

Android Studio Problems and Solutions

Stephen Gilmore

School of Informatics

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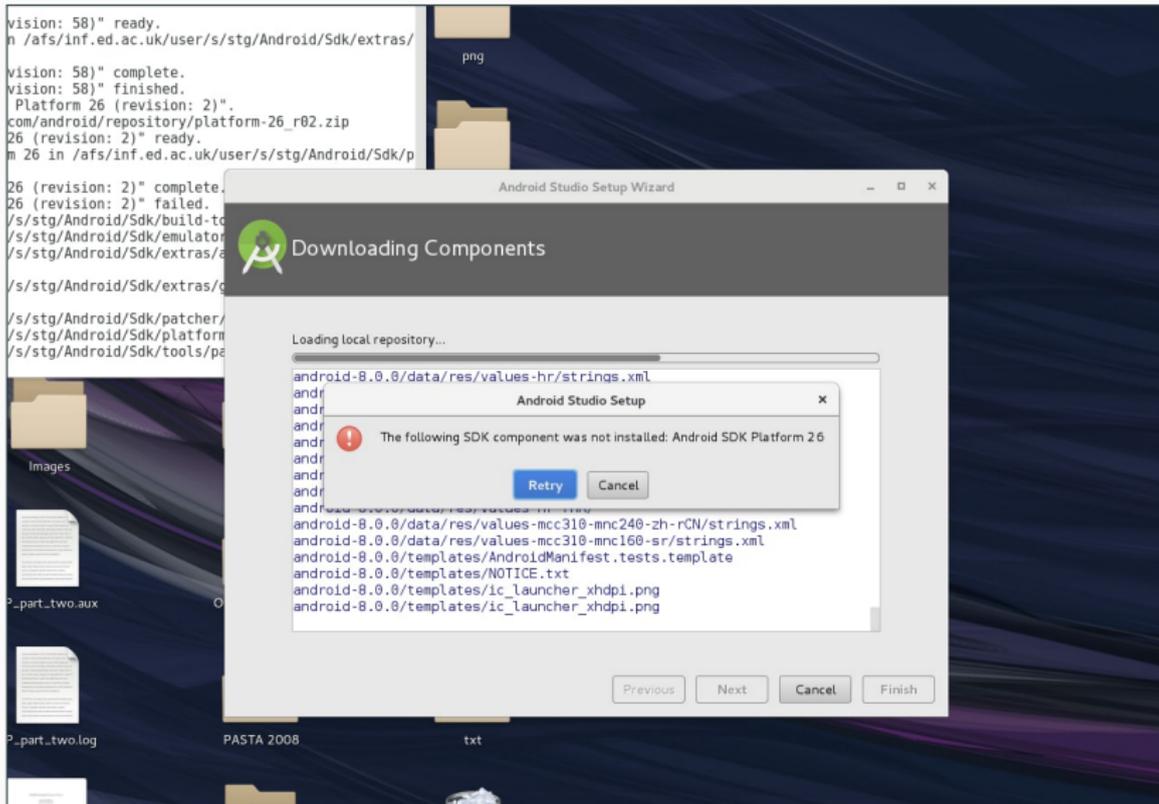
1. Using Android Studio on DICE
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Using Android Studio on DICE

