

Connectivity Testing: Market Information Management (MIM) Application Programming Interface (API) Using MIM Web Services Toolkit (MWT)

February 5, 2024



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Preface

This document outlines the test cases to be executed as part of the connectivity testing phase for the applications impacted by the Market Renewal Program (MRP). In this phase of testing, the primary objective is to assess and validate the connectivity components of the systems. Comprehensive functional testing phases will be scheduled for a future date and is not in scope of this test.

Please ensure any anomalies, disruptions, or irregularities discovered while performing the connectivity testing are documented in the qTest or Issue Log Template. This will contribute significantly to the overall improvement of the IESO tools.

Precondition:

- 1. API Credentials (username and password) to access <https://webservices-sandboxmrp.ieso.ca/emim?wsdl>**
- 2. Must have the MWT.zip package available. MWT Toolkit available for download at <https://www.ieso.ca/en/Market-Renewal/Market-Participant-Readiness/Technical-Reference-Materials> . **Navigate to *Market Information Management System* section and download the *MIM Web Services Toolkit (MWT)*. Note: The screenshots that display the path for MWT is subject to change based on newer versions of the toolkit being published.****
- 3. Must have Java SDK 1.8.x installed on the machine. The Java version installed on a windows machine can be confirmed running the command `java -version` on Command Prompt.**

TC01 - Access MIM API Using MWT Toolkit

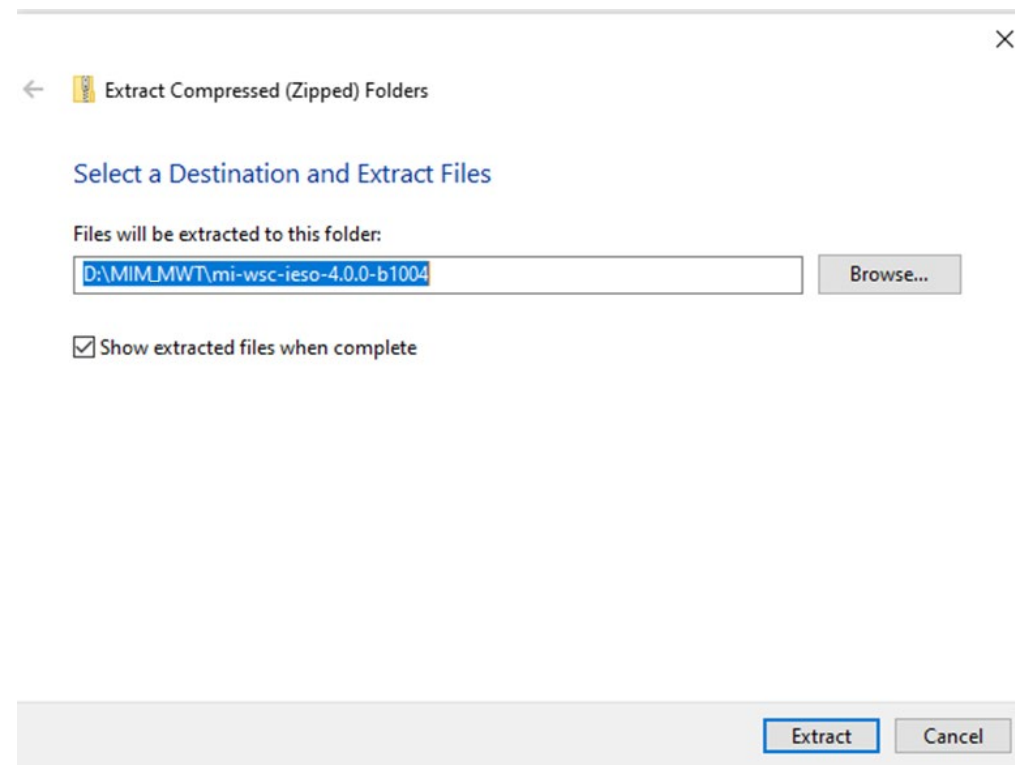
Step User Instruction Expected Result

1 **Extract MWT Toolkit** files from the zip file downloaded into a folder of your choice on the windows machine. In this case the folder used will be: D:\MIM_MWT\

To extract:

1. Right click the .zip file
2. Select "Extract All"
3. Set the path
4. Click Extract

As shown below, specify the output path and select **Extract**.

