

# iOS 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 Xcode
- 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

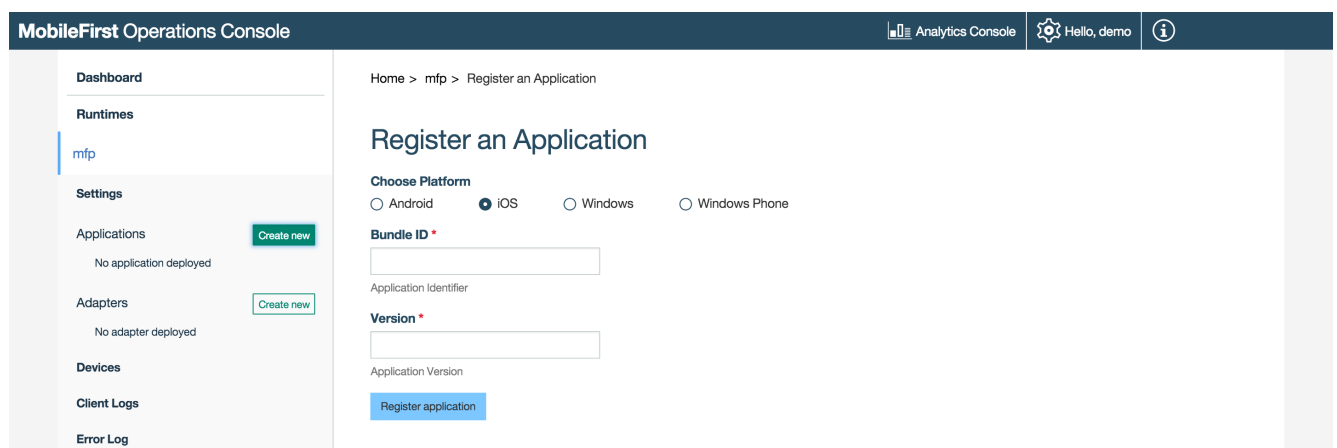
If a remote server was already set-up, skip this step.

1. From a **Command-line** window, navigate to the server's **scripts** folder and run the command: `./start.sh`.

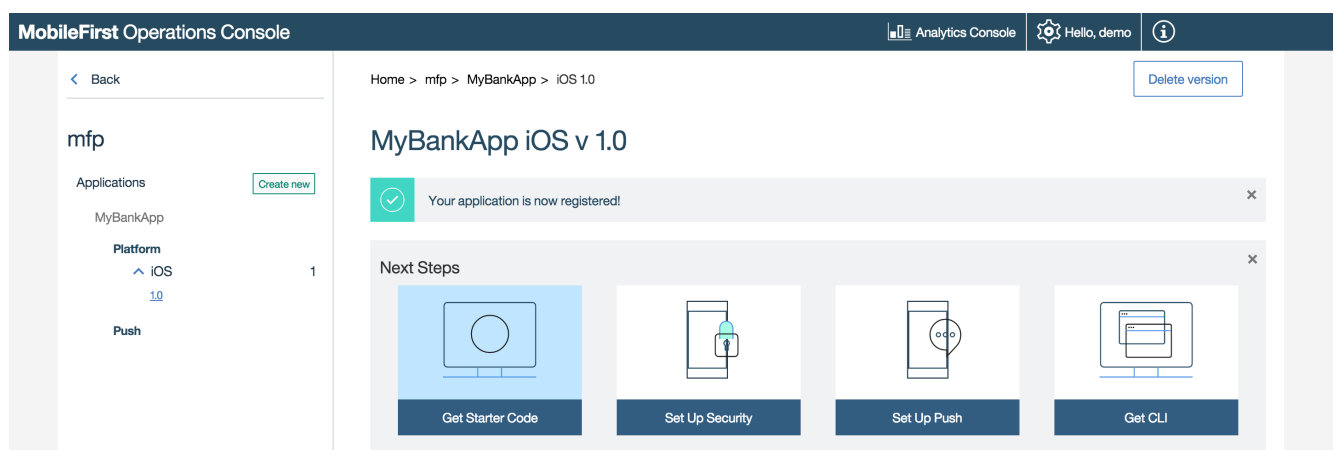
## 2. Creating an application

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 iOS Starter Code.





