" is reported after a message is delivered successfully?

#### Troubleshooting process:Vendor channel delivery failure:

1. Check whether the limit on the number of messages pushed per device per day of the vendor channel is exceeded. For the message count limits of different vendors, see [Vendor Message Classification Feature Use Instructions](#). For example, Huawei's return code 256 indicates that the limit on the information and marketing messages sent in the current day is exceeded and that the message sending policy needs to be adjusted.
2. Check whether [the display of message arrival receipts](#) is configured for the Huawei, HONOR, and Meizu push channels. If not, arrival data cannot be reported (without affecting the actual push results).
3. The vendor delays the message delivery. If Tencent Push Notification Service has delivered the message to the vendor in time but the vendor does not deliver the message to the device, you can contact the vendor for reasons.

4. Check whether the notification bar is enabled. For some vivo and OPPO models, the notification bar is disabled by default. Determine whether to manually enable the notification bar.

**Tencent Push Notification Service channel delivery failure:**

Possible case 1: The Tencent Push Notification Service backend delivered the message via the Tencent Push Notification Service channel when the link between the Tencent Push Notification Service SDK and the backend was actually disconnected. As a result, the message failed to reach the device.

Possible case 2: By default, the Tencent Push Notification Service SDK sends a heartbeat at an interval of five minutes to maintain a persistent connection. When it fails to send a heartbeat, the SDK immediately rebuilds the persistent connection. For example, if the SDK receives five push messages from the backend before the persistent connection is rebuilt successfully, only the latest three push messages will be delivered after the persistent connection is rebuilt. As a result, the first two push messages are delivered through the Tencent Push Notification Service channel and fail to reach the device.

Possible case 3: No arrival event was reported but the message actually reached the device (the actual push effect is not affected).

# Flutter

Last updated : 2024-01-16 17:43:54

## If I integrate Tencent Push Notification Service via Flutter/React Native, how do I get the custom parameters when I cold start my iOS app?

1. We recommend that you update your `tpns_flutter_plugin` to version 1.0.7 or above, and `tpns_rn_plugin` to version 1.1.3 or above.
2. If your `tpns_flutter_plugin` version is below 1.0.7 and `tpns_rn_plugin` below 1.1.3, you need to get the parameters by calling the following APIs in the `runner->AppDelegate->didFinishLaunchingWithOptions` method.



```
- (BOOL)application:(UIApplication *)application didFinishLaunchingWithOptions:(NSDictionary *)launchOptions {  
    // Get the message content.  
    NSDictionary *remoteNotification = [launchOptions objectForKey:UIApplicationLaunchOptionsRemoteNotificationKey];  
    // Perform logical processing according to the message content.  
}
```

**I integrated Tencent Push Notification Service into my Android app via Flutter, why are callbacks not triggered sometimes?**



We recommend that you call `XgFlutterPlugin().addEventHandler()` to set callbacks right after you initialize your app in Flutter. This helps ensure that the callback API remains valid when you cold start your app. Also, make sure that you configure all the callbacks you need in one `XgFlutterPlugin().addEventHandler()` call. Repeated calls will overwrite the callbacks set in previous calls. For details, see the calling methods in `example/lib/main.dart` of the project directory.

# Others

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## Since the push API of Tencent Push Notification Service no longer supports TLS 1.0, how can I know if my service is affected?

You have no need to update the client SDK, and you just need to check the TLS version in the push API callback side.

For the push with RESTful APIs, check the TLS version specified in the push code.

For the push with the server SDK provided by Tencent Push Notification Service, check whether the current request-related libraries support TLS 1.1 or later, including whether Java JDK is v1.8 or later and OpenSSL supports TLS 1.1 or later.

