

HMS Workshop

1. Week

Sezer BOZKIR



— 01





Trainers

DTSE Community

— 02



Sezer BOZKIR

Developer
Technical
Support
Engineer



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Technical
Support
Engineer





Introduction

Part 01

— 03





Training Plan

Overview of the Workshop

Week

Account Kit
Push Kit
Crash Service
Analytics Kit

01

02

03

Week

Ads Kit
ML Kit

04

— 04

Week

What is HMS ?
Register as a Developer
HMS Kits Integration
How to use Documentation
AGC Console
HMS Core Toolkit

Week

Location Kit
Map Kit
Site Kit





Huawei Mobile Services

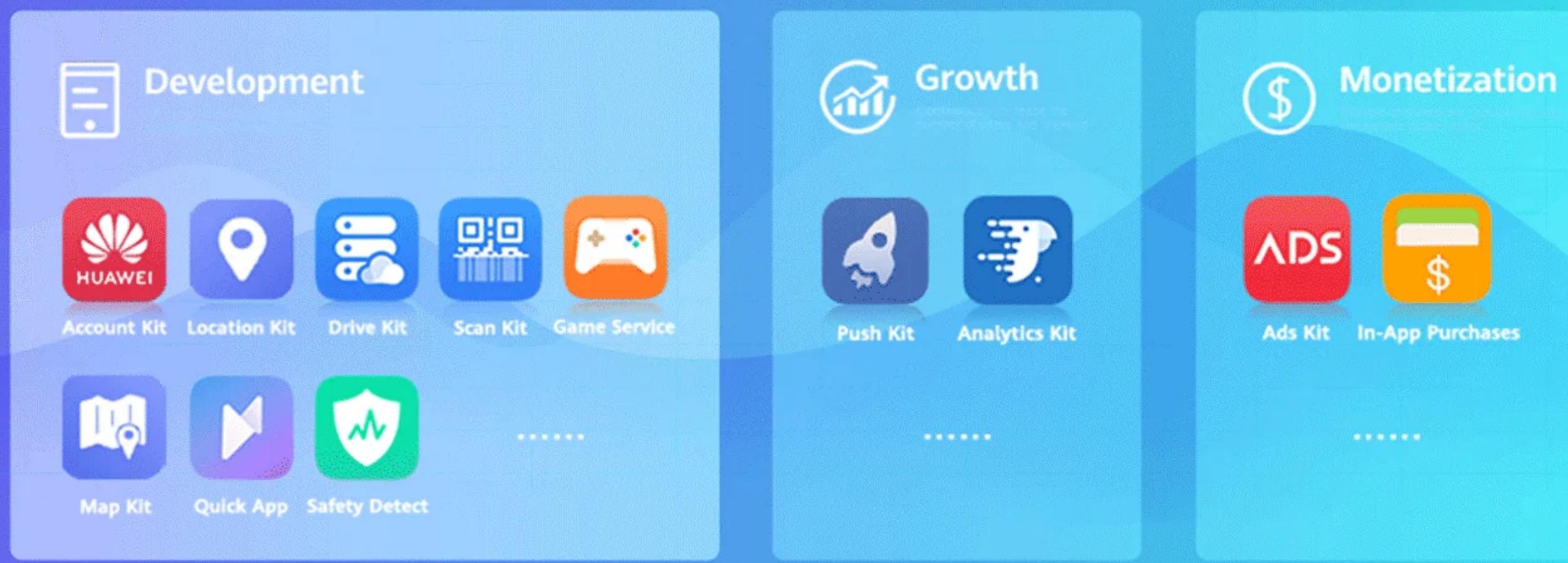
— 05

What is HMS Core?



Overview of HMS Core

HMS Core enables quick access so developers can focus on innovation



Development

-  HUAWEI
-  Location Kit
-  Drive Kit
-  Scan Kit
-  Game Service
-  Map Kit
-  Quick App
-  Safety Detect

Growth

-  Push Kit
-  Analytics Kit

Monetization

-  Ads Kit
-  In-App Purchases

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Useful Links for HMS Core

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Main Page: <https://developer.huawei.com/>

Development Documentation:

<https://developer.huawei.com/consumer/en/doc/landing/development>

Codelabs:

<https://developer.huawei.com/consumer/en/codelabsPortal/index>

Development Guides:

<https://developer.huawei.com/consumer/en/doc/development/HMSCore-Guides/introduction-0000001050980807>





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AppGallery Connect



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Registration Process

English ▾ Sign in Sign up

Console

Register HUAWEI ID

Already have an account? [Log in >](#)

Country/Region Turkey ▾

sezer.bozkir1@huawei.com

Email code [Obtain code](#)

.....

