

Resource Request from Cordova Applications

Overview

MobileFirst applications can access resources using the `WLResourceRequest` REST API. The REST API works with all adapters and external resources, and is supported in the following Cordova platforms: iOS, Android, Windows 8.1 Universal and Windows 10 UWP.

Prerequisite: Ensure you have added the MobileFirst Platform SDK (`../../adding-the-mfpf-sdk/adding-the-mfpf-sdk-to-android-applications`) to your Cordova application.

WLResourceRequest

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

```
var resourceRequest = new WLResourceRequest(  
    "/adapters/RSSReader/getFeedFiltered",  
    WLResourceRequest.GET  
);
```

The parameters for the constructor are:

- **request URL:**
 - For JavaScript adapters, the URL should be `/adapters/{AdapterName}/{procedureName}`
 - For Java adapters, the URL should be `/adapters/{AdapterName}/{path}`
 - To access resources outside of the project, use the full URL
- **HTTP method:** Most commonly `WLResourceRequest.GET` or `WLResourceRequest.POST`

setQueryParameter

By using the `setQueryParameter` method, you can include query (URL) parameters in the REST request.

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

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

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

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

send(body)

The `send()` method triggers the request. It takes an optional parameter to set a body to the HTTP request, which could be a JSON object or a simple string.

```
resourceRequest.send().then(  
    onSuccess,  
    onFailure  
)
```

Using JavaScript promises, you can define `onSuccess` and `onFailure` functions.

sendFormParameters(json)

To send URL-encoded form parameters, use the `sendFormParameters(json)` method instead. This method converts the JSON to a URL encoded string, sets the content-type to `application/x-www-form-urlencoded`, and sets it as the HTTP body.

For more information about `WLResourceRequest`, see the API reference in the user documentation.

The response

Both the `onSuccess` and `onFailure` callbacks receive a `response` object, which typically contains the following properties:

- **status**: The HTTP response status
- **responseJSON**: An object that contains the data that is returned by the called resource, and additional information about the resource call

The `response` object is returned to the corresponding success/failure handler.

```
{
  "errors": [],
  "info": [],
  "warnings": [],
  "isSuccessful": true,
  "responseHeaders": {
    "Cache-Control": "no-cache, must-revalidate, post-check=0, pre-check=0"
  },
  "responseTime": 491,
  "statusCode": 200,
  "statusReason": "OK",
  "totalTime": 592,
  "Items": [{
    "creator": "Jon Fingas",
    "link": "http://www.engadget.com/2014/11/10/harvard-used-cameras-to-check-attendance/?ncid=rss_truncated",
    "pubDate": "Mon, 10 Nov 2014 02:21:00 -0500",
    "title": "Harvard used cameras to track attendance without telling students"
  }, {
    "creator": "Jon Fingas",
    "link": "http://www.engadget.com/2014/11/10/bmw-ev-charging-street-lights/?ncid=rss_truncated",
    "pubDate": "Mon, 10 Nov 2014 00:10:00 -0500",
    "title": "BMW's new street lights will charge your electric car"
  }, {
    "creator": "Daniel Cooper",
    "link": "http://www.engadget.com/2014/11/09/hwyc-lumia-925/?ncid=rss_truncated",
    "pubDate": "Sun, 09 Nov 2014 22:43:00 -0500",
    "title": "How would you change Nokia's Lumia 925?"
  }
]}
```

- `errors`, `info`, and `warnings` are optional arrays of strings that contain messages.
- The `isSuccessful` property is set to `true` if the resource call succeeded (even if no data was retrieved), or to `false` otherwise.
- The response can contain other metadata such as `responseHeaders`, `responseTime`, `statusCode`, `statusReason`, and `totalTime`.

Handling the response

The rest of the resource call result depends on what was retrieved from the back-end system. In this example, the `Items` element is a JSON representation of the XML code that was received from the back end, after the rules in the XSL file were applied.

```
function loadFeedsSuccess(result){
  WL.Logger.debug("Feed retrieve success");
  if (result.responseJSON.Items.length > 0)
    displayFeeds(result.responseJSON.Items);
}
```

For more information

For more information about `WLResourceRequest`, refer to the user documentation.

Sample application

The ResourceRequestSwift project contains a Cordova application that makes a resource request using a Java adapter.

The adapter Maven project contains the Java adapter to be used during the resource request call.

Click to download (<https://github.com/MobileFirst-Platform-Developer-Center/ResourceRequestCordova/tree/release80>) the MobileFirst project.

Click to download (<https://github.com/MobileFirst-Platform-Developer-Center/Adapters/tree/release80>) the adapter Maven project.

Sample usage

1. From the command line, navigate to the Cordova project.
 2. Add a platform by running the `cordova platform add` command.
 3. Prepare and run the Cordova application by running the `cordova prepare` command followed by the `cordova run` command.
- The sample uses the `JavaAdapter` contained in the Adapters Maven project. Use either Maven or MobileFirst Developer CLI to build and deploy the adapter (`../../creating-adapters/`).

RSS Reader

Connecting Securely to On-Premise Backends from MobileFirst on IBM Bluemix containers

Thu, 27 Aug 2015 11:09:24 +0000

ATS and Bitcode in iOS 9

Mon, 24 Aug 2015 07:45:20 +0000

First lab series for MFP 7.1 has been released

Sun, 23 Aug 2015 22:24:20 +0000

Integrating IBM MobileFirst on Bluemix Containers with Bluemix Services

Fri, 21 Aug 2015 07:26:27 +0000

Importing Visual studio Cordova project with Ionic and AngularJS into MobileFirst Platform

Thu, 20 Aug 2015 06:12:36 +0000

Handling binary responses in native Android using Java adapters

Wed, 19 Aug 2015 11:06:49 +0000

Try on Bluemix and migrate to on-prem MobileFirst Platform

Wed, 19 Aug 2015 10:36:51 +0000

Come chat with us!

Wed, 19 Aug 2015 05:38:49 +0000

Xamarin SDK for IBM MobileFirst 7.1 is live

Mon, 17 Aug 2015 04:19:06 +0000

Debugging a MFP Sliverlight and Windows 8.1 Universal Apps

Fri, 14 Aug 2015 19:13:44 +0000