



## Basic steps

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Follow the video at

<http://www.embarcadero.com/starthere/xe5/index.html>

- This used to be an iOS page,  
but now starts with the Android information

## Android Mobile Help Wizard



### Help > Mobile Help Wizard:

<http://www.embarcadero.com/starthere/xe5/mobdevsetup/android/en/index.html>

Delphi Requires ADB (see further on) which is in Android SDK and NDK bundle

Summary:

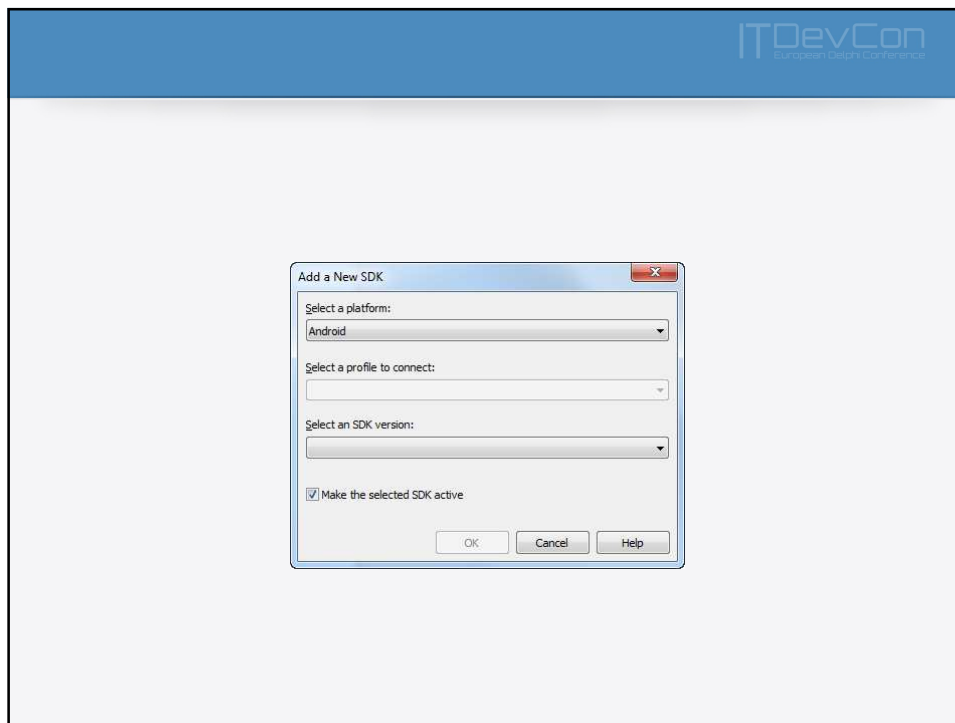
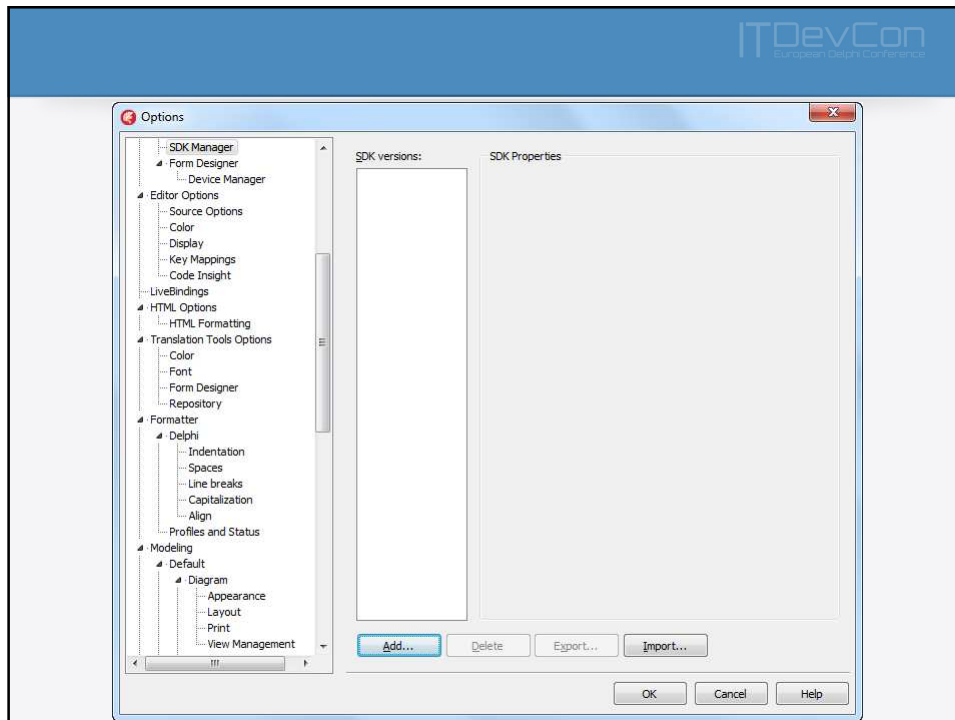
- Do not use emulator:
  - It is painfully slow
  - It does not run inside VMware/HyperV/VirtualBox/...  
(if you still want to run it, see a few slides later)
- Do use multiple devices: it is the real world
- Install remote screen viewer / control tools