Confirm password

Date of birth 2001 ▾ 2 ▾ 18 ▾

REGISTER

Identity verification

Customer Service

My activities

Settings

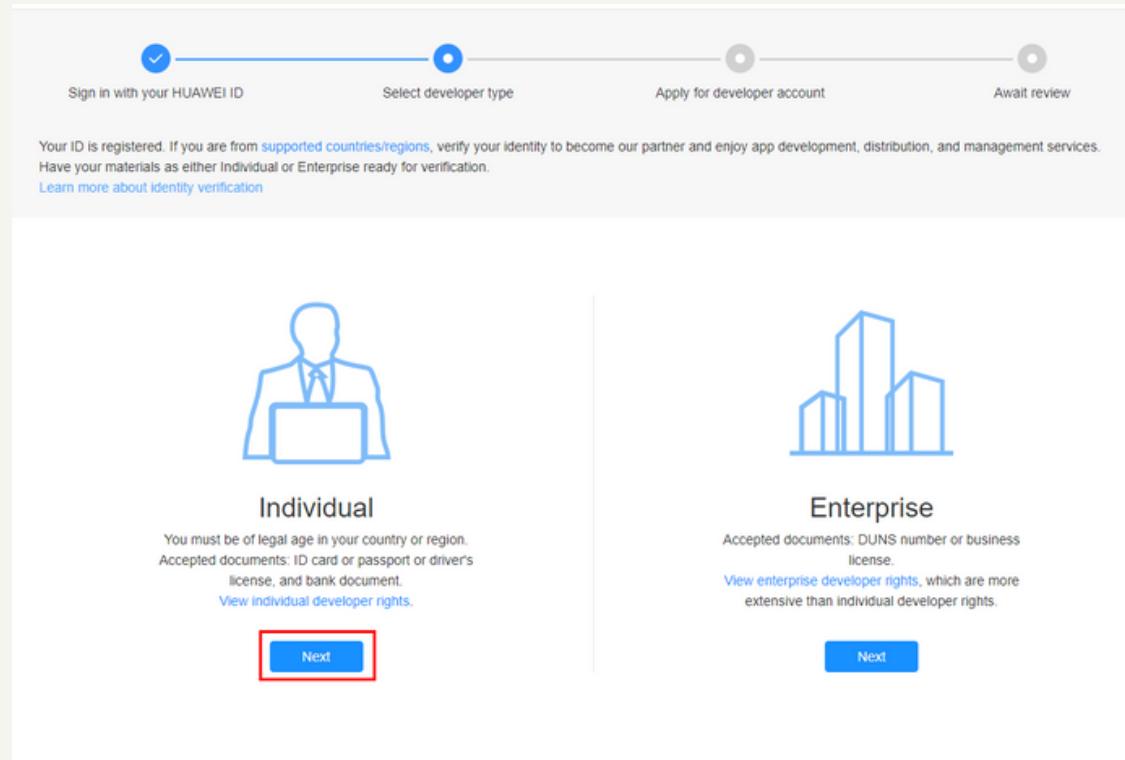
Sign out

— 09

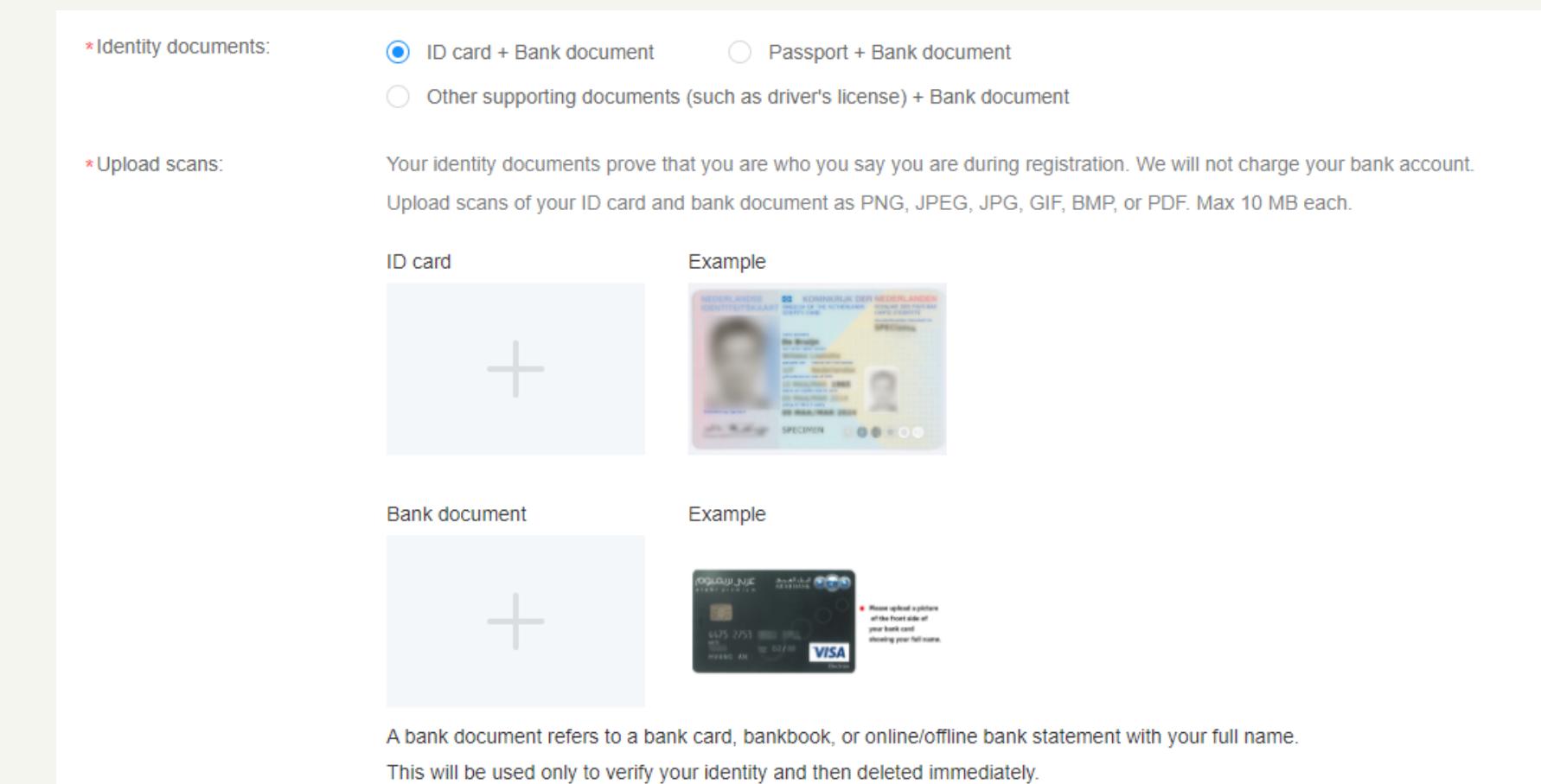




Registration Process



complete the
review within
1 to 2 working
days



