1.0 Installing Thinkpad Tablet ADB Interface Driver.

The following is a step by step guide for setting up the Android SDK and ADB tools onto the Lenovo Thinkpad Tablet. This guide was created ThinkpadTabletForum member TekMason and now has images for the steps outlined.

This guide is for those that are first attempting to install the Android SDK and ADB tools on your PC/Laptop and for installation onto a Windows 7 64-bit PC or laptop that didn't have a previous installation. If you had a previous ADB setup on your machine, you may not need this guide unless you encounter an error issuing the adb commands or can't connect to the device. In a case like that, it is recommended to remove any previous ADB/SDK installations before following the steps outlined below.

Disclaimer:
As always, you are ultimately responsible for any development activities on your device, such as installing files from this guide, editing files, adding code, etc. ThinkpadTabletForums, its owner and staff are not liable for any actions you might undertake as a result of information used from this site.

1.1   Download the adb driver zip file from the Lenovo's support page.

1.2   Extract the zip contents onto your C Drive.

1.3   Go to where the files have been extracted and right click on the "android_winusb.inf"file and select "Open With", choose any text editor you have or Notepad.
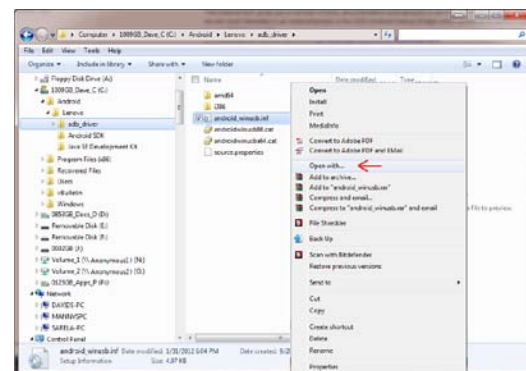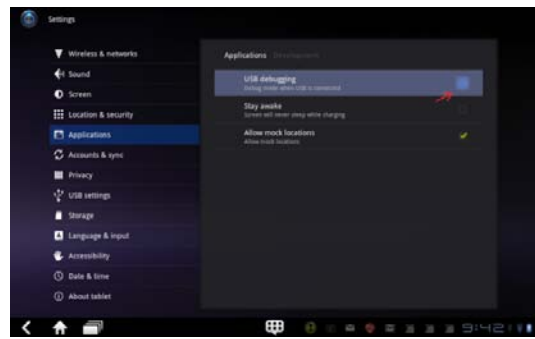
1.4   In the text editor, scroll down to the [Google.NTamd64] section and insert the following code.

```
;
;NVIDIATegra
%SingleAdbInterface% = USB_Install, USB\VID_0955&PID_7000
%CompositeAdbInterface% = USB_Install, USB\VID_0955&PID_7100&MI_01
;
;NVIDIA Tegra
%SingleAdbInterface% = USB_Install, USB\VID_17EF&PID_741C
%CompositeAdbInterface% = USB_Install, USB\VID_17EF&PID_741C&MI_01
;
```

BEFORE -->

After-->

1.5   Save file and close the editor.

1.6   Turn on the Lenovo Thinkpad Tablet
       (if it isn't already).

1.7   Press the slider bar icon to display the Settings
       property page.

1.8   Press Applications on the left side of the page.

1.9   Press Development

1.10	USB debugging should have a check in it. If not, then make it so.	

1.11	Press the OK button on the pop up dialog.	
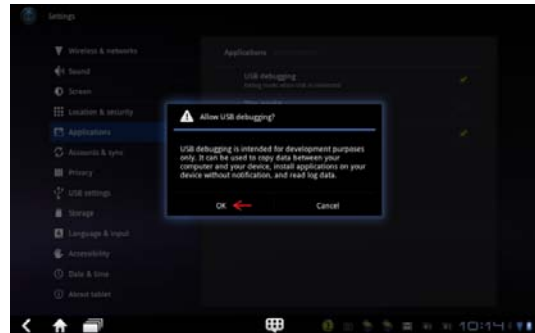
1.12	Connect the Tablet to your computer or laptop.	

