Release Notes for Version 17096 of Android for the Mesa 2

April 2017

These notes provide important information for Juniper Systems release of the Android operating system for the Mesa 2. These notes may also include important hardware information for the device.

Documentation and software updates are located here:

http://www.junipersys.com/Juniper-Systems/support

Contents

These release notes contain the following sections:

Important Notes

- **Android 5.1 (Lollipop) provides many features and supports many apps which are shared by consumer smartphones and tablets. Because this is the open source version of the operating system, Google Mobile Services are not included. One of the most notable differences is that the Google Play store is not available, so apps must be manually installed by transferring and running the associated APK install file.**
- **To reconnect the batteries after storage or shipping, plug in external power.**

- **To aid in the removal of SD and SIM cards, you can place a small piece of tape on the top of the card. Use care and do not cover any contact pads on the card with tape [8197].**
- **Do not use SIM card adapters.** Only use the specified size of SIM cards. SIM card adapters will damage the pins in the SIM card slot [8197].

Electronically disconnect the batteries for storage or shipping. To prevent damage to software components, shut down the operating system then press and hold the power button for 20 second to disconnect the batteries. To restore the connection with the batteries, plug-in to external power and press the power button.

Debugging over Ethernet(May work for some applications over WiFi)

The Mesa2 Android includes a USB 3.0 Host connector. This can be used to connect devices such as USB storage devices, thumb drives, mice, etc. The Mesa2 does not use USB for application development, but rather can use either WiFi or Ethernet for that purpose. Juniper Systems offers a USB to Ethernet Dongle (JSPN 26761).This section describes how to set up an Android Debug Bridge (ADB) connection for programing and development purposes.

1. Connect a Plugable USB 3.0 Ethernet dongle to the Mesa2 (optionally through a USB hub).
2. On the Mesa2

a. Go to Settings->About Tablet

b. Tap on the "Build number" line 7 times (this enables the "Developer options" item in Settings).

c. Go back to settings and go into Developer options.

d. (Optional, but nice for development), Enable "Stay awake".

e. Enable "USB debugging".

f. Go to Settings->About Tablet->Status, and note the IP address

3. On your development machine

a. Open a terminal. Ensure ADB is in the path

i. On Windows 10 for example, if you have installed Android Studio, you can navigate to c:\Users\<user_name>\AppData\Local\Android\sdk\platform-tools

ii. On Ubuntu, ensure adb is installed.

b. Type adb connect <IP address from device>

4. On the Mesa2, a popup should show up "Allow USB debugging" with the fingerprint of the PC you are connecting with. Check the checkbox to "Always allow from this computer", and hit OK.

5. On the PC, type "adb devices". You should see the IP address followed by ":5555 device".

6. Now Android Studio should see the device and be able to debug applications normally.

7. Rarely, the Ethernet connection may drop out. Typically the device needs to be rebooted before connecting again. Otherwise, you may get an "Offline" status when you type "adb devices". Please note the IP address may change after a reboot.