# Creating your first native Windows 8 MobileFirst application

fork and edit tutorial (https://github.ibm.com/MFPSamples/DevCenter/tree/master/tutorials/en/foundation/7.0/hello-world/creating-first-native-windows-8-mobilefirst-application.html) | report issue (https://github.ibm.com/MFPSamples/DevCenter/issues/new)

#### **Overview**

To serve a native Windows 8 application, MobileFirst Server must be aware of it. For this purpose, IBM MobileFirst Platform Foundation provides a Native API library, which contains a set of APIs and configuration files.

This tutorial explains how to generate the Windows 8 Native API and how to integrate it with a native Windows 8 application. These steps are necessary for you to be able to use it later on for tasks such as connecting to MobileFirst Server, invoking adapter procedures, implementing authentication methods, and so on.

**Prerequisite:** Developers are expected to be proficient with Microsoft's developer tools.

## **Creating a MobileFirst Native API**

- In MobileFirst Studio, create a MobileFirst project and add a MobileFirst Native API.
- In the **New MobileFirst Native API** dialog, enter your application name and select **Windows 8** for the **Environment** field.
- Right-click the generated NativeAPI folder (located in your-projects/apps/your-nativeapi-app-name) and select Run As > Deploy Native API.

This action is required in order for MobileFirst Server to recognize the application if it attempts to connect.

The MobileFirst native API contains several components:



- worklight-windows8.dll is a MobileFirst API library that you must copy to your native Win8 project.
- Newtonsoft. Json. dll is a library that provides JSON support.
- application-descriptor.xml defines application metadata and security settings that MobileFirst Server enforces.
- wlclient.properties contains connectivity settings that a native Windows 8 application uses. You must copy this file to your native Windows 8 project.
- As with any MobileFirst project, you create the server configuration by modifying the files that are in the *server*|*conf* folder.

#### wlclient.properties

You can edit the *wlclient.properties* file to set connectivity information.

- wlServerProtocol The communication protocol to MobileFirst Server, which is either http or https.
- wlServerHost The host name of the MobileFirst Server instance.
- wlServerPort The port of the MobileFirst Server instance.

- wlServerContext The context root path of the application on MobileFirst Server.
- wlAppld The application ID as defined in the application-descriptor.xml file.
- wlAppVersion The application version.
- wlEnvironment The target environment of the native application.
- wlPlatformVersion The MobileFirst Studio version.
- languagePreferences The list of preferred locales.

## Creating and configuring a Windows 8 native application

- 1. Create a Windows 8 Application project or use an existing one.
- 2. Add as a reference the files worklight-windows8.dll and Newtonsoft.Json.dll.
- 3. Copy the wlclient.properties file to the root of the native project.
- 4. In Visual Studio, open the *wlclient.properties* **Properties** window and set the **Copy to Output Directory** option to **Copy always**.
- 5. Add the following capabilities to the *Package.appxmanifest*:

  Internet (Client & Server)

Private Networks (Client & Server)

For more information, review the "Developing native C# applications for Windows 8" user documentation topic