

# Invoking adapter procedures from native Windows Phone 8 applications

Relevant to:



Native Windows Phone 8

To create and configure a Windows Phone 8 (Silverlight) native project, first follow the [Configuring a native Windows Phone 8 application with the MobileFirst Platform SDK](#) tutorial.

Topics:

- [Initializing WLClient](#)
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## Initializing WLClient

```
WLClient client = WLClient.getInstance();
```

1. To establish a connection to MobileFirst Server, use the `connect` method by specifying the `MyConnectResponseListener` class instance as a parameter.

```
client.connect(new MyConnectResponseListener(this));
```

The `WLClient` instance tries to connect to the MobileFirst Server instance according to the properties of the `wlclient.properties` file.

After the connection is established, it invokes one of the methods of the `MyConnectResponseListener` class.

2. Specify that the `MyConnectResponseListener` class implements the `WLResponseListener` interface.

```
public class MyConnectResponseListener : WLResponseListener
```

The `WLResponseListener` interface defines two methods:

- `public void onSuccess (WLResponse response) { }`
- `public void onFailure (WLFailResponse response) { }`

3. Use the previous methods to process connection success or connection failure.

## Invoking an adapter procedure

After the connection is established with a MobileFirst Server instance, you can use the `WLClient` instance to invoke adapter procedures.

1. Create a `WLProcedureInvocationData` object with the adapter and procedure names.
2. Add the required parameters as an object array and set request options (for example: Invocation Context).
3. Get the existing `WLClient` instance and use it to invoke an adapter procedure.
4. Specify the `MyInvokeListener` class instance as a parameter.

```
WLProcedureInvocationData invocationData = new
    WLProcedureInvocationData("RSSReader", "getStories");
invocationData.setParameters(new Object[]{});
String myContextObject = "InvokingAdapterProceduresWP8";
WLRequestOptions options = new WLRequestOptions();
options.setInvocationContext(myContextObject);
WLClient.getInstance().invokeProcedure(invocationData, new
    MyInvokeListener(this), options);
```

## Receiving a procedure response

After the procedure invocation is completed, the `WLClient` instance calls one of the methods of the `MyInvokeListener` class.

As before, you must specify that the `MyInvokeListener` class implements the `WLResponseListener` interface.

```
using IBM.Worklight;
namespace InvokingAdapterProceduresWP8{
    public class MyInvokeListener : WLResponseListener
    {
    {
```

The `onSuccess` and `onFailure` methods are invoked by the `WLClient`. The response object contains the response data. You can use its methods and properties to retrieve the required information.

```
public void onSuccess(WLResponse response)
{
    WLProcedureInvocationResult invocationResponse =
    ((WLProcedureInvocationResult) response);
    JObject items;
    try
    {
        items = invocationResponse.getResponseJSON();
        Deployment.Current.Dispatcher.BeginInvoke(() =>
        {
            myMainPage.AddTextToReceivedTextBlock("Response Success: "
+ items.ToString());
        });
    }
    catch (JsonReaderException e)
    {
        Deployment.Current.Dispatcher.BeginInvoke(() =>
        {
            myMainPage.AddTextToReceivedTextBlock("JSONException : " +
e.Message);
        });
    }
}
```

```
public void onFailure(WLFailResponse response)
{
    Deployment.Current.Dispatcher.BeginInvoke(() =>
    {
        myMainPage.AddTextToReceivedTextBlock("Response failed: " +
response.ToString());
    });
}
```

## Sample application

[Click to download](#) the MobileFirst project.

[Click to download](#) the Native project.

- The `InvokingAdapterProcedures` project contains a **MobileFirst Native API** to deploy to MobileFirst Server.
- The `InvokingAdapterProcedures` project contains a **native Windows Phone 8 application** that uses a MobileFirst native API library to communicate with a MobileFirst Server instance.

Make sure to update the `wlclient.properties` file in `NativeWP8` invoking with the relevant server settings.



