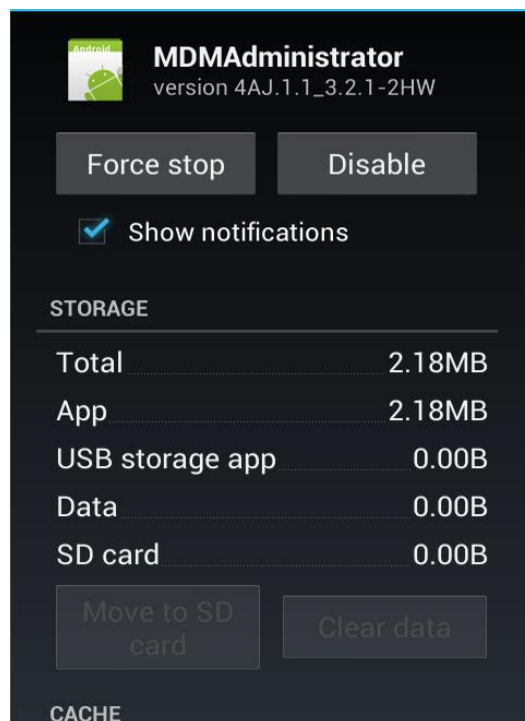1. What is the need behind generation of Transition APK?

        ✓ Transition APK is generated only when there are changes in MBO (change in SQLite Schema)
        ✓ Basically when code is replaced in src/mbo in android project.

2. <u>Pre requisites'</u>

The device must have the MDM patch provided by Motorola.

If your MDMAdministrator version is below this 4AJ.1.1_3.2.1-2HW please request hallmark to provide updateMDMAdministrator patch.

Steps to upgrade MDMAdministrator Patch

- Place the MDMAdministrator patch file in the root of the \internal
- Turn off the device
- Press the volume up key and the power key at the same time to boot into recovery mode
- Choose \internal
- Choose the MDMAdministrator patch file
- Once done, reboot

3. Steps to create Transition APK

For creating 'Transition APK', maintain two working copies. (Working Copy A and Working Copy B)

Working Copy A - To Create Payload Apk

- ✓ Make all the changes (MBO related changes like replacing the code into src/mbo)as the part of release in this working copy.
- ✓ Update the field `android:versionName`in android manifest.
- ✓ Run the app using the debug keystore and generate an apk. The generated apk is the 'Payload Apk'

Logic behind naming Payload Apk in android manifest

1.1.1113 – here 1113 represents November 13 (11/13)

1.1 – When there is some attribute change in MBO (basically when attribute is added to MBO)

Example: 1.1.1113

1.2 – When there is change in MBO (basically when MBO is added to the project)

Example: 1.2.1113

1.2.x.1 – When there is change in functionality along with the above MBO changes.
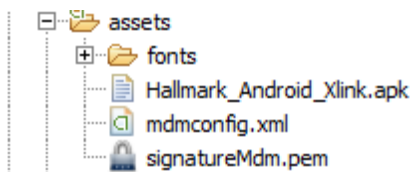
Example: 1.2.1113.1

Working Copy B-To Create Transition Apk

This working copy should not contain any code changes that are included in Working Copy A which is used to generate 'PayloadApk'.

Basically, this working copy should be previous release source code.

Copy mdmconfig.xml, signatureMdm.pem and the Payload Apk generated from Working Copy A into the assets folder of project in Working Copy B.

`android:versionName`in AndroidManifest.xml and *UPGRADE_VERSION_NUMBER* in *IAppConstants.java* should be the same.

Logic behind naming Transition Apk

1.1.1113.1 – here 1113 represents November 13 (11/13)

No change in 1.1, only the last four digits should be changed as per the current date.

Also, no change in last .1 (1.1.1113==.1==)

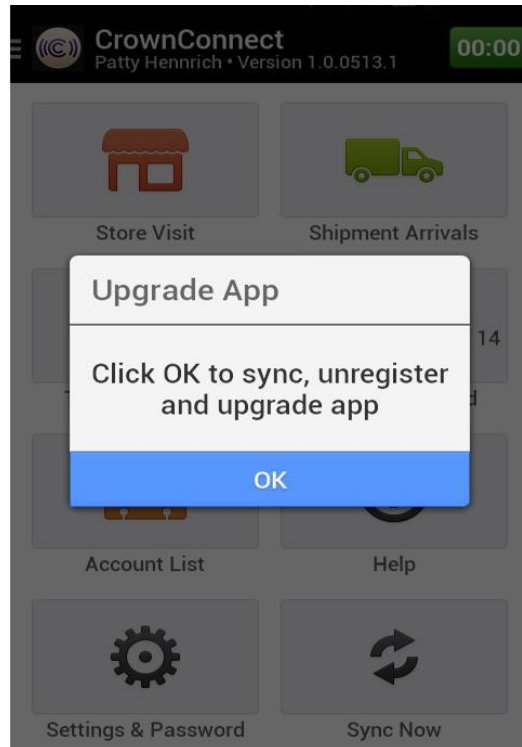Before running the application, make sure the below files are placed in correct location in the device.

