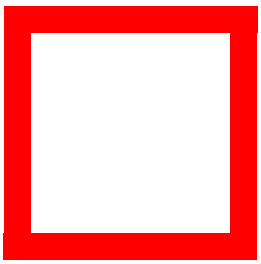
XTT User Interface Guide

X-treme Testing Tool version 0.1

Created on 9 April 2009.



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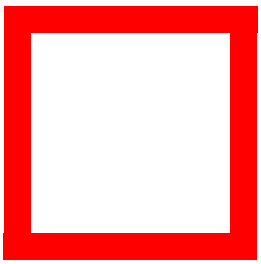


Introduction

This book describes how to use the XTT features. You use this application to run the test cases (which are xml files) & generate the logs which contain the result of test execution.. The XTT framework incorporates an easy to use GUI. It is an unit/integration test framework for Window/Unix based environment.

This Guide is designed to help you understand and successfully use XTT. It describes the features of XTT and provides step-by-step instructions for performing the testing activities.

Target Audience

This document is for regular users who use XTT, for software testers who use XTT, and for developers who extend XTT.

This Guide, as well as the features it describes, is designed primarily for XTT system administrators. This Guide assumes that you are familiar with the following:

- XTT configuration
- Functions and features of XTT
- Standard aspects of operating software applications in the Window environment

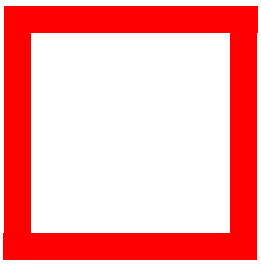
Related Documents

This Guide is part of the XTT v0.1 documentation set that includes the following documents:

- XTT Installation Guide
- XTT Function Modules Guide
- XTT Utilities Guide

Summary of Changes

Issue	Date	Release Changes
v 0.1	March 2, 2009	For XTT Release (Draft Version)



Using XTT Application

This chapter has the following sections:

- Starting the XTT Application
- Testing the scripts
- Using the Xtreme Testing Tool

Starting the XTT Application

It is assumed that you have

- Installed Windows 2000 or the Windows XP operating system on your computer
- Installed JDK 1.5 or above
- Installed Oracle 9i client (required for SQL related test cases)
- Installed ANT 1.6.5 or later (for developers extending XTT)
- Downloaded the tar.gz file and extracted the XTT folder on your computer

To start XTT application, follow these steps:

1. Click **Start** and then click **Run**.
2. Enter `cmd` and click **OK**. The Command Prompt appears.
3. Navigate to the folder where you have extracted the XTT package.
4. Set the following paths at the command prompt if you are using a Windows computer:

```
set JAVA_HOME="<Your JDK installed folder>"
set PATH="<Your JDK installed folder>\bin";%PATH%
```

OR

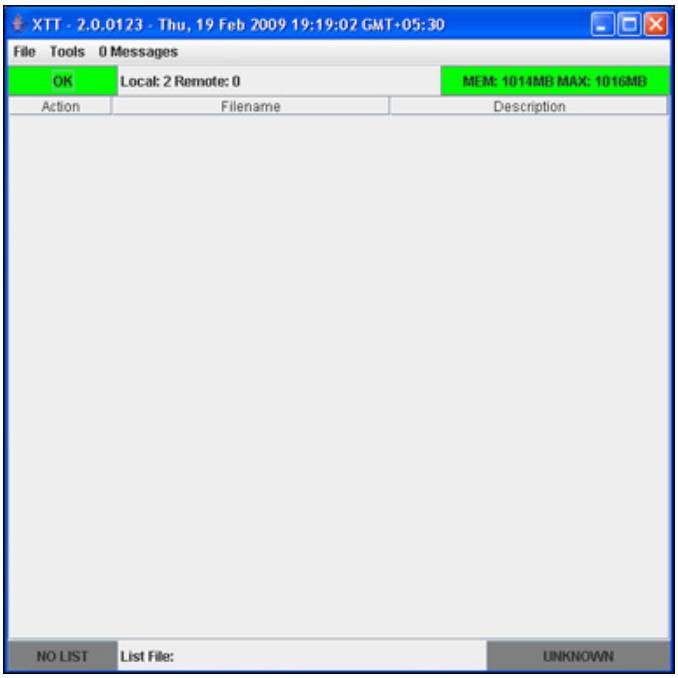
Set the following paths at the command prompt if you are using a UNIX computer:

```
export JAVA_HOME="<Your JDK installed folder>"
export PATH="<Your JDK installed folder>/bin":$PATH
```

