RangerX Software update instructions from Ice Cream Sandwich to Jelly Bean with Google Play for the RangerX with for WiFi with CAC Configuration
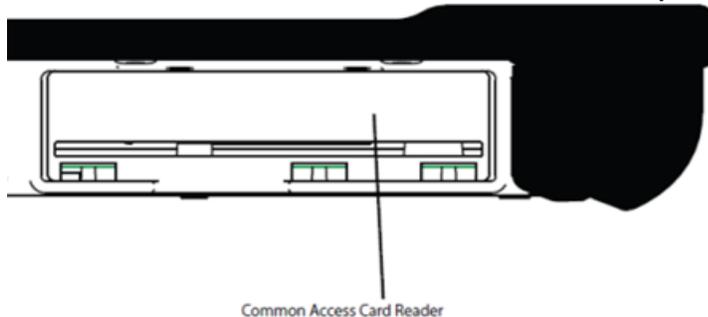
Date: 01/08/2014
Version: 1.00

Below are the instructions to update your Software image from the Android Ice Cream Sandwich (ICS) to Jelly Bean (JB) Google Play Image. It is a multi-stage procedure which must be followed to realize full performance from your RangerX device. ***Only follow this procedure if your current SW image is Android 4.0.4 Ice Cream Sandwich (ICS).***
NOTE: To check if you have ICS,

    a.   boot up your unit

    b.   go to Settings => About tablet

    c.   look for Android version.   If it says 4.0.4 you have ICS. If you have 4.2.2 you should not use this procedure to upgrade your device. Please contact your Help Desk, your Xplore Technologies representative, or Xplore Technologies support.

Check that your unit has a CAC card reader installed. See drawing below. If the unit does not have a Common Acess Card Reader and no WWAN radio this procedure does not apply.

Common Access Card Reader

To check if you have a WWAN card, go into your ICS and run Settings, Check About tablet, and check if the Baseband version has "Unknown" or a long value. If it says "Unknown" please continue with this script.

For your Windows unit, we recommend Windows 7 64 bit.

Hardware Needed
Here is a list of all of the hardware you will need before starting this upgrade:
1. Micro SD card 1 GB or greater
2. USB to Micro USB cable.
3. Windows 7 64 bit unit
4. RangerX tablet with ICS 4.0.4

Software required

1. RangerX_CACWiFi.zip – All of these files should be extracted to your adb working directory (most likely the platform-tools directory)

Download the two update images listed below in items 2 and 3 and place those two files on your SD Card only.

2. TomCat-U_update_jb_20131029-0955_CTS_releaseKey.zip

ftp://Support:Xplore@ftp.xploretech.com/RangerX/Images/TomCat-U_update_jb_20131029-0955_CTS_releaseKey.zip

3. TomCat-U_update_jb_20131126-1359_SKU23_signedReleaseKey.zip

ftp://Support:Xplore@ftp.xploretech.com/RangerX/Images/TomCat-U_update_jb_20131126-1359_SKU23_signedReleaseKey.zip

Setting up the Environment

You will also need the below debug environment properly functioning for your RangerX (iX101T1) device

1. A Windows system with Android ADB (ANDROID Debug Bridge) installed
2. USB Driver for Android on your Windows system

Help can be found on the Xplore Technologies RangerX Support site for items 1 and 2 above at

- RangerX Windows USB Debug Driver: **Download**

- RangerX Windows USB Driver Setup Instructions: **Download**

- Android Debug Bridge: **Download**

If you can meet these requirements above, then proceed. Otherwise contact your Help Desk or Xplore Technologies representative or Xplore Technologies support.

Unzip the RangerX_CACWiFi.zip and place all the files in your adb or platform-tools directory that you created when installing the Android Debug Bridge or Android SDK package.

At this stage you should have

i. ADB program installed and iX101T1 USB driver installed on your Windows PC.
ii. 3 Files loaded to your MicroSD and MicroSD inserted into your RangerX (iX101T1) device.
iii. The USB cable inserted to your RangerX (iX101T1) device.

It is now time to run an interactive script and follow all the instructions carefully. Please note this will clear any data or applications that you currently have on your unit. You should only need to follow the interactive script, but this document is to get you started and refer to as needed.

To run the interactive script go to your adb or platform-tools directory(created from your Android debug install on Windows) and run *RangerX_CACWiFi.cmd*.

What follows is a manual upgrade procedure detail that closely follows the instructions given in the above interactive automated script. It may help to clarify some of the steps in the script or may be used without launching the script if preferred but is not recommended.

1. Make sure you unit is powered off. Hold the Home button down and press the Power Button. Hold the Home button down for 15 seconds after the Power button was used.   The splash screen for ICS should look like below. The commands below in bold should be typed and run in the adb command window on your Windows unit.

2. Check that you are connected via ADB
   Fastboot devices
   It should something like this
   015DA84713001011   fastboot
   If it doesn't do not continue. Check your USB cable, ADB, or command window. If it still doesn't work contact your Help Desk, your Xplore Technologies representative, or Xplore Technologies support.