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Developer Forum





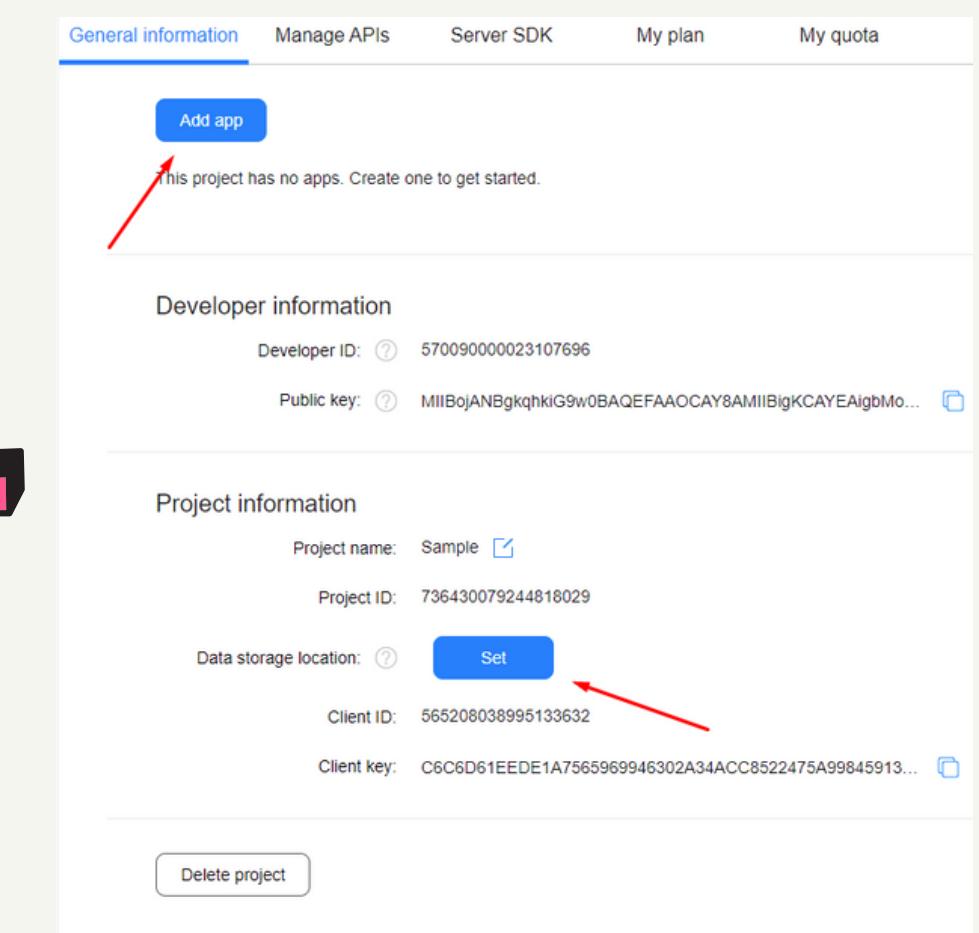
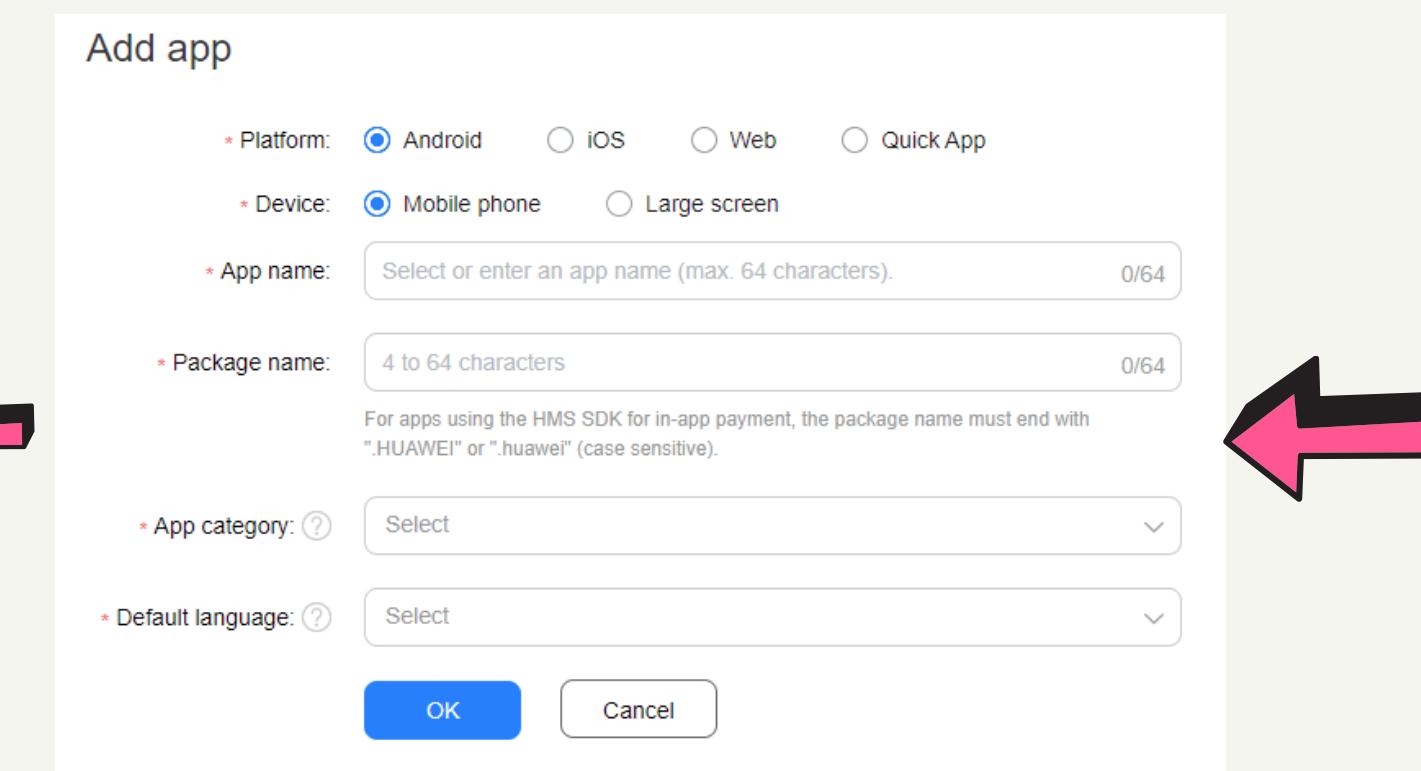
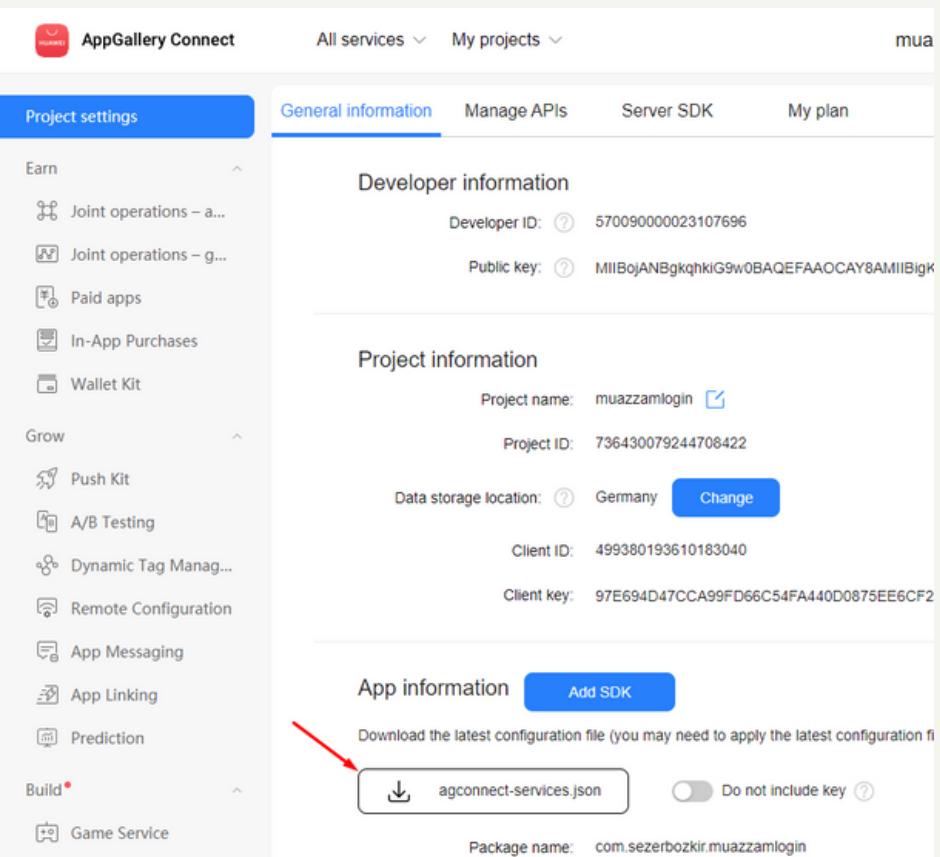
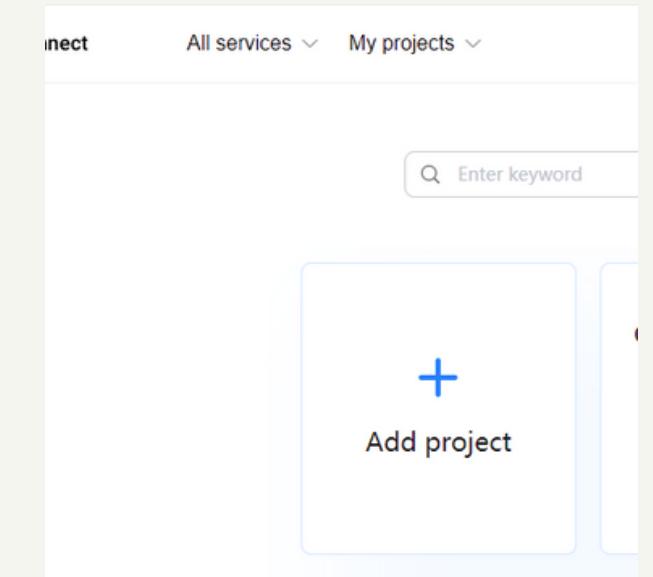
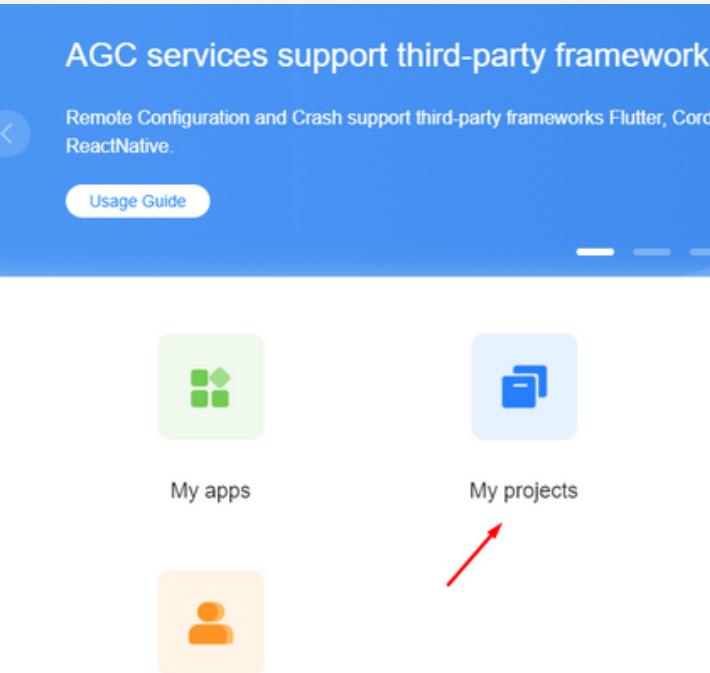
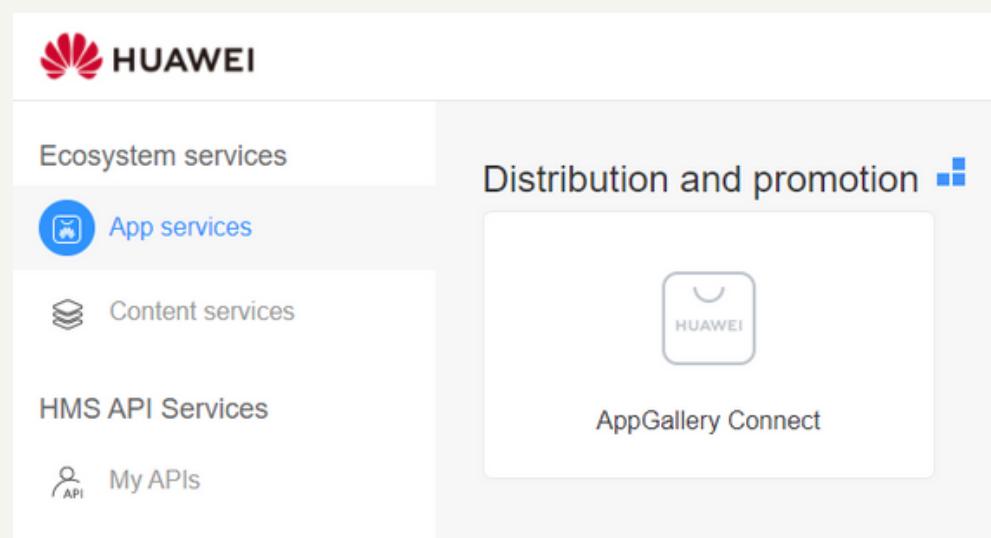
How to Create App in AppGallery Connect?

