



IBM MobileFirst Platform Foundation

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# IBM MobileFirst™ Platform Foundation V7.0.0

**C# client-side API for native Windows 8 apps**

20 March 2015

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## About this document

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

## 1 API overview

The IBM MobileFirst Platform Foundation C# client-side API for native Windows 8 applications exposes two main capabilities:

- Calling back-end services to retrieve data and perform back-end transactions.
- Writing custom log lines for reporting and auditing purposes.

The IBM MobileFirst Platform Foundation C# client-side API for native Windows 8 applications is available as part of the IBM MobileFirst Platform Studio.

Type	Name	Description	Implemented By
Properties file	wlclient.properties	Properties file that contains the necessary data to connect to IBM MobileFirst Platform Server.	IBM
Class	WLClient	Singleton class that exposes methods to communicate with the MobileFirst Server, in particular <code>invokeProcedure</code> for calling a back-end service.	IBM
Class	WLProcedure InvocationData	Class that contains all data necessary to call a procedure.	IBM
Class	WLRequestOptions	Class that you use to add request parameters, headers, and invocation context.	IBM
Interface	WLResponseListener	Interface that defines methods that a listener for the <code>WLClient</code> <code>invokeProcedure</code> method implements to receive notifications about the success or failure of the method call.	Application developer
Class	WLResponse	Class that contains the result of a procedure invocation.	IBM



Type	Name	Description	Implemented By
Class	WLFailResponse	Class that extends WLResponse. This class contains error codes, messages, and the status in WLResponse. This class also contains the original response DataObject from the server.	IBM
Class	WLProcedureInvocationResult	Class that extends WLResponse. This class contains the result of calling a back-end service, which includes statuses and data items that the adapter function retrieves from the server.	IBM
Class	WLProcedureInvocationFailResponse	Class that extends WLFailResponse and that you can use to retrieve the invocation error messages.	IBM
Class	WLErrorCode	Class that contains an error code and its message that arrive from the MobileFirst Server.	IBM

*Table 1-1: IBM MobileFirst Platform Foundation C# client-side API for Windows 8 applications – packages, classes, interfaces, and files*

## 2 API reference

### 2.1 Example Code

The following code samples show how to use the IBM MobileFirst Platform Foundation C# client-side API for native Windows 8 applications.

#### 2.1.1 Example: connecting to the MobileFirst Server and calling a procedure

##### Initializing the MobileFirst client

```
WLClient client = WLClient.getInstance();
client.connect(new MyConnectResponseListener());
```

##### Implementation of a Response Listener for connect

```
public class MyConnectResponseListener : WLResponseListener{
    public void onFailure(WLFailResponse response) {
        Debug.WriteLine("Response fail: " + response.getErrorMsg());
    }
    public void onSuccess(WLResponse response) {
        WLProcedureInvocationData invocationData = new
WLProcedureInvocationData("myAdapterName", "myProcedureName");
        invocationData.setParameters(new Object[]{"stringParam"});
        String myContextObject = new String("This is my context object");
        WLRequestOptions options = new WLRequestOptions();
        options.setInvocationContext(myContextObject);
        WLClient.getInstance().invokeProcedure(invocationData, new
MyInvokeListener(), options);
    }
}
```

##### Implementation of a Response Listener for Procedure Invocation

```
public class MyInvokeListener : WLResponseListener {
    public void onFailure(WLFailResponse response) {
        Debug.WriteLine("Response failed: " + response.getErrorMsg());
    }
}
```

```
}  
public void onSuccess(WLResponse response) {  
    WLProcedureInvocationResult invocationResponse =  
((WLProcedureInvocationResult) response);  
    JObject items;  
    try {  
        items = invocationResponse.getResponseJSON();  
        // do something with the items  
    } catch (JSONException e) {  
    }  
}  
}
```

## 2.2 Class WLClient

This singleton class exposes methods that you use to communicate with the MobileFirst Server.

### 2.2.1 Method getInstance

#### Syntax

```
public static WLClient getInstance()
```

#### Description

This method gets the singleton instance of WLClient.

### 2.2.2 Method connect

#### Syntax

```
public void connect(WLResponseListener  
responseListener)
```

#### Description

This method sends an initialization request to the MobileFirst Server, establishes a connection with the server, and validates the application version.

