

# Resource request from Native Windows 8.1 Universal applications

## Overview

MobileFirst applications can access resources using the `WLResourceRequest` REST API. The REST API works with all adapters and external resources.

### Prerequisites:

- Ensure you have added the MobileFirst Platform SDK (../adding-the-mfpf-sdk/adding-the-mfpf-sdk-to-windows-8-applications) to your Native Windows 8.1 project.
- Learn how to create adapters (../adapters/adapters-overview/).

## WLResourceRequest

The `WLResourceRequest` class handles resource requests to adapters or external resources.

1. Define the URI of the resource:

```
URI adapterPath = new URI("/adapters/RSSReader/getFeed");
```

- For JavaScript adapters, use `/adapters/{AdapterName}/{procedureName}`
- For Java adapters, use `/adapters/{AdapterName}/{path}`
- To access resources outside of the project, use the full URL

2. Create a `WLResourceRequest` object and choose the HTTP Method (GET, POST, etc):

```
WLResourceRequest request = new WLResourceRequest(adapterPath, WLResourceRequest.GET);
```

3. Add the required parameters:

- In JavaScript adapters, which use ordered nameless parameters, pass an array of parameters with the name `params`:

```
request.setQueryParameter("params", ["param1", "param2"]);
```

- In Java adapters or external resources, use the `setQueryParameter` method for each parameter:

```
request.setQueryParameter("param1", "value1");  
request.setQueryParameter("param2", "value2");
```

4. Call the resource by using the `.send()` method.

Specify a `MyInvokeListener` class instance:

```
request.send(new MyInvokeListener());
```

See the user documentation to learn more about `WLResourceRequest` and other signatures for the `send` method, which are not covered in this tutorial.

## The response

When the resource call is completed, the framework calls one of the methods of the `MyInvokeListener` class.

1. Specify that the `MyInvokeListener` class implements the `WLResponseListener` interface:

```
public class MyInvokeListener : WLResponseListener{  
}
```

2. Implement the `onSuccess` and `onFailure` methods.

If the resource call is successful, the `onSuccess` method is called. Otherwise, the `onFailure` method is called. Use these methods to get the data that is retrieved from the adapter.

The `response` object contains the response data and 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();  
        await dispatcher.RunAsync(CoreDispatcherPriority.Normal, () =>  
        {  
            myMainPage.AddTextToReceivedTextBlock("Response Success: " + items.ToString());  
        });  
    }  
    catch (JsonReaderException e)  
    {  
        Debug.WriteLine("JSONException : " + e.Message);  
    }  
}  
  
public void onFailure(WLFailResponse response)  
{  
    await dispatcher.RunAsync(CoreDispatcherPriority.Normal, () =>  
    {  
        myMainPage.AddTextToReceivedTextBlock("Response failed: " + response.ToString());  
    });  
}
```

## Sample application

Click to download (<https://github.com/MobileFirst-Platform-Developer-Center/ResourceRequestWin8>) the Native project.

- The `ResourceRequestWin8` project contains a native Windows 8.1 Universal application that uses a MobileFirst native SDK to communicate with a MobileFirst Server instance.
- Make sure to update the `mfpclient.properties` file in the native Windows 8.1 with the relevant server

settings.

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