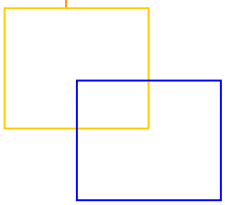
TRACE

THE THIRD EYE



LOADTRACER OVERVIEW

- *Overview*
- *Components*
- *Process*
- *Features*

Trace Technologies Pvt. Ltd.
D5A, Second Avenue Extn,
Anna Nagar East, Chennai.600 102
Phone: 91-44-52183182/52170489

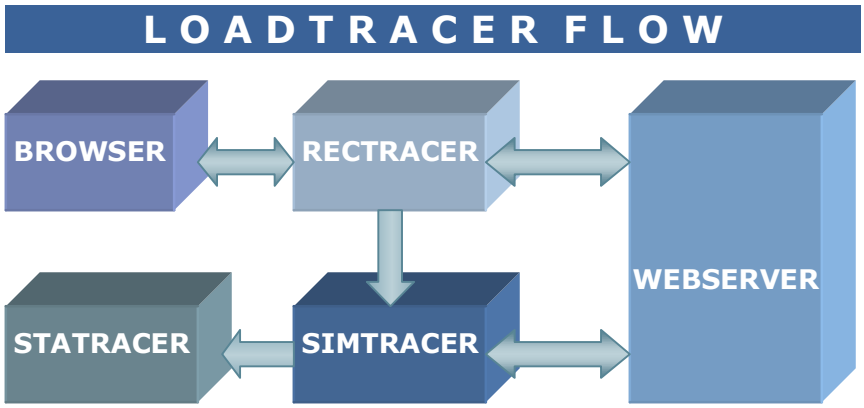
INTRODUCTION

Load Tracer is a GUI-based tool for load/Performance /Stress/ Scalability testing of web applications. Using this tool we can generate a number of virtual clients to hit the web server at a specific time. It simulates multiple instances of web client accessing a Web Server based on the simulating information obtained from one web client during a session with a web server. So under various load or stress condition, any web application can be tested effectively. This tool is developed into three modules, Load Tracer- Recorder, Load Tracer- Generator, and Load Tracer- Analysis. Load Tracer is compatible with Internet Explorer and Netscape.

LoadTracer is powerful GUI-based load simulation tool for load/Performance /Stress/ Scalability testing of web applications.

LoadTracer simulates multiple instances of web client accessing a Web Server based on the simulating information obtained from one web client during a session with a web server.

LoadTracer is entirely developed C as an integration package of three application, **RecTracer, SimTracer and StaTracer**



All rights reserved, Trace Technologies Pvt. Ltd.

COMPONENTS OF LOADTRACER

RECTRACER -a RECORDER

This module records session between web client and web server based on request and response. All the data are collected in separate files, which can be further used in second module. In Recorder module the user can view all the data which is collected like request, response, number of bytes transferred, request and response time along with think time, number of connections and number of events.

SIMTRACER- a SIMULATOR

This module actually generates the load on the web server by creating virtual clients. Threads are used for manipulating virtual clients. Load can be put on the server with many inbuilt options, along with the option of generating virtual clients it also has option to iterate the each virtual client for n number of times or n minutes of times. Using Think time option virtual client will execute on original time, which is taken by the user during recording. Think time can also change in seconds and mille seconds, other options are setting proxy servers, generating output files etc. Status of each virtual client can be viewed during the load generation. More than one script can be added in a single test and each script will be executed sequentially and data for each script is collected separately. During the execution, graph is displayed for running virtual users.

STATRACER- an ANALYZER

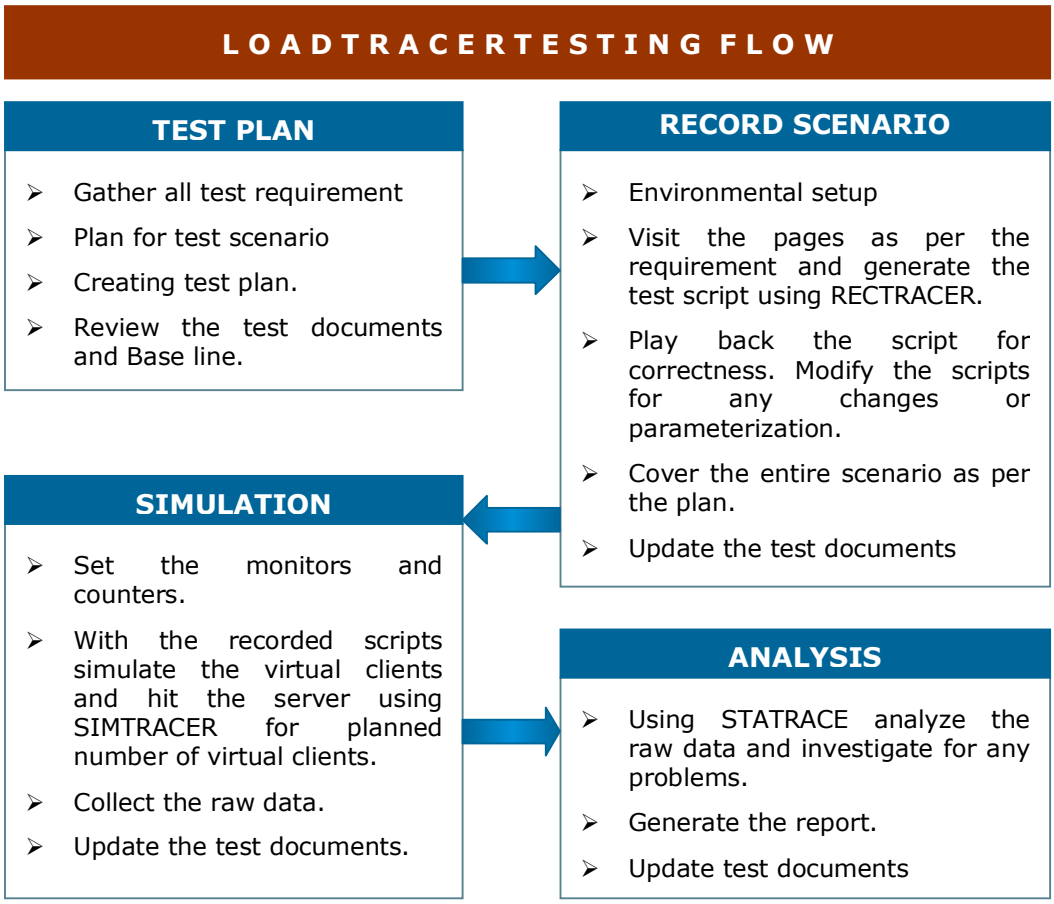
The output file generated by Generator is used for analysis purpose. Reports and Graphs are generated for various types of data collected during the load on server.

