



Kony Fabric

News and Weather App (Cordova with Kony Fabric)

Release V8

Document Relevance and Accuracy

This document is considered relevant to the Release stated on this title page and the document version stated on the Revision History page. Remember to always view and download the latest document version relevant to the software release you are using.

Copyright © 2017 by Kony, Inc.

All rights reserved.

September, 2017

This document contains information proprietary to Kony, Inc., is bound by the Kony license agreements, and may not be used except in the context of understanding the use and methods of Kony, Inc., software without prior, express, written permission. Kony, Empowering Everywhere, Kony Fabric, Kony Nitro, and Kony Visualizer are trademarks of Kony, Inc. MobileFabric is a registered trademark of Kony, Inc. Microsoft, the Microsoft logo, Internet Explorer, Windows, and Windows Vista are registered trademarks of Microsoft Corporation. Apple, the Apple logo, iTunes, iPhone, iPad, OS X, Objective-C, Safari, Apple Pay, Apple Watch, and Xcode are trademarks or registered trademarks of Apple, Inc. Google, the Google logo, Android, and the Android logo are registered trademarks of Google, Inc. Chrome is a trademark of Google, Inc. BlackBerry, PlayBook, Research in Motion, and RIM are registered trademarks of BlackBerry. SAP® and SAP® Business Suite® are registered trademarks of SAP SE in Germany and in several other countries. All other terms, trademarks, or service marks mentioned in this document have been capitalized and are to be considered the property of their respective owners.

Revision History

Date	Document Version	Description of Modifications/Release
09/17/2017	1.0	Document Release Version V8 GA

Table of Contents

1. Preface	5
1.1 Purpose	6
1.2 Intended Audience	6
1.3 Formatting Conventions in This Guide	6
2. Overview	9
2.1 Audience	10
2.2 Overview of the News and Weather Cordova Application	10
2.3 Download and Install the News and Weather Cordova Application	10
2.4 Configuration of the Cordova Client Application	17
2.5 Deploying and Executing the News and Weather Application	18
2.6 Next steps	24

1. Preface

Kony Fabric is a Mobile Back-end as a Service (MBaaS) provider that helps developers build native and web apps for mobile. Various back-end services are easily integrated with the application irrespective of whether the application is built using JavaScript, PhoneGap, iOS, or Android frameworks.

Kony Fabric allows you to define the back-end to build native mobile apps for iOS, Android, and HTML5-based apps for modern browsers. Kony Fabric ensures that developers build mobile applications quickly by focusing on core areas and obtaining secured back-end services instantly. Kony Fabric has multiple features that can be used - Identity, Integration, Orchestration, Objects, Sync, and Engagement Services. These features can be accessed through a common, centralized console.

For successful authentication with users, and to access the centralized features of Kony Fabric, Kony recommends that you install the following Kony Fabric features on premises:

- Kony Fabric Identity and Console
- Kony Fabric Integration
- Kony Fabric Engagement Services
- Kony Fabric Sync Services

Kony Fabric supports the following back-end services for your applications:

- Identity: This feature allows you to define the type of authentication used for granting access to your application. Kony Fabric supports the following authentication services: Microsoft Active Directory, Salesforce, Security Assertion Markup Language (SAML), Kony SAP Gateway, Kony Facebook, Custom Identity Service, OAuth2.0, and Kony User Repository.
- Integration: This feature allows you to define various back-end services for your application. You can define the service in XML, SOAP, JSON, Java, Salesforce, Kony SAP Gateway, and MuleSoft.

- **Orchestration:** This feature allows you to create two types of orchestration services. They are:
 - **Composite:** Allows you to run two or more services concurrently or sequentially.
 - **Looping:** Allows you to run a single service in a loop until the loop ends or an exit criteria is met.
- **Synchronization:** This feature allows you to define the synchronization services for your application. Sync supports only Web Services, except SAP Sky.
- **Engagement Services:** This feature allows you to define and configure push messaging services for your application.

1.1 Purpose



The document explains how to build, integrate, and deploy mobile applications across multiple channels, including iOS native, Android native, Windows, Blackberry, mobile web and Desktop Web.

1.2 Intended Audience

This manual is intended for developers who use Kony Fabric to build, integrate, and deploy mobile applications across multiple channels, including iOS native, Android native, Windows, Blackberry, mobile web and Desktop Web. Developers should be familiar with JavaScript.

1.3 Formatting Conventions in This Guide

The following formatting conventions are used throughout the document:

Convention	Explanation
Monospace	<ul style="list-style-type: none"> ■ User input text, system prompts, and responses ■ File path ■ Commands ■ Program code ■ File names
<i>Italic</i>	<ul style="list-style-type: none"> ■ Emphasis ■ Names of books and documents ■ New terminology
Bold	<ul style="list-style-type: none"> ■ Windows ■ Menus ■ Buttons ■ Icons ■ Fields ■ Tabs
<u>URL</u>	Active link to a URL
	Provides helpful hints or additional information
	Highlights actions or information that might cause problems to systems or data

We welcome your feedback on our documentation. Email us at techpubs@kony.com.

For technical questions, suggestions and comments, or to report problems on Kony's product line, contact support@kony.com.

2. Overview

This manual is intended for developers familiar with the Cordova framework. This document highlights how a Cordova developer can connect mobile applications to Kony Fabric back-end services and run a News and Weather sample app developed using Cordova on an Android emulator. Kony Fabric is Kony's open standards, mobile back end as a service (MBaaS) allowing developers to quickly expose key mobile services and enterprise services to mobile applications. These mobile application can be built using Cordova, Native iOS, Native Android, JavaScript, Kony Studio and other platforms that can leverage REST-based services as part of a mobile framework.

This manual features a sample application created using Cordova to demonstrate how easy it is to connect Cordova applications to enterprise services based on SOAP, XML, JSON, or other protocols. Our sample application, The News & Weather App, uses the Google's REST based service for news and CDYNE's SOAP service for current weather and weather forecast. Both these services are not optimized by default for a mobile device and use two separate protocols to convey information from their services. In both cases, the services send back more data than will be needed for our mobile application. In the case of a mobile app, it's ideal to send back a concise response that reduces bandwidth needs. In this lab, Kony Fabric will be used to expose these services to news and weather app as mobile optimized, REST based services that are easily ingested by the Cordova framework.

We assume that you:

1. Have access to a Kony Fabric server that has installed the sample News and Weather application. If you do not have access to Kony Fabric, enroll in a 90-day trial at <http://www.kony.com/products/konyfabric/trial>.
2. Have access to the client-side Cordova development environment and an Android emulator. Click the following link to set up an Eclipse-based environment and an Android emulator in a Windows environment: [CRM Quick Start Guide](#).
3. Have reviewed the [Kony Fabric for News and Weather App user guide](#) and have published the application in your Kony Fabric environment.

2.1 Audience

This manual is designed for IT professionals who use Cordova mobile applications that integrate with Kony Fabric services.

2.2 Overview of the News and Weather Cordova Application

The Cordova client application runs in an Eclipse-based Windows environment. The development environment has the following components:

1. **Node.js** : The npm of Node.js helps install the Cordova libraries.
2. **Eclipse**: This is the primary development environment that is used with the Android plug-in.
3. **Android SDK**: The SDK helps install the Android APIs that are needed to run the application on the Android emulator.
4. **Android plug-in for Eclipse**: The plug-in provides integration with the Android SDK that is installed.

