# Android end-to-end demonstration

## Overview

The purpose of this demonstration is to experience an end-to-end flow where an application is quickly created using the MobileFirst Operations Console and connectivity is verified with the MobileFirst Server.

### Prerequisites:

- Configured Android Studio
- MobileFirst developer CLI (download (file:////home/travis/build/MFPSamples/DevCenter/_site/downloads))
- *Optional* Stand-alone MobileFirst Server (download (file:////home/travis/build/MFPSamples/DevCenter/_site/downloads))

## 1. Starting the MobileFirst Server

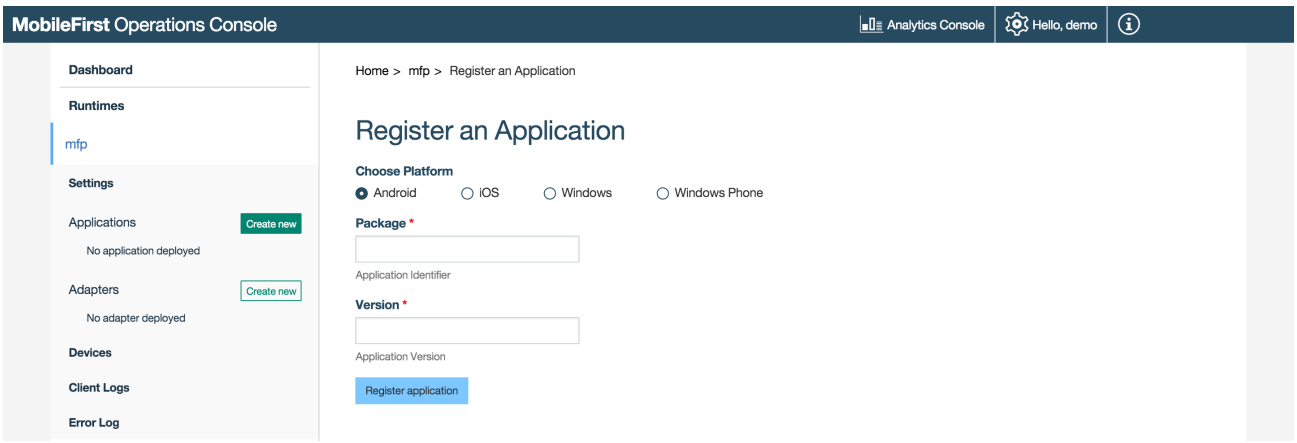
> If a remote server was already set-up, skip this step.

From a **Command-line** window, navigate to the server's **scripts** folder and run the command: `./start.sh` in Mac and Linux or `start.cmd` in Windows.