1.13	Open Device Manager (Start→ Control Panel→ System→ Device Manager)	
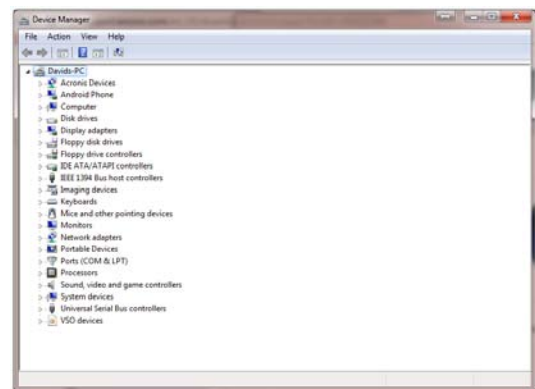
1.14	Expand the Other Devices node. (In my example it shows as Android Phone)	
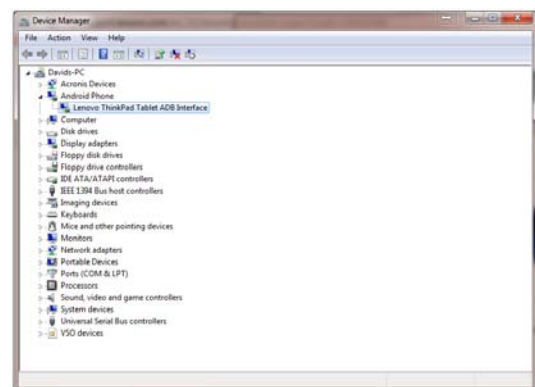
| 1.15	Right click the Thinkpad Tablet node and select Update Driver Software.	
1.16	Select Browse my computer for software.	
1.17	Browse to the folder that contains the driver files.	
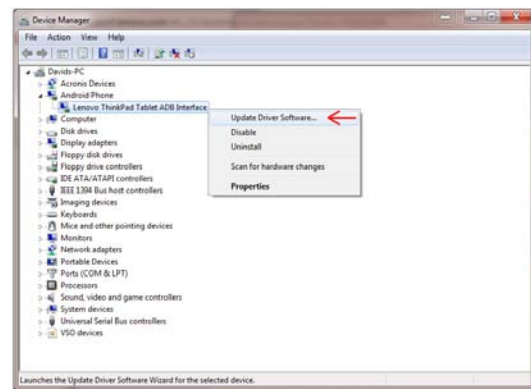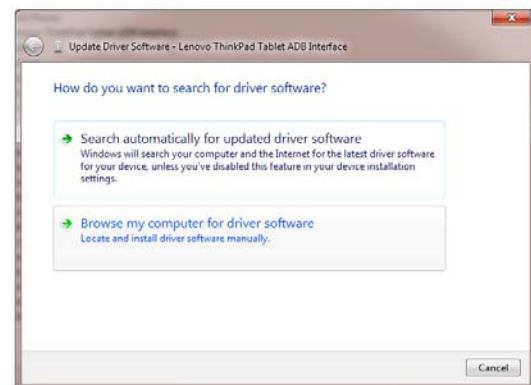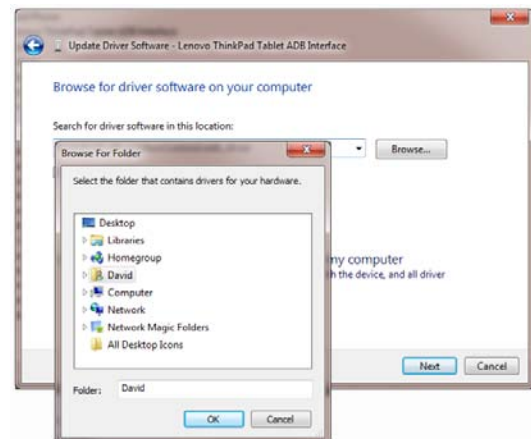
1.8   Select the driver folder and continue with the installation.