The following steps are involved in executing the News and Weather Cordova app:

1. Downloading the News and Weather Cordova client application from [github](#).
2. Importing the downloaded application into the development environment.
3. Configuring the Cordova client application with the App key, App secret, and Kony Fabric URL of the published News and Weather application in Kony Fabric.
4. Deploying and running the News and Weather application in the Android emulator.

2.3 Download and Install the News and Weather Cordova Application

To download and install the News and Weather Cordova application in the Eclipse environment, follow these steps:

1. Enter https://github.com/kony/MobilefabricFastTrack_NewNWeatherApp_PhoneGap, in your browser and click on Clone or Download (1 in the following figure). The application downloads to your local drive.

kony / MobilefabricFastTrack_NewNWeatherApp_PhoneGap

Watch 14 Star 0 Fork 0

Code Issues 0 Pull requests 0 Pulse Graphs

This application will showcase how to create a fully functional Cordova(PhoneGap) application using the Kony PhoneGap SDK to invoke integration and orchestration services.

18 commits 1 branch 0 releases Fetching contributors

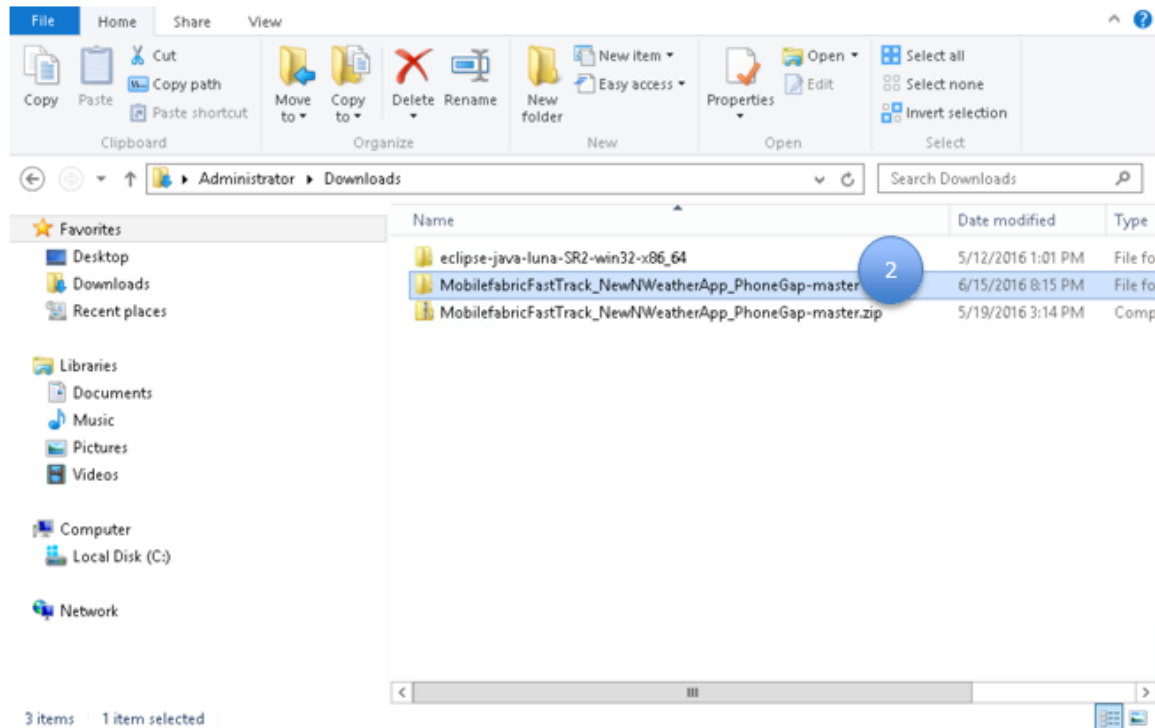
Branch: master New pull request Find file Clone or download

Commit	Message	Date
KonyDev	Updated the code to fetch weather info	Jan 25, 2016
	Binaries Folder added	Jan 21, 2016
	Updated the code to fetch weather info	Jan 25, 2016
	Initial commit	Jul 3, 2015
	Updated README.md and other files.	Jan 21, 2016

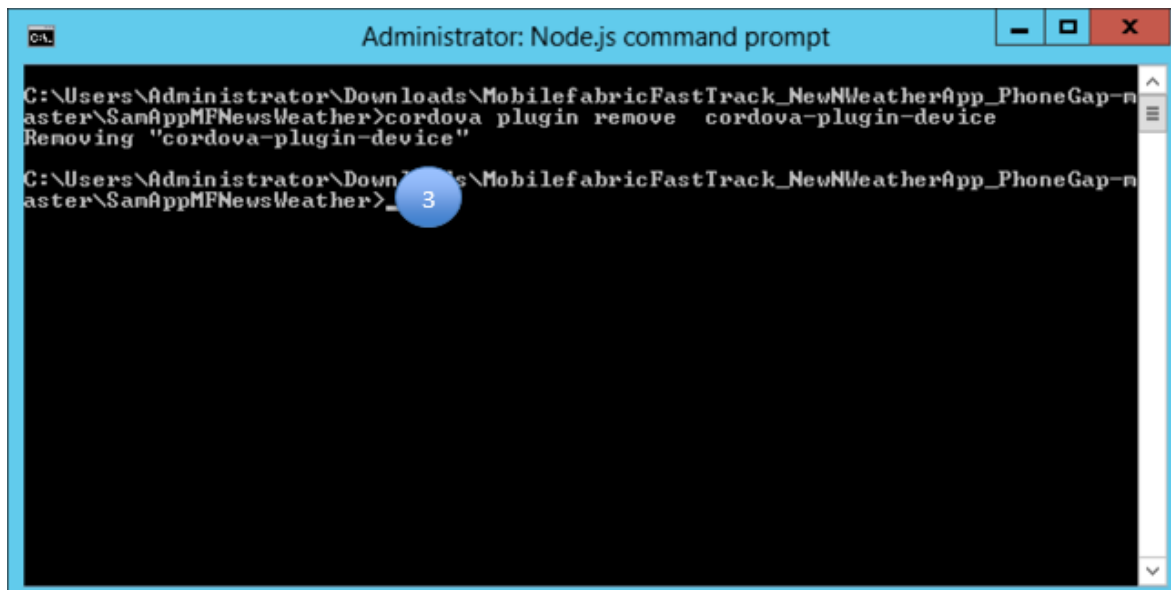
README.md

To get started, first click the Download ZIP button to the right to download this tutorial's assets.

2. Extract the downloaded zip file into the Kony FabricFastTrack_NewWeatherApp_PhoneGap folder (below).



3. Open the **Node.js** command prompt, in your development environment, and navigate to the **SampleAppMFNewsWeather** folder (3).