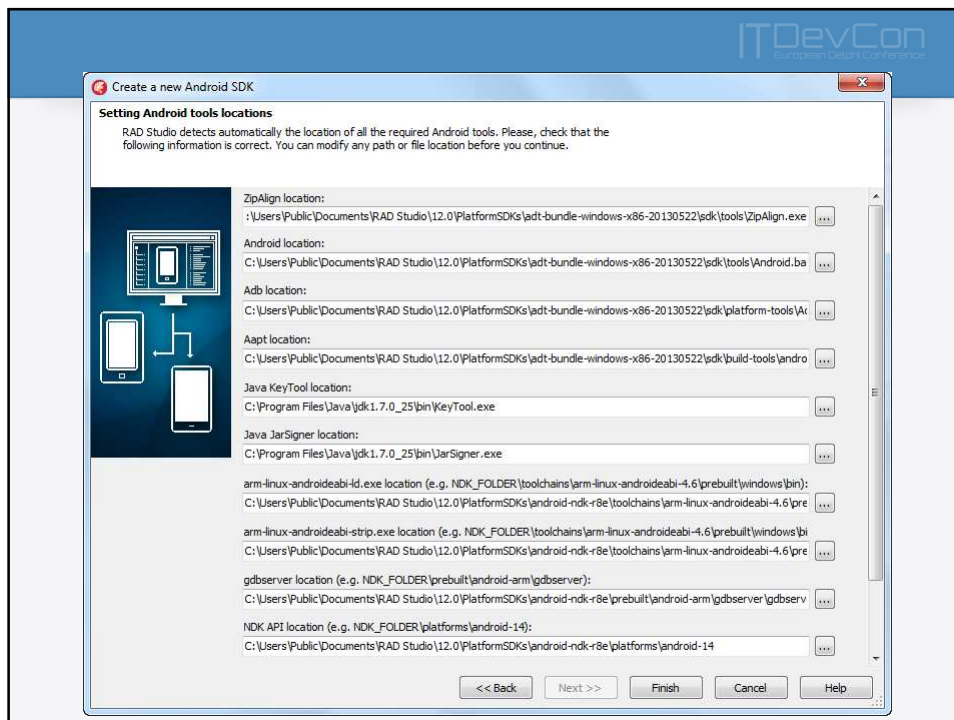
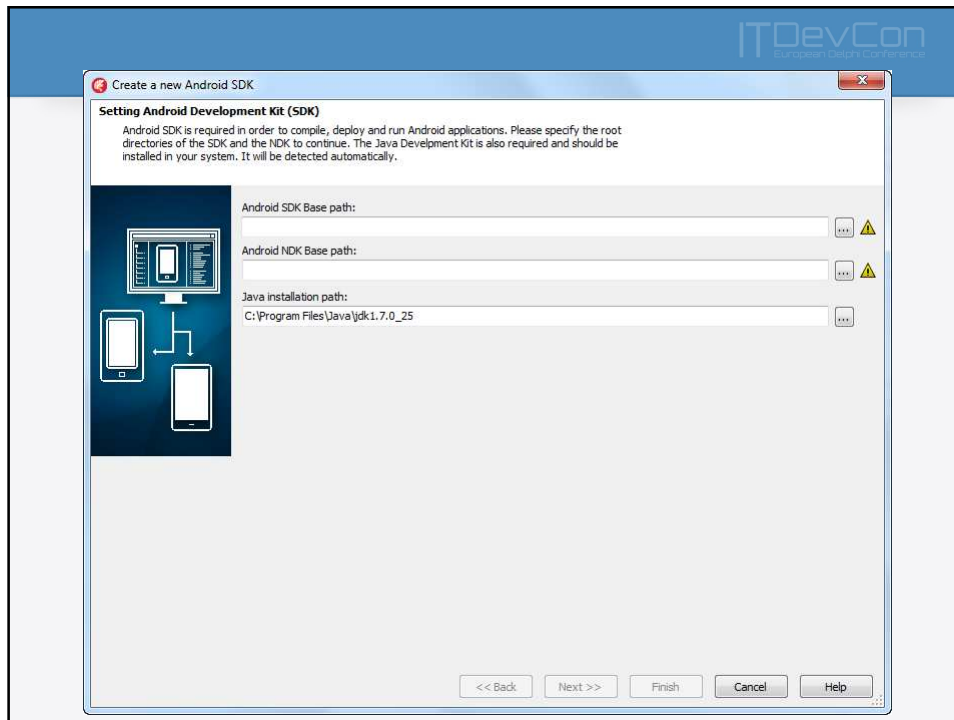
## SDK and NDK

