



**IBM MobileFirst Platform Foundation**

---

# **IBM MobileFirst™ Platform Foundation V8.0.0**

**C# client-side push API for native Windows 10 UWP, Windows 8 Universal and Windows Phone 8.1 Universal apps**

## Note

Before using this information and the product it supports, read the information in “Notices” on page [Appendix A. Notices](#).

This edition applies to version V8.0.0 of IBM MobileFirst Platform Foundation and to all subsequent modifications and fix-packs, until otherwise indicated in new editions. This edition was updated last on 31 March 2016.

© Copyright IBM Corporation 2014, 2016

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

## About IBM®

See the [About IBM](http://www.ibm.com/ibm/us/en/) page (www.ibm.com/ibm/us/en/).

## Contents

1.1	MFPPush Class .....	4
1.1.1	Method GetInstance.....	4
1.1.2	Method GetSubscriptions.....	4
1.1.3	Method GetTags .....	4
1.1.4	Method Initialize .....	5
1.1.5	Method Initialize(Int32).....	5
1.1.6	Method IsPushSupported .....	5
1.1.7	Method Listen .....	5
1.1.8	Method RegisterDevice.....	6
1.1.9	Method UnregisterDevice .....	6
1.1.10	Method Subscribe .....	7
1.1.11	Method Unsubscribe .....	7
1.1.12	Method GetTags .....	8
1.1.13	Method GetSubscriptions.....	8
1.2	MFPPushMessageResponse Class.....	8
1.2.1	Property ErrorMessage.....	9
1.2.2	Property ResponseJSON.....	9
1.2.3	Property Success.....	9
1.3	MFPPushNotificationListener Interface.....	9
1.3.1	Method onReceive .....	10

## Tables

Table 1-1: Method Initialize(Int32) parameters.....	5
Table 1-2: Method Listen(MFPPushNotificationListener) parameters.....	6
Table 1-3: Method RegisterDevice(JObject) parameters .....	6

## About this document

This document is intended for developers who want to access IBM MobileFirst™ Platform Foundation Push services from Windows 10 UWP, Windows 8 Universal or Windows Phone 8.1 Universal applications that are written in C#. The document guides you through the available classes and methods.

## 1.1 MFPPush Class

### 1.1.1 Method GetInstance

#### Syntax

```
public MFPPush GetInstance()
```

#### Description

Creates the singleton instance of MFPPush.

#### Return Value

Type: MFPPush

Returns MFPPush reference.

### 1.1.2 Method GetSubscriptions

#### Syntax

```
public Task<MFPPushMessageResponse> GetSubscriptions()
```

#### Description

Retrieves all the subscriptions of the device.

#### Return Value

Type: Task<MFPPushMessageResponse>

Returns MFPPushMessageResponse Object from the server which contains return status and response data.

### 1.1.3 Method GetTags

#### Syntax

```
public Task<MFPPushMessageResponse> GetTags()
```

#### Description

Retrieves all the available tags of the application.

#### Return Value

Type: Task<MFPPushMessageResponse>

Returns MFPPushMessageResponse Object from the server which contains return status and response data.

### 1.1.4 Method Initialize

#### Syntax

```
public void Initialize()
```

#### Description

Initializes the MFPPush instance.

### 1.1.5 Method Initialize(Int32)

#### Syntax

```
public void Initialize(int timeout)
```

#### Description

Initializes the MFPPush instance.

#### Parameters

Type	Name	Description
System.Int32	timeout	Integer value that specifies time out for the push requests made to the MFP server

Table 1-1: Method Initialize(Int32) parameters

### 1.1.6 Method IsPushSupported

#### Syntax

```
public Boolean IsPushSupported()
```

#### Description

Checks whether push notification is supported.

#### Return Value

Type: Boolean

Returns true if push notification is supported, false otherwise.

### 1.1.7 Method Listen

#### Syntax

```
public void Listen(MFPPushNotificationListener notificationListener)
```

#### Description



Request MFPPush to deliver incoming push messages to listener.onReceive() method.

### Parameters

Type	Name	Description
MFPPushNotificationListener	notificationListener	MFPPushNotificationListener object whose onReceive() method will be called upon receipt of a push message

Table 1-2: Method Listen(MFPPushNotificationListener) parameters

## 1.1.8 Method RegisterDevice

### Syntax

```
public Task<MFPPushMessageResponse> RegisterDevice(JObject options)
```

### Description

Registers the device with the push service.

### Parameters

Type	Name	Description
JObject	options	Push notification options. You can send phone number which is used in SMS Based notifications. For example : <pre>JObject options = new JObject(); options["phoneNumber"]="9844012345";</pre>

Table 1-3: Method RegisterDevice(JObject) parameters

### Return Value

Type: Task<MFPPushMessageResponse>

Returns MFPPushMessageResponse Object from the server which contains return status and response data contains deviceId if it is a success, otherwise failure response.

## 1.1.9 Method UnregisterDevice

### Syntax

```
public Task<MFPPushMessageResponse> UnregisterDevice()
```

### Description

Unregister the device from the push service.