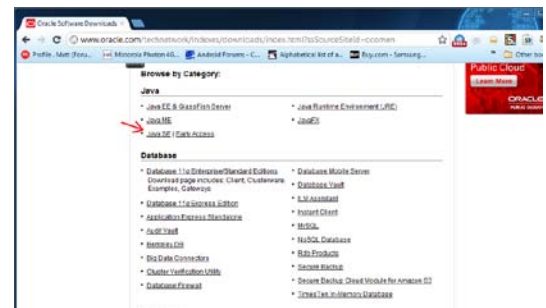## 2.0 Install the Java SE Development Kit (JDK)

The JDK is a prerequisite for the Android SDK and ADB. Note that a JRE (java Run-Time Environment) is not the same as the JDK.

2.1   Download the Java SE Development Kit (JDK) from the Oracle [website](#).
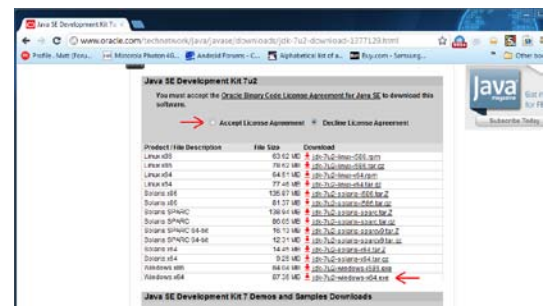

A-   Click Downloads (on the menu bar)
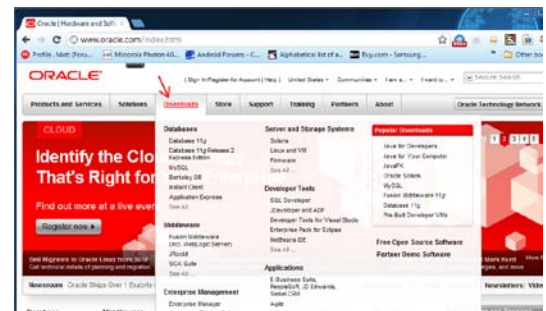
B-   Scroll down to Browse by Category, Java. Select Java SE.

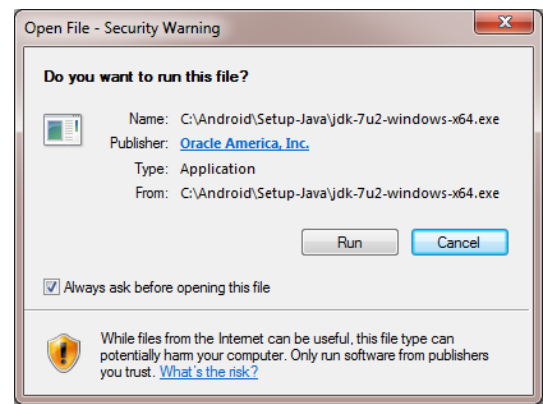C-   Scroll down to Java Platform, Standard Edition section and click on the JDK download button (Java SE 7u2).

