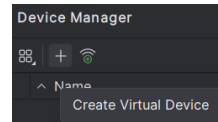
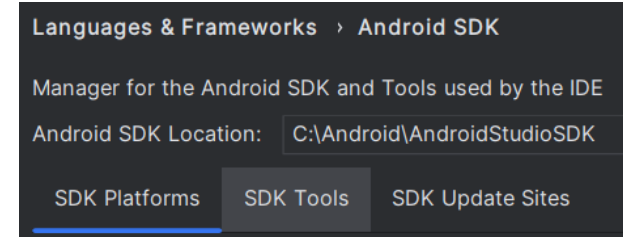


QT Tablet Configuration : Virtual Environment

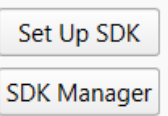
1. Set up the environment through Android Studio <https://developer.android.com/studio>
2. Install the SDK packages through the installer
3. In Tools>SDK Manager, make sure that for QT development you install:
 - The SDK Platforms for the target Android versions
 - The Android SDK Tools
 - The Android SDK Platform-tools
 - The Android SDK Build-tools
4. Within SDK Manager>SDK Tools tab, check the boxes for NDK and CMake, and complete installation.
5. Set up your virtual device through the Device Tab on the main screen, and click "Create Virtual Device"
6. Choose the device you'd like to simulate, and download the system image to configure correct version
7. After AVD configuration, press the green start button, so that when your emulator is running, it should appear in the list of available Android devices in QT
8. Inside QT Creator, load your project, and go to Projects>Manage Kits>Devices>Android
9. Specify the paths to the previous JDK, SDK, and NDK installations
10. Confirm the kit in your run settings, and once the emulator is selected as the target, clicking the "Run" button in Qt Creator will build your application, install it on the emulator, and start it



QT Tablet Configuration : Physical Device

Another way to run your programs is by using a physical device, like a tablet.

1. In your open QT project, go to Projects>Manage Kits>Devices>Android
2. Click, Set Up SDK to install the packages required through QT, and specify the paths for their locations
3. Install a JDK through <https://adoptium.net/>, and make sure that you are using the correct JDK, compatible with your device and program versions.

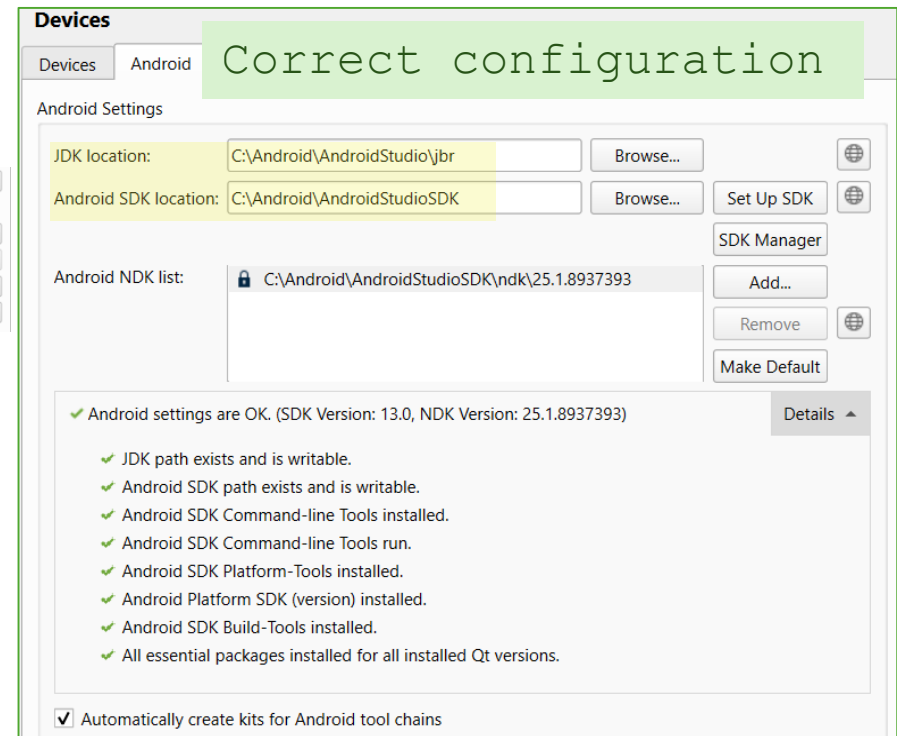
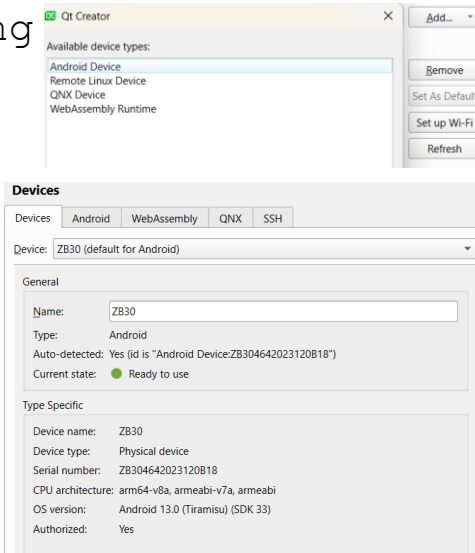