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Useful Development Tools

HMS Toolkit
DigixLab

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HMS TOOLKIT



Functions

Converter
—
Reuse your app code to run with HMS APIs.

Repository
—
View, import, and upgrade code in HMS Core service repositories.

Coding Assistant
—
Use drag-and-drop APIs with clear descriptions and code snippets and templates for every scenario.

Cloud Debugging
—
Connect 24/7 free-of-charge to any HUAWEI/HONOR phone in one click.

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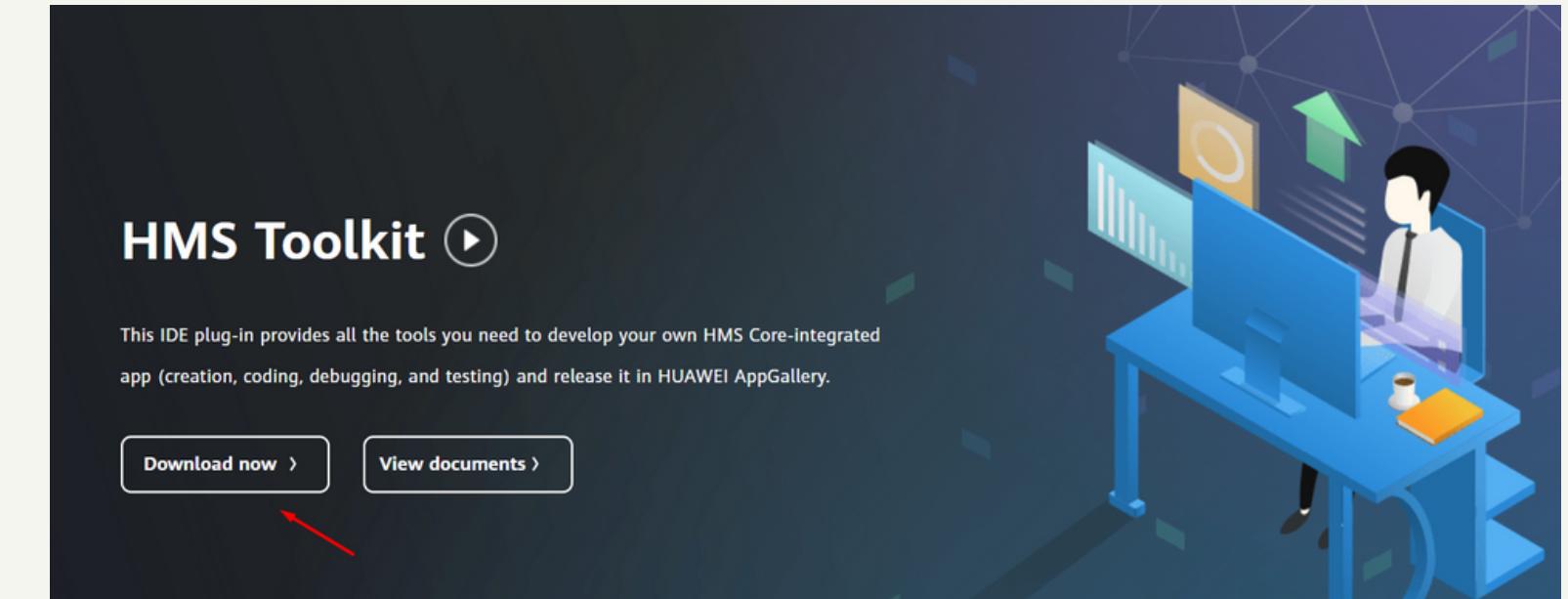


