Blackberry MDM configuration with hybrid apps

Step 1: Install latest stable version of nodeJs on machine

- Macos - $ brew install node
- Window - Browse nodejs portal https://nodejs.org/en/ and download and run windows installer
- Verify Installation using –
  $ node –v
  $ npm –v

Step 2: Installing Ionic and its Dependencies

- $ npm install -g ionic
- $ npm install -g cordova@8
- $ npm install –g @angular/cli

Step 3: Create a simple project using angular or any other framework.

- $ ionic start projectName blank --type=angular
- $ cd projectName
- $ ionic cordova platform add android@8
- $ ionic cordova platform add ios@4.5.5

Step 4: Test the application in terminal to ensure that you can build a non-blackberry dynamics app

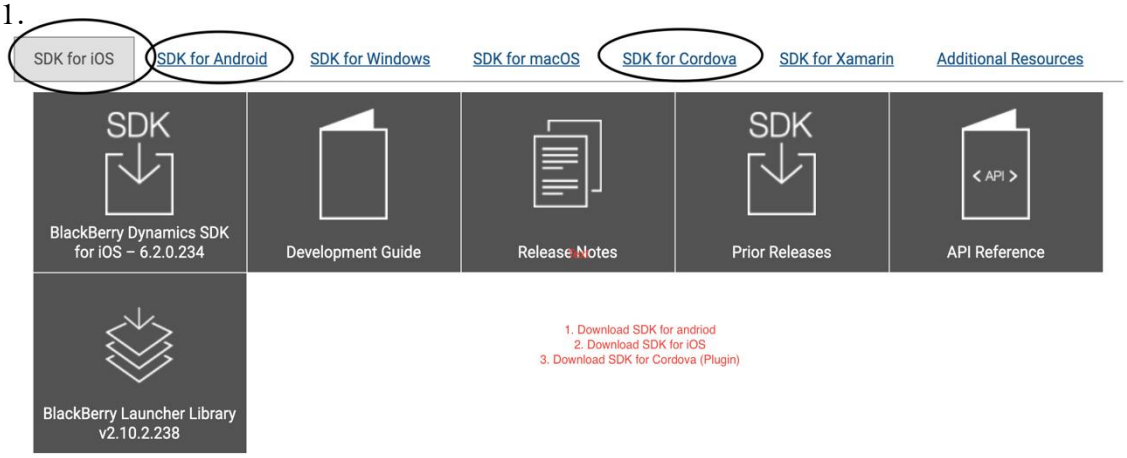
- $ ionic cordova build android
- $ ionic cordova build ios
- $ ionic cordova emulate android / $ionic cordova run android --devices
- $ ionic cordova emulate ios / $ionic cordova run ios --devices

- At this point, if the app does not successfully build and deploy to your emulator or devices something is wrong. Pause here and fix your development environment before continuing.

Step 5: Configuration of BlackBerry_Dynamics_SDK_for_Cordova_v6.0.0

- Registration using company email address on blackberry portal https://account.blackberry.com/#/register
- Login on blackberry developer portal https://login.blackberry.com/sso/SSOPOST/metaAlias/idp
- Browse and download latest SDK for android, ios and cordova plugin https://developers.blackberry.com/us/en/resources/downloads.html

1.



Step 6:

- For Mac Users –
  - Install android studio and set system environment variable path on mac
  - Extract BlackBerry_Dynamics_SDK_for_iOS_v7.0.0.93 tar file and double-click at .pkg file to install the ios SDK on mac
  - Create a folder "blackberry/dynamics_sdk" inside android director/Library /Android/sdk/extras and copy m2repository from BlackBerry_Dynamics_SDK_for_Cordova.zip inside dynamics_sdk folder
  - Final path - Library /Android/sdk/extras / blackberry / dynamics_sdk/ m2repository

- For Window User
  - Install android studio and set system environment variable path
  - Create a folder "blackberry/dynamics_sdk" inside C:\Users\userName\AppData\Local\Android\Sdk/Android/sdk /extras and copy m2repository from BlackBerry_Dynamics_SDK_for_Cordova.zip inside dynamics_sdk
  - Final path – C:\Users\userName\AppData\Local\Android\Sdk/Android/sdk/extras/blackberry/dynamics_sdk/ m2repository

Step 7: Installation of blackberry dynamics plugin

- For both android and ios platforms
  - $ ionic cordova plugin add <path of BlackBerry_Dynamics_SDK_for_Cordova_v6.0.0.38> /plugins/cordova-plugin-bbd-configure

