



# Mobile Phone Security



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# **Google Gapps – Download Gapps for Android**

## Gapps

- ✓ Gapps (or Google Apps) are the proprietary applications developed by Google and are included in most Android devices.
- ✓ These are the core Google applications that are found in every phone and tablet so you can sign in to Google services and download the latest apps and games from the Google Play Store.
- ✓ Most of these Gapps can now be found and updated by the Google Play Store app

Ref: <https://www.teamandroid.com/gapps/>

## Gapps

- ✓ however, you still need the complete Gapps package installed into your /system directory when working with custom ROMs.
- ✓ These apps are always running on an Android device under the process of com.google.process.gapps (Google Services Framework / Google Play Services)

Ref: <https://www.teamandroid.com/gapps/>

## Gapps

- ✓ Previously, you only needed to download Gapps as a single package, but now, there are several variants available – depending on the number of Google apps you want to include in your Android device.
- ✓ The most popular variants are: pico, nano, micro, mini, full, stock and super.

Ref: <https://www.teamandroid.com/gapps/>

## Why download GApps?

- ✓ You need to download Gapps when you install a custom ROM on your Android phone, tablet, TV or watch. Most custom ROMs are built using the AOSP (Android Open Source Project) code.
- ✓ For more information visit :  
<https://www.teamandroid.com/gapps/>
- ✓ For more information visit: <https://opengapps.org/>

Ref: <https://www.teamandroid.com/gapps/>

## Gapps – Installation steps

1. Open GAPPS available for various platform and Android Version.
  - ✓ So it is important to know the platform and version used by the Android phone or android virtual machine.
  - ✓ To know download
    - ✓ CPU-Z-Android to discover the architecture (cpu-z\_1.07.apk)
    - ✓ Download from the internet
  - ✓ Check the CPU architecture and Android Version

## Gapps – Installation steps

2. Genymotion is support the X86\_32 (X86 32 bit) CPU architecture.
- ✓ And some application compiled and built on ARM or ARM 64 or X86\_64
- ✓ Same will be happen in the case of GAPPS
- ✓ So let make Genymotion compatible to understand the ARM or ARM64 instructions.
- ✓ Otherwise you will get error  
INSTALL\_FAILED\_NO\_MATCHING\_ABIS



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- ✓ INSTALL\_FAILED\_NO\_MATCHING\_ABIS –

Solution

- ✓ To make the app to work in both the CPU architectures, we need to install the ARM Translation.

- ✓ Steps for installation:

- ✓ Download the ARM Translation from the link Genymotion-ARM-Translation\_v1.1.zip –

[https://docs.google.com/file/d/0B-](https://docs.google.com/file/d/0B-p1r5SNN4adcmhtaGdMVml0Qzg/edit)

[p1r5SNN4adcmhtaGdMVml0Qzg/edit](https://docs.google.com/file/d/0B-p1r5SNN4adcmhtaGdMVml0Qzg/edit)

## Gapps – Installation steps

3. Download Gapps from

- ✓ <https://www.teamandroid.com/gapps/>
- ✓ For more information visit: <https://opengapps.org/>
- ✓ According to platform and Android Version
- ✓ And drag and drop to Genymotion Android Emulator
- ✓ Restart the Emulator and Google Apps will be available in the Android Phone or Emulator.
- ✓ Enjoy

- ✓ You can download application from Google Play store install in the Genymotion emulator and perform following things
  - ✓ Reverse engineering and can do secure source code review
  - ✓ Application security pen testing
  - ✓ Static or dynamic analysis
  - ✓ Android application forensics by performing addition / un installation / deletion operation and upload the virtual image to Autopsy or FTK for forensics.



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