5. Enter `java -cp lib\jdom.jar -jar lib\xtt.jar -g` at the command prompt and press **Enter**.

The XTT application GUI appears.

You see the following **XTT** home screen.



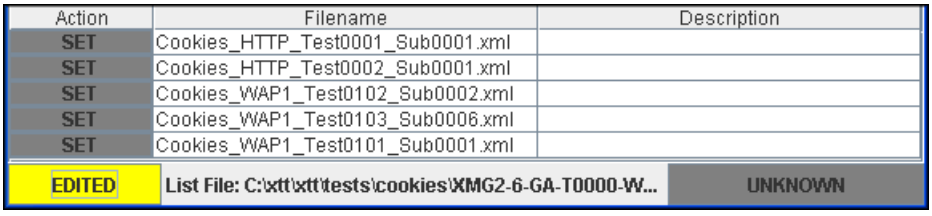
Testing the scripts

Adding XML files to the XTT console

1. Click on the **No List** button at the bottom left corner of the XTT console.
2. Click on the **Add Test** option. A dialog box appears.
3. Browse through to the appropriate folder containing the XML files
4. Select the XML file you want to load, and click **Open**. You can add one file at a time.

   The XML file can now be seen in the XTT console. The **No List** gray button now turns yellow with label changing to **Edited**. Likewise you can add more files to the XTT console.

   To run the XML file, there are several options available.



5. Click on the individual script and click **Run**. This command applies only to the selected script.
6. Alternatively, click on the **Edited** button, and click the **Run List** or **Run Selected** option.

Run List will run all the XML files whereas **Run Selected** will run only the selected XML file(s).

Adding List files to the XTT console

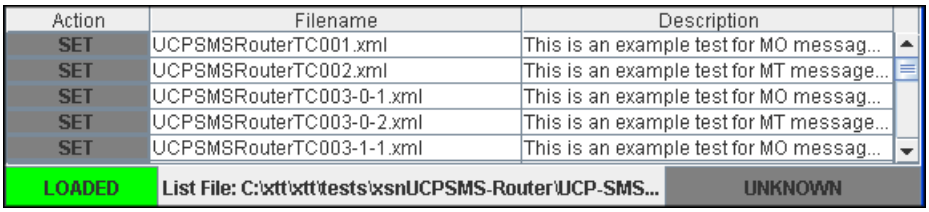
1. Click on the **File** menu.
2. Click on the **NewLoad Test List** option. A dialog box appears.
3. Browse through to the appropriate folder containing the list files.
4. Select the list file you want to load, and click **Open**.

Note: A list file contains a set of xml scripts. It contains all the test script path along with the test script name i.e. tests\XTT_AGW\MMStoHTTPRetrievalTC022.xml.

Sample test list file:

```
tests\XTT_AGW\MMStoHTTPRetrievalTC022.xml
tests\XTT_AGW\sendMM1TC003.xml
tests\XTT_AGW\sendMM1TC003.xml
```

The XML files can now be seen in the XTT console. The **No List** gray button now turns green with label changing to **Loaded**.



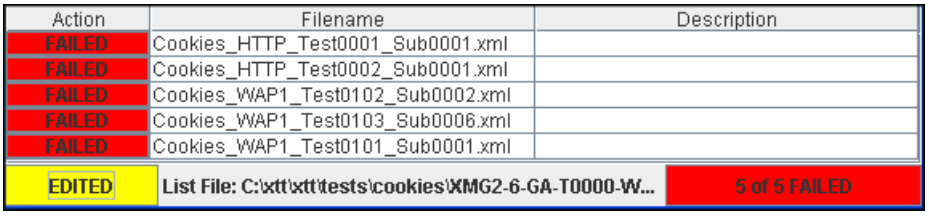
Likewise you can add more files to the XTT console.