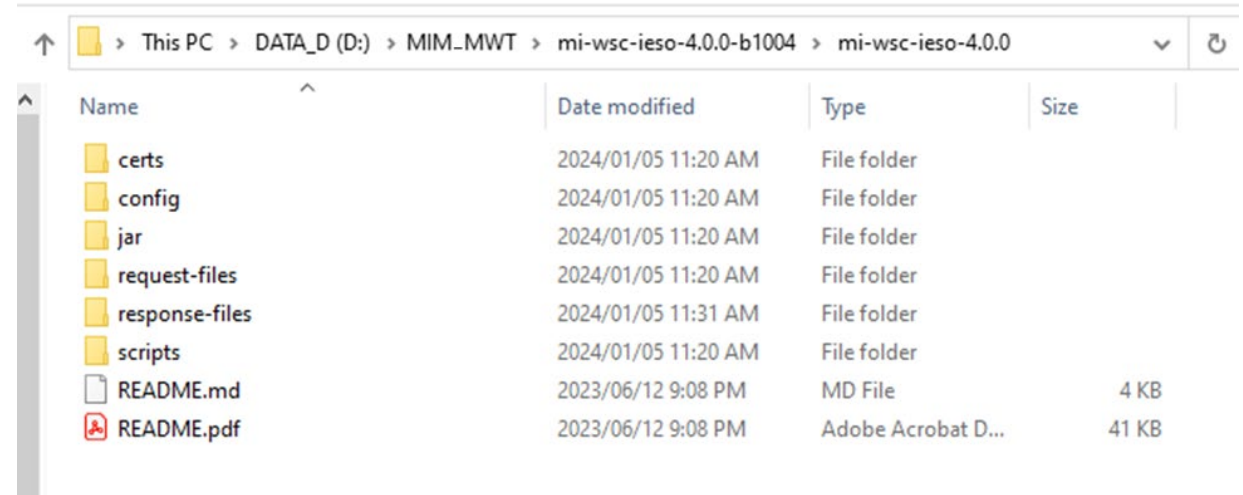


Step User Instruction

Expected Result

2 Verify files have been extracted, and open the extracted folder.

The file structure should be similar to the screenshot below:

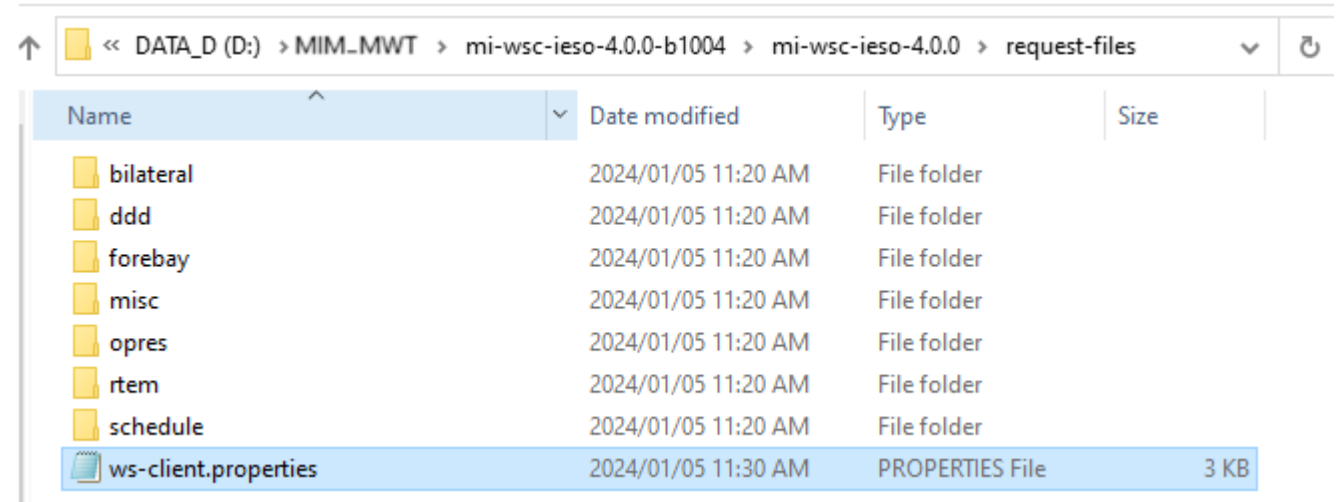


Step User Instruction

Expected Result

3 Open the **request-files/ws-client.properties** file, using your **Notepad** application.

The **ws-client.properties** file will be in the **request-files** folder:



