Push notifications in native Windows Phone 8 applications

Overview

IBM MobileFirst Platform Foundation provides a unified set of API methods to send, or push, notifications to devices where the MobileFirst application is installed. It is possible to send a notification in 3 distinct types: event source notification, broadcast notification, and tag notification.

This tutorial explains the concept, API, and usage of push notifications in the context of Native Windows Phone 8 applications.
To create and configure a Windows Phone 8 native project, first follow these tutorials:

- Creating your first Native Windows Phone 8 MobileFirst application (../../hello-world/creating-first-native-windows-phone-8-mobilefirst-application/)
- Invoking adapter procedures from native Windows Phone 8 applications (../../server-side-development/invoking-adapter-procedures-native-windows-phone-8-applications/)

The following topics are covered:

- Notification types
- Setting up the project

Notification types

Even source notification

Event source notification sends notification messages that are targeted to devices with a user subscription.

Broadcast notification

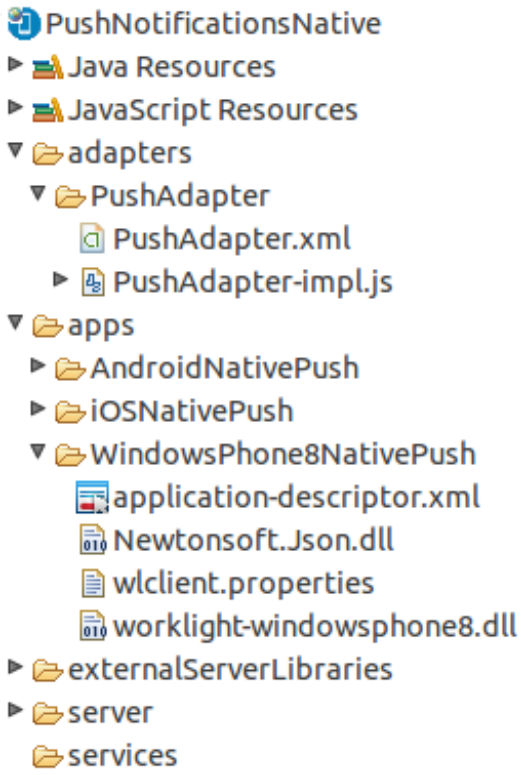
Broadcast notification sends notification messages that are targeted to all subscribed devices.

Tag-based notification

Tag-based notification sends notification messages that are targeted to all the devices that are subscribed to a particular tag.

For more information, select a notification type.

Setting up the project



1. **Create a MobileFirst project.**

   Add a MobileFirst Windows Phone 8 native API. The native API project provides the files that are necessary to build a Windows Phone 8 app.

2. **Edit the `application-descriptor.xml` file.**

   Add the "**pushSender**" tag to the `application-descriptor.xml` file.

   ```
   <nativeWindowsPhone8App id="WindowsPhone8NativePush"
   platformVersion="6.3.0.00.20141111-0731" version="1.0" xmlns="http://www.worklight.com/native-
   windowsphone8-descriptor" securityTest="MySecurityTest">
      <displayName>WindowsPhone8NativePush</displayName>
      <description>WindowsPhone8NativePush</description>
      <pushSender></pushSender></p>
   </nativeWindowsPhone8App>
   ```

3. Edit the `wlclient.properties` file.

   Edit the `wlclient.properties` file in your native Windows Phone 8 project and enter appropriate values for the following fields:

   - `wlServerHost` - The host name or IP address of the MobileFirst Server instance.
   - `wlServerPort` - The port on which MobileFirst Server is listening.
   - `wlServerContext` - The context root of your MobileFirst Server instance.

```
# Licensed Materials - Property of IBM
# 5725-I43 (C) Copyright IBM Corp. 2011, 2013. All Rights Reserved.
# US Government Users Restricted Rights - Use, duplication or
# disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

wlServerProtocol = http
wlServerHost = 10.0.0.5
wlServerPort = 10080
wlServerContext = /PushNotificationsNative/
wlAppId = WindowsPhone8NativePush
wlAppVersion = 1.0
wlEnvironment = WindowsPhone8native
wlPlatformVersion = 6.3.0.0
#languagePreferences = Add locales in order of preference (e.g. fr, en, pt-BR)
#wlMPNSServiceName = Add the MPNS service name for authenticated push.
```

4. Modify the native Windows Phone 8 project.

   Edit the `Properties\WMAppManifest.xml` file and add the following capabilities:

   ```
   <Capability Name="ID_CAP_PUSH_NOTIFICATION" />
   <Capability Name="ID_CAP_IDENTITY_DEVICE" />
   ```