4. Run the following commands to add the plug-ins.

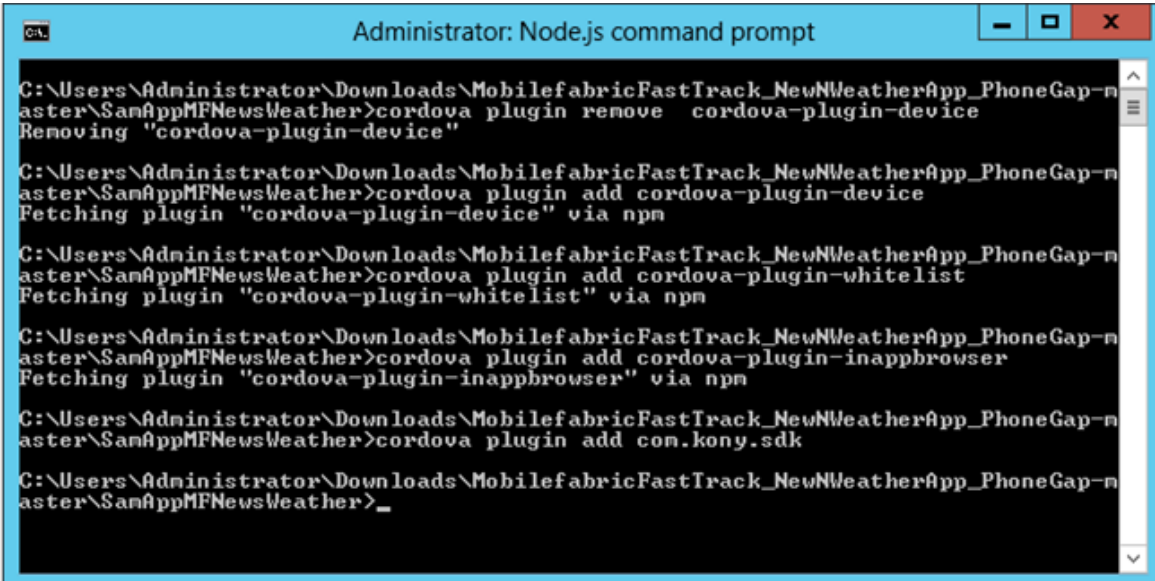
```
cordova plugin add cordova-plugin-device
```

```
cordova plugin add cordova-plugin-whitelist
```

```
cordova plugin add cordova-plugin-inappBrowser
```

```
cordova plugin add com.kony.sdk
```

Once the plug-ins are successfully added, the following screen appears:



```
Administrator: Node.js command prompt
C:\Users\Administrator\Downloads\MobilefabricFastTrack_NewWeatherApp_PhoneGap-n
aster\SanAppMFNewsWeather>cordova plugin remove cordova-plugin-device
Removing "cordova-plugin-device"

C:\Users\Administrator\Downloads\MobilefabricFastTrack_NewWeatherApp_PhoneGap-n
aster\SanAppMFNewsWeather>cordova plugin add cordova-plugin-device
Fetching plugin "cordova-plugin-device" via npm

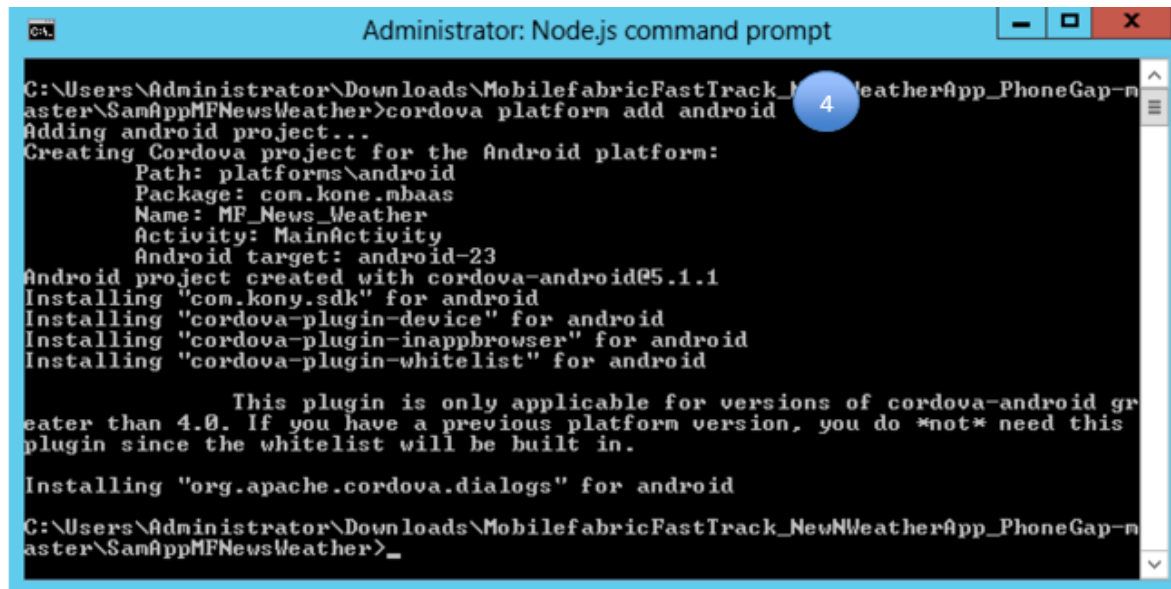
C:\Users\Administrator\Downloads\MobilefabricFastTrack_NewWeatherApp_PhoneGap-n
aster\SanAppMFNewsWeather>cordova plugin add cordova-plugin-whitelist
Fetching plugin "cordova-plugin-whitelist" via npm

C:\Users\Administrator\Downloads\MobilefabricFastTrack_NewWeatherApp_PhoneGap-n
aster\SanAppMFNewsWeather>cordova plugin add cordova-plugin-inappbrowser
Fetching plugin "cordova-plugin-inappbrowser" via npm

C:\Users\Administrator\Downloads\MobilefabricFastTrack_NewWeatherApp_PhoneGap-n
aster\SanAppMFNewsWeather>cordova plugin add com.kony.sdk

C:\Users\Administrator\Downloads\MobilefabricFastTrack_NewWeatherApp_PhoneGap-n
aster\SanAppMFNewsWeather>_
```

- To create the Android folder, type the command `cordova platform add android` (4).