Step User Instruction

Expected Result

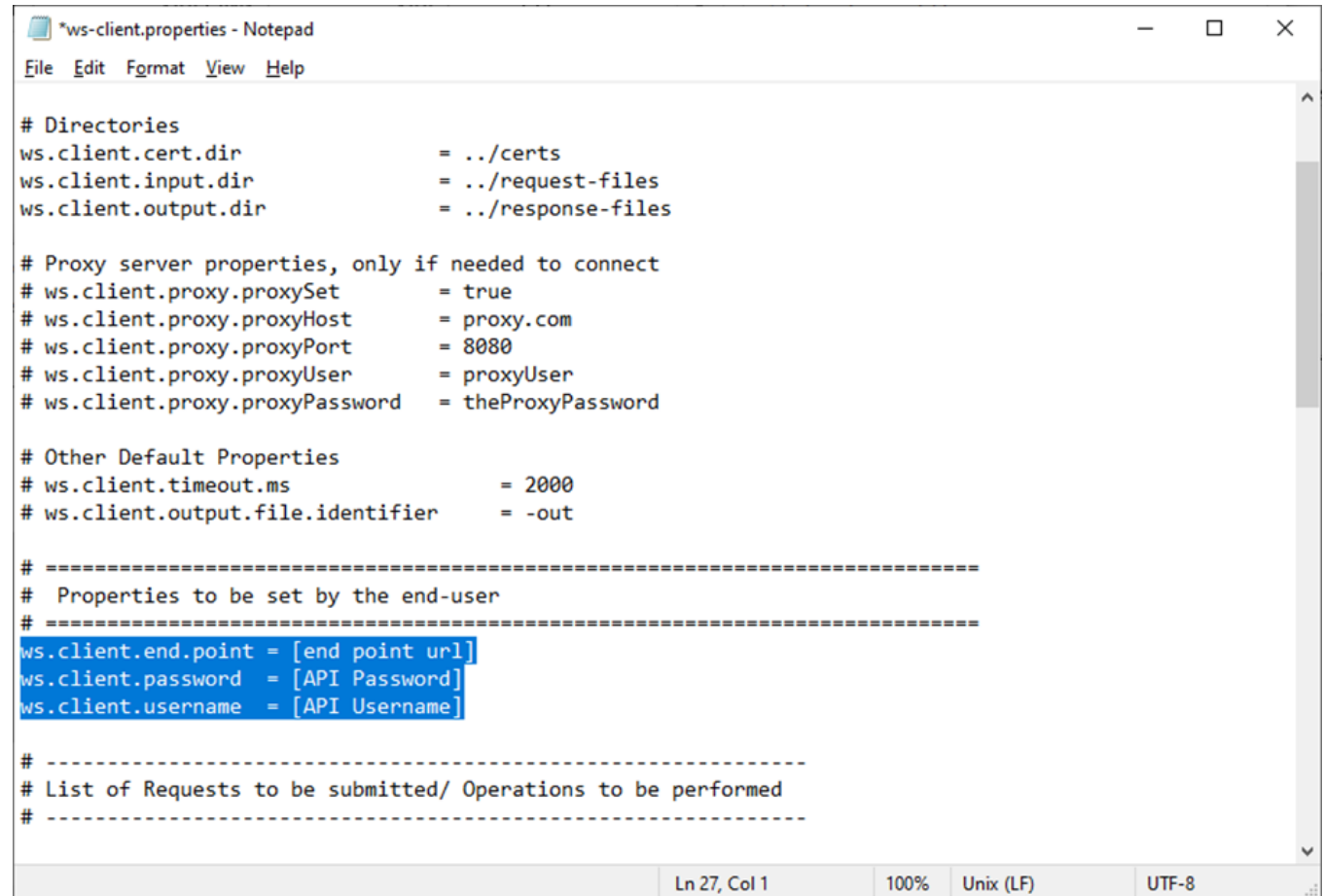
4 Update the following information in the file:

ws.client.end.point =
https://webservices-
sandboxmrp.ieso.ca/emim

ws.client.password = [API
Password]

ws.client.username = [API
Username]

