

# Push Notifications in Native Windows Phone 8 Applications

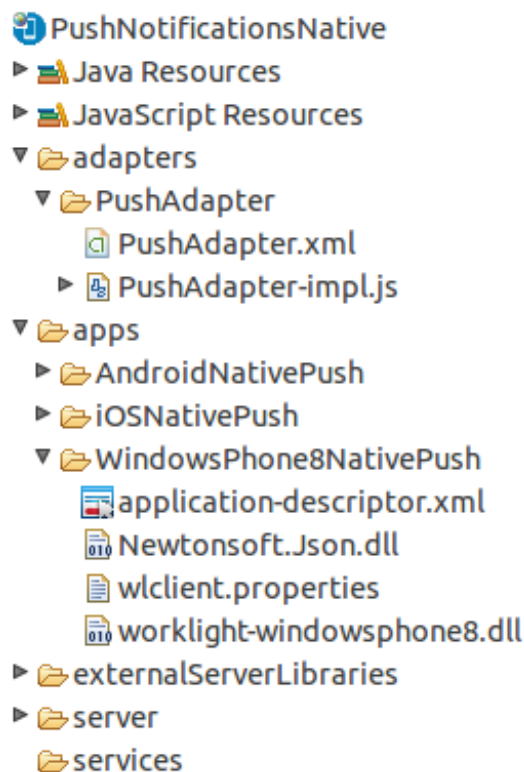
## Overview

This tutorial explains how to configure a MobileFirst Native Windows Phone 8 application to support push notifications.

Also mentioned are the addresses and ports that are required for notifications to arrive to the supported Microsoft Push Notification Service vendor (MPNS).

**Prerequisite:** Make sure that you read the Configuring a native Windows Phone 8 application with the MobileFirst Platform SDK (`../../..../configuring-the-mfpf-sdk/configuring-a-native-windows-phone-8-application-with-the-mfpf-sdk/`) tutorial first.

## Setting up the project



(<http://developer.ibm.com/mobilefirstplatform/wp-content/uploads/sites/32/2014/11/nativeWP8PushProjectAdapterExpanded.png>)

To send push notifications to Windows Phone 8 devices, use the Microsoft Push Notifications Service (MPNS).

- Non-authenticated push notification does not require any setup from the developer. Authenticated push notification requires a Windows Phone Dev Center account.
- To use authenticated push, you must use a certificate that is issued by a Microsoft-trusted root certificate authority. *For production, consider using authenticated push notification in order to ensure that the information is not compromised.*

## 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** element under the `nativeWindows8App` environment (these settings are also editable with the Application Descriptor Editor in Design mode).

- Non-authenticated push

```
[code lang="xml" highlight="5"]
```

```
<nativeWindowsPhone8App id="AppName" platformVersion="7.0.0.00.20150312-0731"
version="1.0" xmlns="http://www.worklight.com/native-windowsphone8-descriptor">
```

```
<displayName>AppName</displayName>
```

```
<description>AppName</description>
```

```
<pushSender />
```

```
</nativeWindowsPhone8App>
```

```
[/code]
```

- Authenticated push

```
[code lang="xml" highlight="5,6,7"]
```

```
<nativeWindowsPhone8App id="AppName" platformVersion="7.0.0.00.20150312-0731"
version="1.0" xmlns="http://www.worklight.com/native-windowsphone8-descriptor">
```

```
<displayName>AppName</displayName>
```

```
<description>AppName</description>
```

```
<pushSender>
```

```
<authenticatedPush serviceName="" keyAlias="" keyAliasPassword=""/>
```

```
</pushSender>
```

```
</nativeWindowsPhone8App>
```

```
[/code]
```

- Replace **serviceName** value with the service name.
- Replace **keyAlias** value with the certificate alias.
- Replace **keyAliasPassword** value with the certificate password.

For more information about using the certificate file, see the topic about setting up push notifications for Windows Phone 8, in the user documentation.

## 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.

- wMPNSServiceName = Add the MPNS service name for authenticated push.

```
[code lang="xml"]
```

```
wlServerProtocol = http
```

```
wlServerHost =
```

```
wlServerPort = 10080
```

```
wlServerContext = /EventSourceNotifications/
```

```
wlAppId = NativeWP8EventSource
```

```
wlAppVersion = 1.0
```

```
wlEnvironment = WindowsPhone8native
```

```
wlPlatformVersion = 7.0.0.0
```

```
#languagePreferences = Add locales in order of preference (e.g. fr, en, pt-BR)
```

```
wMPNSServiceName = Add the MPNS service name for authenticated push.[/code]
```

#### 4. **Modify the native Windows Phone 8 project.**

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

```
[code lang="xml"]
```

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

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

```
[/code]
```

## **Windows Phone 8 Push Notifications Service**

No specific port needs to be open in your server configuration.

MPNS uses regular http or https requests.

## **Notification Types**