- Android only
  - $ ionic cordova plugin add <Path of BlackBerry_Dynamics_SDK_for_Cordova_v6.0.0.38>/plugins/cordova-plugin-bbd-configure -variable bbdSDKForAndroid="C:\Users\userName\AppData\Local\Android\Sdk\extras\blackberry\dynamics_sdk\m2repository" --variable bbdSDKForiOS=""

- iOS only
  - $ ionic cordova plugin add <Path of BlackBerry_Dynamics_SDK_for_Cordova_v6.0.0.38>/plugins/cordova-plugin-bbd-configure --variable bbdSDKForiOS="/Applications/Xcode.app/Contents/Developer/Platforms/iPhoneOS.platform/Developer/SDKs/iPhoneOS.sdk/System/Library/Frameworks/GD.framework" --variable bbdSDKForAndroid=""

Step 8:

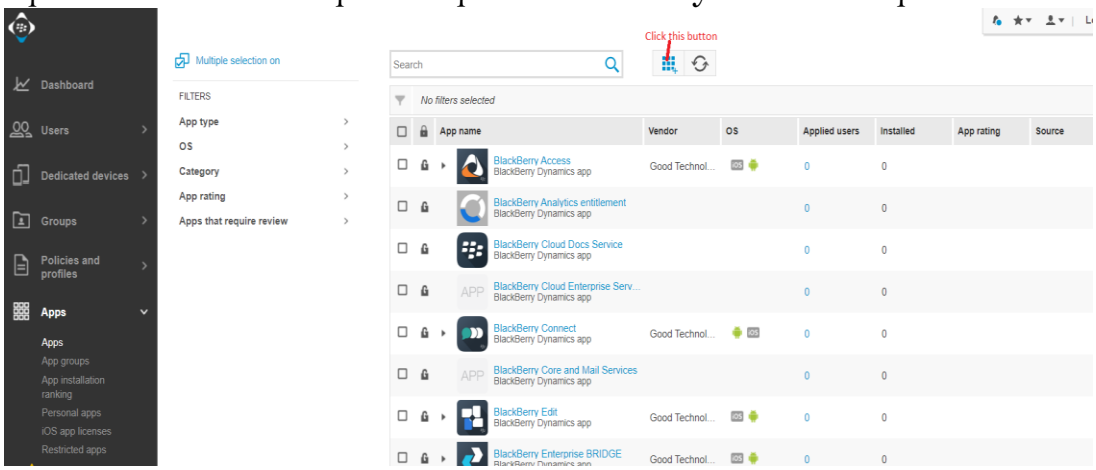
- Open BlackBerry_Dynamics_SDK_for_Cordova_v6.0.0.38\plugins\cordova-plugin-bbd-base plugin into visual studio and removed <uses-sdk android:minSdkVersion="23" android:targetSdkVersion="27" /> from plugin.xml file

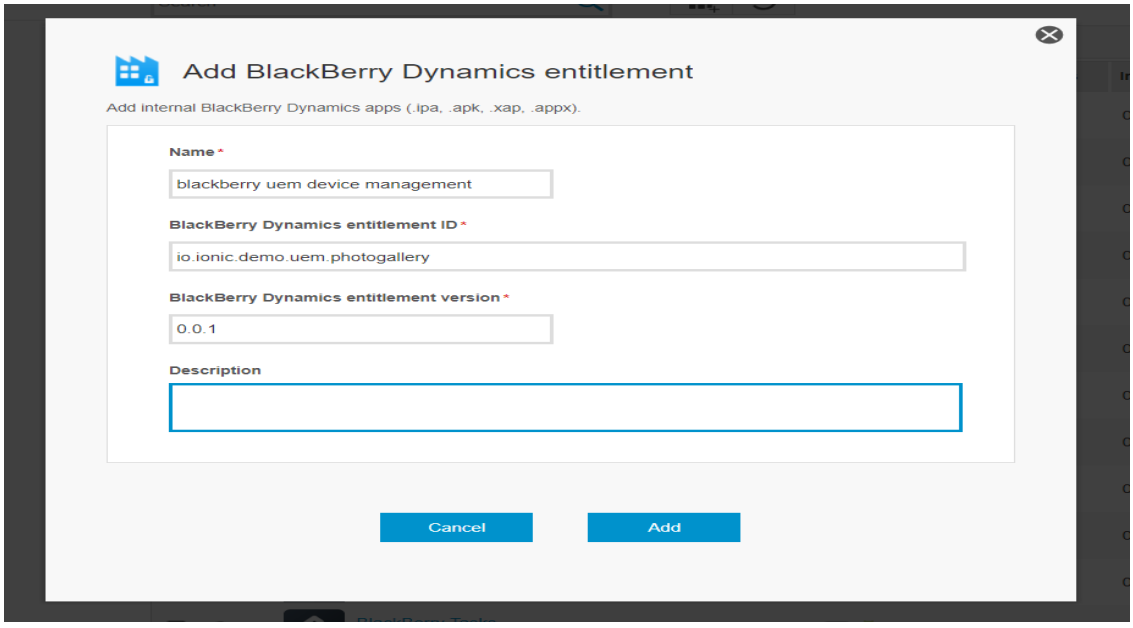
Step 9:

- cordova-plugin-bbd-all or cordova-plugin-bbd-base is used to enable your apps. We will use cordova-plugin-bbd-base that provides the necessary configuration that is required for the BlackBerry Dynamics platform
- $ ionic cordova plugin add < path of BlackBerry_Dynamics_SDK_for_Cordova_v6.0.0.38> /plugins/cordova-plugin-bbd-base

Step 10: Deploy Mobile Apps integrated with BlackBerry SDK to BlackBerry UEM

- Prepare release build of android (apk) and ios (ipa) using android studio and xcode
- Upload release build apk and ipa on blackberry uem admin panel such as

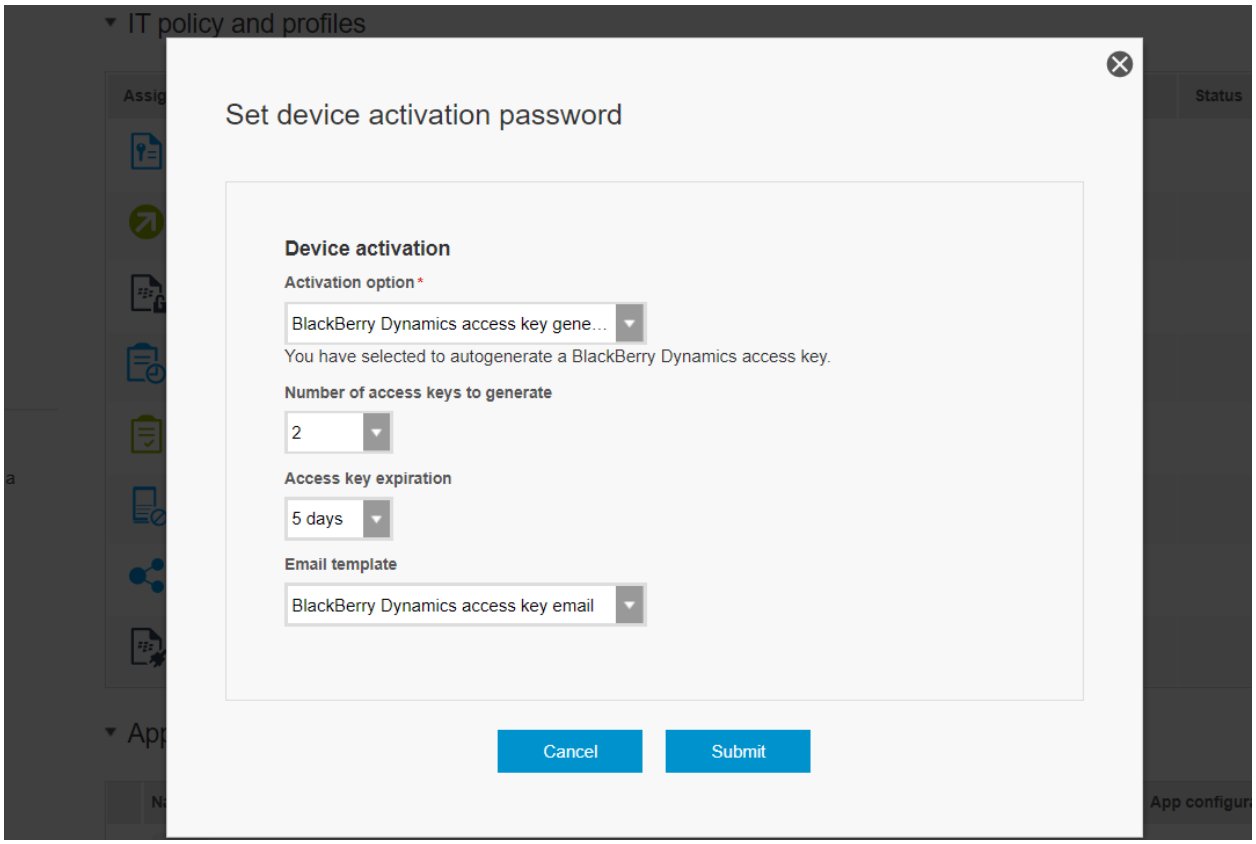




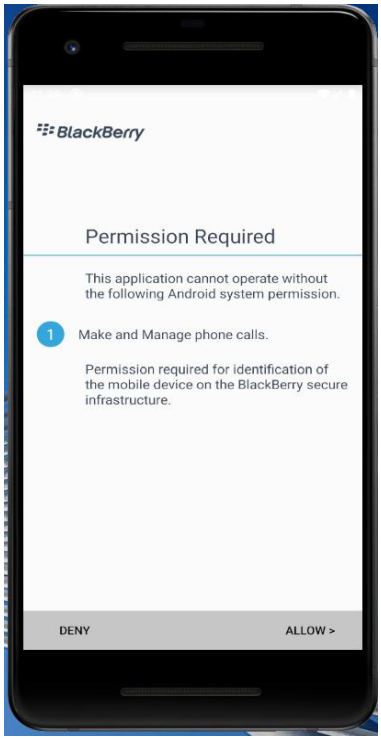
Please refer this site for more details

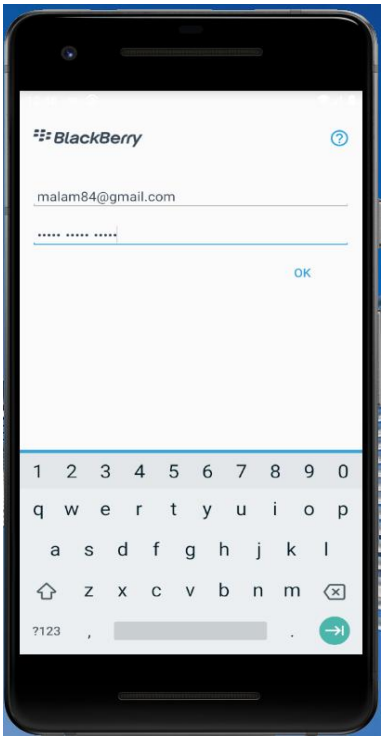