Update the 3 fields below with the API endpoint provided and your API password and username.



```
*ws-client.properties - Notepad
File Edit Format View Help

# Directories
ws.client.cert.dir           = ../certs
ws.client.input.dir          = ../request-files
ws.client.output.dir         = ../response-files

# Proxy server properties, only if needed to connect
# ws.client.proxy.proxySet   = true
# ws.client.proxy.proxyHost  = proxy.com
# ws.client.proxy.proxyPort  = 8080
# ws.client.proxy.proxyUser  = proxyUser
# ws.client.proxy.proxyPassword = theProxyPassword

# Other Default Properties
# ws.client.timeout.ms       = 2000
# ws.client.output.file.identifier = -out

# =====
# Properties to be set by the end-user
# =====
ws.client.end.point = [end point url]
ws.client.password = [API Password]
ws.client.username = [API Username]

# -----
# List of Requests to be submitted/ Operations to be performed
# -----

Ln 27, Col 1    100%    Unix (LF)    UTF-8
```

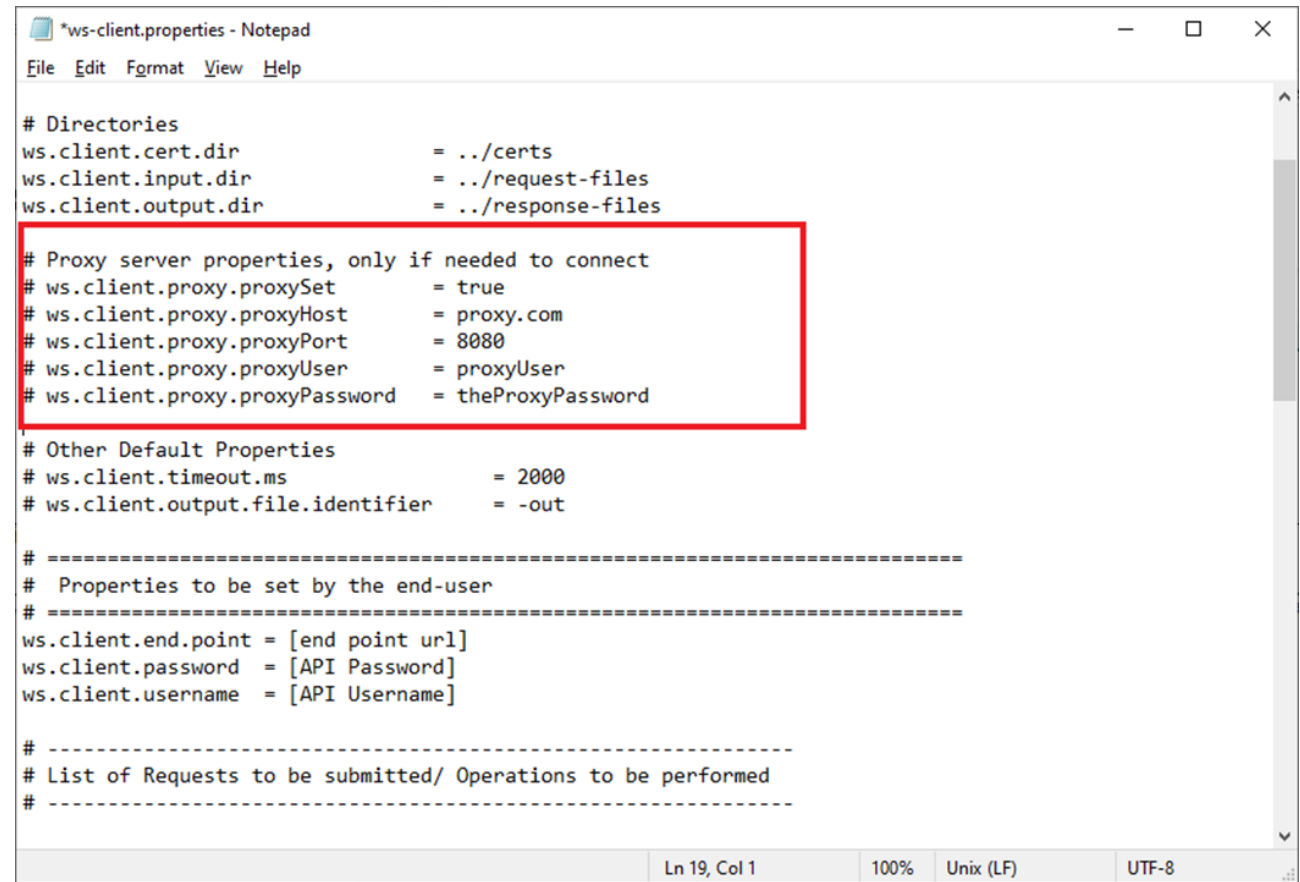
Step User Instruction

Expected Result

5 If required, update the proxy server properties in the same file.

Save the file if any changes are made.

This is an optional step. Update the following fields to update the proxy server properties. If updated, remove the pound sign (#) before each setting.



```
*ws-client.properties - Notepad
File Edit Format View Help

# Directories
ws.client.cert.dir          = ../certs
ws.client.input.dir         = ../request-files
ws.client.output.dir        = ../response-files

# Proxy server properties, only if needed to connect
# ws.client.proxy.proxySet   = true
# ws.client.proxy.proxyHost  = proxy.com
# ws.client.proxy.proxyPort  = 8080
# ws.client.proxy.proxyUser  = proxyUser
# ws.client.proxy.proxyPassword = theProxyPassword

# Other Default Properties
# ws.client.timeout.ms       = 2000
# ws.client.output.file.identifier = -out

# =====
# Properties to be set by the end-user
# =====
ws.client.end.point = [end point url]
ws.client.password  = [API Password]
ws.client.username  = [API Username]

# -----
# List of Requests to be submitted/ Operations to be performed
# -----

Ln 19, Col 1    100%    Unix (LF)    UTF-8
```

