# Quick Start demonstration

The purpose of this demonstration is to make you experience an end-to-end flow where IBM MobileFirst Platform Foundation SDK for Android is integrated into an Android project and used to retrieve data by using a MobileFirst adapter.

To learn more about creating projects and applications, using adapters and lots more, visit the Native Android Development (../) landing page.

**Prerequisite:** Make sure that you have installed the following software:

- MobileFirst Platform command line tool (download (file:////home/travis/build/MFPSamples/DevCenter/\_site/downloads))
- Android Studio

#### 1. Create a MobileFirst back-end project and adapter.

Create a back-end project in a location of your choice.

```
mfp create MyProject
cd MyProject
```

Add an HTTP adapter to the project.

```
mfp add adapter MyAdapter -t http
```

### 2. Deploy artifacts to the MobileFirst Server.

• Start the MobileFirst Server and deploy the adapter.

```
mfp start
mfp push
```

3. Create an Android project in Android Studio.

## 4. Add the MobileFirst Android SDK to the Android Studio project

- In Project > Gradle scripts, select build.gradle (Module: app).
- After apply plugin: 'com.android.application', add the following line:

```
repositories {
    jcenter()
}
```

Inside android, add the following lines:

```
packagingOptions {
    pickFirst 'META-INF/ASL2.0'
    pickFirst 'META-INF/LICENSE'
    pickFirst 'META-INF/NOTICE'
}
```

• Inside dependencies, add the following lines:

```
compile group: 'com.ibm.mobile.foundation',
name: 'ibmmobilefirstplatformfoundation',
version: '7.1.0.0',
ext: 'aar',
transitive: true
```

• Add the following permissions to the AndroidManifest.xml file:

```
<uses-permission android:name="android.permission.INTERNET"/>
<uses-permission android:name="android.permission.ACCESS_WIFI_STATE"/>
<uses-permission android:name="android.permission.GET_TASKS" />
```

• Add the MobileFirst UI activity:

```
<activity android:name="com.worklight.wlclient.ui.UIActivity" />
```

• In Terminal, navigate to the root of the Android Studio project and add the required configuration files by running this command:

```
mfp push
```

- Implement MobileFirst adapter invocation.
  - Main Activity class

Make sure that your MainActivity class extends the Activity class:

```
public class MainActivity extends Activity {
...
```

Add the following import statements:

```
import com.worklight.wlclient.api.*;
import android.util.Log;
import java.net.URI;
import java.net.URISyntaxException;
```

Add the following lines to the onCreate method:

```
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);
final WLClient client = WLClient.createInstance(this);
client.connect(new WLResponseListener() {
  @Override
  public void onSuccess(WLResponse wlResponse) {
     URI adapterPath = null;
      adapterPath = new URI("/adapters/MyAdapter/getFeed");
    } catch (URISyntaxException e) {
      e.printStackTrace();
    WLResourceRequest request = new WLResourceRequest(adapterPath,WLRe
sourceRequest.GET);
     request.send(new MyInvokeListener());
  @Override
  public void onFailure(WLFailResponse wlFailResponse) {
    Log.i("MFPMyProject", "Failed connecting to the MobileFirst Server: " + wlFailR
esponse.getErrorMsg());
  }
});
```

#### MyInvokeListener class

```
Add a new MyInvokeListener class.

Add the following import statements:
```

```
import com.worklight.wlclient.api.*;
import android.util.Log;
```

Paste the following lines:

```
public class MyInvokeListener implements WLResponseListener {
    @Override
    public void onSuccess(WLResponse wlResponse) {
        Log.i("MFPMyProject","Adapter invocation response: " + wlResponse.getResponseJSON());
    }
    @Override
    public void onFailure(WLFailResponse wlFailResponse) {
        Log.i("MFPMyProject", "Adapter invocation response: " + wlFailResponse.get
ErrorMsg());
    }
}
```

### Final configurations

■ Create an Android Virtual Device (AVD).

#### · Click Run.

Review the LogCat view for the data retrieved by the adapter request.