D-   Select Accept License button, then select the Windows x64 version and then download to the directory of your choice.
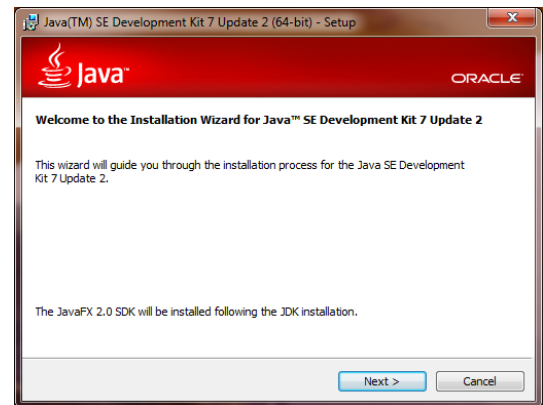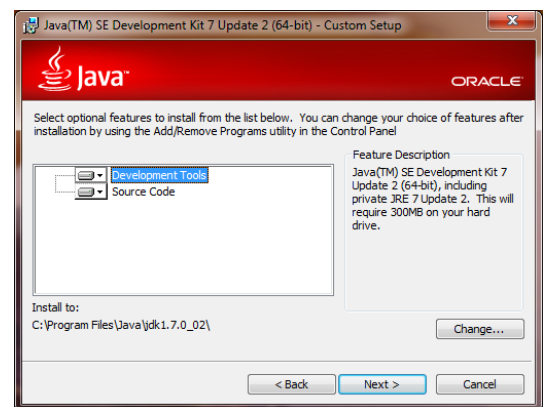
2.2 Proceed to the directory where you downloaded the file and run the installer.

2.3 The Installation Wizard appears, click "Next".

**2.4** Select the defaults settings, then click next.

2.5 The Installation completes, you can click the "X" or the Continue button to close the dialog.
(Note: you do not have to register at the end of the installation.)

3.0 Install the Android SDK (Software Development Kit)

The Android SDK gives you a number of tools, documentations and samples to develop for Android OSes. The tool that we are most interested in as rooters/hackers is the ADB (Android Debug Bridge) which allows us to perform operations on our TPT from our PC/laptop.
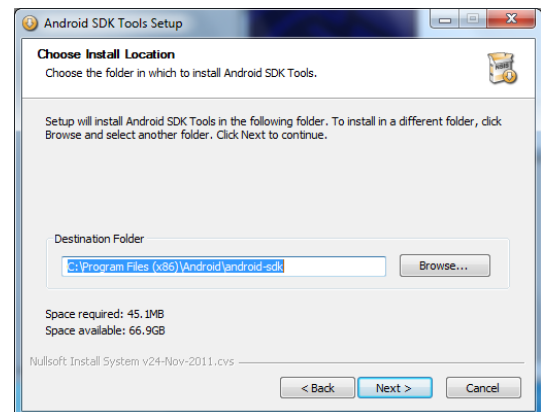
3.1   Download the Windows Android SDK (Installer file) from the Android Developers site.
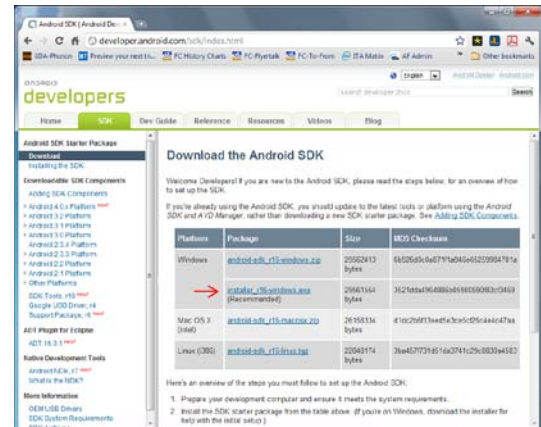
3.2   Execute the installer file that you downloaded and accept all of the defaults settings.
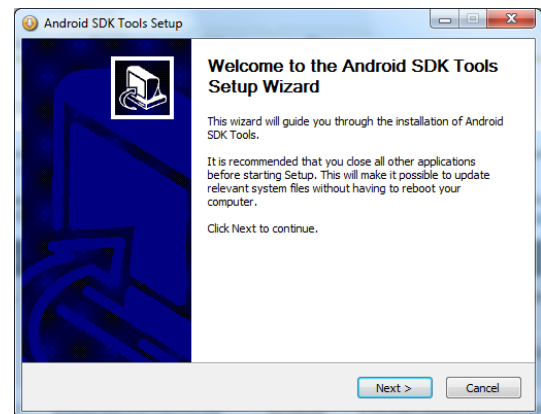
Note: by default, it will install to the C:\Program Files directory either…

at   C:Program Files\Android\android-sdk   (for Windows 32-bit)
or   C:\Program Files (x86)\Android\android-sdk   (for Windows 64-bit)
or   You can also select a directory of your choosing (I did C:\Android\SDK)
   Just remember the directory where you installed it in, you will need this path for step 4.0