All rights reserved, Trace Technologies Pvt. Ltd.

OVERVIEW OF PROCESSES

The RECTRACER sits between client and server. It traps all the request and response from the client and server and generates script. During this recording session itself, the RECTRACER generates a detailed report for different parameters like request time, response time, number of bytes sent and number of bytes received. This script can be modified for parameterization and correction as per the requirement. It can be played back.

In SIMTRACER, this recorded script is used for simulating the virtual client. The number of clients and the others parameters like think time, iteration, proxy settings, cookie usage, etc., can be specified in SIMTRACER setting. By executing the script, SIMTRACER hits the server with the specified requirements. All the virtual clients can be controlled by SIMTRACER Each virtual clients will run on a separate thread and carrying its own data and other parameter. The result of all virtual clients is stored in separate file. During the execution, SIMTRACER collects all the data for every virtual clients and data for all counters. These raw data is sent to Statracer.



All rights reserved, Trace Technologies Pvt. Ltd.

The STATRACER will analyze all the counters and virtual users data and generate a detailed report. The report can be generated in many formats like tabular, graphical. All the reports are stored in html pages.

All rights reserved, Trace Technologies Pvt. Ltd.

FEATURES OF LOADTRACER

FEATURES	DESCRIPTION
Web based	It is completely a web application tool.
Compatibility	LoadTracer compatible with Internet Explorer and Netscape.
Operating System	ALL WINDOWS CLIENT AND SERVER PLATFORM
Http, Https, cookies, proxy	Supports Cookies, proxy, different subnet and HTTP redirects.
Reports	Reports are generated in many formats like graph, tabular for better analysis. Clear and unambiguous reports are generated as html.
Think time	Think time and random delays can be given for virtual clients
Multiple server	At same time multiple server testing is possible.
Iteration	Same scenario can be executed iteratively for any number of virtual clients
Readability	To enhance the speed of the automation process readability of the scripts is made very easy. The scripts are generated in such a way that even a new tester also can find easy to understand and modify the scripts for replay. Modification can be done at code level or by using the properties for each objects and controls.
Synchronization	Supports the synchronization for various testing steps
Real User Simulation	By configuring all the attributes for virtual client accurate simulation of load created by a real user.
Parameterization	Each virtual client can be parameterized to have its own unique data.
Multithreading	Each virtual clients runs on its own thread. Independent of the other thread having its own cookie and data. This feature enables us to simulate an accurate load created by real user.
Record and play back	Record and play back feature for single and multi users are supported.
Scheduling	Scheduling feature allows running any test script at a specified time.
LOGS	Logs are generated each and every steps based on log level. (0,1,2,3). Level 0 indicates no logs, level 1 indicated low level, level 2 indicates medium level and 3 indicates high level logs will be generated.
Performance Monitors	All the action and events by real users and virtual clients can be monitored with this option. This allows in effective performance analysis
Portability	Scripts can be ported from one machine to other machine
Counters	Counters are provided to monitor many objects and events like

All rights reserved, Trace Technologies Pvt. Ltd.

	networking, memory, process, and processor usages. This can be taken on time basis or test basis. Idle level values are also given for better understandings. This allows in effective test analysis.
Alarm	This option allows us to specify alarm indicators values. If it reaches the indicated value log will be generated.

About TRACE

Trace Technologies, is a Software Testing Company, serving Software companies

- **To minimize the businesses risks**
- **To minimize the cost of producing Good Quality Software**
- **To minimize Time to Market.**

The spectrum of Trace services is

- **Software testing**
- **Test Consultation**
- **Test Automation**

Trace Products are

- **Load Tracer-** a load and performance testing tool
- **Tracer**- an effective tool for the automation of functional and regression testing.
- **Tracktest-** a complete web based test management tool

For more information call 91-44-52170489 / 52183182 / 9444160581
Or visit our Web site at: www.tracet.net

All rights reserved, Trace Technologies Pvt. Ltd.