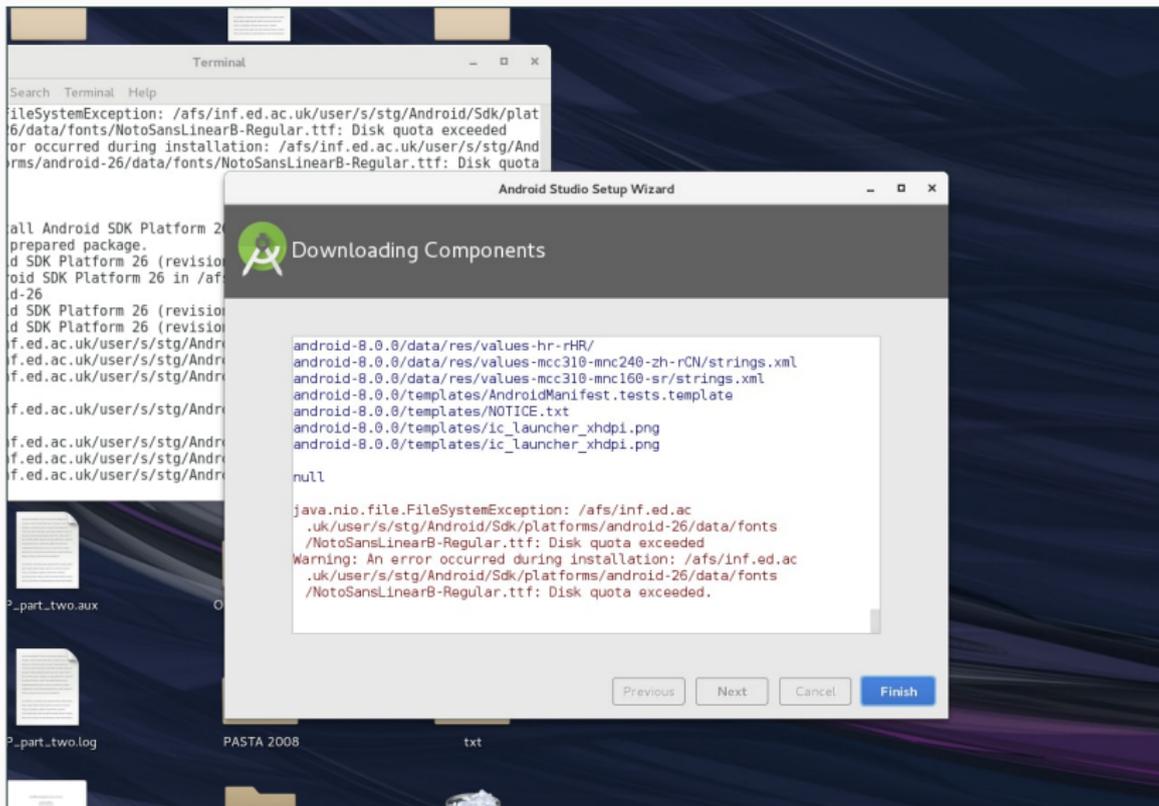
Getting started on Android Studio with DICE

- Android Studio is installed on DICE in `/usr/bin/androidstudio3`
- If `/usr/bin/` is in your PATH then you can run Android Studio by typing `androidstudio3`
- The first time that you run Android Studio it will take you through a setup dialogue which ask you to install additional components such as SDKs.