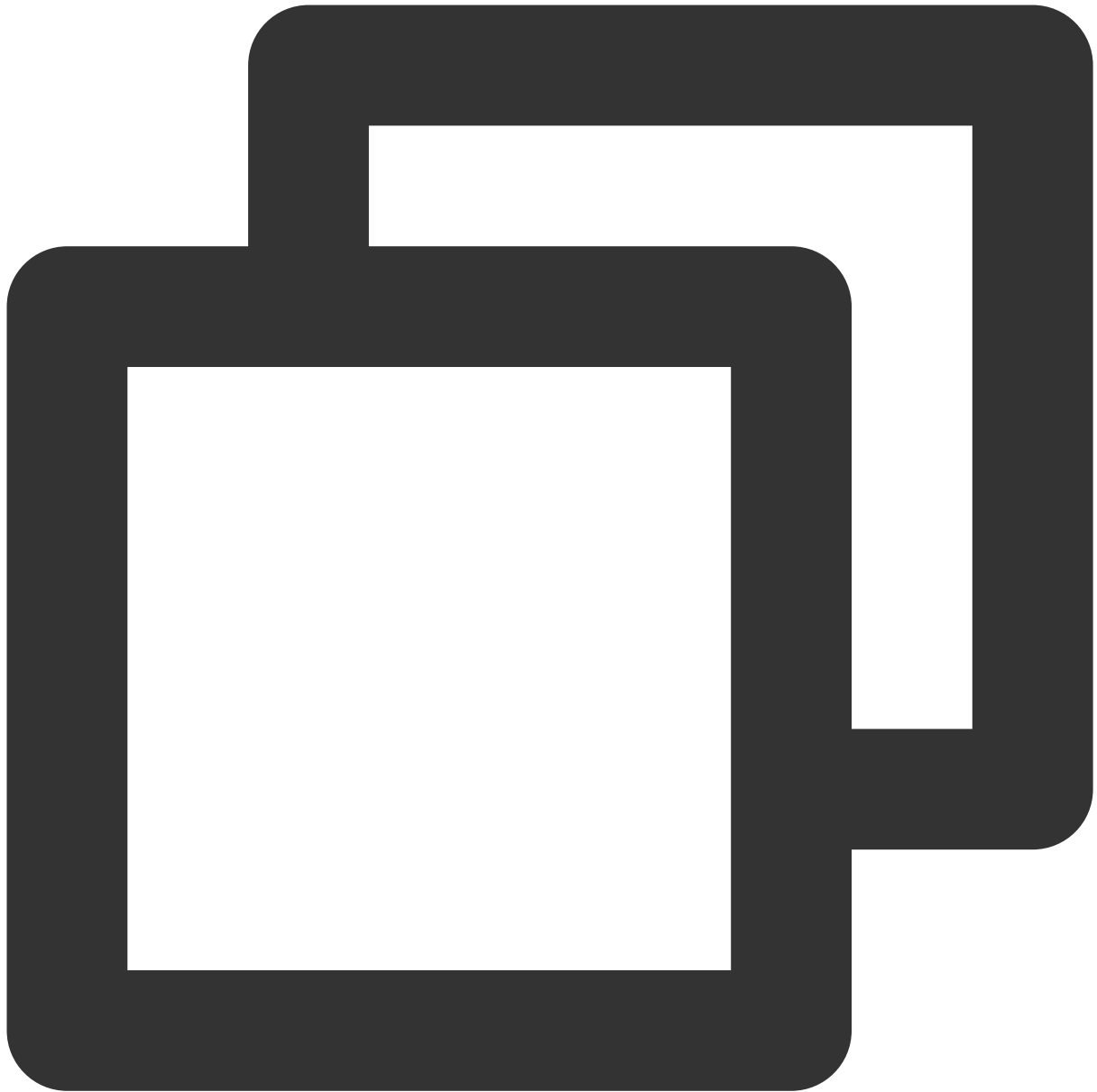
## How do I migrate a Tencent Push Notification Service application under Tencent Cloud account A to account B?

To migrate an application, the root account owner should apply for account migration as follows using the **corporate email address** or **registered email address** of account A.

Subject: Migration of Tencent Push Notification Service Applications under Tencent Cloud Account

To: tpns\_team@tencent.com

Email content:



1. Source Tencent Cloud account ID:
2. AccessID and name of the application to be migrated:
3. Target Tencent Cloud account ID:
4. Company name:
5. Contact (mobile):

**How do I use the `AccessID` , `AccessKey` , and `SecretKey` of a Tencent Push Notification Service application?**

**AccessID:** The unique identifier of the application, which is used in SDK integration and in authentication signature generation during RESTful API call.

**AccessKey:** The client authentication key of the application, which is used in SDK integration.

**SecretKey:** The server authentication key of the application, which is used in authentication signature generation during RESTful API call.

### Is there a limit on the number of messages displayed in the notification bar?

There is no limit on the number of notification bar messages that a phone can receive and display. The reasons for not displaying messages may include:

The notification bar on a Mi phone displays the latest message by default. If you want multiple messages to be displayed, you need to set a unique `n_id` for different messages.

The message broadcast is blocked by a phone manager application.

A Meizu phone has a message box, and uncommon messages will go directly to it. Please view the messages there.

### Why can't callback information be received for device registration?

A vendor channel's callbacks are returned by the vendor server.

Check whether broadcast is blocked by any security application.

### Why can't I find the records of pushes created through API?

Log in to the [Tencent Push Notification Service console](#) and select **Created via API** on the **Push Management > Task List** page to view the records of pushes created through API.



Push Time	Push ID	Notification Title
-----------	---------	--------------------

### If an account changes its bound device, what will happen when a message is sent to this account?

The currently bound device (B) can receive the push, but the originally bound device (A) cannot, because only the last device bound to the account can receive pushes.

### What is the order in which multiple push messages are received after a user goes back online?

The messages are in ascending order by message ID. The client will also receive messages in this rule; therefore, the order in which the messages are received is the same as that in which they are sent.

**If a past time is selected for a scheduled push, will the push be sent?**

Yes. If a past time is selected, the system will send the push immediately.

**Why does the troubleshooting tool show that the notification bar is disabled even though I have granted the notification bar permission?**

The notification bar status is not synced. Open the app again to sync the notification bar status to the backend.