---

**Important:** You must call this method before any other WLClient methods that communicate with the MobileFirst Server.

---

#### Parameters

Type	Name	Description
<b>WLResponseListener</b>	responseListener	When the server returns a successful response, the <code>WLResponseListener</code> <code>onSuccess</code> method is called. If an error occurs, the <code>onFailure</code> method is called

Table 2-1: Method connect parameters

### 2.2.3 Method invokeProcedure

#### Syntax

```
public void invokeProcedure (
    WLProcedureInvocationData invocationData,
    WLResponseListener responseListener,
    WLRequestOptions requestOptions)
```

```
public void invokeProcedure (
    WLProcedureInvocationData invocationData,
    WLResponseListener listener)
```

#### Description

This method sends an asynchronous call to an adapter procedure. The response is returned to the callback functions of the provided [responseListener](#).

If the invocation succeeds, the `onSuccess` method is called. If the invocation fails, the `onFailure` method is called.

#### Parameters

Type	Name	Description
<b>WLProcedureInvocationData</b>	invocationData	The invocation data for the procedure call.
<b>WLResponseListener</b>	responseListener	The listener object whose callback methods <code>onSuccess</code> and <code>onFailure</code> are called.
<b>WLRequestOptions</b>	requestOptions	Optional. Invocation <a href="#">options</a> .

Table 2-2: Method invokeProcedure parameters

### 2.2.4 Method logActivity

#### Syntax

```
public void logActivity(String activityType)
```

#### Description

This method reports a user activity for auditing or reporting purposes.

The MobileFirst Server maintains a separate database table to store application statistics.

**Important:** Ensure that `reports.exportRawData` is set to `true` in the `worklight.properties` file. Otherwise, the activity is not stored in the database. You must also ensure that the following properties are entered in the `worklight.properties` file:

- `wl.reports.db.type`
- `wl.reports.db.url`
- `wl.reports.db.username`
- `wl.reports.db.password`

#### Parameters

Type	Name	Description
String	<code>activityType</code>	A string that identifies the activity type.

Table 2-3: Method `logActivity` parameters

### 2.2.5 Method `setHeartbeatInterval`

#### Syntax

```
public void setHeartbeatInterval(int value)
```

#### Description

This method sets the interval, in seconds, at which the MobileFirst Server sends the heartbeat signal. You use the heartbeat signal to ensure that the session with the server is kept alive when the app does not issue any call to the server, such as `invokeProcedure`.

By default, the interval is set to 7 minutes.

#### Parameters

Type	Name	Description
int	<code>value</code>	An interval value in seconds, at which the heartbeat signal is sent to MobileFirst Server.

Table 2-4: Method `setHeartbeatInterval` parameters

### 2.3 Class `WLProcedureInvocationData`

This class contains all data necessary to call a procedure, including the following elements:

- The names of the adapter and procedure to call.

- The parameters that the procedure requires.

### 2.3.1 Method setParameters

#### Syntax

```
public void setParameters(Object [] parameters)
```

#### Description

This method sets the request parameters.

#### Parameters

Type	Name	Description
Object []	parameters	An array of objects of primitive types (String, Integer, Float, Boolean, Double). The order of the objects in the array is the order in which they are sent to the adapter.

Table 2-5: Method setParameters parameters

#### Example

```
invocationData.setParameters(new Object[]{"stringParam", true, 1.0, 1});
```

## 2.4 Class WLRequestOptions

This class contains the request parameters, headers, and invocation context.

### 2.4.1 Method addParameter

#### Syntax

```
public void addParameter(String name,String value)
```

#### Description

This method adds a request parameter with the given name and value.

#### Parameters

Type	Name	Description
String	name	The name of the parameter.
String	value	The value of the parameter.

Table 2-6: Method addParameter parameters

## 2.4.2 Method addParameters

### Syntax

```
public void addParameters(Dictionary<String,
String> parameters)
```

### Description

This method adds a table of request parameters.

### Parameters

Type	Name	Description
Dictionary<String,String>	parameters	Request parameters table.

Table 2-7: Method addParameters parameters

## 2.4.3 Method getParameter

### Syntax

```
public String getParameter(String name)
```

### Description

This method returns the value of the parameter that is set.

### Parameters

Type	Name	Description
String	name	The name of the parameter.

Table 2-8: Method getParameter parameters

## 2.4.4 Method getParameters

### Syntax

```
public Dictionary<String,String> getParameters()
```

### Description

This method returns the parameters table.