To run the XML file, there are several options available.

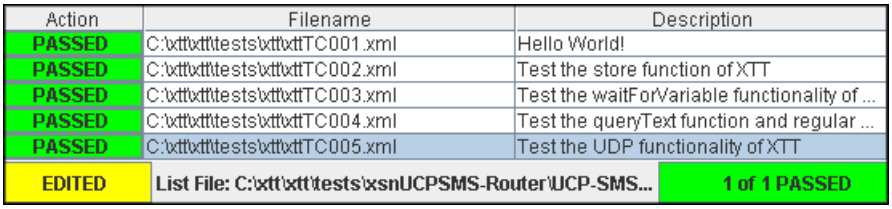
5. Click on the individual script and click **Run**. This applies only to the selected script.
6. Alternatively, you can click on the **Loaded** button, and then click on the **Run List** option. This applies to all the scripts that are loaded in the XTT.

The test scripts either Pass or Fail to execute. The status of the result can be seen on the individual script.

The **Unknown** grey colored button changes to red color and it reads **Failed** if the script failed the test.



Similarly, if the script passes the test, the **Unknown** grey colored button changes to green color and it reads **Passed.**



Viewing Logs

To view log of the test scripts, you can:

- Click on the **Passed/Failed** button

  If you have run the list, then you can see the logs of all the tested scripts in one window. If you have run an individual script, then you can see the log of the last test case that was run.

- Click on the **Edited/Loaded** button

  If you have run the list, then you can see the logs of all the tested scripts in one window. If you have run an individual script, then you can see the log of the last test case that was run.

- Click on the individual script and click Log

  It allows you to see the last log of the selected scripts only.

When you click on an individual test case, a list with the following options is displayed:

Options	Description
Run	Use this to execute the test.
Edit	This option allows you to edit the test script.
Set	Sets (or selects) the test script.
Log	This allows you to view the last log of the selected test case.
Remove	This option allows you to remove the test case from the list.

When you right-click on an individual test case, a list with the following options is displayed:

Options	Description
Run Selected	Use this to execute the selected tests.
Run List	Use this to run all the test cases available in the XTT console.

Options	Description
Remove Selected	This option allows you to remove the selected tests from the list.

Using the Xtreme Testing Tool

The XTT application displays menus, buttons and fields, which you can use to explore the various functions and features.

- File menu
- Tools menu
- Messages menu
- OK button
- Edited/Loaded button
- Passed/Failed button
- Fields

File menu

The **FIle** menu displays three options, **New/Loadtest List**, **Export**, which is further divided into **All Test Results** and **Selected Test Results** and **Exit**.

Options	Description
New/Load test List	Use this option to create a new test list file and load that test list from your computer.
Export	-
◆ All Test Results	Using this option you can save all the test results on your local machine.
◆ Selected Test Results	Using this option you can save only the selected test results on your local machine.
Exit	Click this option to exit the application.