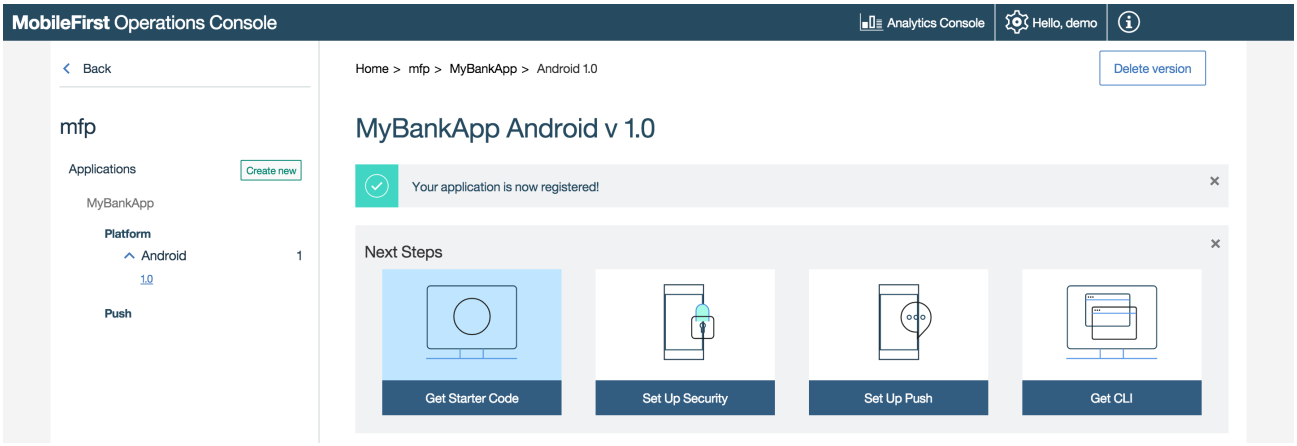
## 2. Creating an application

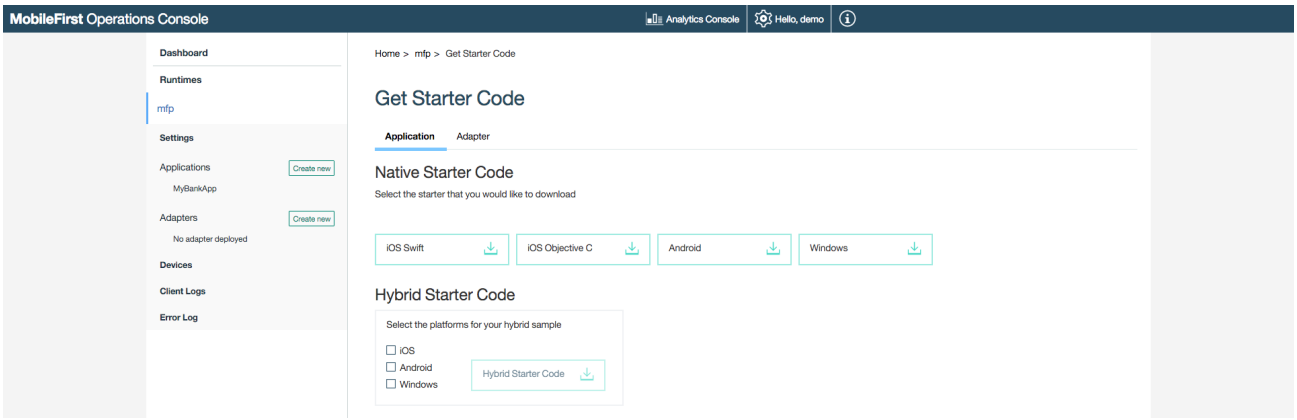
In a browser window, open the MobileFirst Operations Console by loading the URL: `http://your-server-host:server-port/mfpconsole`. If running locally, use: http://localhost:9080/mfpconsole (http://localhost:9080/mfpconsole). The username/password are *admin/admin*.

1. Click on the "Create new" button next to **Applications** and select the desired *platform*, *identifier* and *version* values.




2. Click on the **Get Starter Code** tile and select to download the Android Starter Code.




## 3. Editing application logic

1. Open the Android Studio project.
2. Select the **app/java/com.mfp.sample/MainActivity.java** file and paste the following code snippets:

- Imports:

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

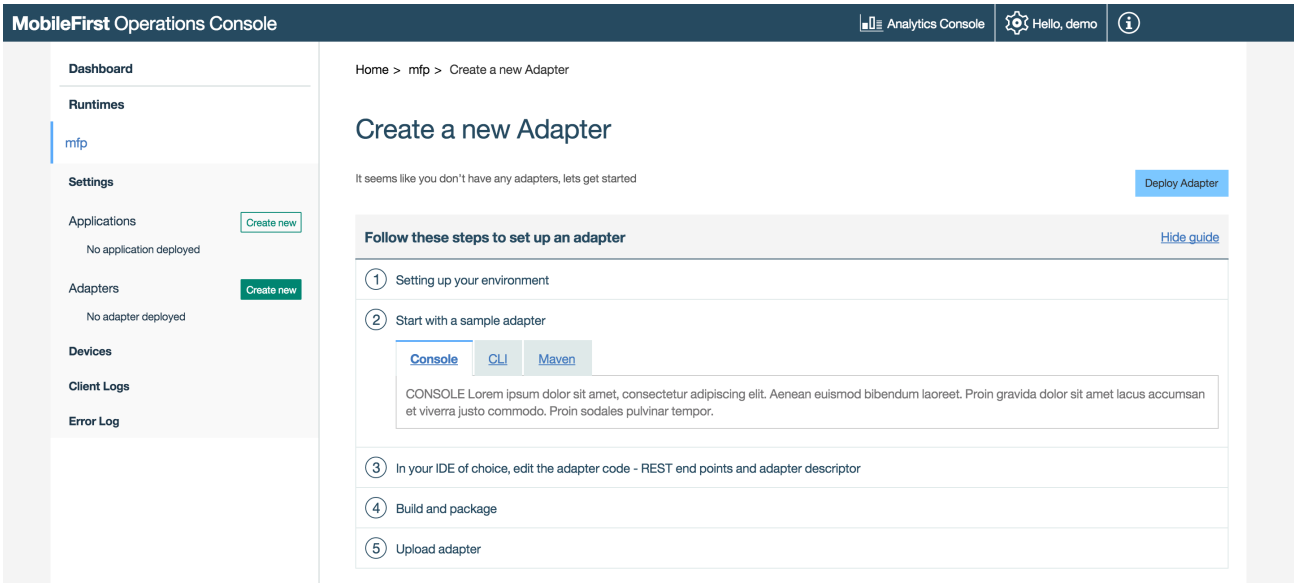
- In `protected void onCreate()`:

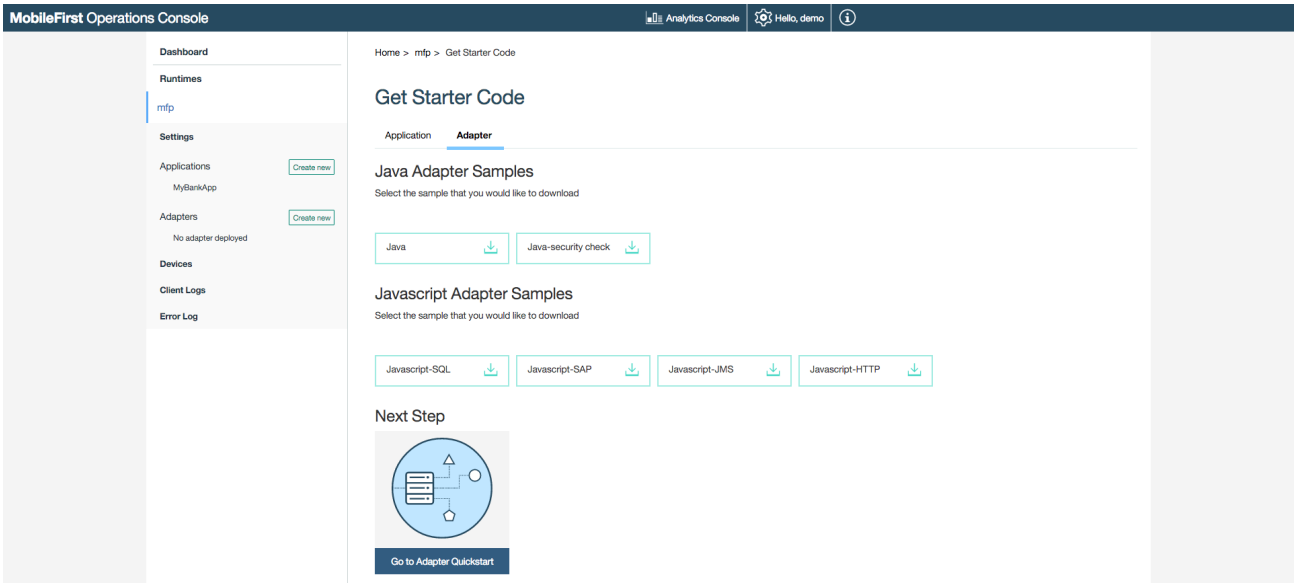
```
WLClient client = WLClient.createInstance(this);
URI adapterPath = null;
try {
    adapterPath = new URI("/adapters/javaAdapter/users/world");
} catch (URISyntaxException e) {
    e.printStackTrace();
}

WLResourceRequest request = new WLResourceRequest(adapterPath, WLResourceRequest.GET);
request.send(new WLResponseListener() {
    @Override
     public void onSuccess(WLResponse wlResponse) {
        Log.i("MobileFirst Quick Start", "Success: " + wlResponse.getResponseText());
    }

    @Override
    public void onFailure(WLFailResponse wlFailResponse) {
        Log.i("MobileFirst Quick Start", "Failure: " + wlFailResponse.getErrorMsg());
    }
});
```

