

SSL SIMULATION SYSTEMS LTD

Intelligent Highway Systems

Telephone (01934) 838803
Fax (01934) 876202
Email: SSL@simulation-systems.co.uk
Web: www.simulation-systems.co.uk

Unit 12,
Market Industrial Estate,
Yatton,
Bristol, BS49 4RF
England

User Manual for the TIHP VASP Simulator



Certificate No 920489

SSL/1504/A/19.06.2001

Document Control

Title: User Manual for the TIHP VASP Simulator

Document No: SSL/1504/A/19.06.2001

SSL Ref: SSL/687/0/4

File: Ssl1504A.doc

Status: Definitive

Product: 155

Synopsis: User manual for the TIHP VASP Simulator.

Originator: R. Clark

Editor:

Authorisation: K. Edwards



Doc. Review: K. Edwards



Circulation List:

1 S. Jones, WSA, Newport (**electronic copy**)

Copy number

1

Change Control: Document must be reviewed by someone other than the Originator / Editor

Change History:

1504/A/19.06.2001 - Original Issue.

Changes Forecast:

Retention Period: This issue should be held on file until 06/2011.

Contents

- 1 Introduction..... 1**
- 2 Getting started..... 2**
 - 2.1 Installation 2
 - 2.2 Running the simulator 2
- 3 Properties and defaults..... 5**
 - 3.1 Properties 5
 - 3.2 Defaults..... 5

References

- [1] SSL/1403 – *Interface Definition Document for the NAW Publisher Application.*
- [2] *Java 2 SDK, Standard Edition Documentation, Version 1.4.0.* Sun Microsystems:
<http://java.sun.com/j2se/1.4/docs>
- [3] *The Java Tutorial.* Sun Microsystems: <http://java.sun.com/docs/books/tutorial>
- [4] *Common Object Request Broker: Architecture and Specification, Version 2.1.* OMG
document 97-09-01.

1 Introduction

This is the User Manual for the TIHP VASP Simulator or TVS. The TVS is the public release version of the TIHP testing application(s) developed at SSL. It allows a user to invoke any method of the TIHP public interface from a command prompt. This document assumes that you have read the TIHP interface document [1]. It is also assumed that you are comfortable with running Java applications from the command line. If you are not then read through the Java Tutorial [3] and JDK tool documentation [2] and become comfortable. Of course you will require a Java Virtual Machine to run this application which you can download one from <http://java.sun.com>.

Please note that some shells such as DOS (Win9X) have a very short prompt, so the use of scripts / batch files might be required for the long commands. NT 4.0, Linux and Solaris should have no problems. Please note that all of the command examples where run under NT4.0 SP6 so the command line syntax should be adjusted accordingly for your OS.

The TVS application has been developed and tested under JDK1.3 and JDK1.4-beta. Releases prior to JDK1.4-beta might have problems using FTP if they have multiple network interfaces on their machine.

2 Getting started

2.1 Installation

1. Install JDK 1.3 or above if you have not already done so. To check that everything is working ok: open up a command prompt and type:

```
java -version
```

It should then print out the following (or similar):

```
java version "1.4.0-beta"  
Java(TM) 2 Runtime Environment, Standard Edition (build  
1.4.0-beta-b65)  
Java HotSpot(TM) Client VM (build 1.4.0-beta-b65, mixed  
mode)
```

If it doesn't print this out then you haven't installed and set up you Java environment correctly.

2. Create a directory, e.g. TVS.

3. Copy the TVS.jar file into this directory.

2.2 Running the simulator

Open up a command prompt to the directory that you copied TVS.jar into.

Now enter:

```
java -classpath TVS.jar TIHP.simulator.VaspSimulator
```

You should then be prompted with the following:

```
Could not read defaults from: [VaspSimulator.properties]  
(Re)creating file  
Enter [method] :
```