Problem: SDK components will not install



Explanation: Your disk quota has been exceeded

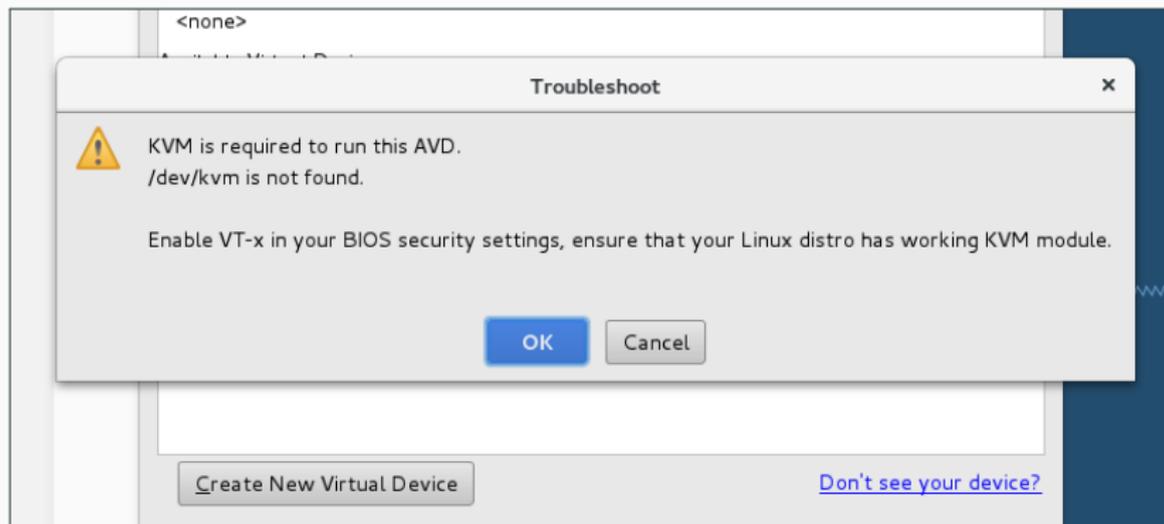


Solution: Increase your disk quota

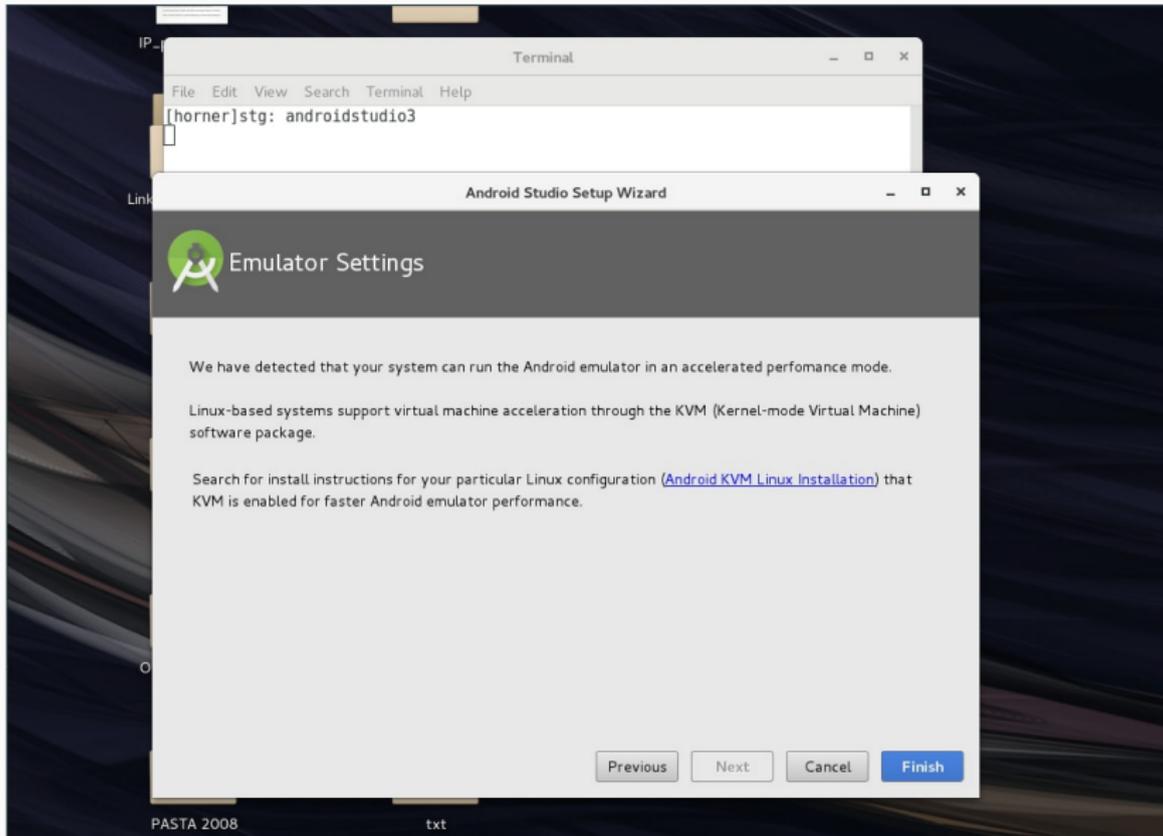
- You can increase your disk quota by following the instructions at <http://computing.help.inf.ed.ac.uk/afs-quotas>

Problem: The emulator will not run (/dev/kvm not found)

- To run your Android app you need either to have a physical Android device, or to use the emulator (an **Android Virtual Device**, or **AVD**). Then this message appears.