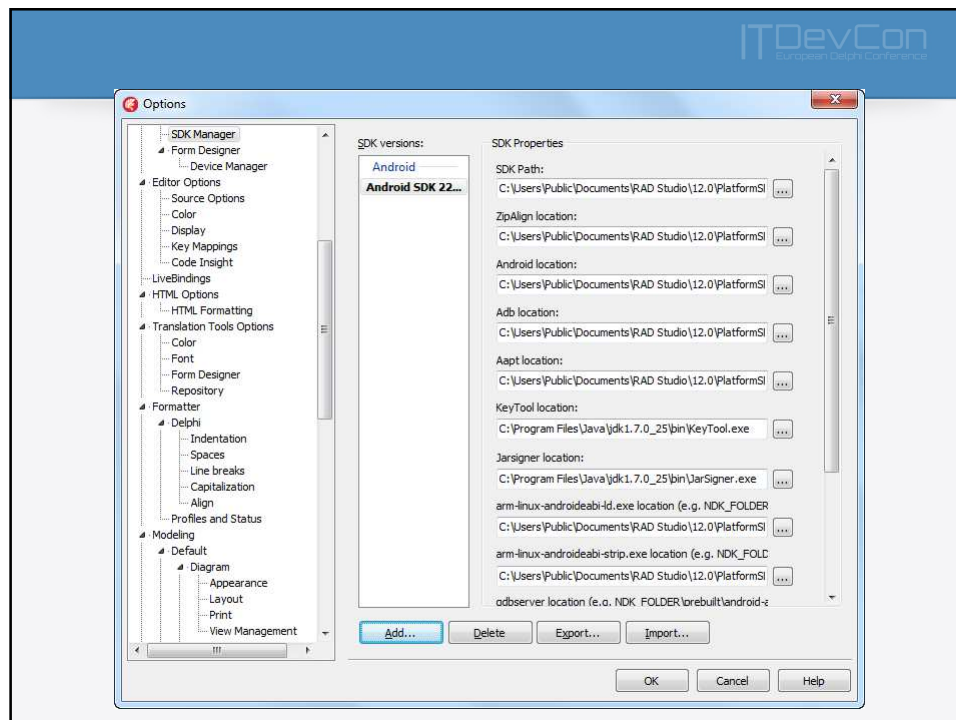


Show what happens when the SDK/NDK config is trashed

- C:\Users\Public\Documents\RAD Studio\12.0\PlatformSDKs\adt-bundle-windows-x86-20130522\sdk
- C:\Users\Public\Documents\RAD Studio\12.0\PlatformSDKs\android-ndk-r8e