## 2.4.5 Method getResponseListener

### Syntax

```
public WLResponseListener getResponseListener()
```

### Description

This method returns the response listener for this request.

## 2.4.6 Method addHeader

### Syntax

```
public void addHeader(String name,String value)
```

### Description

This method adds a header with the given name and value.

### Parameters

Type	Name	Description
String	name	The name of the header.
String	value	The value of the header.

Table 2-9: Method addHeader parameters

## 2.4.7 Method setHeaders

### Syntax

```
public void setHeaders(WebHeaderCollection
extraHeaders)
```

### Description

This method sets the request with the given headers.

### Parameters

Type	Name	Description
WebHeaderCollection	extraHeaders	The headers to be set.

Table 2-10: Method setHeaders parameters

## 2.4.8 Method getHeaders

### Syntax

```
public WebHeaderCollection getHeaders()
```

### Description

This method returns the headers that are set for this request.

## 2.4.9 Methods getInvocationContext, setInvocationContext

### Syntax

```
public Object getInvocationContext()
```



```
public void setInvocationContext(Object
invocationContext)
```

### Parameters

Type	Name	Description
Object	invocationContext	An object that is returned with <code>WLResponse</code> to the listener methods <code>onSuccess</code> and <code>onFailure</code> . You can use this object to identify and distinguish different <code>invokeProcedure</code> calls. This object is returned as is to the listener methods.

Table 2-11: Methods `getInvocationContext`, `setInvocationContext` parameters

## 2.5 Interface `WLResponseListener`

This interface defines methods that the listener for the `WLClient.invokeProcedure` method implements to receive notifications about the success or failure of the method call.

### 2.5.1 Method `onSuccess`

#### Syntax

```
public void onSuccess (WLResponse response)
```

#### Description

This method is called after successful calls to the `WLClient` `connect` or `invokeProcedure` methods.

#### Parameters

Type	Name	Description
<code>WLResponse</code>	response	The response that the server returns, along with any invocation context object and status.

Table 2-12: Method `onSuccess` parameters

### 2.5.2 Method `onFailure`

#### Syntax

```
public void onFailure (WLFailResponse response)
```

#### Description

This method is called if any failure occurred during the execution of the `WLClient` `connect` or `invokeProcedure` methods.

#### Parameters

Type	Name	Description
<b>WLFailResponse</b>	response	A response that contains the error code and error message. Optionally, this response contains the results from the server, and any invocation context object and status.

Table 2-13: Method onFailure parameters

## 2.6 Class WResponse

This class contains the result of a procedure invocation. IBM MobileFirst Platform Foundation passes this class as an argument to the listener methods of the `WLClient` `invokeProcedure` method.

### 2.6.1 Method getStatus

#### Syntax

```
public HttpStatusCode getStatus()
```

#### Description

This method retrieves the HTTP status from the response.

### 2.6.2 Method getInvocationContext

#### Syntax

```
public Object getInvocationContext()
```

#### Description

This method retrieves the invocation context object that is passed when the `invokeProcedure` method is called.

### 2.6.3 Method getResponseText

#### Syntax

```
public String getResponseText()
```

#### Description

This method retrieves the original response text from the server.

### 2.6.4 Method getResponseJSON

#### Syntax

```
public JObject getResponseJSON()
```

#### Description

This method retrieves the response text from the server in JSON format.

## 2.7 Class `WLFailResponse`

This class extends `WLResponse`. This class contains error codes, messages, the status in `WLResponse`, and the original response `DataObject` from the server.

### 2.7.1 Method `getErrorCode`

#### Syntax

```
public WLErrorCode getErrorCode ()
```

#### Description

The `WLErrorCode` section describes the possible errors.

### 2.7.2 Method `getErrorMsg`

#### Syntax

```
public String getErrorMsg()
```

#### Description

This method returns an error message that is for the developer and not necessarily suitable for the user.

## 2.8 Class `WLProcedureInvocationResult`

This class extends `WLResponse`. This class contains statuses and data that an adapter procedure retrieves.

### 2.8.1 Method `getResult`

#### Syntax

```
public JObject getResult()
```

#### Description

This method returns a `JObject` that represents the JSON response from the server.