3.3   At the end of the install, choose to run the Android
       SDK Manager.
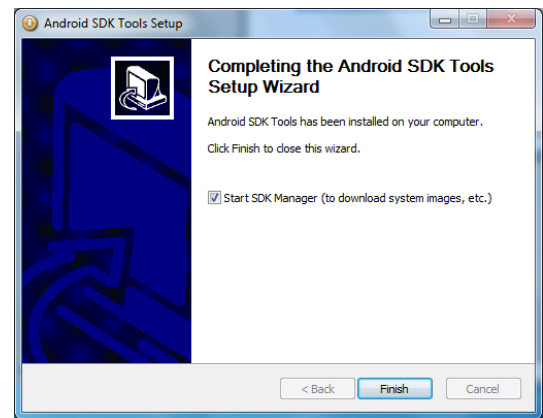
3.4   The Android SDk manager appears, you will need the following packages for the TPT:
       -   Android SDK Tools
       -   Android 3.1 (API 12)
       -   Extras > Google USB Driver package
       Check the status column for each and if it is not installed, then select the check box beside the
       package and click the install packages button.
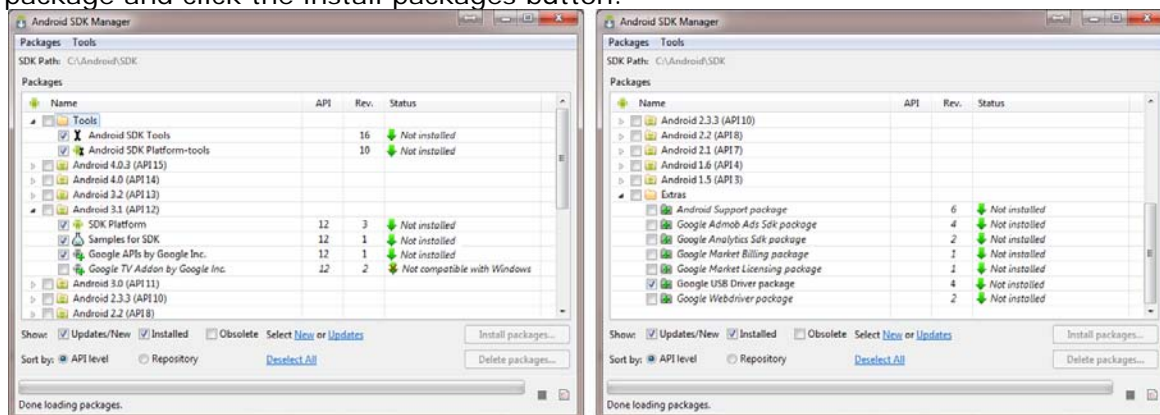
3.5   If you get a Dependencies List, select the Accept All radio button and click the install button.

4.0 Add the Android Platform-tools Directory to your local Path variable.

This step is not a necessity but it will save you a lot of time if you are using ADB. Without adding the path to adb.exe you would have to change directories from a DOS command line every time you want to use ADP.
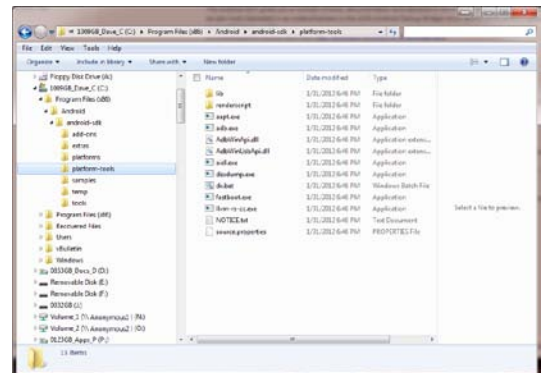
For each flavor of OS the exact steps will vary. The steps here are for Windows 7 64-bit. If you have a hard time adapting to your OS, just Google "set path environment variable <your OS version>.