https://www.appdome.com/no-code-mobile-integration-knowledge-base/deploying-apps-fused-with-the-blackberry-dynamics-emm-sdk-to-uem/

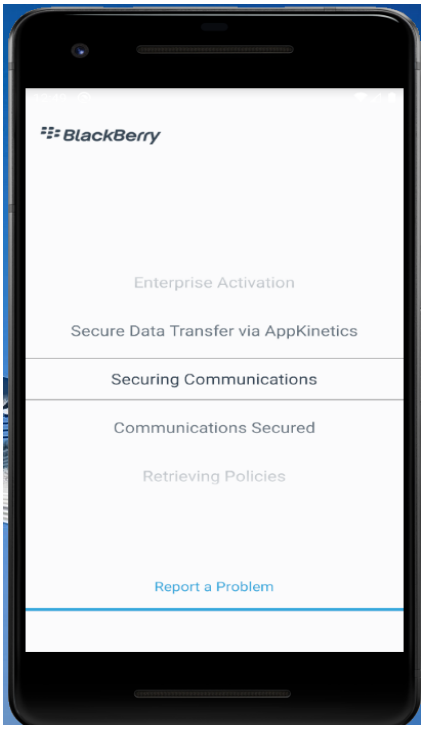
Step 11: Generate device activate code. UEM will send device activation code on registered user email address. Activation code is required for registered apps and device on blackberry uem



Step 12: Ruining apk and ipa in device or emulator







Step 13: Blackberry UEM provide list of plugins and functionality that user can used in their apps. Developer can used blackberry dynamic sdk api reference url for development

https://developer.blackberry.com/devzone/files/blackberry-dynamics/cordova/

Some important blackberry UEM features

Blackberry self services, Secure communication between apps, AtHoc Services, Restful services, Single Sign off, Analytics, Blackberry client and many more