Android Studio Problems and Solutions

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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.

	<none></none>			
	Troubleshoot		×	
	KVM is required to run this AVD. /dev/kvm is not found.			
	Enable VT-x in your BIOS security settings, ensure that yo	our Linux distro has working KVM mod	lule.	
	OK Cancel			
	<u>Create New Virtual Device</u>	Don't see your device?		

Explanation: KVM provides hardware acceleration

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File Edit View Search	Terminal Help			
[horner]stg: androids	tudio3			
k	Android Studio Setup Wiza	rd	_ = ×	
🛛 👧 Emulator Se	ttings			
We have detected that y	your system can run the Android emulator in	an accelerated perfoman	ce mode.	
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Linux-based systems sup software package.	port virtual machine acceleration through t	he KVM (Kernel-mode Virt	ual Machine)	
Search for install instruc	tions for your particular Linux configuration	(Android KVM Linux Insta	<u>llation</u>) that	
KVM is enabled for faste	r Android emulator performance.			
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- 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 *st* to edit)

	Android Virtual Device Manager										
Your Virtual Devices											
Virtual Device Configuration											
Type	Nan 3.7 FWVGA slider	Android Virtual Device (AVD)	Actions								
¥	Android Wear Rou	Verify Configuration	• / •								
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Co	Nexus 5 API 20	AVD Name Pixel API 25 Graphics Rendering	► / ▼								
Co	Nexus 5 API 24	Change	► / -								
Co	Nexus 5X API 23	Choose how the graphics should be rendered in the emulator.	× / -								
Co	Nexus 5X API 24	Nougat Android 7.1.1 x86 Change Hardware Use your computer's graphics card for faster rendering.	× / •								
Co	Nexus 6 API 23	Startup orientation Emulate the graphics in software, use this to work around issues	► / -								
Co	Nexus 6 API 24	with your computer's graphics card.	× / •								
Co	Nexus 6P API 22	Portrait Landscape	► / ▼								
Co	Nexus 6P API 25		► / -								
Co	Nexus One API 19	Emulated Graphics: Software - GLES 2.0 🗘	► / •								
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		Show Advanced Settings									
		Cancel Previous Next Frish									
? + Create Virtual Device											

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.