### 3. Editing application logic

1. Open the Xcode project project.
2. Select the `[project-root]/ViewController.m/swift` file and:

- Add the following header:

In Objective-C:

```
#import <IBMMobileFirstPlatformFoundation/IBMMobileFirstPlatformFoundation.h>
```

In Swift:

```
import IBMMobileFirstPlatformFoundation
```

- Paste the following code snippet in the `viewDidLoad` function:

In Objective-C:

```
NSURL* url = [NSURL URLWithString:@"adapters/javaAdapter/users/world"];
WLResourceRequest* request = [WLResourceRequest requestWithURL:url method:WLHttpMethodGet];

[request sendWithCompletionHandler:^(WLResponse *response, NSError *error) {
    if (error != nil){
        NSLog(@"Failure: %@",error.description);
    }
    else if (response != nil){
        NSLog(@"Success: %@",response.responseText);
    }
}];
```

In Swift:

```
let url = NSURL(string: "/adapters/javaAdapter/users/world")
let request = WLResourceRequest(URL: url, method: WLHttpMethodGet)

request.sendWithCompletionHandler { (WLResponse response, NSError error) -> Void in
    if (error != nil){
        NSLog("Failure: " + error.description)
    }
    else if (response != nil){
        NSLog("Success: " + response.responseText)
    }
}
```

### 4. Creating an adapter

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

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

MobileFirst Operations Console

Analytics Console

Hello, demo

Dashboard

Runtimes

mfp

Settings

Applications

No application deployed

Create new

Adapters

No adapter deployed

Create new

Devices

Client Logs

Error Log

Home > mfp > Create a new Adapter

Create a new Adapter

It seems like you don't have any adapters, lets get started

Deploy Adapter

Follow these steps to set up an adapter

Hide guide

1

Setting up your environment

2

Start with a sample adapter

Console

CLI

Maven

CONSOLE

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aenean euismod bibendum laoreet. Proin gravida dolor sit amet lacus accumsan et viverra justo commodo. Proin sodales pulvinar tempor.

3

In your IDE of choice, edit the adapter code - REST end points and adapter descriptor

4

Build and package

5

Upload adapter

MobileFirst Operations Console

Analytics Console

Hello, demo

Dashboard

Runtimes

mfp

Settings

Applications

MyBankApp

Create new

Adapters

No adapter deployed

Create new

Devices

Client Logs

Error Log

Home > mfp > Get Starter Code

Get Starter Code

Application

Adapter

Java Adapter Samples

Select the sample that you would like to download

Java

Java-security check

Javascript Adapter Samples

Select the sample that you would like to download

Javascript-SQL

Javascript-SAP

Javascript-JMS

Javascript-HTTP

Next Step

Go to Adapter Quickstart

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

```
mfpdev adapter build
```

- When the build finishes, run the command:

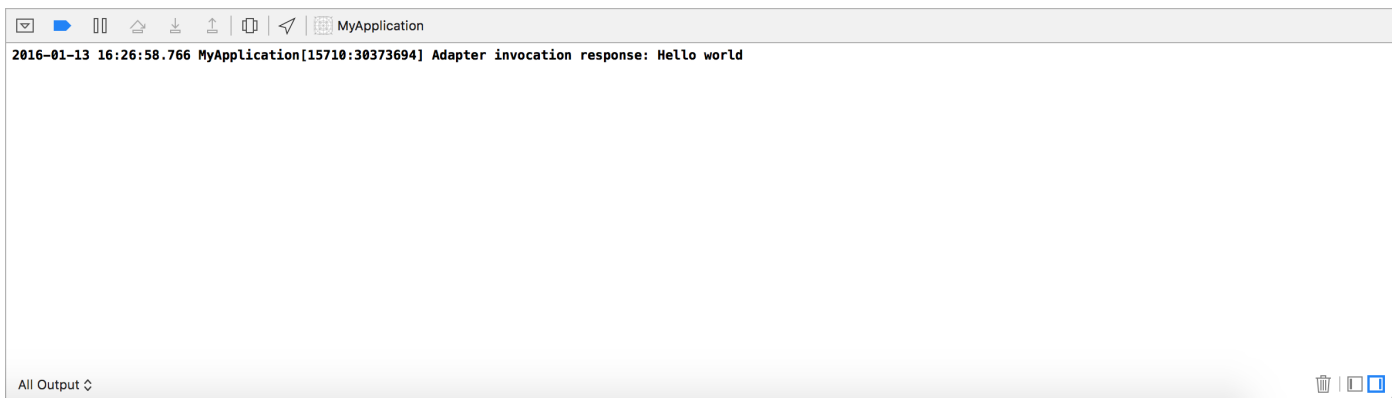
```
mfpdev adapter deploy
```

If using a remote MobileFirst Server, run the command:

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

## 5. Testing the application

In Xcode, press the **Play** button.



**Note:** Xcode 7 enables Application Transport Security (ATS)

([https://developer.apple.com/library/ios/releasenotes/General/WhatsNewIniOS/Articles/iOS9.html#//apple\\_ref/doc/uid/TP40016198-SW14](https://developer.apple.com/library/ios/releasenotes/General/WhatsNewIniOS/Articles/iOS9.html#//apple_ref/doc/uid/TP40016198-SW14)) by default.

To complete the tutorial, disable ATS (<http://iosdevtips.co/post/121756573323/ios-9-xcode-7-http-connect-server-error>).

1. In Xcode, right-click the **[project]/info.plist** file → **Open As** → **Source Code**
2. Paste the following:

```
<key>NSAppTransportSecurity</key>
<dict>
  <key>NSAllowsArbitraryLoads</key>
  <true/>
</dict>
```

3. Press the **Play** button.

## 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](#))