### Return Value

Type: Task<MFPPushMessageResponse>

Returns MFPPushMessageResponse Object from the server which contains return status and response data.

### 1.1.10 Method Subscribe

#### Syntax

```
public Task<MFPPushMessageResponse> Subscribe(String[] Tags)
```

#### Description

Subscribes the device to the given tags.

#### Parameters

Type	Name	Description
String[]	Tags	Array of tags for which the device needs to be subscribed to

Table 1-3: Method Subscribe parameters

#### Return Value

Type: Task<MFPPushMessageResponse>

Returns MFPPushMessageResponse Object from the server which contains return status and response data contains TagNames for which subscription is created if its success, otherwise failure response.

### 1.1.11 Method Unsubscribe

#### Syntax

```
public Task<MFPPushMessageResponse> Unsubscribe(String[] Tags)
```

#### Description

Unsubscribes the device from the given tags.

#### Parameters

Type	Name	Description
String[]	Tags	Array of tags the device needs to be unsubscribed from

Table 1-4: Method Unsubscribe parameters

#### Return Value

Type: Task<MFPPushMessageResponse>

Returns MFPPushMessageResponse Object from the server which contains return status and response data contains TagNames for which subscription is deleted if its success, otherwise failure response.

### 1.1.12 Method GetTags

#### Syntax

```
public Task<MFPPushMessageResponse> GetTags ()
```

#### Description

Retrieves all the available tags of the application.

#### Return Value

Type: Task<MFPPushMessageResponse>

Returns MFPPushMessageResponse Object from the server which contains return status and response data contains list of available tags if its success, otherwise failure response.

### 1.1.13 Method GetSubscriptions

#### Syntax

```
public Task<MFPPushMessageResponse> GetSubscriptions ()
```

#### Description

Retrieves all the subscriptions of the device.

#### Return Value

Type: Task<MFPPushMessageResponse>

Returns MFPPushMessageResponse Object from the server which contains return status and response data contains list of tags subscribed to device if its success, otherwise failure response.

## 1.2 MFPPushMessageResponse Class

#### Syntax

```
public class MFPPushMessageResponse
```

#### Description

This class contains the result of a MFPPush invocation.

#### Inheritance Hierarchy

System.Object

IBMMobileFirstPlatformFoundationPush. MFPPushMessageResponse

### 1.2.1 Property ErrorMessage

#### Syntax

```
public String ErrorMessage { get; }
```

#### Description

This method returns an error message that is for the developer, and not necessarily suitable for the user. Particularly useful in case of failure. In case of Success you may not get any message.

#### Property Value

Type: String

### 1.2.2 Property ResponseJSON

#### Syntax

```
public JObject ResponseJSON { get; }
```

#### Description

The JSON object obtained from response text which contains success message and information. Particularly useful in case of Success. In case of failure you may not get any message.

#### Property Value

Type: JObject

### 1.2.3 Property Success

#### Syntax

```
public bool Success { get; }
```

#### Description

Is the response from the server a success or a failure.

#### Property Value

Type: Boolean

## 1.3 MFPPushNotificationListener Interface

## Syntax

```
public interface MFPPushNotificationListener
```

## Description

This interface defines the callback method used for receiving the notification from WNS.

## Inheritance Hierarchy

System.Object

IBMMobileFirstPlatformFoundationPush.MFPPushNotificationListener

### 1.3.1 Method onReceive

## Syntax

```
public void onReceive(String properties, String payload)
```

## Description

This method is called when a notification arrives on the device.

## Parameters

Type	Name	Description
String	properties	A JSON block that contains the notifications properties of the platform
String	payload	A JSON block that contains other data that is sent from the MobileFirst Server. It also contains the tag name for tag and broadcast notification. The tag name appears in the "tag" element.

Table 1-5: Method onReceive parameters

## Appendix A. Notices

This information was developed for products and services offered in the US. This material might be available from IBM in other languages. However, you may be required to own a copy of the product or product version in that language in order to access it.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

*IBM Director of Licensing  
IBM Corporation  
North Castle Drive, MD-NC119  
Armonk, NY 10504-1785  
US*

For license inquiries regarding double-byte character set (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

*Intellectual Property Licensing  
Legal and Intellectual Property Law  
IBM Japan Ltd.  
19-21, Nihonbashi-Hakozakicho, Chuo-ku  
Tokyo 103-8510, Japan*

INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM websites are provided for convenience only and do not in any manner serve as an endorsement of those websites. The materials at those websites are not part of the materials for this IBM product and use of those websites is at your own risk.

IBM may use or distribute any of the information you provide in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling:  
(i) the exchange of information between independently created programs and other programs

(including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

*IBM Director of Licensing  
IBM Corporation  
North Castle Drive, MD-NC119  
Armonk, NY 10504-1785  
US*

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

The performance data and client examples cited are presented for illustrative purposes only. Actual performance results may vary depending on specific configurations and operating conditions.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to actual people or business enterprises is entirely coincidental.

#### COPYRIGHT LICENSE:

This information contains sample application programs in source language, which illustrate programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs. The sample programs are provided "AS IS", without warranty of any kind. IBM shall not be liable for any damages arising out of your use of the sample programs.

