

## How to Enable USB Host API Support into Android Host Device

You would need root permission to do this procedure:

To enable USB host API support you should add a file named **android.hardware.usb.host.xml** and containing the following lines:

```
<permissions>
  <feature name="android.hardware.usb.host"/>
</permissions>
```

into folder

```
/system/etc/permissions
```

in that folder find file named

```
handheld_core_hardware.xml or tablet_core_hardware.xml
```

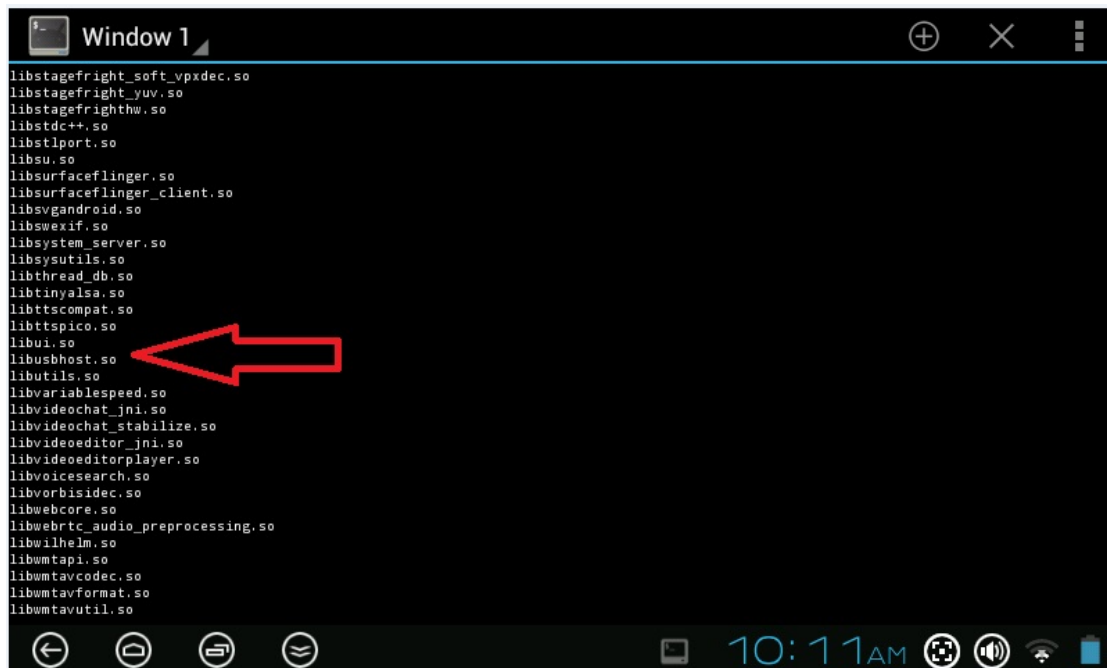
and add

```
<feature name="android.hardware.usb.host">
```

```
into <permissions> section
```

Reboot your device. Usb host api should work.

NOTE: It is also required to have the driver “libusbhost.so” found in /system/lib/.