- ✓ Place the file 'fsoMXRootcert509.pem' which is provided by Afaria Team in the location ==\internal==

- ✓ Also, place 'certificate.xml' in the same path ==\internal==

- ✓ Copy the file 'fsoMXRootcert509.pem' from ==\internal== to the following path ==\enterprise\device\settings\mdm\autoimport==

- ✓ Open the file 'Result.xml', which is in the following path ==\enterprise\device\settings\mdm\autoimport== and open as 'txt'. It shows the successfully installed message.

Now run the application using the debug keystore provided by SAP to generate an APK. The generated APK is the transition APK.
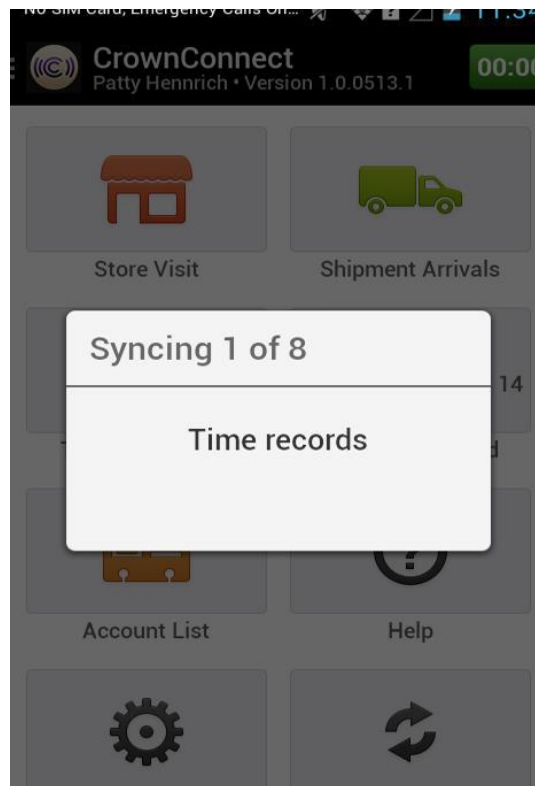
4. Steps to follow after installing Transition Apk
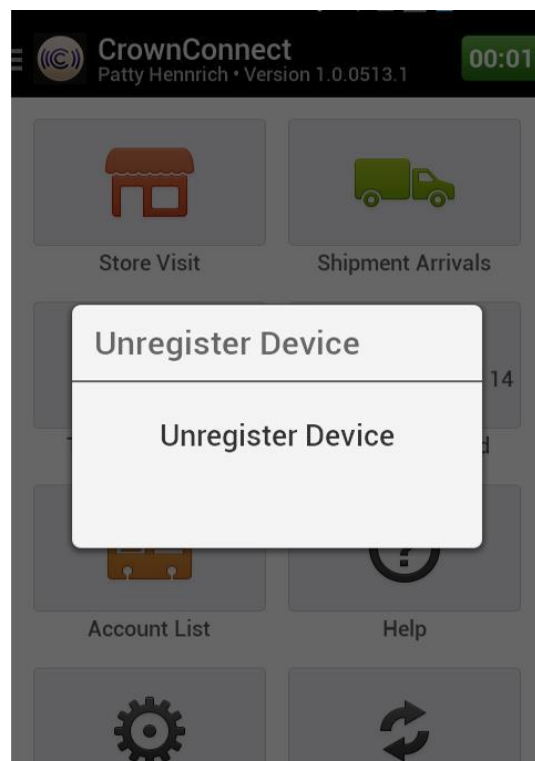
The below steps apply for users who are registered.

