

# Tag-based notifications in native Windows 8 applications

## Overview

Tag notifications are notification messages that are targeted to all the devices that are subscribed to a particular tag.

Tags represent topics of interest to the user and provide the ability to receive notifications according to the chosen interest.

## Setting up tags

Tags are defined in the `application-descriptor.xml` file:

```
<nativeWindows8App xmlns="http://www.worklight.com/native-windows8-descriptor" id="NativeWin8TagNotifications" platformVersion="7.0.0.00.20150312-0731" version="1.0">
  <pushSender clientSecret="WNS_CLIENT_SECRET" packageSID="WNS_PACKAGE_SID"/>
  ...
  ...
  ...
  <tags>
    <tag>
      <name>my tag 1</name>
      <description>About my tag 1</description>
    </tag>
    <tag>
      <name>my tag 2</name>
      <description>About my tag 2</description>
    </tag>
  </tags>
</nativeWindows8App>
```

## Tag-based notifications API methods

### Client-side API methods

- `WLPush.subscribeTag(tagName, options)` - Subscribes the device to the specified tag name.
- `WLPush.unsubscribeTag(tagName, options)` - Unsubscribes the device from the specified tag name.
- `WLPush.isTagSubscribed(tagName)` - Returns whether the device is subscribed to a specified tag name.

## Common API methods for tag-based and broadcast notifications

### Client-side API

- `WLNotificationListener`  
Defines the callback method to be notified when the notification arrives.
- `WLPush.notificationListener = new MyNotificationListener();`  
Sets the implementation class of the `WLNotificationListener` interface.
- `WLPush.onReadyToSubscribeListener`  
This method registers a listener to be used for push notifications. This listener should implement the `onReadyToSubscribe()` method.
- The `onMessage(props, payload)` method of `WLNotificationListener` is called when a push notification is received by the device.

- **props** - A JSON block that contains the notifications properties of the platform.
- **payload** - A JSON block that contains other data that is sent from MobileFirst Server. The JSON block also contains the tag name for tag-based or broadcast notification. The tag name appears in the "tag" element. For broadcast notification, the default tag name is `Push.ALL`.

## Server-side API

This method submits a notification that is based on the specified target parameters.

- `WL.Server.sendMessage(applicationId,notificationOptions)`
  - `applicationId` - (mandatory) The name of the MobileFirst application
  - `notificationOptions` - (mandatory) A JSON block containing message properties

For a full list of message properties, see the `WL.Server.sendMessage` API in the API reference of the user documentation.

## Sample application

Before running the application, check the adapter's `PushAdapter-impl.js` file and verify that the `WL.Server.sendMessage()` method uses the correct application name. The correct application name can be determined from the `id` attribute in `application-descriptor.xml`.

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(<http://public.dhe.ibm.com/software/products/en/MobileFirstPlatform/docs/v700/TagBasedNotificationsProject.zip>)  
the Studio project.

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(<http://public.dhe.ibm.com/software/products/en/MobileFirstPlatform/docs/v700/Win8NativeTagNotificationsProject.zip>)  
the Native project.