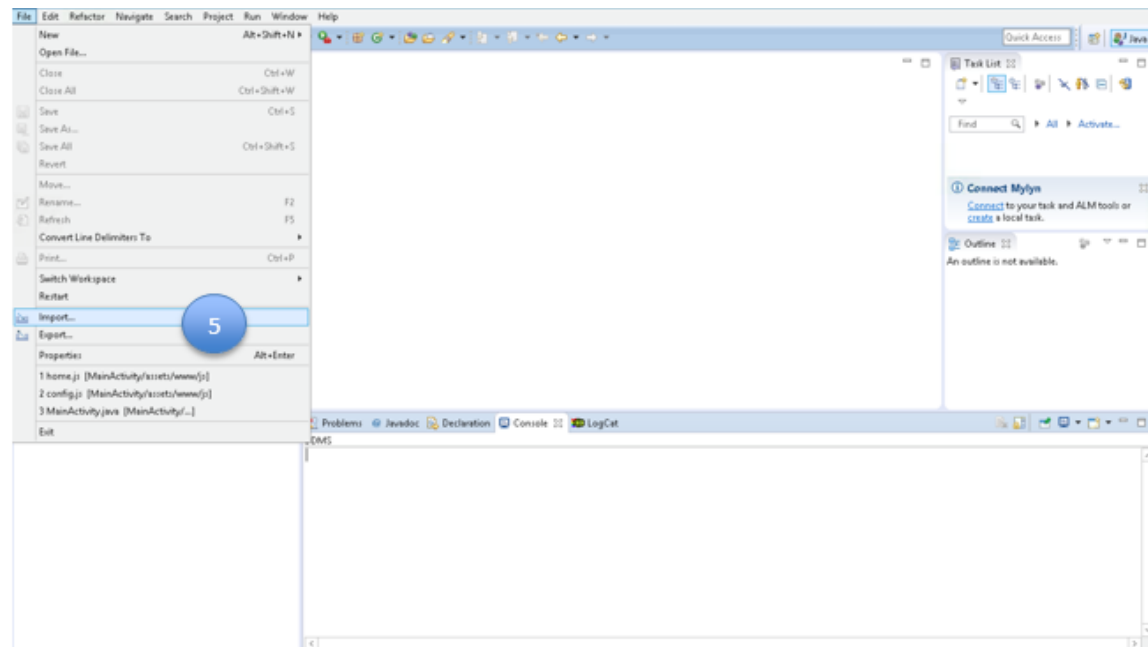


```
Administrator: Node.js command prompt
C:\Users\Administrator\Downloads\MobilefabricFastTrack_NewWeatherApp_PhoneGap-master\SAMAppMFNewsWeather>cordova platform add android
Adding android project...
Creating Cordova project for the Android platform:
  Path: platforms\android
  Package: com.kone.mbaas
  Name: MF_News_Weather
  Activity: MainActivity
  Android target: android-23
Android project created with cordova-android@5.1.1
Installing "com.kony.sdk" for android
Installing "cordova-plugin-device" for android
Installing "cordova-plugin-inappbrowser" for android
Installing "cordova-plugin-whitelist" for android

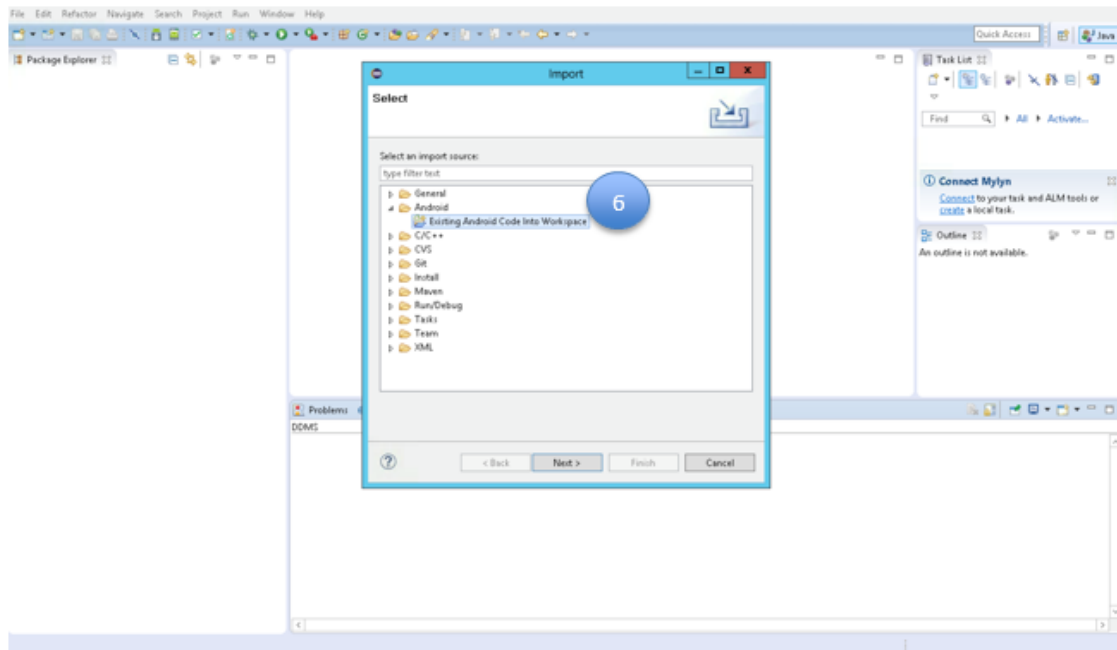
This plugin is only applicable for versions of cordova-android greater than 4.0. If you have a previous platform version, you do *not* need this plugin since the whitelist will be built in.

Installing "org.apache.cordova.dialogs" for android
C:\Users\Administrator\Downloads\MobilefabricFastTrack_NewWeatherApp_PhoneGap-master\SAMAppMFNewsWeather>
```

- Import the Android folder into your workspace. In the Eclipse-based, Cordova environment, click **File > Import** (5).

