

BML/C2SIM Server Version 4 – Client Package

Overview

This package consists of several client applications that run with \ the fourth version of the GMU C4I center developed BML/C2SIM server. It also includes the java library, used to build the applications. This library should also be used to build additional applications and to create WS and STOMP client functionality for C2 and Simulation packages .

The client applications, and library were all written in Java 8 and have been tested with version 4 of the BML/C2SIM server. While they may work with earlier versions of the server this has not been tested.

It is intended that the applications provided in this package be used for testing and as examples of how to use the library. These applications and the library have been built to published standards. The applications, the library and the server have only been tested with each other and not with external independently produced components. It is strongly recommended, therefore, that all applications and interfaces that will be accessing the BML/C2SIM Server use this library rather than attempting to build to published standards.

STOMP Client

Command line client for receiving BML messages from a STOMP based server.

Filename:

BML_StompClient2_ALL-1.0.jar (Name may include a later release level)

Functions:

Connects to STOMP based messaging server

Maintains connection as until program ends

Subscribes to "topic/BML"

Does not subscribe to any sub topics or selectors and will therefore receive all messages published to this topic.

All messages received are printed on stdout

Usage:

```
java -jar BML_StompClient2.jar host [s]
```

- *host* is the name/ address of the STOMP Messaging server host
- *s* indicates that a summary form of received messages should be printed rather than the entire message body.

Differences from previous versions:

- Program uses Version 2 of BML Client Library – See description below
- When connection is make "OK CONNECTED" is printed rather than "OK".
- The *s* option is new
- It is no longer possible to set the port number to be used. If the use of a non standard port number is necessary then the client could be modified.
- Network problems are correctly detected and more descriptive messages are printed when problems do occur.

Web Services Client

Command line client for submitting BML/C2SIM documents to the RESTful Web Services based BML server.

Filename:

BML_WSClient2_ALL-1.0.jar (Name may include a later release level)

Functions:

- Connects to RESTful Web Services Server (BML Server)
- Submits BML document specified on command line
- The result is received and printed on stdout
- The TCP connection is broken
- The program completes

Usage:

```
java -jar BML_WSClient2_1.0.jar host bmlFile submitter firstForwarder
```

host Name/address of RESTful WS server

bmlFile Path to BML XML file (BML Document)

submitter Initials/name of person making submission. No validation is made on the submitter identification but it is carried through the processing and exists as an HTTP header in the published document.

firstForwarder This is the address of the first server to handle this message and is used in a multi-server environment. Not usually set by command line users.

Difference from previous versions:

- Program uses Version 2 of BML Client Library – See description below
- Previous versions used a *domain* on the command line. This is no longer used. The client library will accept this property but it isn't currently used.
- The response returned is a more complete XML document returned either containing status and processing statistics if the document was successfully processed or an error message if there were problems.
- Network problems are correctly detected and more descriptive messages are printed

Performance Web Services Client

A command line Web Services client used to measure server performance.

TBD

Replay Client

A command line client used for replaying logged transactions.

TBD

B2B Client

A command line client used for provide forwarding services of BML documents in a multi server environment

TBD

BML Client Library Version 2

Java library of classes used to build various client applications. Also intended to be imbedded in command and control system and in simulation systems when implementing BML or C2SIM.

Filename:

BMLClientLib2-1.0.jar (Name may include a later release level)

Classes:

BMLClientREST_Lib	Provides WebServices RESTful interface to server
BMLClientSTOMP_Lib	Provides interface to STOMP based messaging server
BMLClientException	Exception thrown by elements of BMLClientLib
BMLSTOMPMessage	Contains STOMP message and other elements
BML_LibTest_REST	Used for testing BMLClientREST_Lib (Should not be used)
BML_LibTest_STOMP	Used for testing BMLClientSTOMP_Lib (Should not be used)

See the JavaDoc for detailed usage of this library.