

C2SIM Server Version 4 – Client Package

Overview

This package consists of several client applications that run with the current version of the fourth version of the GMU C4I center developed C2SIM server. It also includes the java library, used to build the applications. This library can also be used to build additional applications. It can also be used to build interfaces to the BML server from C2 and simulation systems.

The client applications, and library were all written in Java 8 and have been tested with version 4 of the 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 produces components. It is strongly recommended, therefore, that all applications and interfaces that will be accessing the C2SIM Server use the library rather than attempting to build them around published standards.

STOMP Client

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

Filename:

BML_StompClient2-1.0.jar (Name may include a later release level)

Functions:

Connects to STOMP based messaging server
Maintains connection as until program ends
Subscribes to BMLServer/bml topic
Does not subscribe to any sub topics and will therefore receives all messages.
All messages received are printed on stdout

Usage:

java -jar BML_StompClient2.jar *host port*

- *host* is the name/ address of the STOMP Messaging server host
- *port* is the port number to use. Defaults to 61613 the standard STOMP port.

Differences from previous versions:

- Program uses Version 2 of BML Client Library – See description below
- When connection is make “CONNECTED” is printed rather than “OK”.

- Network problems are correctly detected and more descriptive messages are printed when problems occur.

Web Services Client

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

Filename:

BML_WSClient2-1.0.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 setting this property but it isn't used.
- A more complete XML document is 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 files included with this library for detailed usage of this library.