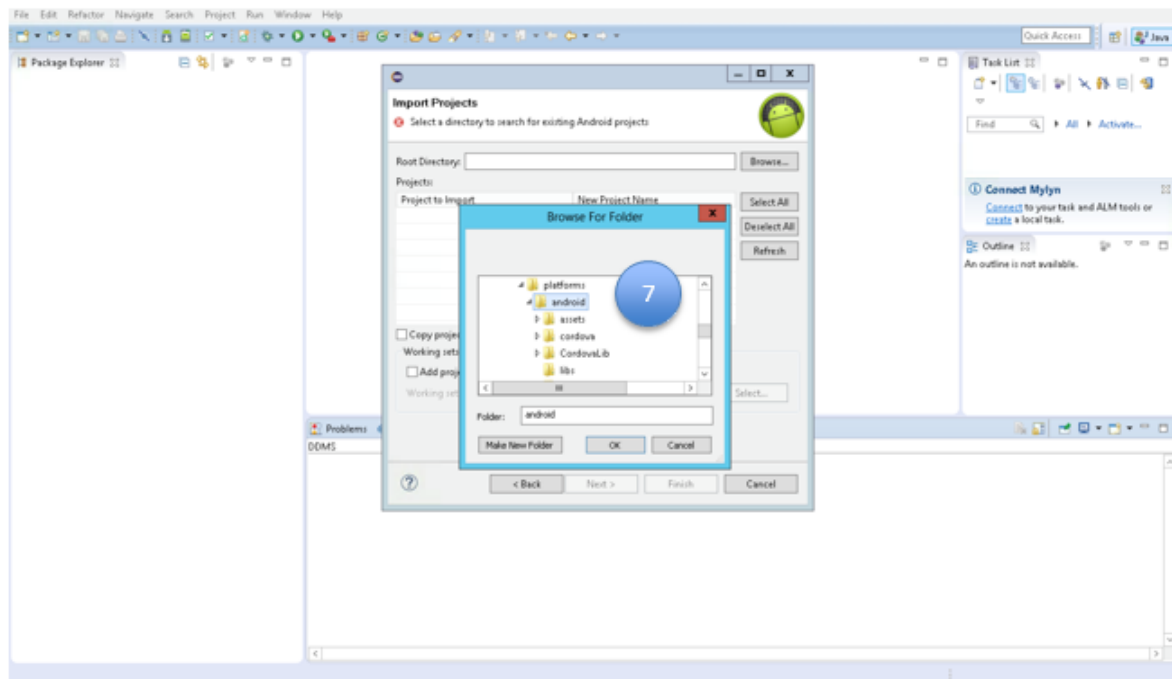


7. Select Existing Android Workspace (6) to select the Android folder that was created earlier.

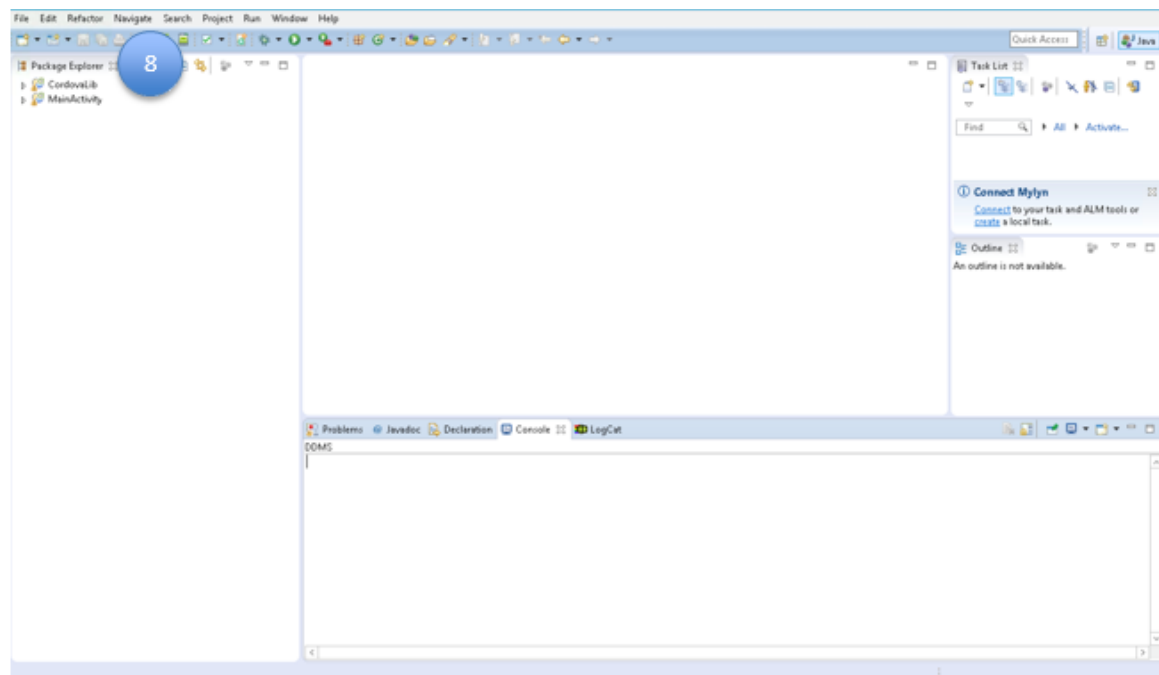


8. Browse the **MobilefabricFastTrack_NewWeatherApp_PhoneGap** folder that is installed on your machine and select the Android folder under Platforms. The Android folder (7) is under SampleAppMFNewsWeather folder.

- Click **OK** to import two projects that are present in the Android folder into the workspace.



When the CordovaLib and MainActivity projects (8) are brought into the workspace, they compile.

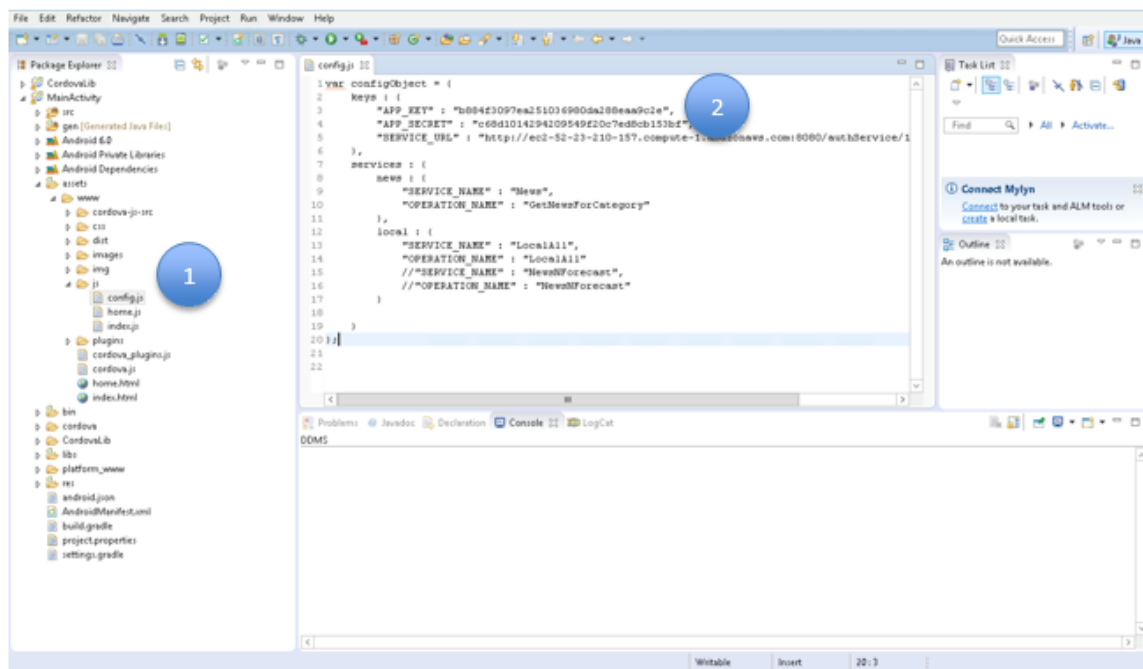


2.4 Configuration of the Cordova Client Application

The section provides details of the configuration of Cordova client application. The configuration enables the client application to connect to Kony Fabric and provide data to the client application.

To configure the client application, follow these steps:

1. Open the **config.js** (shown as 1 below) file in the eclipse editor. The config file is under **MainActivity**> **assets** > **www** > **js** folder.
2. The **keys** section (shown as 2 below) will need to be updated with the **Appkey**, **AppSecret** and **ServiceURL** of the published application in Kony Fabric. (The **Appkey**, **AppSecret** and **ServiceURL** are provided when the application is published in Kony Fabric).