HMS TOOLKIT INSTALLATION

Download From Website

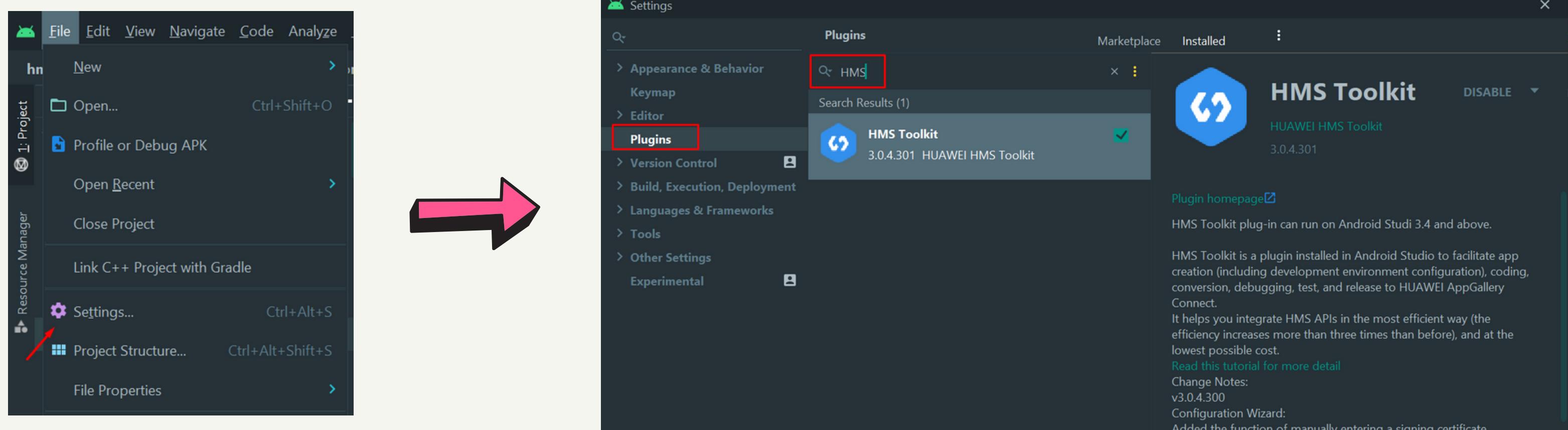
Develop Distribute Monetize Solutions Events Programs Community Trail

HMS Core DigiX Lab Graphics Profiler HMS Toolkit
AppGallery Connect Huawei Quick App IDE Theme Studio Petal Search OpenWeb
HarmonyOS
Developer Tools
Others