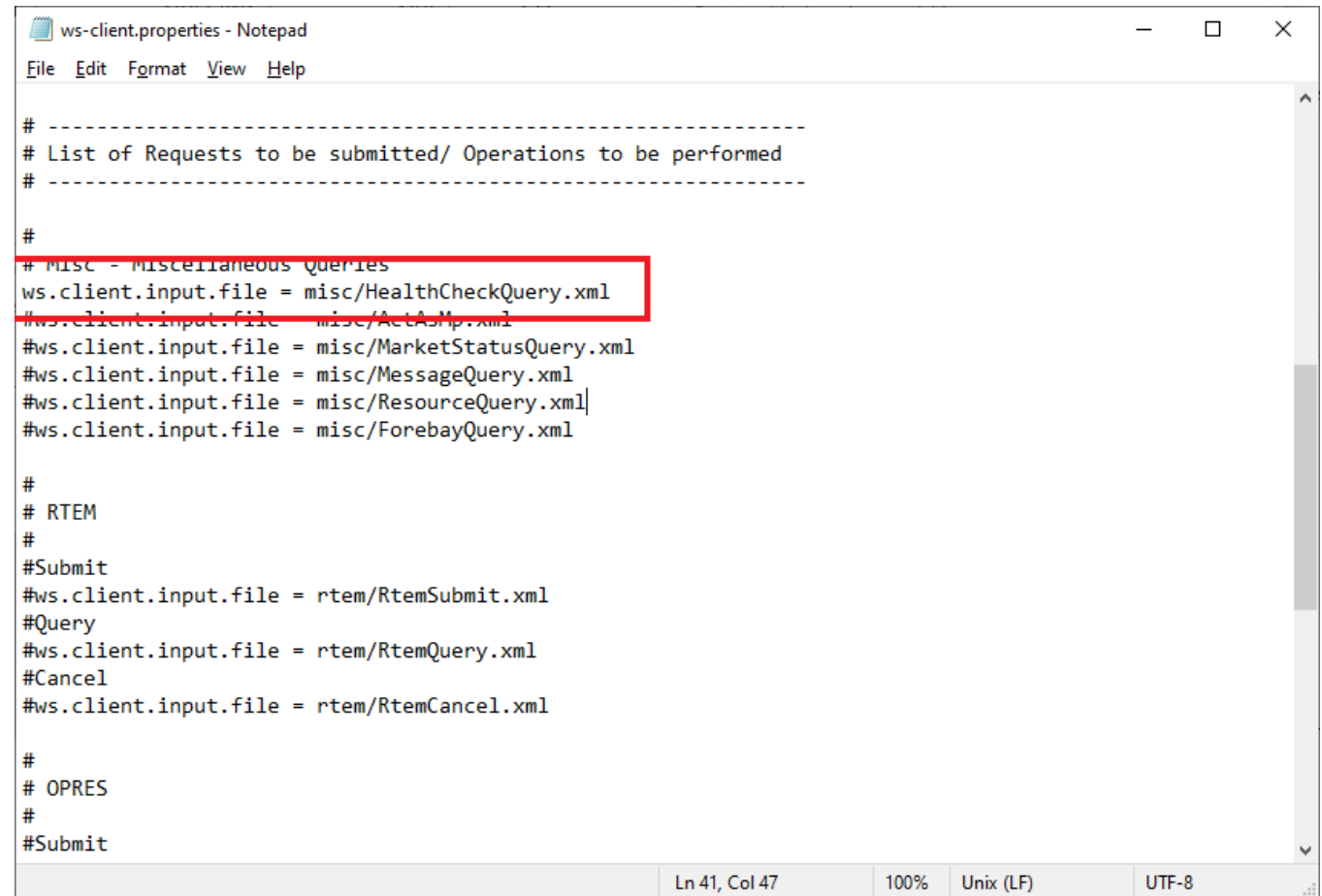

Step User Instruction

Expected Result

6 In that same ws-client.properties file, verify the **HealthCheckQuery.xml** is active under **Miscellaneous Queries**.

Save and close the file if any changes are made.

The row with the **HealthCheckQuery.xml** should not have a pound sign (#) in front of it for it to be active. Ensure all the remaining lines below it have a pound sign (#) at the start as shown below.



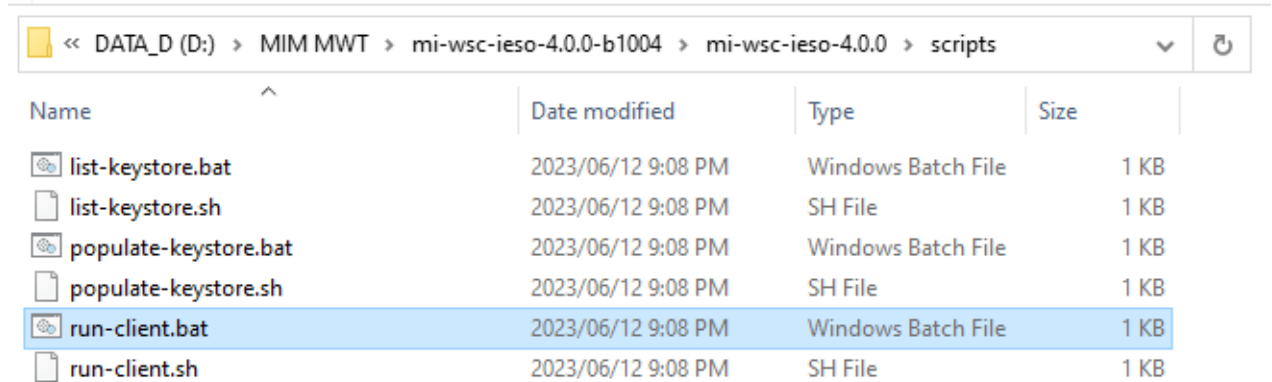
```
ws-client.properties - Notepad
File Edit Format View Help
# -----
# List of Requests to be submitted/ Operations to be performed
# -----
#
# MISC - Miscellaneous Queries
ws.client.input.file = misc/HealthCheckQuery.xml
#ws.client.input.file = misc/ActAsMp.xml
#ws.client.input.file = misc/MarketStatusQuery.xml
#ws.client.input.file = misc/MessageQuery.xml
#ws.client.input.file = misc/ResourceQuery.xml
#ws.client.input.file = misc/ForebayQuery.xml
#
# RTEM
#
#Submit
#ws.client.input.file = rtem/RtemSubmit.xml
#Query
#ws.client.input.file = rtem/RtemQuery.xml
#Cancel
#ws.client.input.file = rtem/RtemCancel.xml
#
# OPRES
#
#Submit
Ln 41, Col 47 100% Unix (LF) UTF-8
```

Step User Instruction

Expected Result

7 Navigate to the **scripts** folder.

The folder should have the **run-client.bat** file.