### 2.8.2 Method `isSuccessful`

#### Syntax

```
public boolean isSuccessful()
```

#### Description

This method returns `true` if the procedure invocation was technically successful. Application errors are returned as part of the retrieved data, and not in this flag.

## 2.9 Class `WLProcedureInvocationFailResponse`

This class extends `WLFailResponse`. This class contains statuses and data that an adapter procedure retrieves.

### 2.9.1 Method `getProcedureInvocationErrors`

#### Syntax

```
public List<String> getProcedureInvocationErrors()
```

#### Description

This method returns a list of applicative error messages that are collected while the procedure is called.

### 2.9.2 Method `getResult`

#### Syntax

```
public JObject getResult()
```

#### Description

This method returns a `JObject` that represents the JSON response from the server.

## 2.10 Class `WLErrorCode`

This class contains the error code and its description that the server returns.

### 2.10.1 Method `getDescription`

#### Syntax

```
public String getDescription()
```

#### Description

This method returns the description of this error code instance.

### 2.10.2 Method `valueOf`

#### Syntax

```
public static WLErrorCode valueOf(String errorCode)
```

#### Description

This method returns the error code instance of the `errorCode` that is given.

[Error Codes](#)

UNEXPECTED\_ERROR - Unexpected errorCode occurred. Please try again.  
REQUEST\_TIMEOUT - Request timed out.  
UNRESPONSIVE\_HOST - The service is currently unavailable.  
PROCEDURE\_ERROR - Procedure invocation errorCode.  
PROCEDURE\_PROTECTED\_ERROR - Procedure is protected.  
APP\_VERSION\_ACCESS\_DENIAL - Application version denied.  
APP\_VERSION\_ACCESS\_NOTIFY - Notify application version changed.

## 2.11 Class BaseChallengeHandler

This class is an abstract base class for all challenge handlers.

### 2.11.1 Constructor

#### Syntax

```
public BaseChallengeHandler(String realm)
```

#### Description

This method creates a BaseChallengeHandler object for a particular realm.

### 2.11.2 Method handleChallenge(T challenge)

#### Syntax

```
public abstract void handleChallenge(T challenge)
```

#### Description

This method must be implemented by the subclass to handle the challenge logic. For example, show a login form in a challenge from a FormBasedAuthenticator.

### 2.11.3 Method submitFailure(WLResponse wlResponse)

#### Syntax

```
protected void submitFailure(WLResponse wlResponse)
```

#### Description

You must call this method when the challenge is answered with an error. The method is inherited from BaseChallengeHandler. Calling this method tells IBM MobileFirst Platform Foundation that the challenge was unsuccessful and that you no longer want to take any

actions to attempt to resolve the problem. This method returns control to IBM MobileFirst Platform Foundation for further handling. For example, call this method only when you know that several authentication attempts were unsuccessful and you do not want the user to continue attempting to authenticate into the realm.

## 2.12 Class ChallengeHandler

This class is an abstract class that you must extend to create custom challenge handlers.

### 2.12.1 Constructor

#### Syntax

```
public ChallengeHandler(String realmName)
```

#### Description

This method creates a `ChallengeHandler` object for a particular realm.

### 2.12.2 Method isCustomResponse

#### Syntax

```
public abstract bool isCustomResponse(WLResponse response)
```

#### Description

You must implement this method to return whether a response from the server is a challenge for this `ChallengeHandler`. The implementation must parse the response to determine whether or not the response is a challenge for this `ChallengeHandler`. For example, a `ChallengeHandler` for a realm with a form-based authenticator must parse the response to search for the `j_security_test` parameter and return `true` if found.

### 2.12.3 Method submitSuccess

#### Syntax

```
protected void submitSuccess(WLResponse response)
```

#### Description

You must call this method from the subclass within the `onSuccess` of your `ChallengeHandler`.

## 2.12.4 Method submitLoginForm

### Syntax

```
protected void submitLoginForm(String requestURL,
Dictionary<String, String> requestParameters,
Dictionary<String, String> requestHeaders, int
requestTimeoutInMs, String requestMethod)
```

### Description

This helper method submits a login form by making an HTTP request to the specified requestURL.

### Parameters

Type	Name	Description
String	requestURL	The full or relative URL to which the request must be made.
Dictionary<String, String>	requestParameters	A Dictionary object with name-value pairs of request parameters.
Dictionary<String, String>	requestHeaders	A Dictionary object consisting of the additional headers that must be sent along with the HTTP request
int	requestTimeoutInMs	The time in milliseconds the request must wait before timing out.
String	requestMethod	The method to use. Specify get or post.