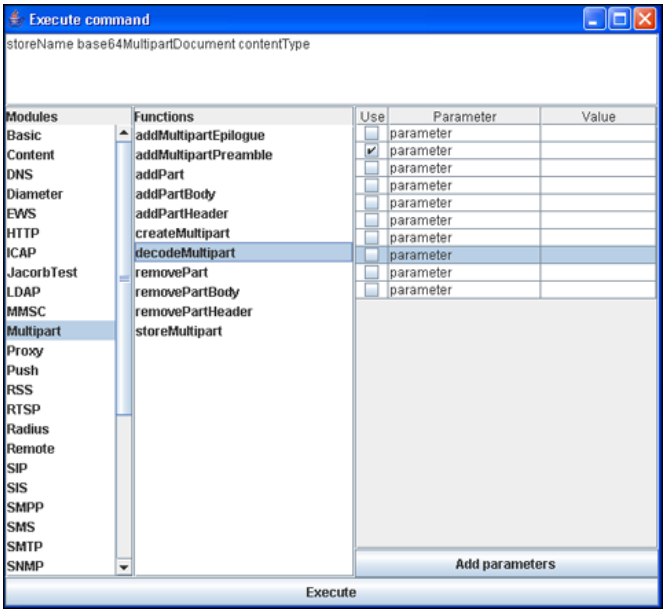
Tools menu

In the Tools menu, there are four options available. They are

- Execute Command
- Check Resources
- Save Encoded String as Binary
- Switch tracing temporarily to

Execute Command

When you run a test case, XTT executes all the functions which are available in a specified function module that is used in a particular test case. Using the Execute Command option, you can select and execute a specific function of the selected Module by providing appropriate values for the parameters.



To Execute Command, follow these steps:

1. Click on the **Tools** menu.
2. Click on the **Execute Command** option. The **Execute Command** window appears.
3. Select a **Module** in the left column. The **Functions** of the selected **Modules** appear in the right column.
4. Select a **function** in the right column. The values are displayed on the top left corner of the window.
5. Enter **Value** against the **Parameter**.

   To add additional parameter rows, click on the **Add Parameters** button.
6. Click **Execute**.

Note: If you enter the wrong argument or parameter and execute command, a failed message is displayed in red.

An illustration of how to assign appropriate values to the parameters, follow these steps:

1. Go to the **XTT** folder of your local computer and double-click the **doc** folder.
2. In the **doc** folder, open the **index.html** file in your browser.
3. In the **All Classes** column in the left side of the window, click on the **FunctionModule_UCP** link.
4. Scroll down to the **Method Summary** section of the page.

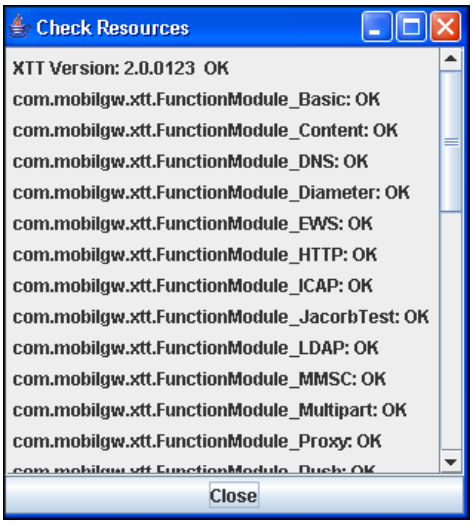
5. In the XTT application, open the **Execute Command** window.
6. Compare the Functions in the **Execute Command** window with those in the **Method Summary** section.
7. Enter the appropriate **Value** against the corresponding **Parameters** in the **Execute Command** window.
8. Click **Execute** in the **Execute Command** window.

Check Resources

You can use this option to check for all the available ports (resources) for the function modules.

To check resources, follow these steps:

1. Click on the **Tools** menu.
2. Click on the **Check Resources** option. A list of function modules is displayed.



Note: The function modules displayed in red color indicates error.

If the **Check Resources** window displays a port or a resource in red

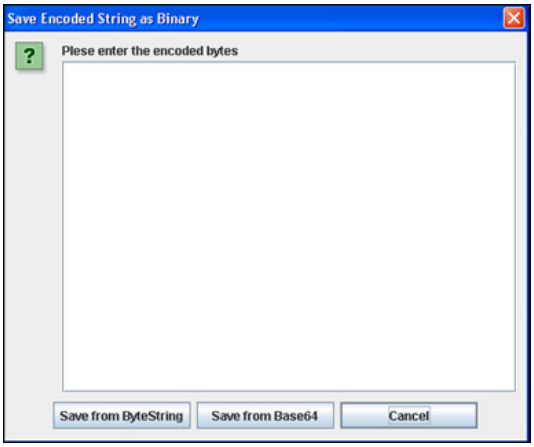
1. Open the configuration file in any editor.
2. Identify the port or resource which is displayed in red.
3. Modify the respective port in the configuration file.
4. **Save** and **Exit** the editor.