4. With the device plugged in, the device and kit should be automatically detected, and you will be able to run the connected device

5. It is important to make sure you have developer mode activated on your device

6. Your .pro file should then have something like this:

```
contains(ANDROID_TARGET_ARCH,arm64-v8a) {  
    ANDROID_PACKAGE_SOURCE_DIR = \  
        SSPWD/android  
}
```



QT Tablet Configuration : Kit Error Fix 5/1/24

If an error occurs where QT does not recognize the architecture of the device¹, even though it is confirmed² and the proper packages are installed³, then the fix is to hit the button: "Set up Wi-Fi", instead of using the cable as connection between the host and device.

The screenshot shows the 'Devices' panel in the Qt IDE. The 'Device' dropdown is set to 'T618 (default for Android)'. The 'General' section shows the device name as 'T618', type as 'Android', and current state as 'Ready to use'. The 'Type Specific' section shows the device name as 'T618', type as 'Physical device', and serial number as 'T618YC23104601'. The 'CPU architecture' is listed as 'arm64-v8a', and the 'OS version' is 'Unknown Android version. API Level: -1 (SDK -1)', which is highlighted with a red box. The 'Set up Wi-Fi' button is highlighted in yellow.

```
2 C:\Users\sasha>adb shell getprop ro.product.cpu.abi
arm64-v8a
```

```
3
```

Android 12.0 ("S")	31
<input checked="" type="checkbox"/> SDK Platform	31
<input checked="" type="checkbox"/> ARM 64 v8a System Image	31