The first two lines are the TVS telling you that it could not read default properties from the `VaspSimulator.properties` file so it has (re)created it. Properties are described further in section 3 below. The third line is the TVS asking you to enter the name of the method that you wish to invoke. By entering an invalid name the TVS will display all of the available methods. Press enter then the following should be displayed:

```
Entered []  
Available methods are:  
PullSession.compactLayout  
PullSession.endSession  
PullSession.getLayout(dump)  
PullSession.getLayout(dumpHtml)  
PullSession.getObjectLimit  
PullSession.getSubscriptions  
PullSession.pull(dump)  
PullSession.pull(dumpHtml)  
PullSession.pull(noDump)  
PullSession.setObjectLimit  
PullSession.unsubscribe  
PullSetup.getSelectionInfo
```

```
PullSetup.getServiceNames
PullSetup.setSelectionCriteria
PullSetup.startPullSession
PullSetup.subscribe
Session.abortBlockedMethods
Session.endSession
Session.getIdleTimeout
Session.getMethodTimeout
Session.setIdleTimeout
Session.setMethodTimeout
Session.setupPullSession
TIHPLogin.login
Enter [method] :
```

Each one of these methods relates to a method on the public interface of the TIHP. For details on how they work please read the TIHP IDD [1]. Now lets login and create a session on the TIHP. You will need a valid username and password to login to the TIHP, here we will assume that you have the username: “TihpVasp0” and the password: “71hpVa5p”. Below is the screen output of this interaction:

```
Enter [method] : TIHPLogin.login
Entered [TIHPLogin.login]
Invoking method [TIHPLogin.login]
Enter [username] : TihpVasp0
Entered [TihpVasp0]
Enter [password] : 71hpVa5p
Entered [71hpVa5p]
Enter [loginUrl] : http://members.traffic-
wales.com/TIHP/login/login.ior
Entered [http://members.traffic-
wales.com/TIHP/login/login.ior]
Logged on
Enter [iorDirectory] : P:\TIHP\ior
Entered [P:\TIHP\ior]
Method [TIHPLogin.login] has returned
```

You might also notice that that a file called Vasp.log has been created in your working directory. This file contains the screen output of the VASP Simulator. If you have a look at the contents they are slightly different than screen output:

```
Enter [method] : Entered [TIHPLogin.login]
Invoking method [TIHPLogin.login]
Enter [username] : Entered [TihpVasp0]
Enter [password] : Entered [71hpVa5p]
Enter [loginUrl] : Entered [http://members.traffic-
wales.com/TIHP/login/login.ior]
Logged on
Enter [iorDirectory] : Entered [P:\TIHP\ior]
Method [TIHPLogin.login] has returned
```

This difference is due to the fact that user input is not rendered to the log directly. You will also notice that this operation has created the file: TihpVasp0.session.ior in the directory specified by the iorDirectory property. This file contains a stringified IOR to the Session object created on the TIHP.

Now lets finish off and end this TIHP session. This time we will pass our input as system properties to the virtual machine. Notice how the VASP Simulator doesn't prompt you for input because it already knows the value:

```
>java -classpath TVS.jar ^
More? -Dusername="TihpVasp0" ^
More? -DiorDirectory="P:\TIHP\ior" ^
More? -Dmethod="Session.endSession" ^
More? -DTIHP.simulator.VaspSimulator
Invoking method [Session.endSession]
Logged off
Cleared Session File
Method [Session.endSession] has returned
```

You will find that the `TihpVasp.session.ior` file has been deleted as the CORBA object that it references no longer exists.

3 Properties and defaults

3.1 Properties

The VASP Simulator will prompt the user as it requires the value of certain properties. All of the properties can be set in the VM options by using the `-Dproperty=value` option or by adding entries to the `VaspSimulator.properties` file. See the JDK documentation [2] and the Java Tutorial [3] for more information. Note that properties set on the command line override the properties specified in the `VaspSimulator.properties` file and that properties are case sensitive.

3.2 Defaults

When the TVS starts up it tries to load some default properties from the `VaspSimulator.properties` file. To prevent this from happening the user can set the `setDefault` property to `"false"` on the command line, the TVS will then specify that it is not loading the defaults. If however the properties file doesn't exist or corrupted the TVS will attempt to (re)create the properties file with the factory default settings. Table 1 shows the four factory default settings that are set by the TVS.

Property	Default
<code>logFilename</code>	<code>"Vasp.log"</code>
<code>sessionIorPostfix</code>	<code>".session.ior"</code>
<code>pullSetupIorPostfix</code>	<code>".pullSetup.ior"</code>
<code>pullSessionIorPostfix</code>	<code>".pullSession.ior"</code>

Table 1: Default Properties

To reset the factory defaults just delete the `VaspSimulator.properties` file.

Please note that the prompting for the `logFilename` will not appear in the log.