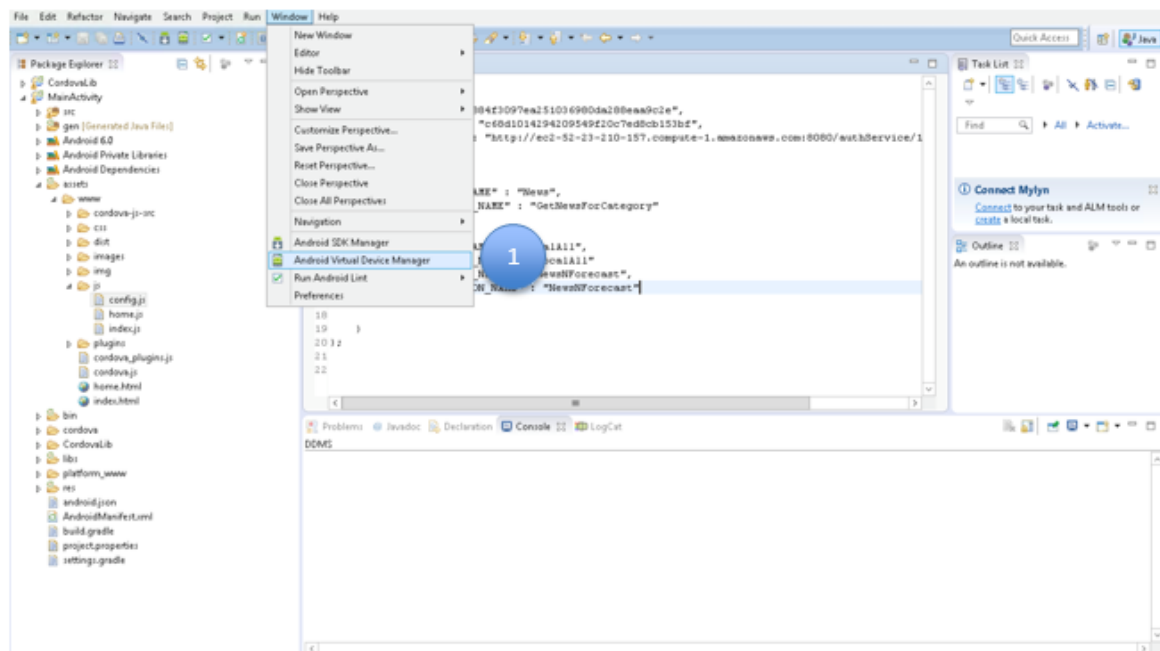


That's it! We are done with the client-side configuration needed to run the News and Weather Cordova application.

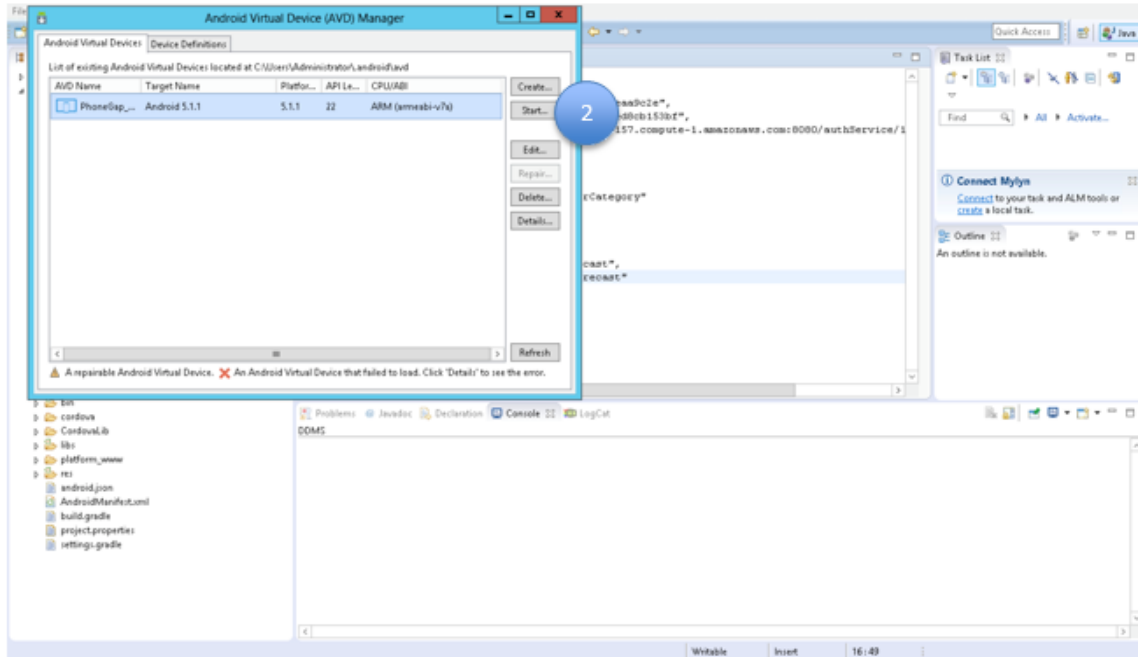
2.5 Deploying and Executing the News and Weather Application

The section provides details of deploying the News and Weather application in the Android emulator. To launch the application in the emulator and run the application, follow these steps:

1. The next step is to launch the preconfigured android emulator .In the eclipse based Cordova environment, click on **Window> Android Virtual Manager**, shown as 1 in the figure below, to start the emulator launch.

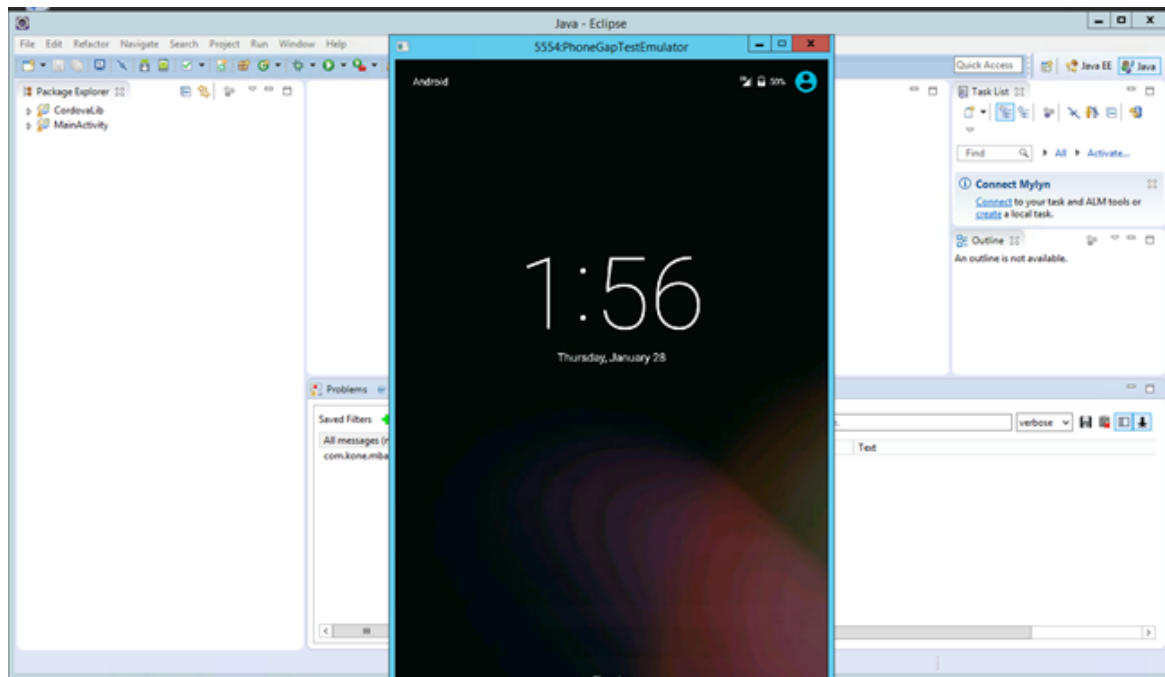


2. In the screen below, select the emulator that you have already created. In the figure it is called as **PhoneGapEmulator**. Click **Start**, shown as 2 in the figure below, to launch the emulator.