HMS TOOLKIT INSTALLATION

Install from Android Studio Plugins



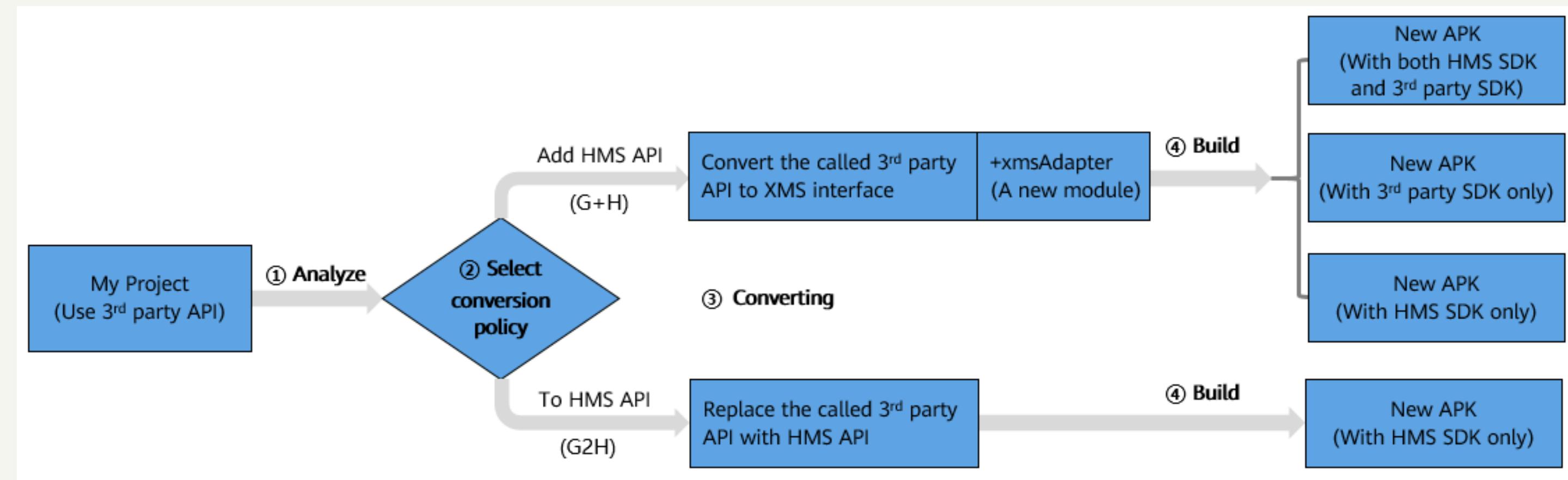
GMS TO HMS CONVERT



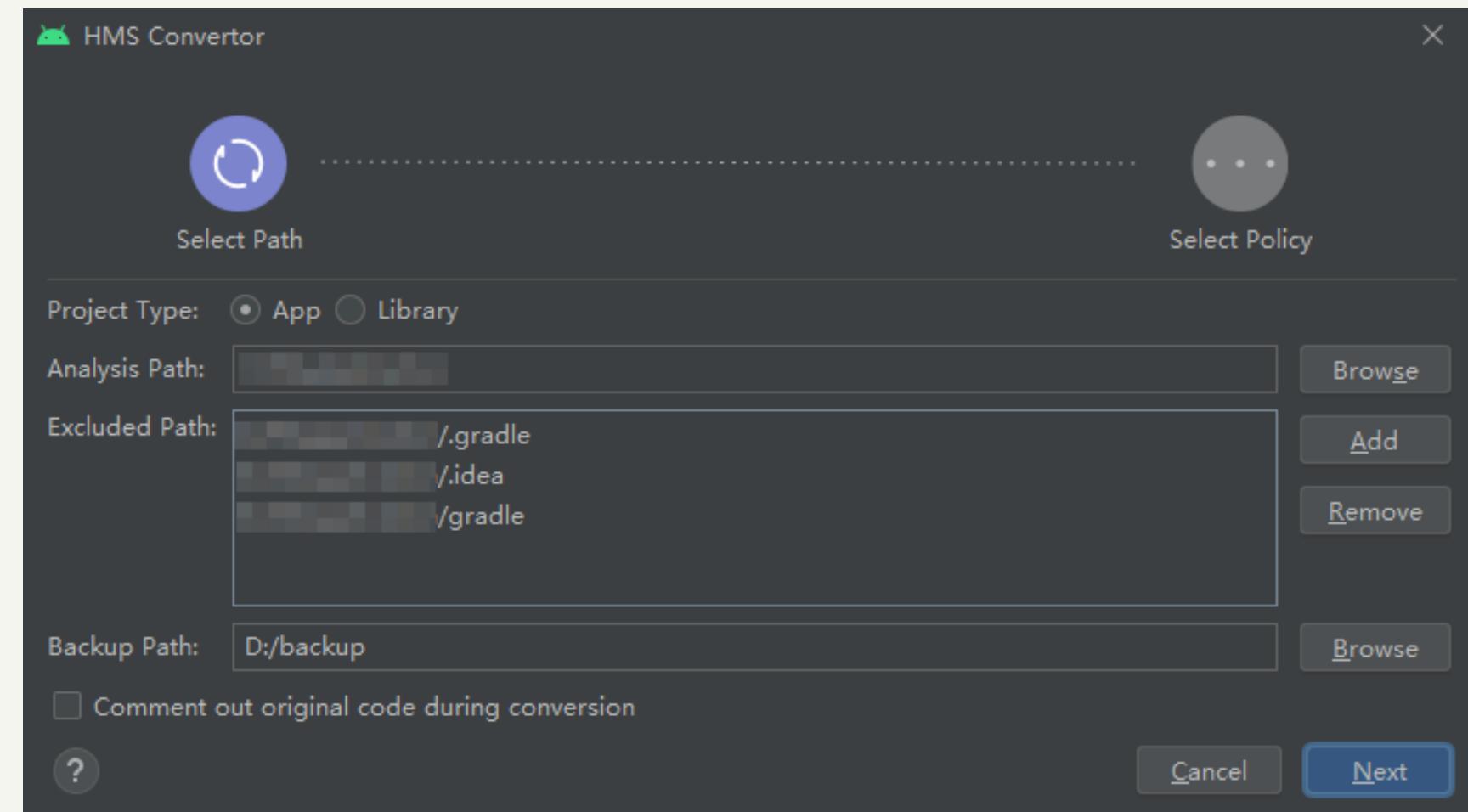
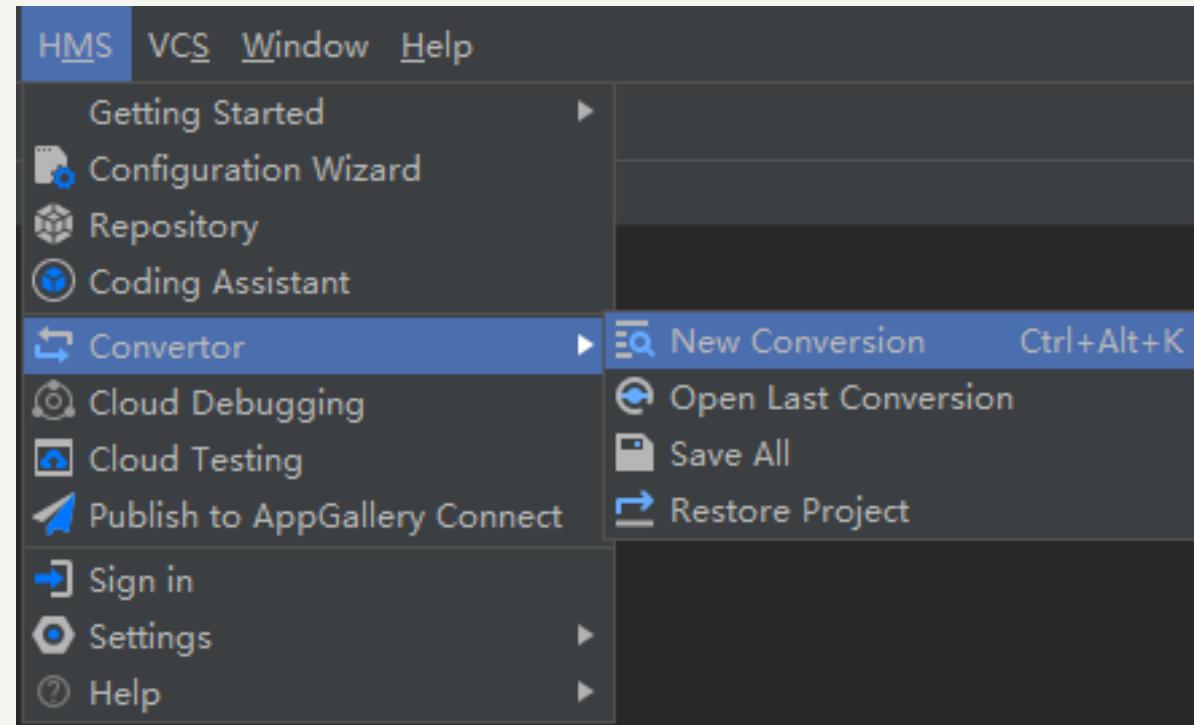
HMS Integration Process Types

G+H and G to H Solutions

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GMS TO HMS CONVERT



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GMS TO HMS CONVERT



Analysis Result

Add HMS API		To HMS API	
Dependent GMS APIs		5 APIs, 176 methods	
Convertible GMS Methods	Auto: 171 Manual: 5 Auto Rate: 97%	Auto: 83 Manual: 93 Auto Rate: 47%	
Unconvertible GMS APIs	N/A	N/A	
Unconvertible GMS Methods	0		

Export analysis result

Select a conversion policy

Add HMS API To HMS API

Show Log Previous Cancel Analyze

Analysis Result

Add HMS API		To HMS API	
Dependent GMS APIs		5 APIs, 176 methods	
Convertible GMS Methods	Auto: 171 Manual: 5 Auto Rate: 97%	Auto: 83 Manual: 93 Auto Rate: 47%	
Unconvertible GMS APIs	FirebasePerf;	N/A	
Unconvertible GMS Methods	0		

Export analysis result

Select a conversion policy

Add HMS API (HMS API First) Add HMS API (GMS API First) To HMS API

Generate code for creating app dependent only on GMS SDK
 Generate code for creating app dependent only on HMS SDK

Path for storing the generated code (for Add HMS API only)

/xmsadapter/src/main/java

Show Log Previous Cancel Analyze



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Summary		Conversion			
File		GMS API		Conversion Type	
No.	File	Line	GMS API	Conversion Type	Content
1	app/build.gradle	2-2	FirebasePerf	Auto	Please go to the AGC console and apply for HMS apms access for your app.
2	app/build.gradle	56-56	Location	Auto	implementation 'com.google.android.gms:play-services-location:17.0.0'
3	app/build.gradle	57-57	Basement	Auto	implementation 'com.google.android.gms:play-services-base:17.1.0'
4	app/src/main/AndroidManifest.xml	108-108	Common	Auto	<uses-permission android:name="com.google.android.gms.permission.ACT...
5	build.gradle	9-9	Common	Auto	classpath 'com.huawei.agconnect:agcp:1.2.1.301'
6	build.gradle	10-10	FirebasePerf, C...	Auto	The AppGallery Connect dependency will be added. ; The AppGallery Apms
7	app/build.gradle	49-49	Common	Dummy	the dependency 'xmsadapter' will be added in your module
8	app/build.gradle	3-3	Common	Manual	The HMS SDK uses JDK 1.8. To ensure code compatibility, you can add
9	app/build.gradle	17-17	Common	Manual	Plan your version based on the compileSdkVersion value of each HMS



GMS TO HMS CONVERT



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Kit	To HMS API	Add HMS API
Account	Supported	Supported
In-App Purchases	Supported	Not supported
Push	Supported	Supported
Ads	Supported	Supported
Analytics	Supported	Supported
Location	Supported	Supported
Map	Supported	Supported
Game Service	Supported	Supported
Drive	Supported	Not supported
Wallet	Supported	Supported
Health	Supported	Supported
ML	Supported	Supported
Awareness	Supported	Supported
Scan	Supported	Supported
Nearby Service	Supported	Supported
Safety Detect	Supported	Supported

Dynamic Tag Manager	Supported	Not supported
Identity	Supported	Supported
Panorama	Supported	Supported
HMS Core base	Supported	Supported
FIDO	Supported	Supported
Remote Configuration	Supported	Supported
Crash	Supported	Supported
Cloud Functions	Supported	Supported
App Linking	Supported	Supported
Auth Service	Supported	Supported
APP Messaging	Supported	Supported
APM	Supported	Supported
Cloud Storage	Supported	Supported

More Details:

<https://developer.huawei.com/consumer/en/doc/development/Tools-Guides/convertor-000001050147221>