   The **OK** button turns yellow and the button label reads **Edited**
5. In the XTT application, click **OK** and then click the **Reload Local Configurations** button.
6. On the **Tools** menu, click **Check Resources**.

The list displays the resources in black.

Save Encoded String as Binary

This option allows you to save and display the **ByteString** or **Base64** encoded bytes into plain text.



To save encoded string as binary, follow these steps:

1. Click on the **Tools** menu.
2. Click on the **Save Encoded String as Binary** option. A dialog box appears.
3. Enter the encoded bytes in the text area.
4. Click on the appropriate button, **Save from ByteString** or **Save from Base64**. A dialog appears.
5. Assign an appropriate file name and destination to the file, and then click **Save**.

Example of Base64

1. Enter the following code in the text area.

   VGhpcyBmaWxlIGlzIHRvIGJlIHNhdmVkIGluIHRoZSB4bWwgZm9ybWF0

2. Click on the **Save from Base64** button.
3. Assign an appropriate file name and destination to the file, and then click **Save.**
4. Open the saved file in any editor.

The following text is displayed:

'This file is to be saved in the xml format'.

Example of ByteString

1. Enter the following code in the text area.

   66

2. Click on the **Save from ByteString** button.
3. Assign an appropriate file name and destination to the file, and then click **Save.**
4. Open the saved file in any editor.

The following text is displayed:

'f'

Example of storing values from the variables

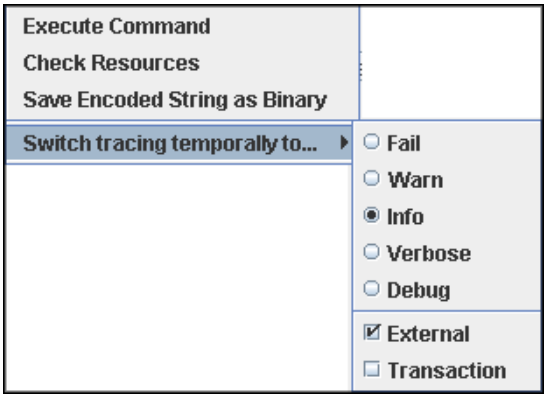
After running a test or execute command, XTT still has the variables stored in memory. Therefore you can for instance save the content of a GET request from module HTTP to disk by specifying the variable name in here instead of direct content.

Following is an HTTP/BODY/BASE64 example where the retrieved data of a get request is stored as base64 encoded data.

1. On the **Tools** menu, click **Switch tracing temporarily to...** option.
2. Select the **Debug** radio button.
3. On the **Tools** menu, click **Execute Command**. The **Execute command** window appears.
4. Select **HTTP** module in the left column. The functions of the selected **HTTP** module appear in the right column.
5. Select a **sendGetRequest** function in the right column. The values are displayed on the top left corner of the window.
6. Enter a URL in the **Value** column against a **Parameter**.
7. Click **Execute**.

Switch tracing temporarily to

The levels displayed in this option are the log levels specified in the configuration. By default, the logging level is set to "Info", you can change this temporally to any other log level, but when you restart XTT, it will come from the configuration file again since this option does NOT save the level in the configuration file.



The logging levels are as follows:

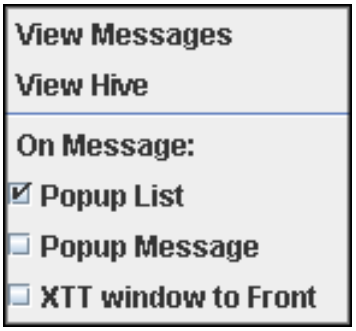
- **Fail**: This level displays only the Fail logs
- **Warn**: This level displays Warn logs and the Fail logs
- **Info**: This level displays Info logs, Warn logs and the Fail logs
- **Verbose**: This level displays Verbose logs, Info logs, Warn logs and the Fail logs
- **Debug**: This level displays Debug logs, Verbose logs, Info logs, Warn logs and the Fail logs

Messages menu

The Messages menu allows you to send and receive messages. This features also enables you to send and receive files. In this way you can communicate with other XTT instances running on the same network (LAN)

Select the **Popup List** check box to view all the received messages in the **Messages** window.