Explanation: KVM provides hardware acceleration



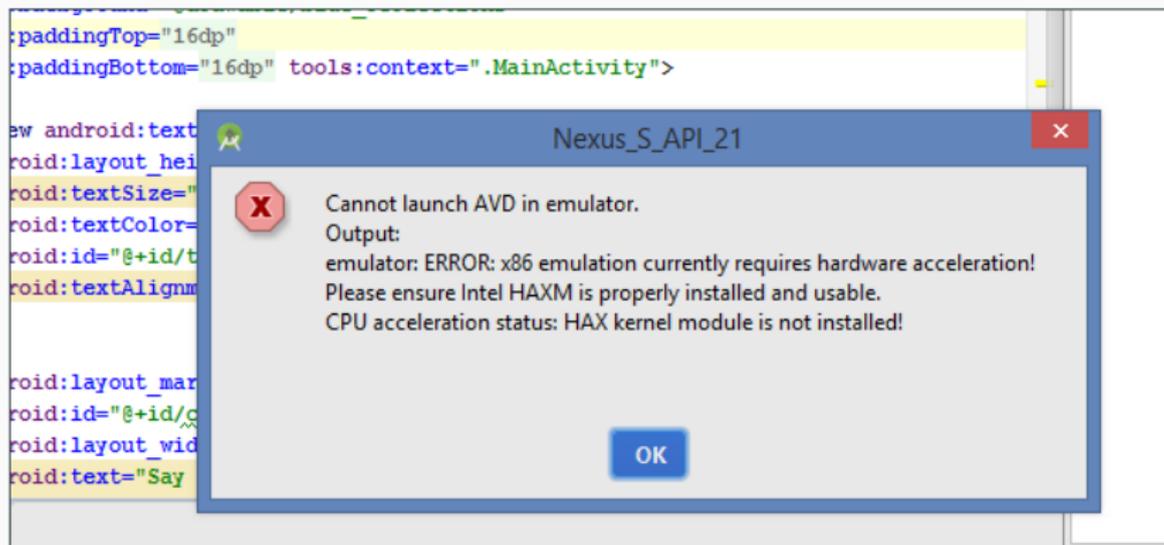
Solution: Report this to Support and use a different machine

- This is a problem with an incorrect configuration of the BIOS on some machines.
- Please report this as a machine fault in the usual way using the Informatics Computing Support form which is located at <http://www.inf.ed.ac.uk/systems/support/form/>
 - **Please include the name of the machine.**
- Support will then fix the machine, or relocate it if it cannot be fixed. We want to ensure though that **as few machines as possible** are unable to run Android Studio.
- **Switch to a different machine in the lab** and try running the emulator there.

Using Android Studio on your own machine

Problem: The emulator will not run (HAX not installed)