Each copy or any portion of these sample programs or any derivative work must include a copyright notice as follows:

© (your company name) (year).

Portions of this code are derived from IBM Corp. Sample Programs.

© Copyright IBM Corp. \_enter the year or years\_.

#### **Trademarks**

IBM, the IBM logo, and ibm.com are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM

trademarks is available on the web at "Copyright and trademark information" at [www.ibm.com/legal/copytrade.shtml](http://www.ibm.com/legal/copytrade.shtml).

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

Other company products or service names may be trademarks or service marks of others.

This document may not be reproduced in whole or in part without the prior written permission of IBM.

## **Terms and conditions for product documentation**

Permissions for the use of these publications are granted subject to the following terms and conditions.

### **Applicability**

These terms and conditions are in addition to any terms of use for the IBM website.

### **Personal use**

You may reproduce these publications for your personal, noncommercial use provided that all proprietary notices are preserved. You may not distribute, display or make derivative work of these publications, or any portion thereof, without the express consent of IBM.

### **Commercial use**

You may reproduce, distribute and display these publications solely within your enterprise provided that all proprietary notices are preserved. You may not make derivative works of these publications, or reproduce, distribute or display these publications or any portion thereof outside your enterprise, without the express consent of IBM.

### **Rights**

Except as expressly granted in this permission, no other permissions, licenses or rights are granted, either express or implied, to the publications or any information, data, software or other intellectual property contained therein.

IBM reserves the right to withdraw the permissions granted herein whenever, in its discretion, the use of the publications is detrimental to its interest or, as determined by IBM, the above instructions are not being properly followed.

You may not download, export or re-export this information except in full compliance with all applicable laws and regulations, including all United States export laws and regulations.

IBM MAKES NO GUARANTEE ABOUT THE CONTENT OF THESE PUBLICATIONS. THE PUBLICATIONS ARE PROVIDED "AS-IS" AND WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, NON-INFRINGEMENT, AND FITNESS FOR A PARTICULAR PURPOSE.

## **IBM Online Privacy Statement**

IBM Software products, including software as a service solutions, ("Software Offerings") may use cookies or other technologies to collect product usage information, to help improve the



end user experience, to tailor interactions with the end user or for other purposes. In many cases no personally identifiable information is collected by the Software Offerings. Some of our Software Offerings can help enable you to collect personally identifiable information. If this Software Offering uses cookies to collect personally identifiable information, specific information about this offering's use of cookies is set forth below.

Depending upon the configurations deployed, this Software Offering may use session cookies that collect session information (generated by the application server). These cookies contain no personally identifiable information and are required for session management. Additionally, persistent cookies may be randomly generated to recognize and manage anonymous users. These cookies also contain no personally identifiable information and are required.

If the configurations deployed for this Software Offering provide you as customer the ability to collect personally identifiable information from end users via cookies and other technologies, you should seek your own legal advice about any laws applicable to such data collection, including any requirements for notice and consent. For more information about the use of various technologies, including cookies, for these purposes, see IBM's Privacy Policy at [www.ibm.com/privacy](http://www.ibm.com/privacy) and IBM's Online Privacy Statement at [www.ibm.com/privacy/details](http://www.ibm.com/privacy/details) the section entitled "Cookies, Web Beacons and Other Technologies" and the "IBM Software Products and Software-as-a-Service Privacy Statement" at [www.ibm.com/software/info/product-privacy](http://www.ibm.com/software/info/product-privacy).

## Appendix B. Support and comments

For the entire IBM MobileFirst™ Platform documentation set, training material and online forums where you can post questions, see the IBM® website at:

[www.ibm.com/mobile-docs](http://www.ibm.com/mobile-docs)

### Support

Software Subscription and Support (also referred to as Software Maintenance) is included with licenses purchased through Passport Advantage® and Passport Advantage Express. For additional information about the International Passport Advantage Agreement and the IBM International Passport Advantage Express Agreement, visit the [Passport Advantage website \(www.ibm.com/software/passportadvantage\)](http://www.ibm.com/software/passportadvantage).

If you have a Software Subscription and Support in effect, IBM provides you assistance for your routine, short duration installation and usage (how-to) questions, and code-related questions. For additional details, consult your [IBM Software Support Handbook \(www.ibm.com/support/handbook\)](http://www.ibm.com/support/handbook).

### Comments

We appreciate your comments about this publication. Please comment on specific errors or omissions, accuracy, organization, subject matter, or completeness of this document. The comments you send should pertain to only the information in this manual or product and the way in which the information is presented.

For technical questions and information about products and prices, please contact your IBM branch office, your IBM business partner, or your authorized remarketer.

When you send comments to IBM, you grant IBM a nonexclusive right to use or distribute your comments in any way it believes appropriate without incurring any obligation to you. IBM or any other organizations will only use the personal information that you supply to contact you about the issues that you state.

Thank you for your support.

If you would like a response from IBM, please provide the following information:

- Name
- Address
- Company or Organization
- Phone No.
- Email address