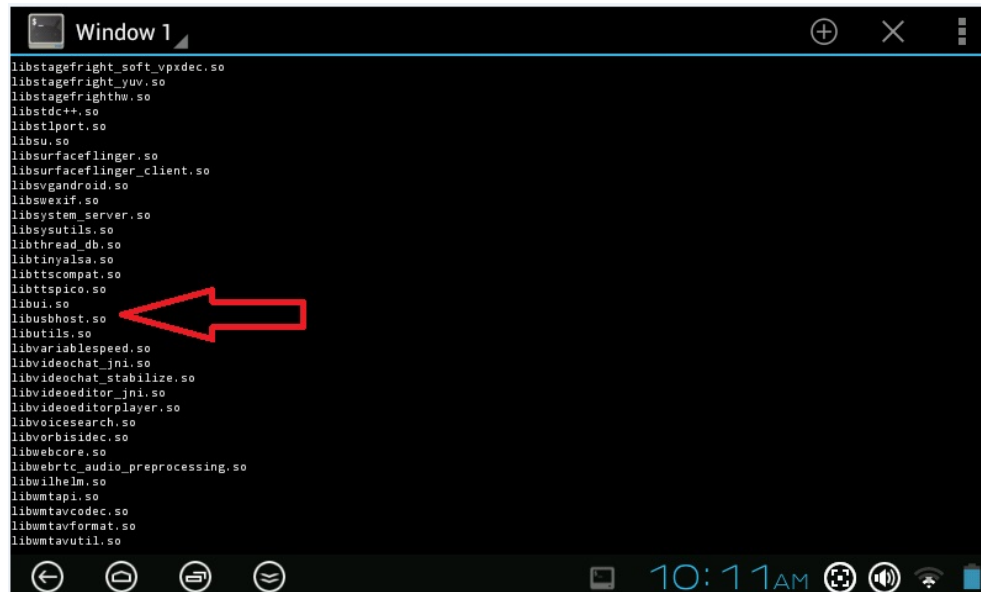


以下過程是在 system 下做加入檔案及修改檔案的動作

※可能需要有 root 權限... 如沒有 root 權限，可能無法加入及修改系統檔案.

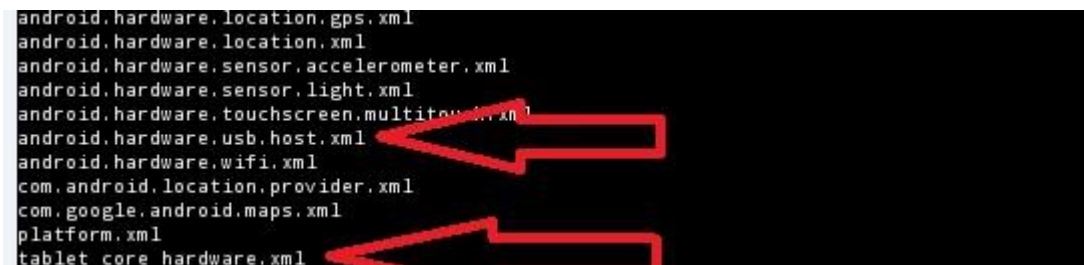
※修改時務必小心，避免修改不正確，Android 系統無法啟動.

在/system/lib/這目錄下，要有 libusbhost.so 這個檔案:



在/system/etc/permissions 下，要加入兩個 xml 檔案:

- “android.hardware.usb.host.xml
- “tablet\_core\_hardware.xml”



android.hardware.usb.host.xml 的內容如下:

```
<?xml version="1.0" encoding="utf-8"?>
<!-- Copyright (C) 2011 The Android Open Source Project
      Licensed under the Apache License, Version 2.0 (the "License");
      you may not use this file except in compliance with the License.
      You may obtain a copy of the License at
          http://www.apache.org/licenses/LICENSE-2.0
      Unless required by applicable law or agreed to in writing, software
      distributed under the License is distributed on an "AS IS" BASIS,
      WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
      See the License for the specific language governing permissions and
      limitations under the License.
-->
<!-- This is the standard feature indicating that the device can communicate
      with USB devices as the USB host. -->
<permissions>
    <feature name="android.hardware.usb.host" />
</permissions>
```

在 tablet\_core\_hardware.xml 或者 handheld\_core\_hardware.xml 裡面需要把下列的 Feature 給加入...

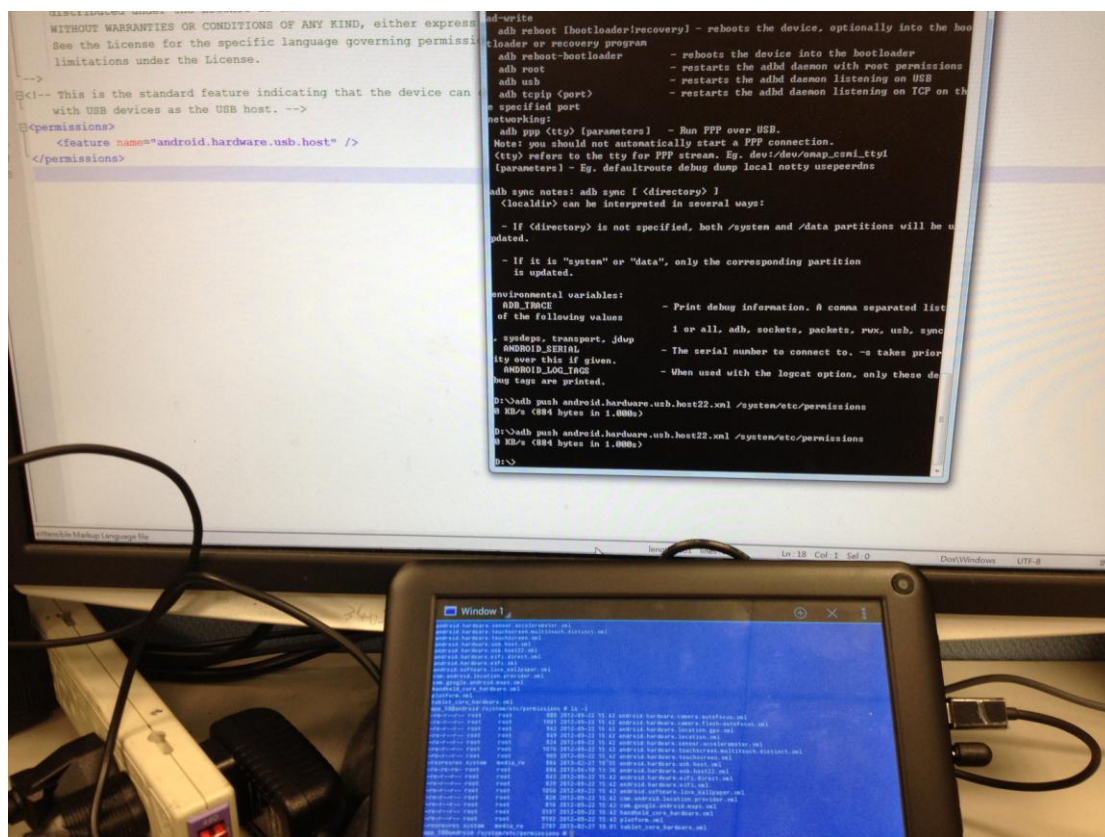
```
<feature name="android.hardware.usb.host" />
```