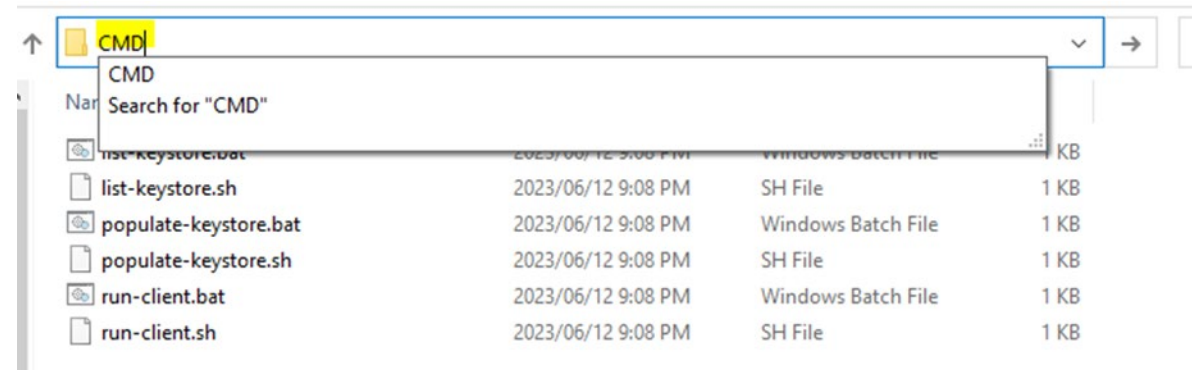
Name	Date modified	Type	Size
list-keystore.bat	2023/06/12 9:08 PM	Windows Batch File	1 KB
list-keystore.sh	2023/06/12 9:08 PM	SH File	1 KB
populate-keystore.bat	2023/06/12 9:08 PM	Windows Batch File	1 KB
populate-keystore.sh	2023/06/12 9:08 PM	SH File	1 KB
run-client.bat	2023/06/12 9:08 PM	Windows Batch File	1 KB
run-client.sh	2023/06/12 9:08 PM	SH File	1 KB