Select the **Popup Message** check box, the **Messages** window pops up when the sender sends you the message or file.



View Messages

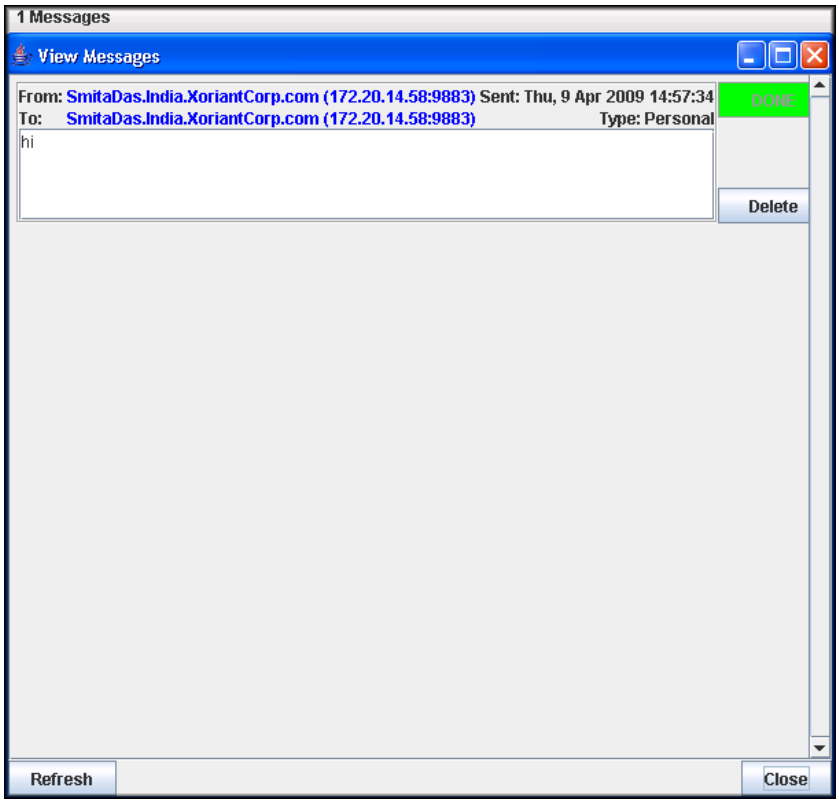
You can use this option to view the received messages and receive files.

To view the messages and receive files, follow this step:

On the **Messages** tool, click **View Messages**.

> *Tip*: The number of messages in the **View Messages** dialog box is displayed in numeric on the left side of the **Messages** menu

The following screen appears:



To delete the message click on the **Delete** button.