## ADB: Android Debug Bridge

<http://developer.android.com/tools/help/adb.html>

Is part of the Android SDK

Delphi XE5 has it here:

- reg query  
HKEY\_CURRENT\_USER\Software\Embarcadero\BD  
S\12.0 /V AndroidPath
  - C:\Users\Public\Documents\RAD  
Studio\12.0\PlatformSDKs\adt-bundle-windows-  
x86-20130522\sdk\platform-tools\adb.exe

Requires some batch files to start successfully

Uses ADB USB drivers for your device to communicate with it

## ADB USB drivers



Google ADB drivers: for Google and compatible devices

- C:\Users\Public\Documents\RAD Studio\12.0\PlatformSDKs\adt-bundle-windows-x86-20130522\sdk\extras\google\usb\_driver
- Or download from <http://developer.android.com/sdk/win-usb.html>
- Or download via the Android SDK Manager; see batch files in C:\Users\developer\Copy\zephyr-xe5\Tools\ADT

Install the Windows drivers, for instance:

- HTC, Corporation - Other hardware - My HTC; Download size: 1.1 MB
- HTC, Corporation Other hardware software update released in September, 2013

Universal Naked Driver: \*.inf modification to allow for most devices

- 0.73 <http://forum.xda-developers.com/showthread.php?t=2386956>
- 0.72 <http://forum.xda-developers.com/showthread.php?t=1426502>
- Find the USB ID for your device through [http://www.nirsoft.net/utils/usb\\_devices\\_view.html](http://www.nirsoft.net/utils/usb_devices_view.html)
- How to modify .inf: <http://stackoverflow.com/questions/4204232/android-usb-adb-driver-for-htc-desire-hd>

Get drivers from your vendor.

- Be aware they often install OLD versions of the ADB binaries

## ADB demo



Show-Devices.bat

- A connected device does not means it will always work

Run-Monitor.bat

Android Debug Monitor;

- Explain what this means:
  - [2013-11-04 07:37:13 - ddms]ADB rejected shell command (ls -l /): closed

Run-droidAtScreen-1.0.2.bat

- Easiest way to remote see the screen of your Android device

Run-SDK-Manager.bat

Android SDK Manager

- Show what is installed and how to update it

Run-ASM\_2\_50.bat

Android Screen Monitor; has trouble finding ADB.EXE

Run-AVD.bat

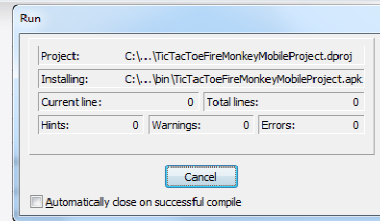
Android Virtual Devices: won't work inside a VM anyway

## When uninstall does not work

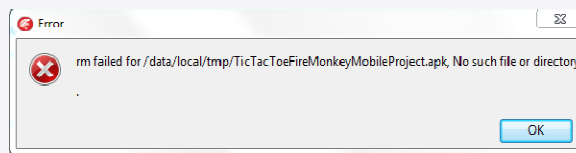
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When you do not get here

- But it hangs at “uninstalling
- ”



Or get this:



Then reconnect your device

## Using a remote Android Emulator

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Note the emulator is really really slow. Really.

You need to two-way tunnel TCP ports 5554 and 5555 between the two machines.

Tunneling options:

- ssh  
<http://delphi.org/2013/09/debugging-against-a-remote-android-emulator/>
- httptunnel  
<http://stackoverflow.com/questions/1754162/remote-debugging-with-android-emulator>

You can also connect over WiFi to a physical Android device like this:

- <http://stackoverflow.com/questions/2604727/how-can-i-connect-to-android-with-adb-over-tcp>  
<http://delphi.org/2013/10/wireless-android-debugging-with-delphi-xe5/>