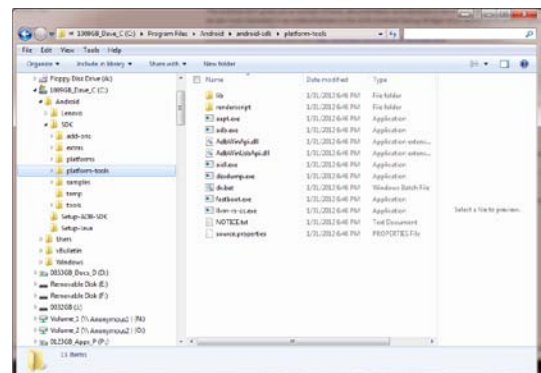4.1   Find out where ADB.exe is located on your PC. Chances are it is located in...

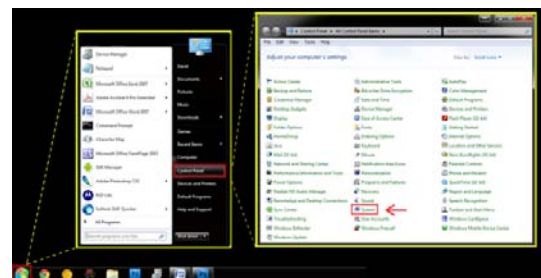For Windows 32-Bit, it would look like this..
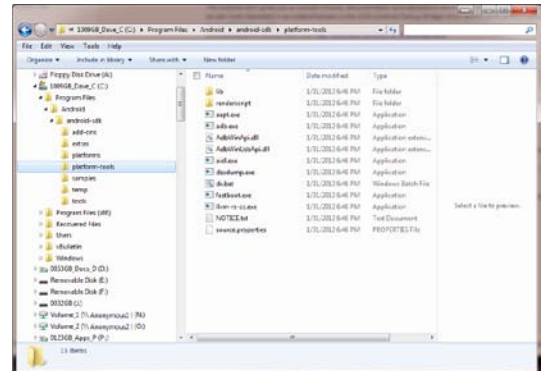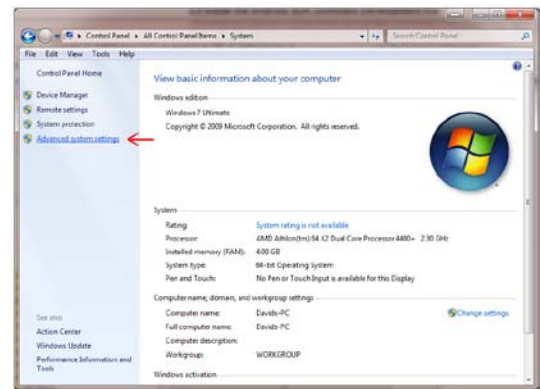

For Windows 64-Bit, it would look like this...