如果您不是系統廠商，但需要更改系統的內容，其中一種方式就是透過 ADB 的方式。

詳細請參考 <http://developer.android.com/tools/help/adb.html>

以下使用一台 Win7 和一台 Android 平板。

- 在 Win7 下進到 ADB 模式。
- 輸入 “adb push android.hardware.usb.host22.xml /system/etc/permissions”，顯示檔案傳輸成功。
- 可以在 Android 平板看到多了一個 “android.hardware.usb.host22.xml” 檔案





```

ADB_TRACE                - Print debug information. A comma separated
of the following values  list of 1 or all, adb, sockets, packets, rwx,
, sysdeps, transport, jdwp
ANDROID_SERIAL            - The serial number to connect to. -s tag
ity over this if given.
ANDROID_LOG_TAGS          - When used with the logcat option, only
bug tags are printed.

D:\>adb push android.hardware.usb.host22.xml /system/etc/permissions
0 KB/s (884 bytes in 1.000s)

D:\>adb push android.hardware.usb.host22.xml /system/etc/permissions
0 KB/s (884 bytes in 1.000s)

D:\>

```

```

...
android.hardware.usb.host.xml
android.hardware.usb.host22.xml
android.hardware.wifi.direct.xml
android.hardware.wifi.xml
android.hardware.live_wallpaper.xml
android.location.provider.xml
com.android.maps.xml
core.hardware.xml
core.hardware.xml
android:/system/etc/permissions # ls -l
-- root      root      880 2012-09-22 15:42 android.hardware.camera.autofocus.xml
-- root      root      1001 2012-09-22 15:42 android.hardware.camera.flash-autofocus.xml
-- root      root      942 2012-09-22 15:42 android.hardware.location.gps.xml
-- root      root      949 2012-09-22 15:42 android.hardware.location.xml
-- root      root      824 2012-09-22 15:42 android.hardware.sensor.accelerometer.xml
-- root      root      1076 2012-09-22 15:42 android.hardware.touchscreen.multitouch.distinct.xml
-- root      root      909 2012-09-22 15:42 android.hardware.touchscreen.xml
x system    media_rw    884 2013-02-27 18:55 android.hardware.usb.host.xml
-- root      root      884 2013-04-10 13:36 android.hardware.usb.host22.xml
-- root      root      843 2012-09-22 15:42 android.hardware.wifi.direct.xml
-- root      root      829 2012-09-22 15:42 android.hardware.wifi.xml
-- root      root      1050 2012-09-22 15:42 android.software.live_wallpaper.xml
-- root      root      828 2012-09-22 15:42 com.android.location.provider.xml
-- root      root      816 2012-09-22 15:42 com.google.android.maps.xml
-- root      root      3197 2012-09-22 15:42 handheld_core.hardware.xml
-- root      root      9192 2012-09-22 15:42 platform.xml
-- root      media_rw    2797 2013-02-27 19:01 tablet_core.hardware.xml
etc/permissions #

```