GMS TO HMS CONVERT



How does it work?

```
boolean isGmsAvailable(android.content.Context context) {  
    return com.google.android.gms.common.GoogleApiAvailability  
        .getInstance()  
        .isGooglePlayServicesAvailable(context) ==  
        com.google.android.gms.common.ConnectionResult.SUCCESS;  
}
```

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```
boolean isHmsAvailable(android.content.Context context) {  
    return com.huawei.hms.api.HuaweiApiAvailability  
        .getInstance()  
        .isHuaweiMobileServicesAvailable(context) ==  
        com.huawei.hms.api.ConnectionResult.SUCCESS;  
}
```





Integrate Kits or Services Part 03

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Repository

Module: app

Please choose the ability you want to use

Search:

Name	Version	Size	Status
App Services			
<input type="checkbox"/> Wallet Kit	4.0.4.301		Not used
<input type="checkbox"/> Ads Lite	13.4.33.300		Not used
<input type="checkbox"/> Health Kit	5.0.4.300		Not used
<input type="checkbox"/> App Linking	1.4.1.300		Not used
<input type="checkbox"/> Awareness Kit	1.0.7.303		Not used
<input type="checkbox"/> Dynamic Tag Manager	5.0.4.301		Not used
<input type="checkbox"/> Map Kit	5.0.3.302		Not used
<input type="checkbox"/> Push Kit	5.0.2.300		Not used
<input type="checkbox"/> Account Kit	5.0.3.301		Not used
<input type="checkbox"/> Location Kit	5.0.4.300		Not used
<input type="checkbox"/> In-App Purchases	5.0.4.301		Not used
<input type="checkbox"/> Game Service	5.0.3.301		Not used

Pack Up All / Expand All Show Used Kits

If you use Huawei APIs, you agree to the [Agreement on Use of Huawei APIs](#) by default.

Cancel Apply OK

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Cloud Debugging

HMS Toolkit provides Cloud Debugging for you to perform 24/7 uninterrupted testing on your app running on remote real devices, covering massive Huawei's latest and hottest models.

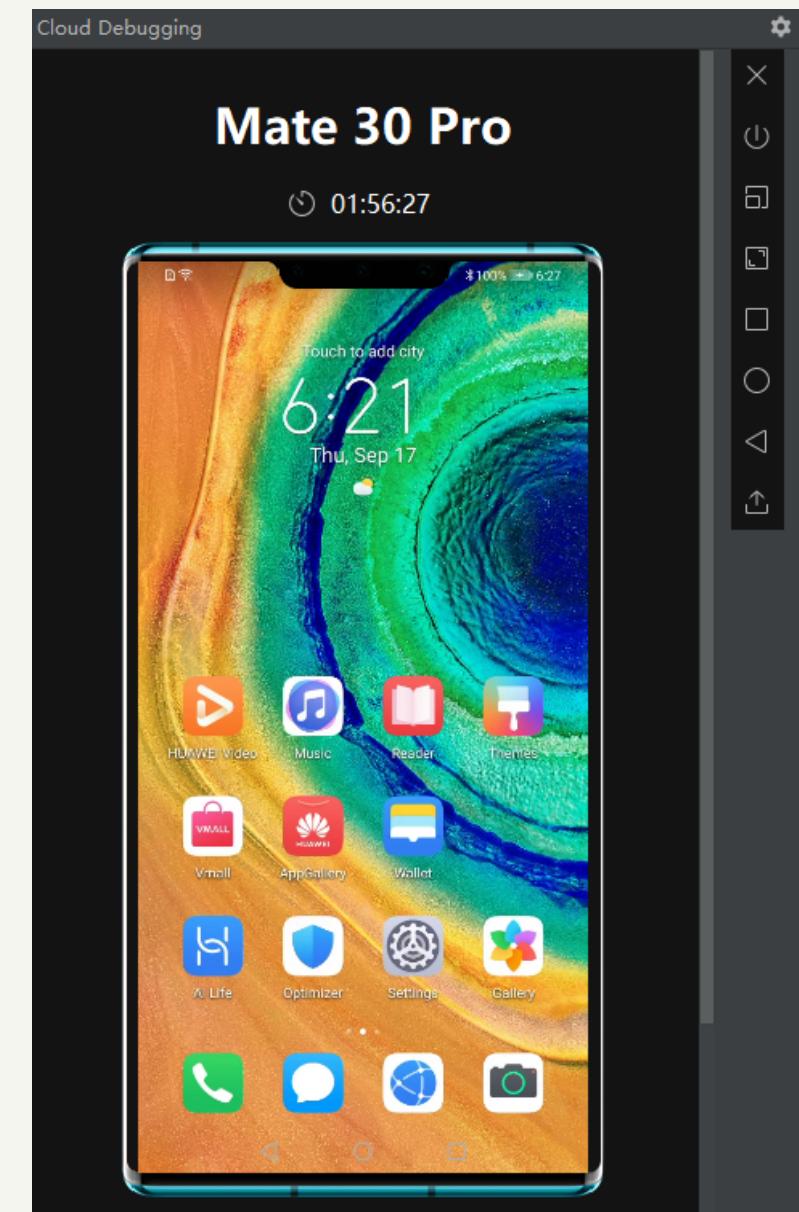
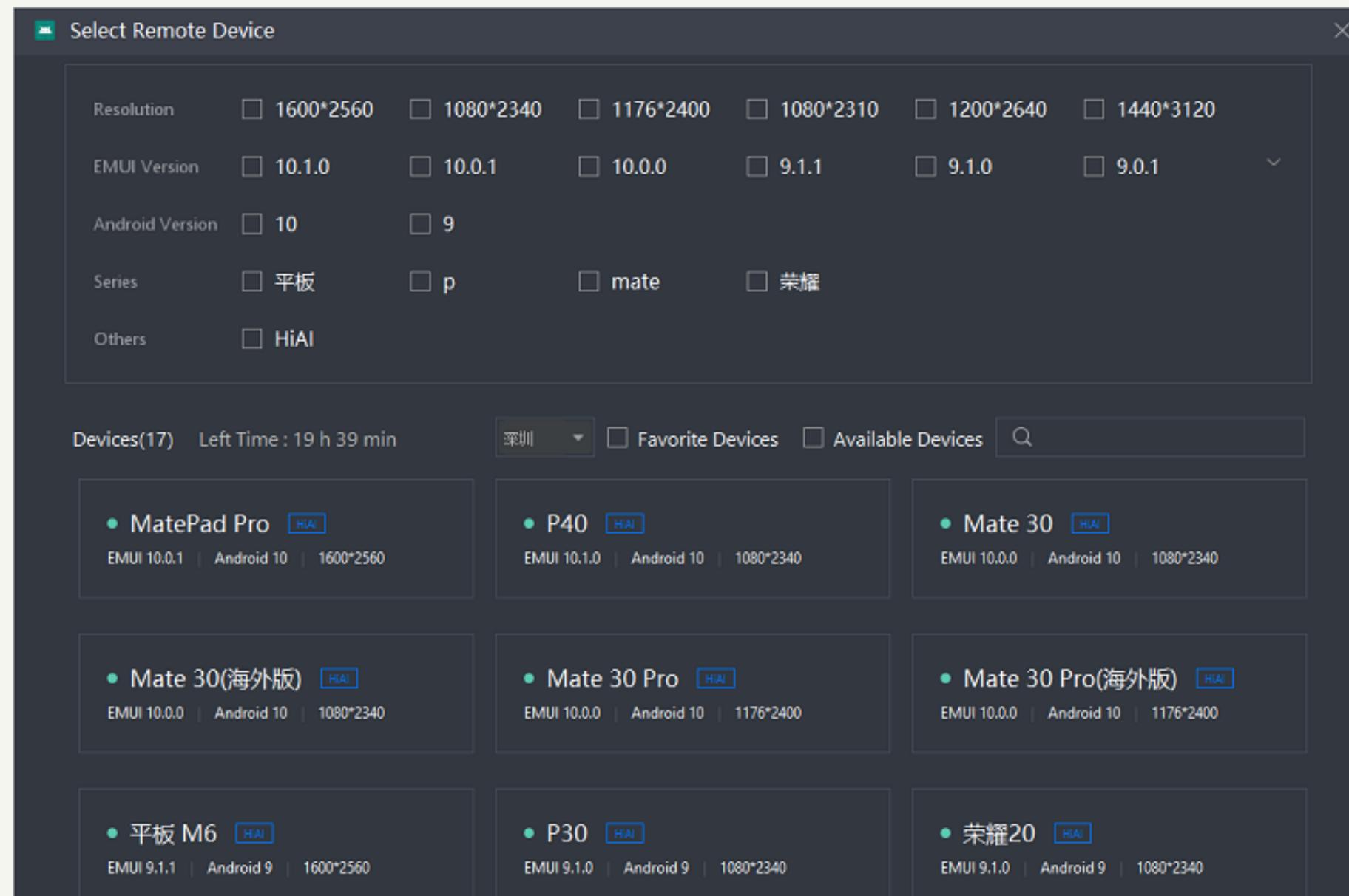


Cloud Testing

HMS Toolkit provides Cloud Testing for you to perform automatic testing of native apps, hybrid apps, and games. Based on excellent DFX experience, Cloud Testing supports the compatibility test, stability test, performance test, and power consumption test.



