

# Event Source Push Notifications in Hybrid Applications

- Download sample  
(<http://public.dhe.ibm.com/software/products/en/MobileFirstPlatform/docs/v700/PushNotificationsHybridProject.zip>)

## Overview

This tutorial expands on the implementation of event source push notification client-side API, and covers the following topics:

- Sending the token and initializing the WLPush class
- Registering the event source
- Subscribing to/unsubscribing from the event source

## Notification API - Client-side

### Methods

- `WL.Client.Push.isPushSupported()` – returns `true` if push notifications are supported by the platform, or `false` otherwise.
- `WL.Client.Push.isSubscribed(alias)` – returns whether the currently logged-in user is subscribed to a specified event source alias.

When a push notification is received by a device, the callback function defined in `WL.Client.Push.registerEventSourceCallback` is invoked:

```
[code lang="js"]function pushNotificationReceived(props, payload) {  
    alert("pushNotificationReceived invoked");  
    alert("props :: " + JSON.stringify(props));  
    alert("payload :: " + JSON.stringify(payload));  
}[/code]
```

If the application was in background mode (or inactive) when the push notification arrived, this callback function is invoked when the application returns to the foreground.

## Back-end emulator

The sample project for this tutorial is bundled with a back-end emulator which can be used to simulate push notification submissions by a back-end system. The source for the emulator can be found in the sample project.

To run the back-end emulator, open the `PushBackendEmulator` folder of the sample project in a command prompt, and then run the supplied JAR file by using the following syntax:

```
[code]java -jar PushBackendEmulator.jar <userId> <message> <contextRoot> <port>[/code]
```

`userId` is the user name that you used to log in to the sample application.

`contextRoot` is the context root of your MobileFirst project.

## Example

```
[code]java -jar PushBackendEmulator.jar JohnDoe "My first push notification" myContextRoot 10080[/code]
```

The back-end emulator tries to connect to a MobileFirst Server and call `asubmitNotification()` adapter procedure. It outputs the invocation result to a command prompt console.

## Success

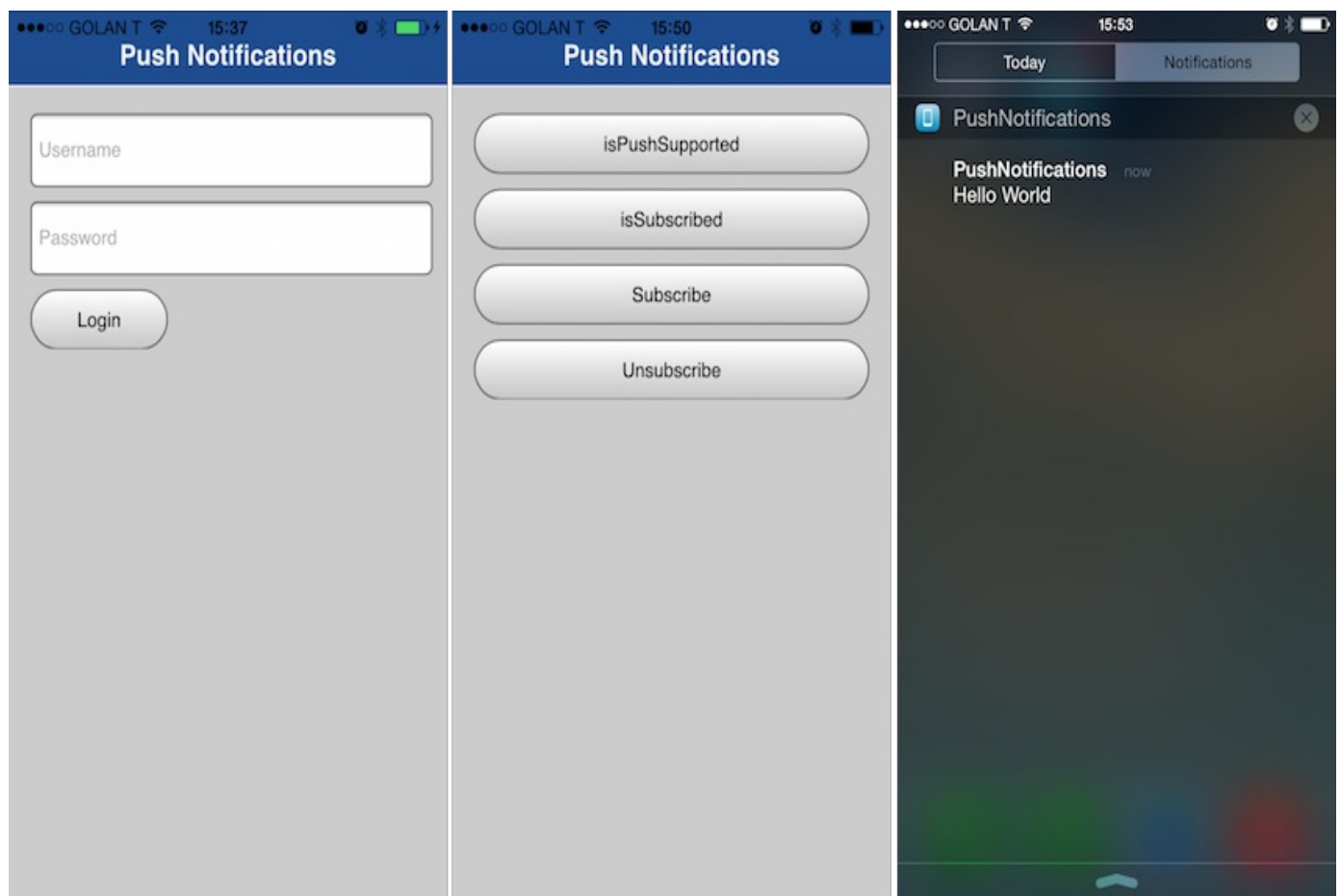
```
c:\>java -jar C:\PushBackendEmulator.jar JohnDoe "hello push" PushNotificationsProject 10080
PushBackendEmulator
User Id: JohnDoe
Notification text: hello push
Server URL: http://localhost:10080/PushNotificationsProject
sending notification
Server response :: {  "isSuccessful": true,  "result": "Notification sent to user :: JohnDoe"}
```

([http://developer.ibm.com/mobilefirstplatform/wp-content/uploads/sites/32/2014/07/08\\_01\\_push\\_success.png](http://developer.ibm.com/mobilefirstplatform/wp-content/uploads/sites/32/2014/07/08_01_push_success.png))

## Failure

```
c:\>java -jar C:\PushBackendEmulator.jar JohnMissing "hello push" PushNotificationsProject 10080
PushBackendEmulator
User Id: JohnMissing
Notification text: hello push
Server URL: http://localhost:10080/PushNotificationsProject
sending notification
Server response :: {  "isSuccessful": true,  "result": "No subscription found for user :: JohnMissing"}
```

([http://developer.ibm.com/mobilefirstplatform/wp-content/uploads/sites/32/2014/07/08\\_01\\_push\\_failure.png](http://developer.ibm.com/mobilefirstplatform/wp-content/uploads/sites/32/2014/07/08_01_push_failure.png))



([http://developer.ibm.com/mobilefirstplatform/wp-content/uploads/sites/32/2014/07/08\\_01\\_push\\_sample.png](http://developer.ibm.com/mobilefirstplatform/wp-content/uploads/sites/32/2014/07/08_01_push_sample.png))

## Sample application

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the sample application.