If you installed the sdk in a custom directory, then you should have written down the path back in step 3.2.
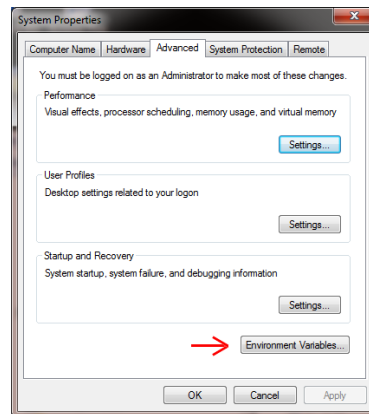

4.2   Start→ Control Panel → System
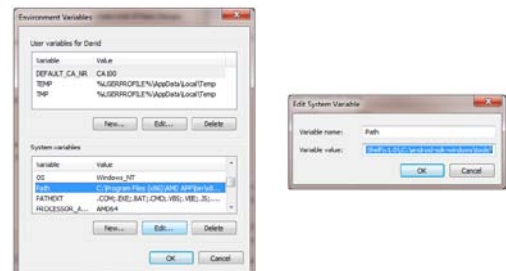
4.3   Click on Advanced Systems Settings

4.4   Click on the "Environment Variables" button

4.5   Under System Variables, find PATH, and click Edit.

4.6   In the Edit Window, modify PATH by adding the location of adb.exe into the value for PATH.

       Note: each path is separated by a ; Make sure that you add a semi-colon before your path.
       i.e   C:\windows\system32;C:\windows\ becomes
             C:\windows\system32;C:\windows\;C:\Program Files (x86)\Android\android-sdk\platform-
             tools\

4.6   Save the setting and close the window.

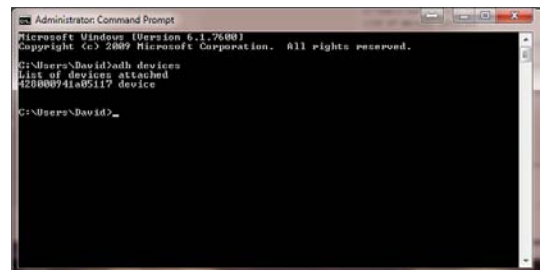## 5.0 Test ADB and Try Out a Few Commands

In this step we will test ADB and run a few interesting shell commands on your TPT.

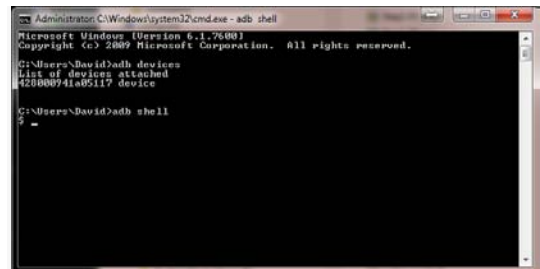5.1   Click Start, type cmd.exe in the text box and hit enter

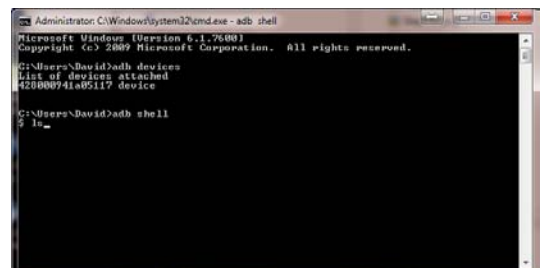5.2   Type "adb devices" and hit the enter key.

If you don't have anything listed something is not right, review the previous steps and if you still have trouble, post to this thread.

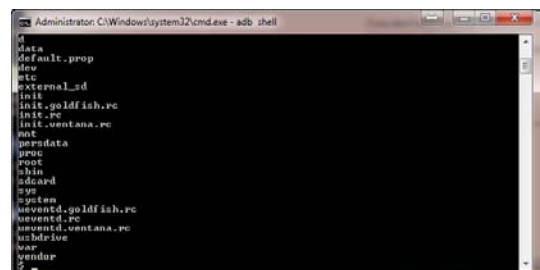5.3   Get a shell on your TPT by typing "adb shell", you should get a $ prompt.

5.4   Now type "ls"

The result is directory listing of all the files and folders on your TPT (in the current directory)

A useful command line switch for ls is –l (ls –l) for long format that displays the permissions as well.

5.5   Exit from the shell and get back to your (local PC) command prompt by typing "exit"

You are now prepared for your journey into hacking around your TPT.