   Load the new bootloader
   fastboot flash bootloader u-boot.bin

    Reboot to the new bootloader
   fastboot reboot-bootloader

   Format the oem partition
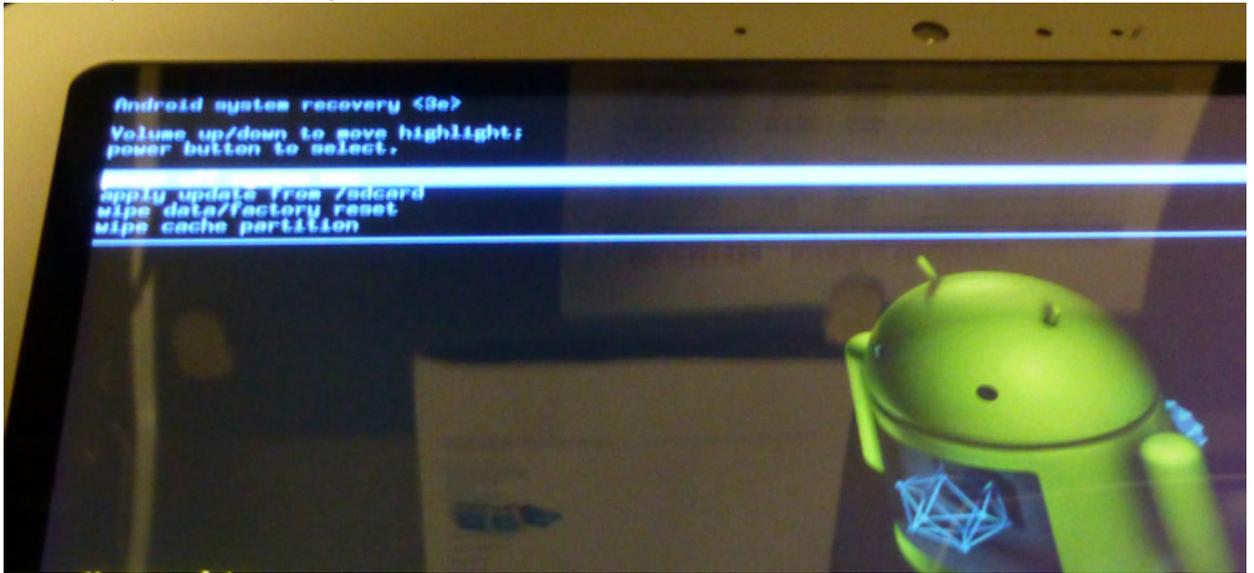   **fastboot oem format**

   Load the recovery image
   fastboot flash recovery recovery.img

Reboot the unit, hold down the Volume down button for 10 seconds during and after running the command below in your adb command window.
fastboot reboot

3. You should be in Recovery Mode now. If you missed this you can Power off the unit and start again. To get into recovery mode, hold down the Volume down button for 10 seconds, while at the time turn on the unit with the Power button. Note: The Power button does not have to be held in.
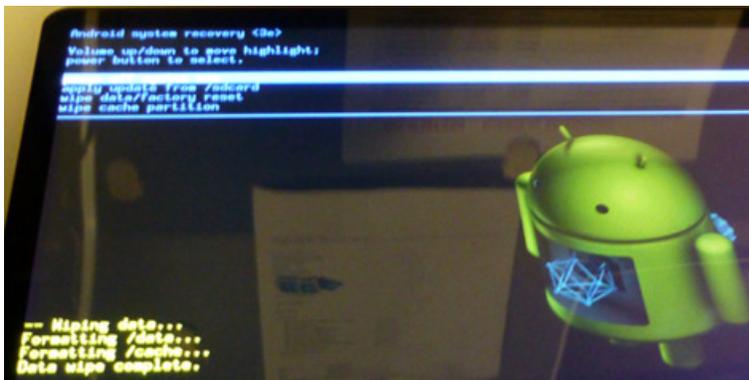
Here is a picture of Recovery Mode

In recovery mode, the Home button(center screen bottom) is used to Enter and Volume up and down keys are used to select the line.

4. Please select "wipe data/factory reset"

    Select "Yes -- delete all user data"

    Once the RangerX is finished resetting on your RangerX screen it should like the below picture.
    This can take several minutes...

    Please select "apply update from /sdcard"

5. Load the first of two new images

    Select "TomCat-U_update_jb_20131029-0955_CTS_releaseKey.zip"
    Once the RangerX image is finished loading on your RangerX screen
    This can take several minutes...

See below picture
After complete.
Select "power off system now" (should already be highlighted)

6. Hold down the Volume Down button for 10 seconds while powering up the system to go into Recovery mode

7. Please select "apply update from /sdcard"

Loading the latest Android image
Select "TomCat-U_update_jb_20131126-1359_SKU23_signedReleaseKey.zip"
Once the RangerX image is finished loading and finished on the RangerX screen
This can take several minutes...
Once complete
Select "power off system now"

YOUR RANGERX UPDATE IS COMPLETE! The system will run a user setup if powered on.

PLEASE REMOVE THE USB CABLE AND MICRO SD CARD