## 4. Creating an adapter

1. Click on the "Create new" button next to **Adapters** and download the **Java** adapter sample.

> If Maven and the MobileFirst developer CLI are not installed, follow the on-screen **Setting up your environment** instructions to install.






2. From a **Command-line** window, navigate to the adapter's Maven project root folder and run the command:

```
mfpdev adapter build
```

3. When the build finishes, run the command:

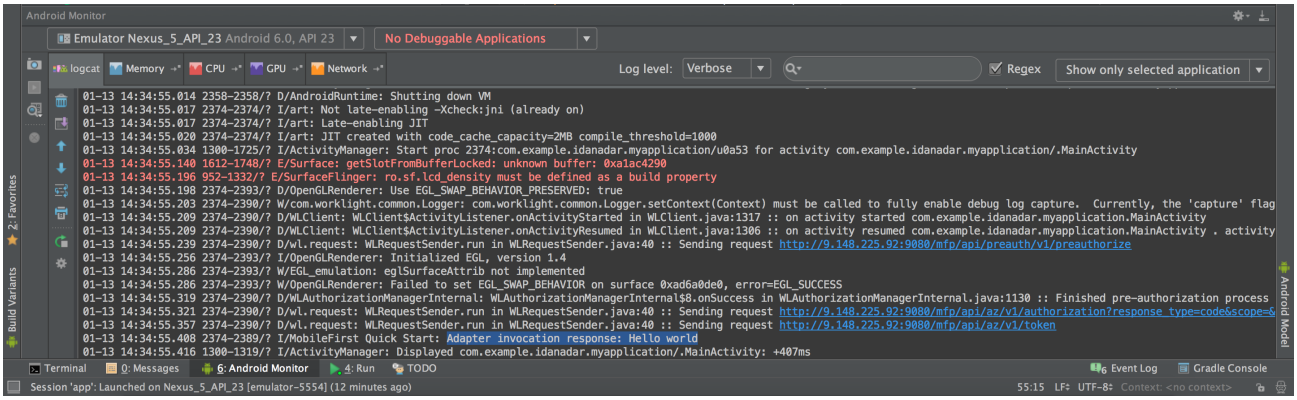
```
mfpdev adapter deploy
```

If using a remote MobileFirst Server, run the command:

```
mfpdev adapter deploy Replace-with-remote-server-name
```

## 5. Testing the application

1. In Android Studio, click on the **Run App** button.
The adapter response is then printed in Android Studio's **LogCat**.




# Next steps

Learn more on using adapters in applications, and how to integrate additional services such as Push Notifications, using the MobileFirst security framework and more:

- Review the Server-side development tutorials (../../server-side-development/)

- Review the Authentication and security tutorials (../../authentication-and-security/)
- Review the Notifications tutorials (../../notifications/)
- Review All Tutorials (../../all-tutorials)