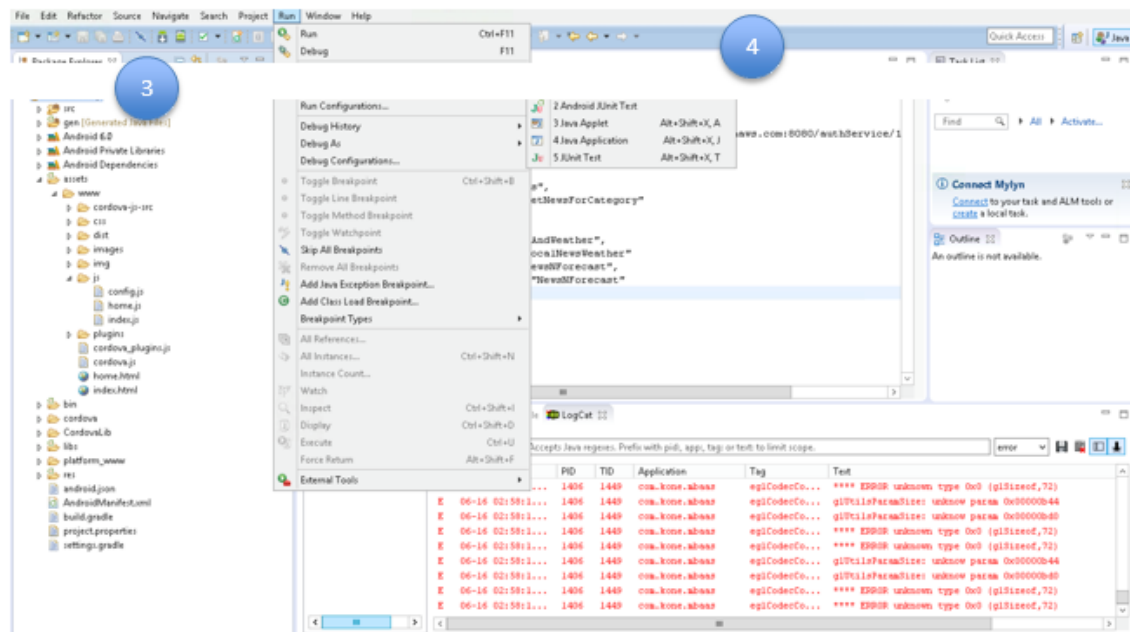


3. Once you see the emulator screen as below, the emulator is ready for the application to be deployed (Note: The emulator screen could look different based your emulator configuration). Please make sure that the emulator is completely launched before the application is deployed

else it takes a long time for the application to launch on emulator.



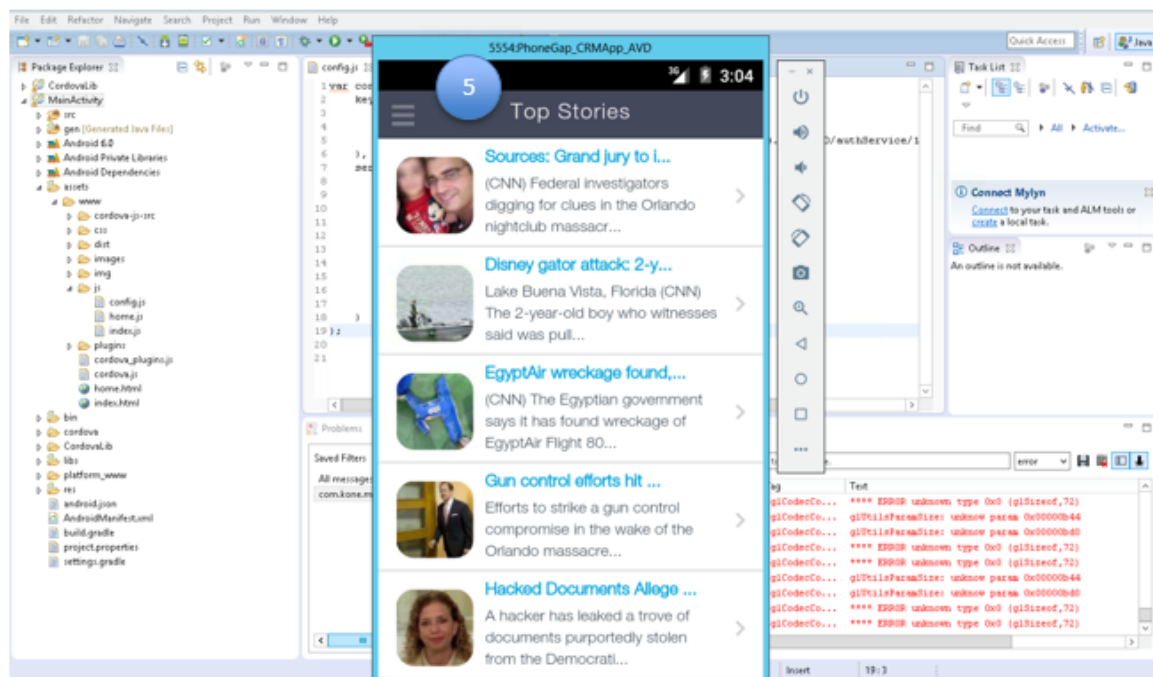
4. Minimize the emulator and click on **MainActivity** (shown as 3 in figure below) on the left. Choose **Run** from the menu and click **Run As > Android Application** (shown as 4 in figure) below. This will launch the application on the emulator that is running.



- Once the application is launched, **Top Stories** option of the application is chosen by default and that data is displayed. This data is displayed by invoking the Kony Fabric's **News** service.

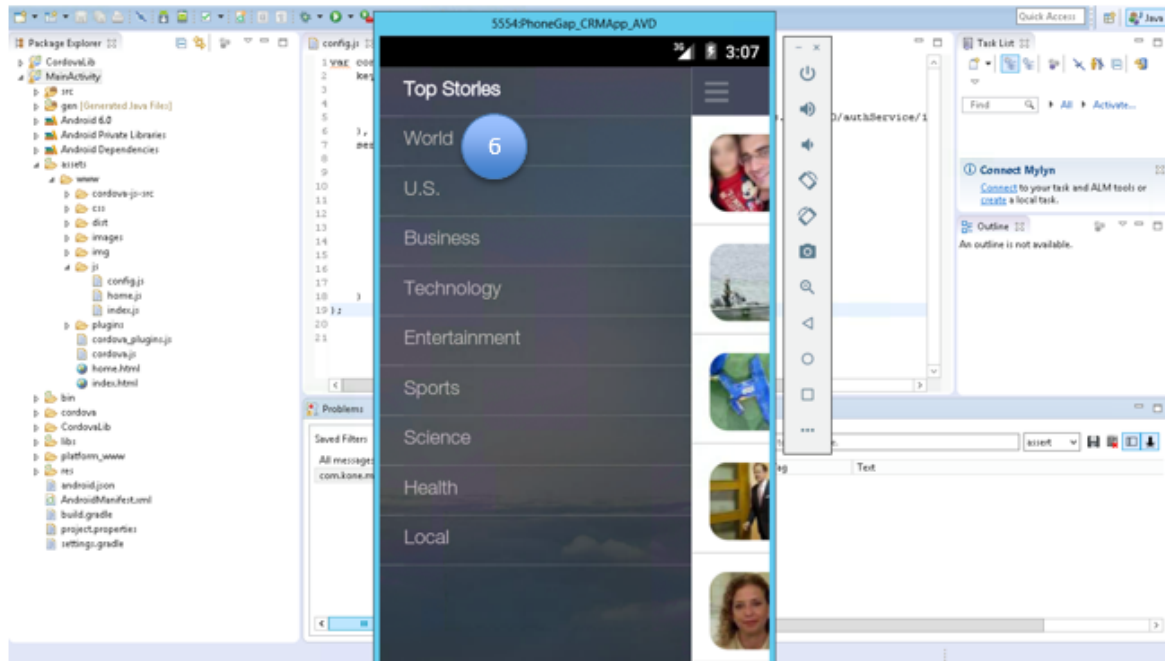
Click on the hamburger menu (shown as 5 in the figure below) on the top left corner of the application in the emulator to display the menu options.