Step User Instruction

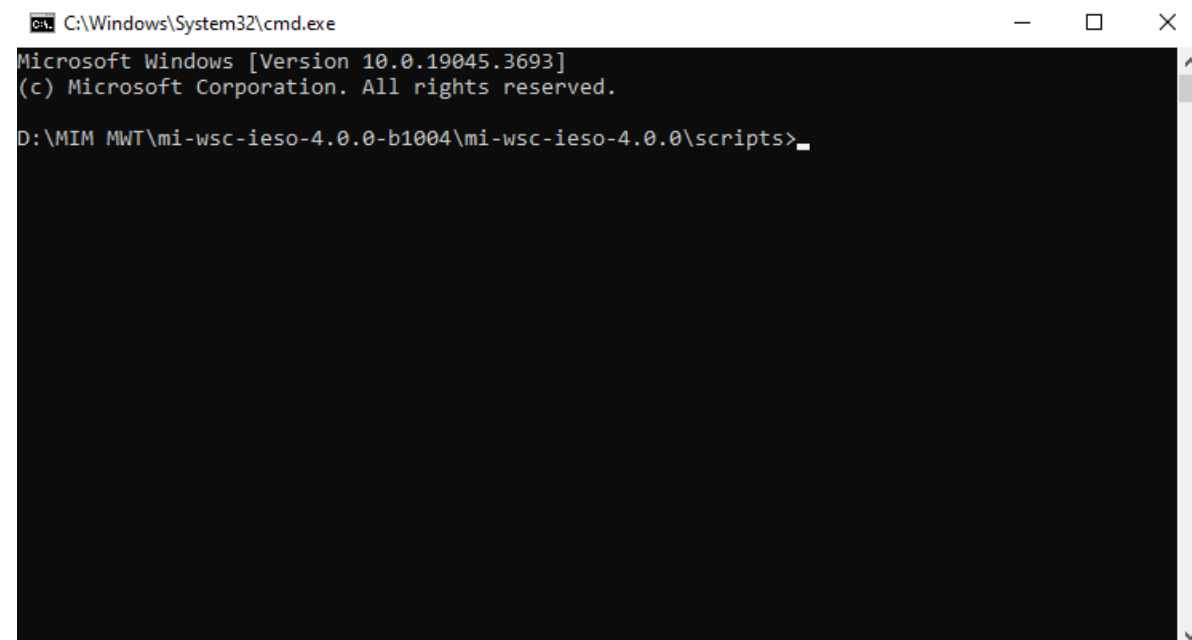
Expected Result

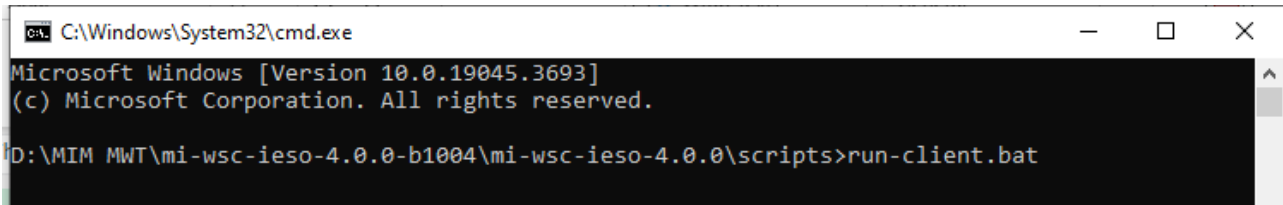
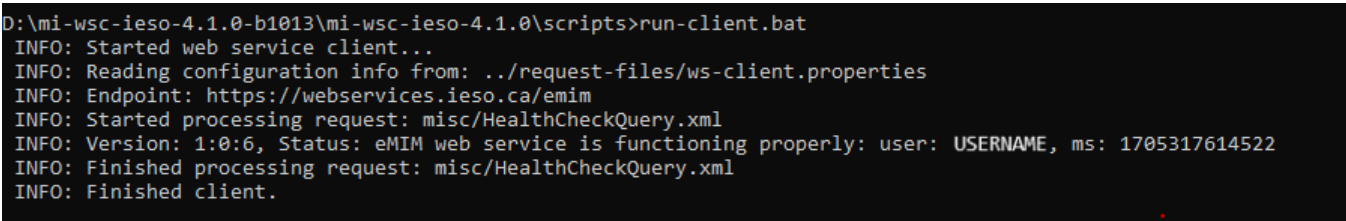
- 8 Select the address bar in **File Explorer** to select the path. Erase the path and type **cmd**. Then, press enter.

Select the path and type the command "CMD" in the address bar.



This should open the **Command Prompt** directly navigated to the path of the script.



Step	User Instruction	Expected Result
9	Type the command “ run-client.bat ” in the Windows Command Prompt and press enter.	<p>Type the command as shown below:</p>  <pre> C:\Windows\System32\cmd.exe Microsoft Windows [Version 10.0.19045.3693] (c) Microsoft Corporation. All rights reserved. D:\MIM MWT\mi-wsc-ieso-4.0.0-b1004\mi-wsc-ieso-4.0.0\scripts>run-client.bat </pre>
10	Confirm the script ran successfully.	<p>If run is successful, the results in the Command Prompt should look like this:</p>  <pre> D:\mi-wsc-ieso-4.1.0-b1013\mi-wsc-ieso-4.1.0\scripts>run-client.bat INFO: Started web service client... INFO: Reading configuration info from: ../request-files/ws-client.properties INFO: Endpoint: https://webservices.ieso.ca/emim INFO: Started processing request: misc/HealthCheckQuery.xml INFO: Version: 1:0:6, Status: eMIM web service is functioning properly: user: USERNAME, ms: 1705317614522 INFO: Finished processing request: misc/HealthCheckQuery.xml INFO: Finished client. </pre> <p>If the run is unsuccessful, the result should show a row with a message starting with ERROR.</p>



Additional Resources

Reference materials on the MIM API System are available here:

- [MIM API: XSD](#)
- [MIM API: WSDL](#)
- [MIM Web Services Toolkit \(MWT\)](#)
- [MWT User Guide](#)
- [MIM Sample Request and Response Files](#)

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