On launching the app, after installing transition apk, the user will be presented with a dialog as shown.
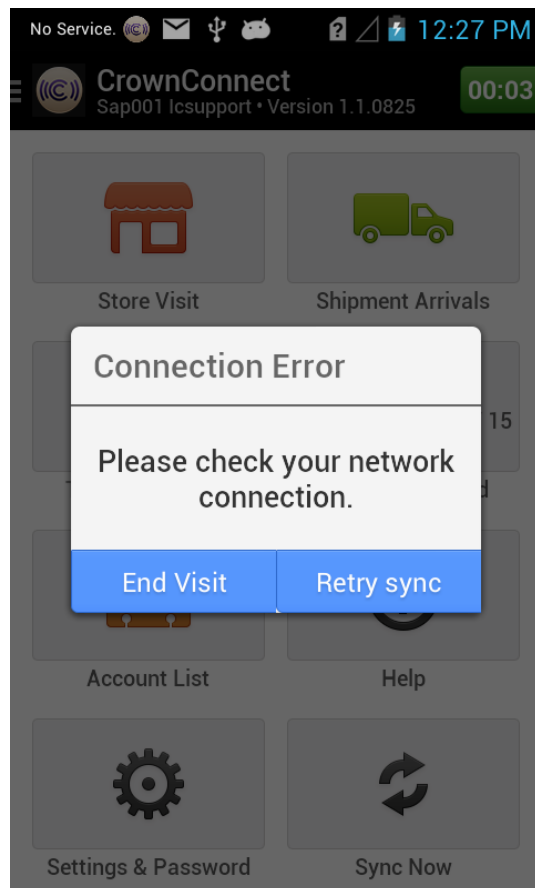
On pressing 'OK', the app will first synchronize all the data pending for submission.
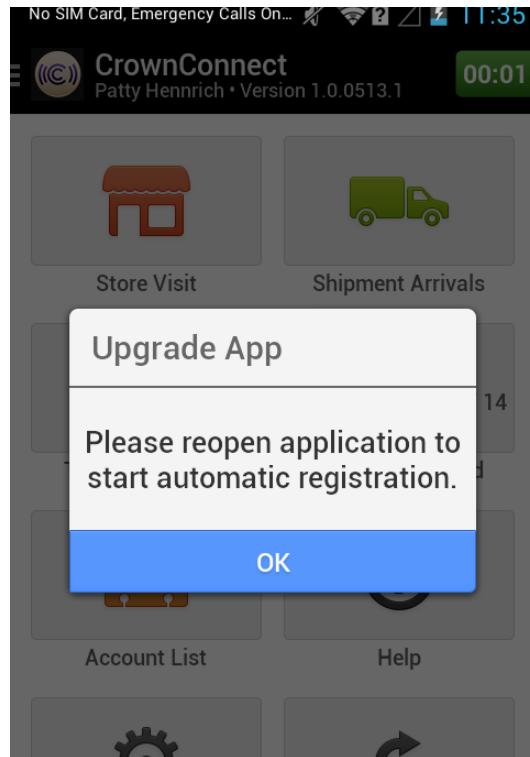
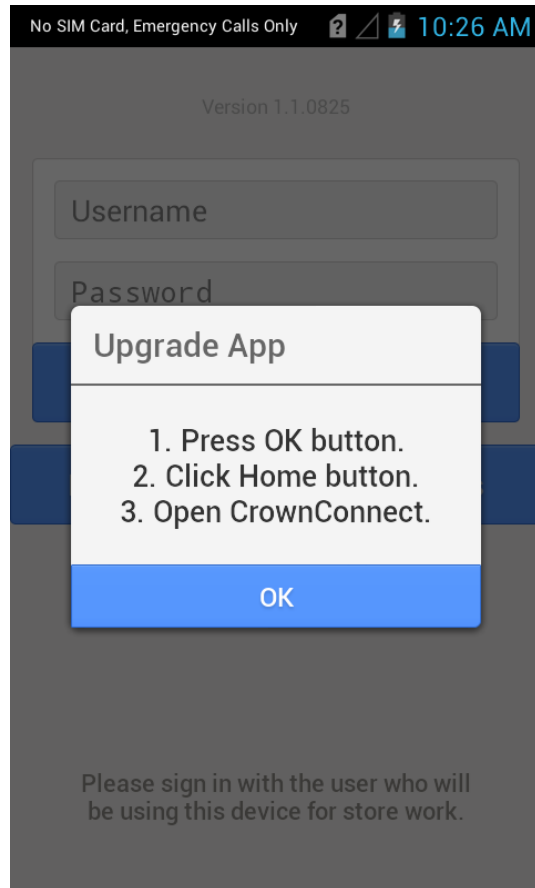Once the data has been successfully synced, it will unregister the user.

If sync didn't happen successfully, user will be presented with a dialog as shown.

After successfully unregistering the user, a dialog is shown asking the user to reopen the application for the new apk to install.

Users, who have not registered, on launching the app, after installing the transition apk, will be presented with a dialog as shown.

On tapping OK, the progress bar is displayed for some time and closes the current activity.

User has to launch the application 'Crown Connect' from the home screen.

<u>FAQ:</u>

1. What would happen if user skips the step of copying the files in device?

   > In this case, the progress bar is displayed indefinitely, and shows hang effect on the device.

2. What would happen if the device don't have file explorer to copy the files?

   > This case is not dealt by us. This should be reported to Hallmark, where they will re-provision the device.

3. Who should be contacted in case of any problem in installing the transition APK?

   > Statrix helpdesk should be contacted in caseof any problem in installing transition APK in the device.

<u>Appendix:</u>

In case of problems like lower end version of the device and not able to install the transition APK, based on the assistance from HALLMARK or Statrix, we should flash the device using Fast Boot, following the document "Installing_ADB__under__windows_XP_for_shelter".