Note: Then two apps are installed on the emulator, the latest installed app may not launch. We recommend that you uninstall the first application before you install another. Restart the emulator after the second application is installed.

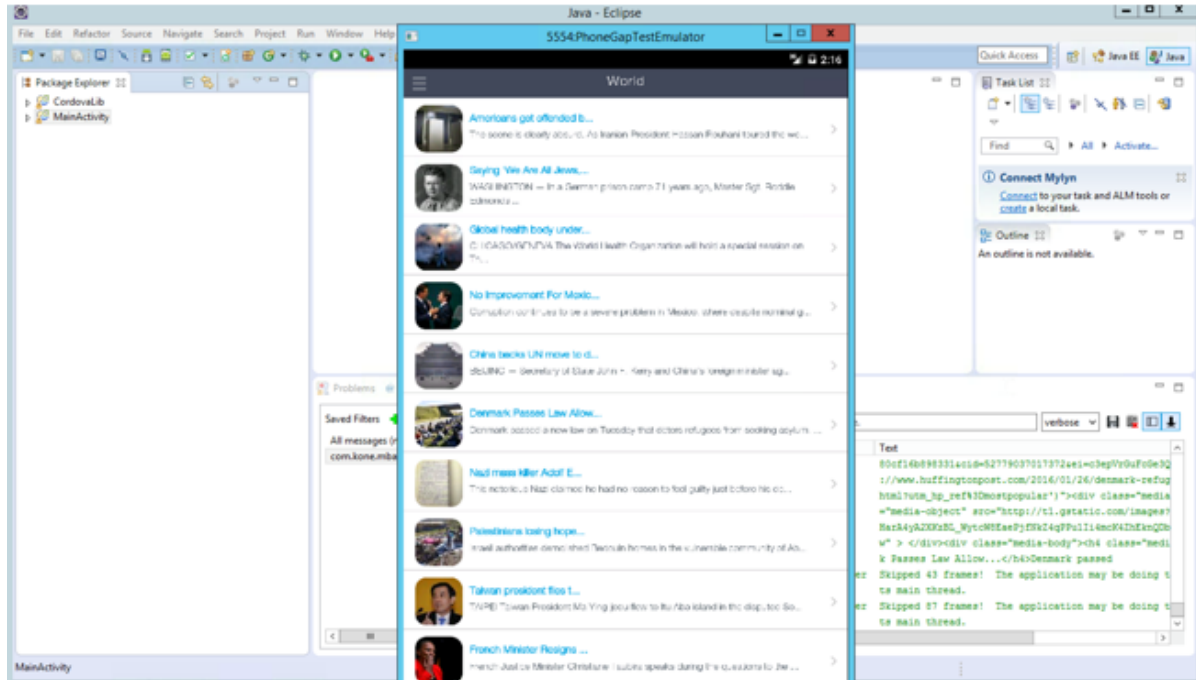


6. Click World (6) to review the World news.

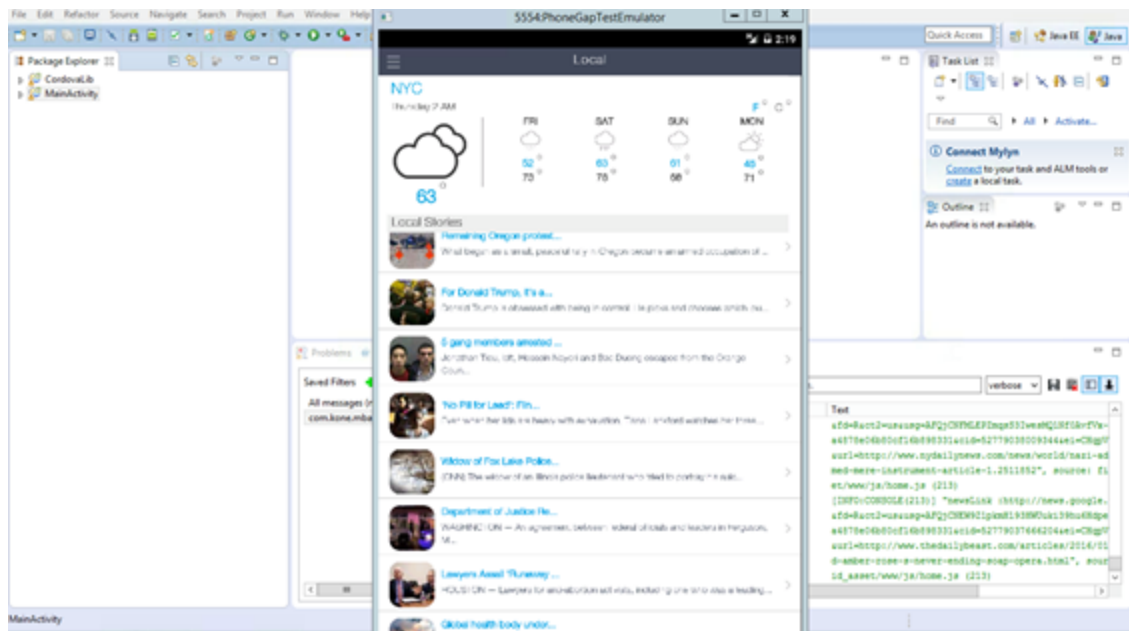
The data is displayed by invoking the Kony Fabric's News service. The category value that is passed to the **GetNewsForCategory** operation is **W** because of which world news is retrieved.



- Once the world news is displayed, click on the “Local” in the hamburger menu to retrieve the local news.



- The application’s **Local** screen displays current weather, weather forecast and the local news. This is done by invoking the Kony Fabric’s **NewsAndWeather** orchestration service. The application invokes the **NewsAndWeather** orchestration service by passing the NYC’s latitude and longitude values.



2.6 Next steps

This manual explained how to connect a Cordova client application to the existing Kony Fabric integration and orchestration services. The manual also demonstrated how to install and run the Cordova application in a preconfigured android emulator. If you want to give Kony Fabric a spin, sign up for a 90 day trial at <http://www.kony.com/products/konyfabric/trial>.