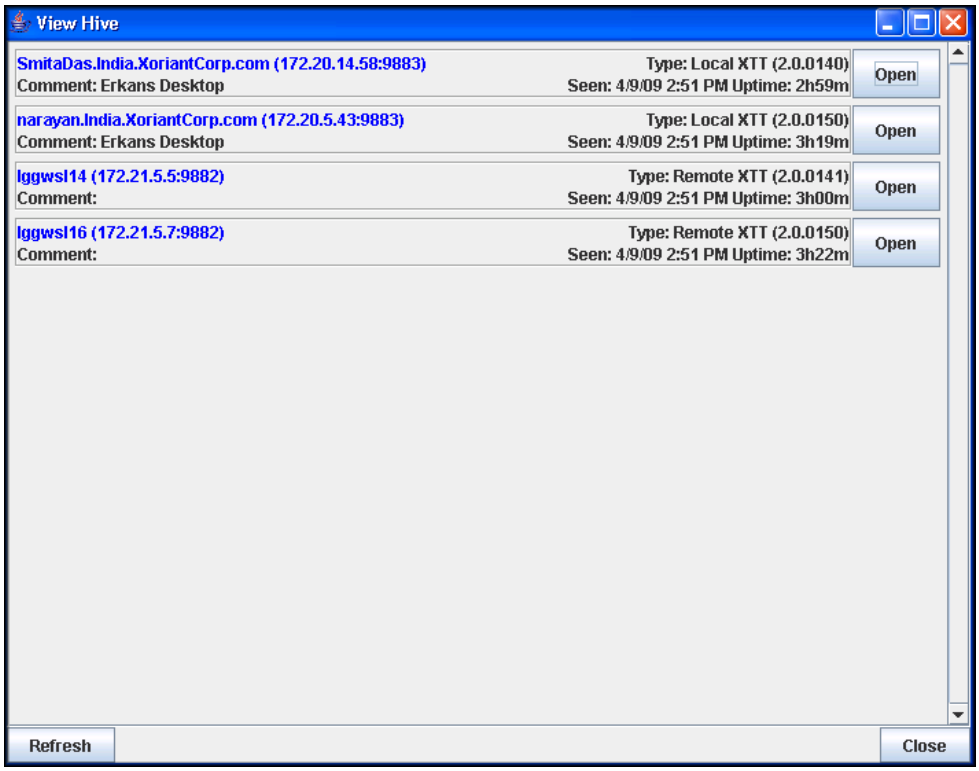
View Hive

You can use this option to send the messages and files.

To send messages as well as files, follow these steps:

1. In the **Messages** menu, click on the **View Hive** option.

The following dialog box appears displaying information of XTT instances running on the network.



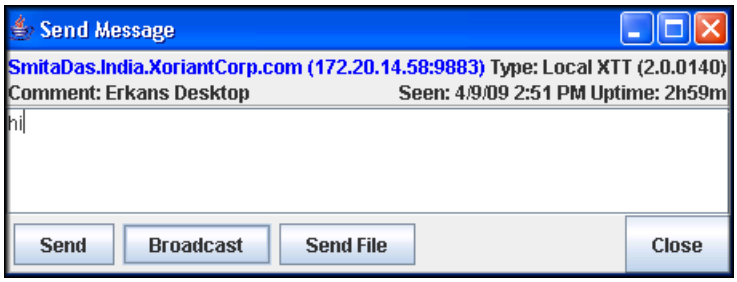
On the left side of the dialog box:

- The information in blue denotes the machine name
- **Comment**:: appearing from the Config.xml file, within the <comment> tag

On the right side of the dialog box:

- **Type**: denotes XTT mode (Local or Remote)
- IP #: denotes XTT package build number
- **Uptime**: denotes time since XTT is running

2. Click the **Open** button. The **Send Message** dialog box appears.



3. To send the message, write the message in the text box and click **Send**.
4. To send the message to all the XTT displayed in the **Hive**, write the message in the text box and click **Broadcast**.
5. To send the file, click the **Send File** button. Browse through your computer to select the fiie you want to send and then click the **Send** button.
6. Click **Close** to cose the diaog box.

OK button

The OK button displays three option related to the local configuration file

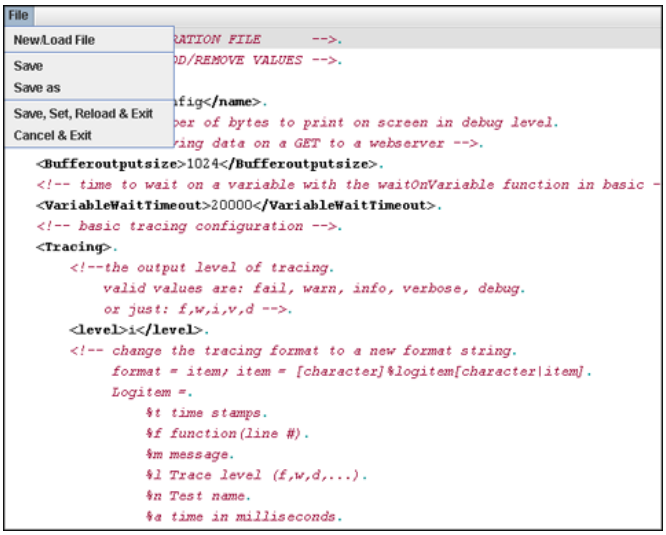
Reload Local Configurations

Using this option you can reload the default local configuration file.