Table 2-14: Method submitLoginForm parameters

## 2.12.5 Method submitAdapterAuthentication

### Syntax

```
protected void submitAdapterAuthentication(String
WLProcedureInvocationData invocationData,
WLRequestOptions requestOptions)
```

### Description

This helper method submits a response to a challenge made by an AdapterAuthenticator by using an invokeProcedure call to the adapter procedure.

### Parameters

Type	Name	Description
<b>WLProcedureInvocationData</b>	invocationData	The <code>WLProcedureInvocationData</code> object that contains the name of the adapter and the procedure.
<b>WLRequestOptions</b>	requestOptions	A <code>WLRequestOptions</code> object with request options.

Table 2-15: Method `submitAdapterAuthentication` parameters

## 2.13 Class `WLChallengeHandler`

This class is an abstract base class for MobileFirst challenge handlers. You must extend it to implement your own version of a MobileFirst challenge handler, for example, the `RemoteDisableChallengeHandler`.

### 2.13.1 Constructor

#### Syntax

```
public WLChallengeHandler(String realm)
```

#### Description

This method creates a `WLChallengeHandler` object for a particular realm.

### 2.13.2 Method `submitChallengeAnswer`

#### Syntax

```
public void submitChallengeAnswer(Object answer)
```

#### Description

Sends the answer back to the server.

## 2.14 Class `WLPush`

This class contains all the methods that are required to work with Push notifications. You cannot instantiate this class directly. To get a reference to this class, use the `getPush()` method of `WLClient`.

To enable Push notifications, add the `pushSender` element to the application descriptor of your native API application.

```
<nativeWindows8App>
...
```



```
<pushSender clientSecret="wns secret key" packageSID="wns unique
identifier"/>
...
</nativeWindows8App>
```

### 2.14.1 Method registerEventSourceCallback

#### Syntax

```
public void registerEventSourceCallback(String
alias, String adapter, String eventSource,
WLEventSourceListener eventSourceListener)
```

#### Description

This method registers a `WLEventSourceListener` that is called whenever a notification arrives from the specified event source.

#### Parameters

Type	Name	Description
String	alias	Mandatory string. A short ID that you use to identify the event source when the push notification arrives. You can provide a short alias, rather than the full names of the adapter and event source. This action frees space in the notification text, which is limited in length.
String	adapter	Mandatory string. The name of the adapter that contains the event source
String	eventSource	Mandatory string. The name of the event source.
WLEventSourceListener	eventSourceListener	Mandatory listener class. When a notification arrives, the <code>WLEventSourceListener.onReceive()</code> method is called.

Table 2-16: Method `registerEventSourceCallback` parameters

### 2.14.2 Method subscribe

#### Syntax

```
public void subscribe(String alias, WLPushOptions
pushOptions, WLResponseListener respListener)
```

#### Description

This method subscribes the user to the event source with the specified alias.

#### Parameters

Type	Name	Description
<code>String</code>	<code>alias</code>	Mandatory string. The event source alias, as defined in <code>registerEventSourceCallBack</code> .
<code>WLPushOptions</code>	<code>pushOptions</code>	This instance contains the custom subscription parameters that the event source in the adapter supports.
<code>WLResponseListener</code>	<code>respListener</code>	The listener object whose callback methods are called by the MobileFirst runtime when a subscribe call succeeds or fails.

Table 2-17: Method `subscribe` parameters

### 2.14.3 Method `unsubscribe`

#### Syntax

```
public void unsubscribe(String alias,
    WLResponseListener respListener)
```

#### Description

This method unsubscribes the user from the event source with the specified alias.

#### Parameters

Type	Name	Description
<code>String</code>	<code>alias</code>	Mandatory string. The event source alias, as defined in <code>registerEventSourceCallBack</code> .
<code>WLResponseListener</code>	<code>respListener</code>	The listener object whose callback methods are called by the MobileFirst runtime when a subscribe call succeeds or fails.

Table 2-18: Method `unsubscribe` parameters

### 2.14.4 Method `isSubscribed`

#### Syntax

```
public void isSubscribed(String alias)
```

#### Description

This method returns whether the currently logged-in user is subscribed to the specified event source alias.