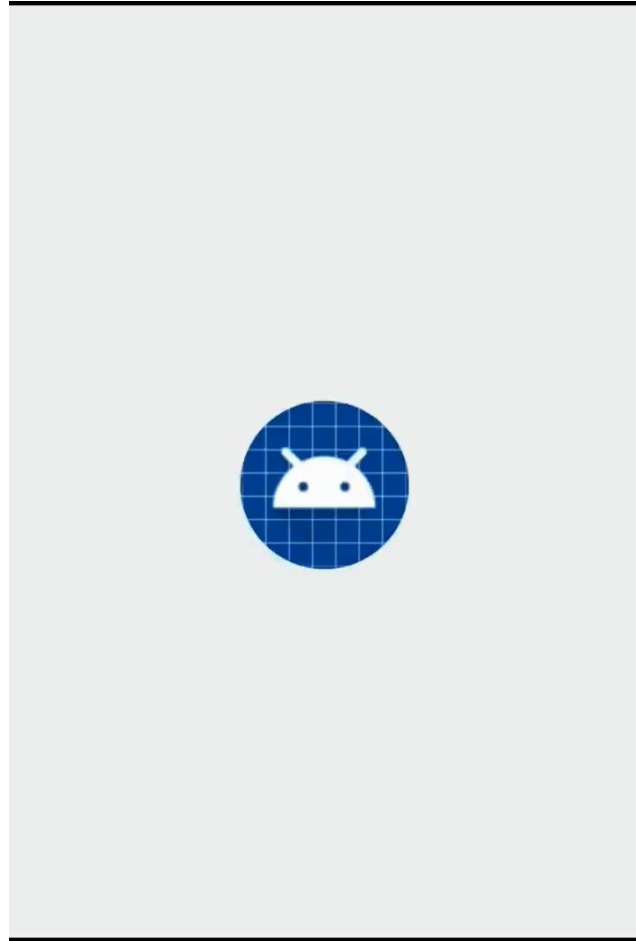
Error

For more information on this bug, visit the [QT bug reports on failed Android deployment](https://bugreports.qt.io/browse/QTCREATORBUG-27103)
: <https://bugreports.qt.io/browse/QTCREATORBUG-27103>

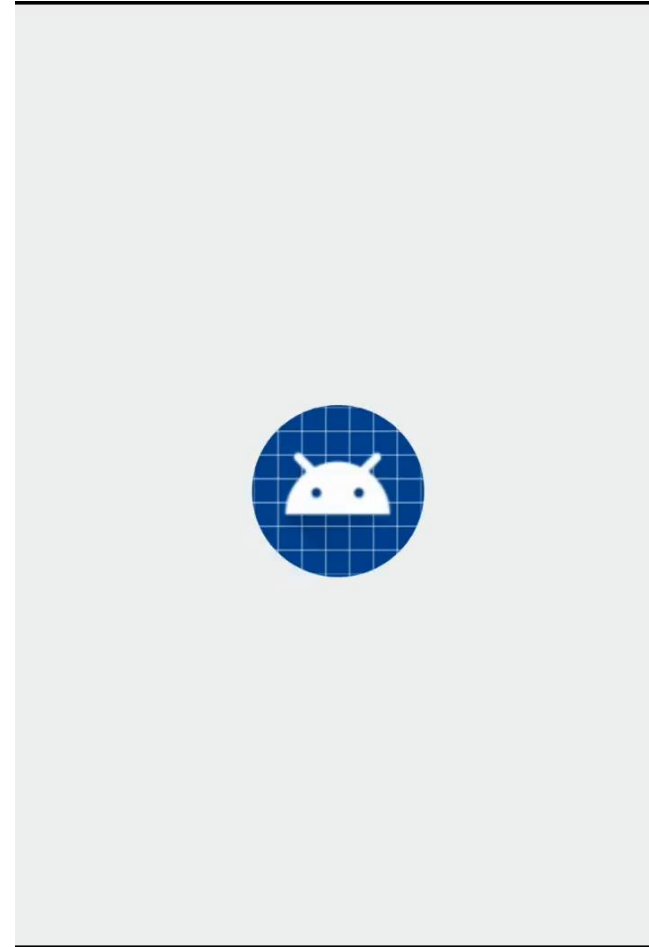
```
1 03:36:47: The deployment device "T618" does not support the architectures used by the kit.
The kit supports "arm64-v8a", but the device uses "".
Error while building/deploying project Charge (kit: Android Qt 6.5.2 Clang arm64-v8a)
When executing step "Deploy to Android device"
```

The screenshot shows the 'Devices' panel in the Qt IDE. The 'Device' dropdown is set to 'T618 (WiFi) (default for Android)'. The 'General' section shows the device name as 'T618 (WiFi)', type as 'Android', and current state as 'Ready to use'. The 'Type Specific' section shows the device name as 'T618 (WiFi)', type as 'Physical device', and serial number as '192.168.0.238:5555'. The 'CPU architecture' is listed as 'arm64-v8a, armeabi-v7a, armeabi', and the 'OS version' is 'Android 12.0 ("S") (SDK 31)'. The 'Authorized' status is 'Yes'.

Example programs run on tablet



QT Example Widget:
RobotArm



CHARGE