When you make changes in the local configuration file, **save** and **exit** the editor, the **OK** button turns yellow and the label changes to **Edited**. Click on the **Reload Local Configuration** option, to revert back to green button with text labelled as **OK**.

Add Local Configuration

This option allows you to edit and save the default configuration file in the edit mode.



Options	Description
New/Load File	Use this option to open a new file in the edit mode.
Save	Use this command to save the file for the first time.
Save as	Use this command if you want to store the file in a different location in a different version, or give it a different name.
Save, Set, Reload & Exit	This allows you to save, set, reload the edited file and exit the program.
Cancel & Exit	This allows you to Cancel the edit and exit the program.

Default Config(null): Edit, Remove

This is the default configuration file, which can only be removed but not edited. When you edit it, it will always save as a new file.

XTT generates a new configuration file when you open the internal configuration editor either by choosing the default configuration or by adding a new one.

You can edit the configuration file for your personalized configuration for running XTT. Once you generate the configuration file, you can save the file and can change it as you wish. You can edit the IP address of the computer where XTT is going to run. This IP address is present under the <system> tag, between the <ip> and </ip> tags.

MEM:XXXMB MAX:XXXMB Menu

This button displays the quantum of memory allocated to XTT.

The XTT displays the default memory, which can be changed to suit your requirement. You can allocate memory to XTT while starting the XTT application.

To allocate the desired memory to XTT, follow these steps

1. Go to the **xtt** folder installed on your local drive.
2. Right-click the **xtt.bat** file and click **Edit**..
3. Identify the following path in the file:

   ```
   java -Xmx1024m -classpath
   ```

4. Change the memory size by modifying the number from **1024** to suit your requirement.

   For Example:

   If you want to allocate 512 MB, make changes in the following manner:

   ```
   java -Xmx512m -classpath
   ```

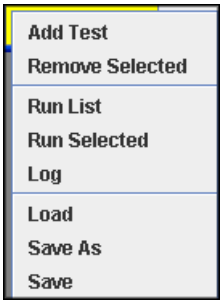
   On the **FIle** menu, Click **Save**.

   Close the file.

512MB memory will be allocated to XTT.

Edited/Loaded button

This button can be used to load, remove and save test cases. It can also be used to view the log of the test cases..



Options	Description
Add Test	Using this you can add an XML test script in to the XTT console.
Remove Selected	This allows you to remove the selected test script from the XTT console.
Run List	Click this to run the list of XML files.
Run Selected	Click this to run the selected XML files.
Log	Click this to view the log of last test case that was run.

Options	Description
Load	Using this you can add a list file (containing XML test script) into the XTT console
Save As	Use this command if you want to store the file in a different location, in a different version, or give it a different name.
Save	Use this command to save the file for the first time.

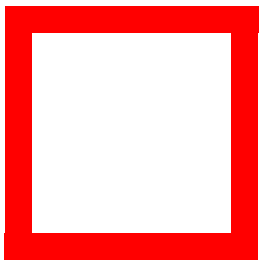
Passed/Failed button

Clicking on this button displays the logs of the script executed individually or as a list. See “Viewing Logs” on page 9

Fields

When you load the list file or add an individual XML file into the XTT console, they appear in the **Action** column with their name and description also displayed in the respective columns.

Fields	Description
Action	This column displays the name of the test cases and their results after they are run.
Filename	Name of the XML file.
Description	Description of the XML file.



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