#### Parameters

Type	Name	Description
<code>String</code>	<code>alias</code>	Mandatory string. The event source alias.

Table 2-19: Method `isSubscribed` parameters

## 2.14.5 Method `subscribeTag`

### Syntax

```
public void subscribeTag(String tagName,
    WLPushOptions pushOptions, WLResponseListener
    respListener)
```

### Description

This method subscribes the device to the tag.

### Parameters

Type	Name	Description
<code>String</code>	<code>tagName</code>	Mandatory string. The name of the tag.
<code>WLPushOptions</code>	<code>pushOptions</code>	This instance contains the custom subscription parameters that the event source in the adapter supports.
<code>WLResponseListener</code>	<code>respListener</code>	The listener object whose callback methods are called by the MobileFirst runtime when a subscribe call succeeds or fails.

Table 2-20: Method `subscribeTag` parameters

## 2.14.6 Method `unsubscribeTag`

### Syntax

```
public void unsubscribeTag(String tagName,
    WLResponseListener respListener)
```

### Description

This method unsubscribes the device from the tag.

### Parameters

Type	Name	Description
<code>String</code>	<code>tagName</code>	Mandatory string. The name of the tag.
<code>WLResponseListener</code>	<code>respListener</code>	The listener object whose callback methods are called by the MobileFirst runtime when a subscribe call succeeds or fails.

Table 2-21: Method `unsubscribeTag` parameters

### 2.14.7 Method `isTagSubscribed`

#### Syntax

```
public void isTagSubscribed(String alias)
```

#### Description

This method returns whether the device is subscribed to the specified tag.

#### Parameters

Type	Name	Description
String	tagName	Mandatory string. The name of the tag.

Table 2-22: Method `isTagSubscribed` parameters

### 2.14.8 Property `onReadyToSubscribeListener`

#### Type

`WLOnReadyToSubscribeListener`

#### Access

Read/Write

#### Description

This property sets the `WLOnReadyToSubscribeListener` callback to be notified when the device is ready to subscribe to push notifications.

### 2.14.9 Property `notificationListener`

#### Type

`WLNotificationListener`

#### Access

Read/Write

#### Description

This property sets the `WLNotificationListener` callback to be notified when the push notification arrives.

## 2.15 Interface `WLOnReadyToSubscribeListener`

This interface defines the method that is notified when a device is ready to subscribe.

### 2.15.1 Method onReadyToSubscribe

#### Syntax

```
void onReadyToSubscribe()
```

#### Description

This method is called when the device is ready to subscribe to push notifications.

## 2.16 Interface WLEventSourceListener

This interface defines the method that receives the notification message.

### 2.16.1 Method onReceive

#### Syntax

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

#### Description

This method is called when the notification arrives from the subscribed event source.

#### 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.

Table 2-23: Method onReceive parameters

## 2.17 Interface WLNotificationListener

This interface defines the method that receives the notification message.

### 2.17.1 Method onMessage

#### Syntax

```
void onMessage(String properties, String payload)
```

#### Description

This method is called when a push notification arrives.

#### 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. The default tag name for broadcast notification is <code>Push.ALL</code> .

Table 2-24: Method `onMessage` parameters

## 2.18 Class `WLPushOptions`

This class contains the subscription parameters that can be specified while you subscribe to push notifications.

### 2.18.1 Constructor

#### Syntax

```
public WLPushOptions()
```

#### Description

This method creates a `WLPushOptions` object.

### 2.18.2 Method `AddSubscriptionParameter`

#### Syntax

```
public void AddSubscriptionParameter(String name,
String value)
```

#### Description

Use this method to add a subscription parameter

#### Parameters

Type	Name	Description
String	name	Mandatory. The name of the subscription parameter.
String	value	Mandatory. The value of the subscription parameter.

Table 2-25: Method `AddSubscriptionParameter` parameters

### 2.18.3 Method `GetSubscriptionParameter`

#### Syntax

```
public void GetSubscriptionParameter(String name)
```

**Description**

This method returns the map that contains the subscription parameters.

**Parameters**

Type	Name	Description
String	name	Mandatory. The name of the subscription parameter.

Table 2-26: Method `GetSubscriptionParameter` parameters

**2.18.4 Property `subscriptionParameters`****Type**

Dictionary <String, String>

**Access**

Read/Write

**Description**

This property gets/sets the subscription parameters.

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