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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](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.

![Screenshot of troubleshoot dialog box](image)
Explanation: KVM provides hardware acceleration.

We have detected that your system can run the Android emulator in an accelerated performance mode.

Linux-based systems support virtual machine acceleration through the KVM (Kernel-mode Virtual Machine) software package.

Search for install instructions for your particular Linux configuration (Android KVM Linux installation) that KVM is enabled for faster Android emulator performance.
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.

![Emulator Message](image-url)
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 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.