# **Debugging Adapters**

fork and edit tutorial (https://github.ibm.com/MFPSamples/DevCenter/tree/master/tutorials/en/foundation/7.1/server-side-development/debugging-adapters.html) | report issue (https://github.ibm.com/MFPSamples/DevCenter/issues/new)

### **Overview**

The available debugging options for adapters are:

- Testing Adapter Procedures
- Debugging Java Adapters

## Testing the adapter procedures

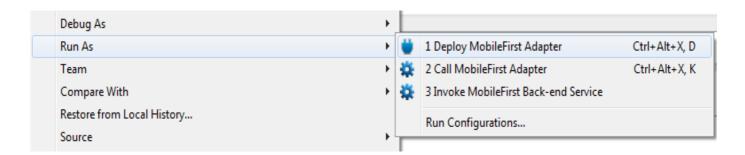
#### **CLI**

In the terminal, within your project, use \$ mfp adapter call and follow the interactive menu to test an adapter. Make sure the adapter is built and deployed before you try.

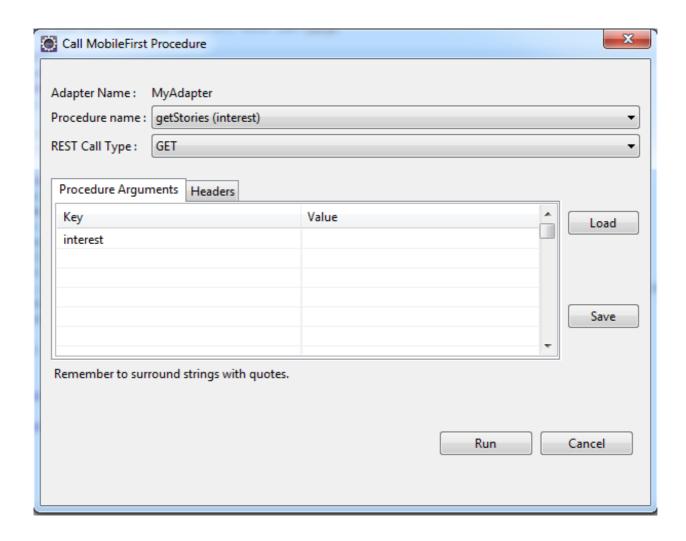
#### **Studio**

It is possible to test adapter procedures by using MobileFirst Studio.

Testing a procedure is done by right-clicking an adapter folder and selecting **Run As > Call MobileFirst Adapter**.



After selecting to call the adapter, you can select the procedure you wish to run. you can also enter commaseparated parameters if the selected procedure requires that.



#### Adapter invocation result:

Invocation Result of procedure: 'getStories' from the MobileFirst Server:

```
"errors": [
],
"info": [
 ],
"isSuccessful": true,
  "responseHeaders": {
    "Alternate-Protocol": "80:quic,p=0.01,80:quic,p=0.01",
       "Cache-Control": "private, max-age=0",
"Content-Type": "text/vxml; charset=UTF-8",
       "Date": "Tue, 28 Oct 2014 12:44:22 GMT",
"ETag": "X8aekjl3CvT45xpcepn6EK2pDJw",
"Expires": "Tue, 28 Oct 2014 12:44:22 GMT"
       "Last-Modified": "Tue, 28 Oct 2014 12:44:19 GMT",
       "Server": "GSE",
       "Transfer-Encoding": "chunked",
       "X-Content-Type-Options": "nosniff",
       "X-XSS-Protection": "1; mode=block"
  "responseTime": 299,
  "rss": {
       "channel": {
            "copyright": "Copyright 2014 Cable News Network LP, LLLP.",
             "description": "CNN.com delivers up-to-the-minute news and information on the latest top stories, weather, entertainment, politics and more.",
             "image": {
                "description": "CNN.com delivers up-to-the-minute news and information on the latest top stories, weather, entertainment, politics and more.", "height": "33", "link": "http://vedition.cnn.com/index.html?eref=edition", "title": "CNN.com - Top Stories", "url": "http://vi.cdn.turner.com/cnn/ve/imgV1.0/logo/cnn.logo.rss.gif", "url": "http://vi.cdn.turner.com/cnn/ve/imgV1.0/logo/cnn.logo.rss.gif", "url": "http://vi.cdn.turner.com/cnn/ve/imgV1.0/logo/cnn.logo.rss.gif", "url": "http://vi.cdn.turner.com/cnn/ve/imgV1.0/logo/cnn.logo.rss.gif", "url": "http://vi.cdn.turner.com/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.0/logo/cnn/ve/imgV1.
                 "width": "144"
             "info": {
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                  "uri": "rssVedition"
             "item": [
                      "description": "The South African state is to appeal both judgment and sentence after athlete Oscar Pistorius was jailed for five years for shooting his girlfriend.",
                      "guid": "http://vedition.cnn.com/2014/10/27/vjustice/south-africa-oscar-pistorius-appeal/vindex.html",
```

## **Debugging Java Adapters**

To debug Java adapter code, you must use Eclipse in debug mode. This required the MobileFirst Studio (you can import you CLI project if needed).

## Starting debug mode

- 1. Right-click a Java adapter, then select **Debug As -> Debug MobileFirst Java Adapters**.
- 2. Optional: Open the debug perspective in MobileFirst Studio.

After you entered debug mode, you can debug the Java code normally, as you would do a standard Java application. You might need to issue a request to the adapter to make its code run and hit the breakpoints.

## Stopping debug mode

- 1. Open the debug perspective in MobileFirst Studio.
- 2. On the **Debug** tab, right-click the item remote debug [Remote Java Application] -> Terminate.