CLOUD DEBUGGING



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CLOUD TESTING



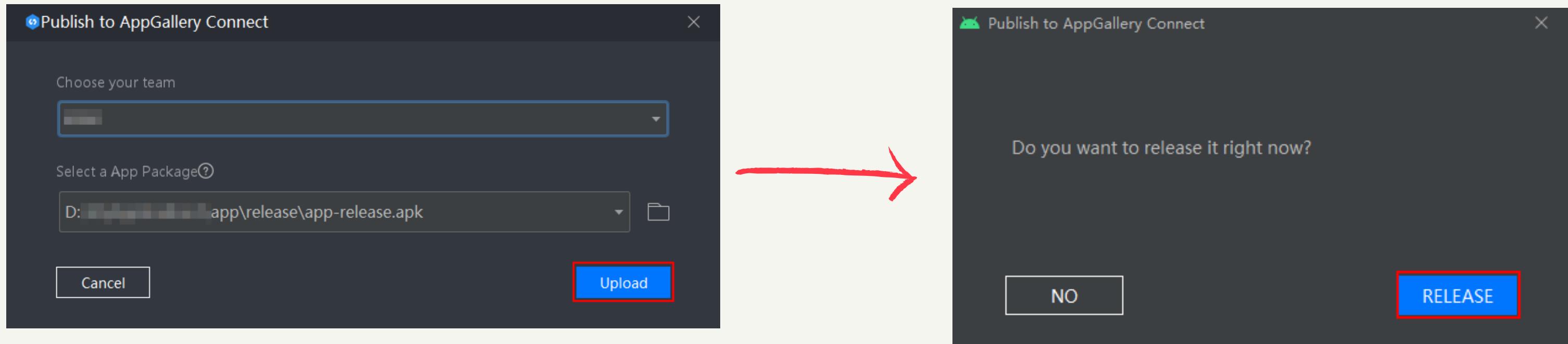
The image illustrates the workflow for cloud testing an Android application using the Cloud Testing feature in Android Studio. It consists of four main panels:

- Top Panel:** The Android Studio interface with the title "My Application [D:\workspace\AndoridProject] - Android Studio".
- Left Panel (Cloud Testing Task List):** Shows a list of tasks with a "New Task" button highlighted with a red box.
- Middle Panel (New Task Dialog):** A modal dialog for creating a new task. It includes fields for "Select Category" (Compatibility Test), "Please Select Apk File" (D:\workspace\AndoridProject\app\build\outputs\apk\debug\app-debug.apk), and "Test Devices" (Selected Devices4). The "Confirm" button is highlighted with a red box.
- Right Panel (Test Report):** The detailed test report for the task "HUAWEI Video". It shows a summary with a "succeed" status, the test version (8.5.70.303), and the date (2020-06-16 16:43:05). The report includes a "Download report" button, a "Pass rate" chart (100%), an "Issue distribution" chart, a "Device model distribution" table, and a "Test results by device model" table. The "Download report" button is highlighted with a red box.

A red arrow points from the "New Task" button in the task list to the "New Task" dialog. Another red arrow points from the "New Task" dialog to the "succeed" status in the test report. A large red arrow points from the "succeed" status to the "Download report" button. A red circle with the number "26" is drawn around the "Download report" button.



PUBLISH APP



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Draft

! Please fill in all the required app information before continuing.

Status: Draft

Review comments: --

Countries/Regions

* Countries/Regions: All

Chinese mainland Chinese mainland

- Europe
- Africa
- Middle East
- North America
- Central Asia
- Asia Pacific
- Latin America and the Caribbean

New country/region

Save Submit



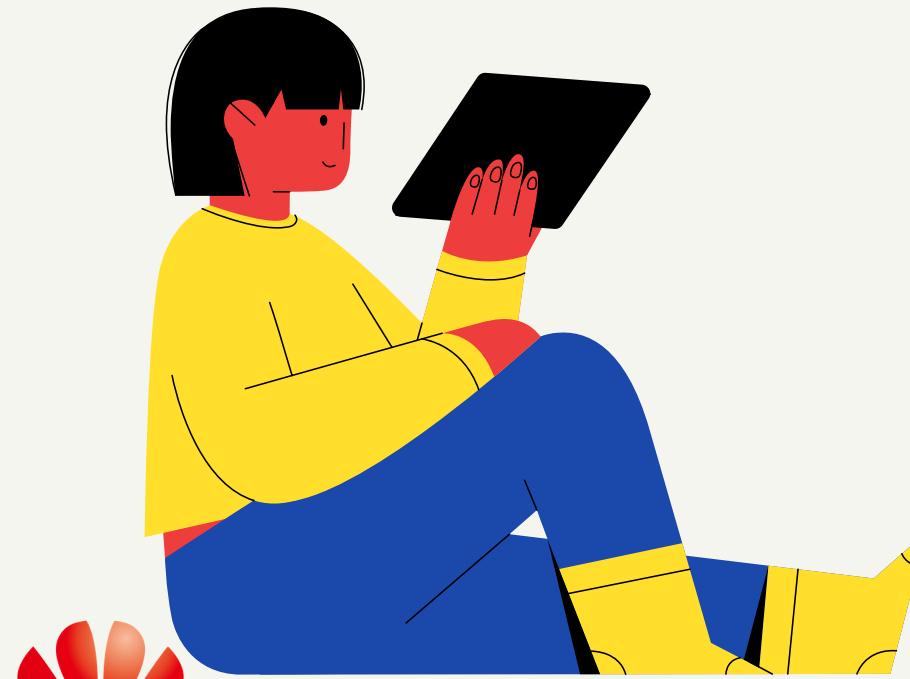
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Q & A

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Thank you for listening

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