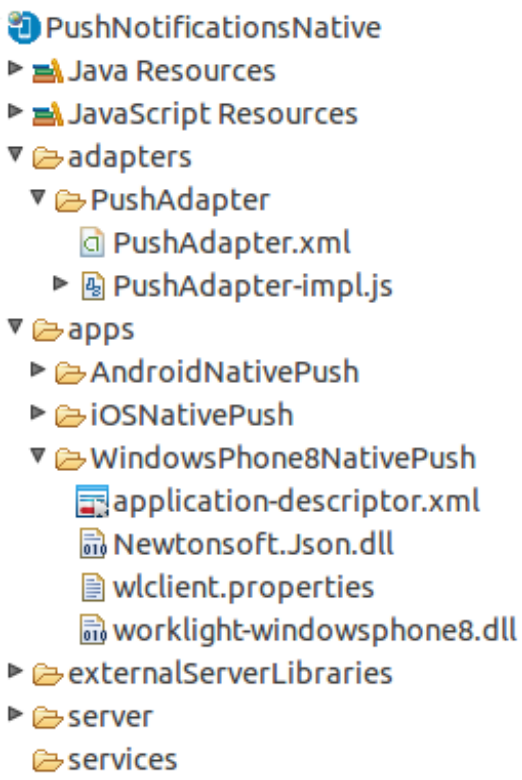
# Push Notifications in Native Windows Phone 8 Applications

## 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 (../../../hello-world/configuring-a-native-windows-phone-8-application-with-the-mfp-sdk/) tutorial first.

## Setting up the project




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

```
<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>
```

- Authenticated push

```
<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>
```

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

```
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)
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" />
```

# 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