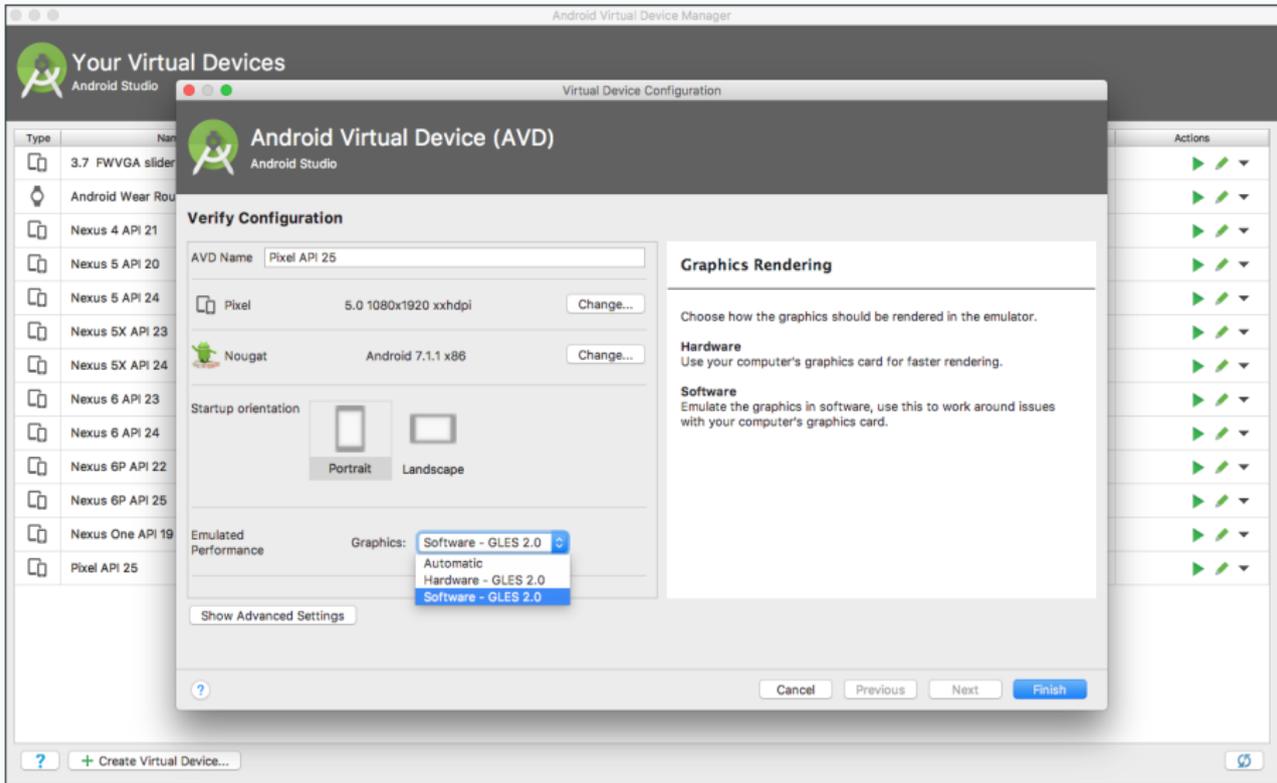
- You try running your app on the emulator and a message like this appears.



Solution: Enable hardware acceleration if possible

- Information on enabling hardware acceleration for the Android Emulator is available at <https://developer.android.com/studio/run/emulator-acceleration.html>
- Use of hardware acceleration can be turned off when running the emulator from the command line following the instructions at <https://developer.android.com/studio/run/emulator-commandline.html>
- You can use a command such as
`emulator @Nexus_6P_API_25 -accel off`
but the resulting emulator may be unusably slow.
- Alternatively, use the Genymotion emulator which does not require hardware acceleration. This is available from <https://www.genymotion.com>

Or: Choose software emulation for your AVD (click to edit)



Android Virtual Device Manager

Your Virtual Devices

Android Studio

Virtual Device Configuration

Android Virtual Device (AVD)

Android Studio

Verify Configuration

AVD Name: Pixel API 25

Pixel 5.0 1080x1920 xxhdpi

Nougat Android 7.1.1 x86

Startup orientation: Portrait Landscape

Emulated Performance: Graphics: **Software - GLES 2.0** (dropdown menu open showing: Software - GLES 2.0, Automatic, Hardware - GLES 2.0, Software - GLES 2.0)

Graphics Rendering

Choose how the graphics should be rendered in the emulator.

Hardware
Use your computer's graphics card for faster rendering.

Software
Emulate the graphics in software, use this to work around issues with your computer's graphics card.

Android Studio bugs

Problem: Android Studio has started behaving weirdly

- Android Studio is refusing to open editors and/or producing error messages such as **PSI and index do not match**.

Solution: Invalidate caches and restart

- Choose **File -> Invalidate caches and restart** then click on the **Invalidate and restart** button.
- After restart you might see the message **Indexing...** and Gradle build actions that could take some minutes to complete.