

Load Test Plan

Load Test Plan

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Objective

This paper is intended to help the end user for planning of the load test. It gives a step by step approach for planning of load test using Load Runner.

This document has taken care of all the necessary things that the user should be aware before and during the process of load testing.

Most of the parameters which are encountered during load testing is covered in this document which helps the users to plan in a better fashion.

Load Test Plan

Introduction about the project

Project Name:	
Project ID/Referring ICP:	

Deadlines (hard dates that must be met)

Production date:	
Proposed Load Testing dates: Staging: Production:	
Other dates:	

Architecture

Description Description of project (2/3 tier client/server, ASP/Java, etc)	3 Tier application WebServer: Apache Middle Server:
Protocols What protocols are used (HTTP, JavaScript/JSP, Tuxedo/JOLT, etc)	HTTP
Source Development Source: Vendor or in-house, or combination?	
Support Who do we call for resolution of technical problems or questions?	

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Hardware Requirement

Load Client Information

Host Name	IP Address	Os and Version	Ram	Available Memory	Number Vuser that can be loaded

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Software Requirement

- 1) Operating system(WinXP,2000 etc.,)
- 2) LoadRunner Generator
- 3) LoadRunner Controller
- 4) Remote Agent
- 5) Internet Explorer

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Script Information

Module Name	Functionality	Transaction to be measured	Expected Transaction time

Detailed test steps can be obtained from the test case document.

Script Location

The path where the scripts would be stored.

Scenario Information

Run Time Settings

VUSER / GROUP INFORMATION				
Group	Script(s)	TD Path	Host(s)	VUsers
1	<input type="checkbox"/>	<input type="checkbox"/> Script	<input type="checkbox"/>	

OTHER INFORMATION				
Group	Script(s)	SCRIPTS INFORMATION		
1	<input type="checkbox"/>	<input type="checkbox"/> URL <input type="checkbox"/> Username <input type="checkbox"/> Datafile <input type="checkbox"/> Transaction(s)	https:/	

RUN-TIME SETTINGS INFORMATION		
TAB	WEB APPLICATIONS	
General	<i>Run Logic</i>	Number of Iterations: 1000 iterations
	<i>Pacing</i>	As soon as the previous iteration ends
	<i>Log</i>	Enable Logging Always send messages : Standard Log
	<i>Think Time</i>	Replay think time Multiply recorded think time by 120 seconds Limit think time to 120 seconds
	<i>Miscellaneous</i>	Continue on error Fail open transactions on lr_error_message Run VUser as a thread Uncheck: Define each <u>step</u> as a transaction Define each <u>action</u> as a transaction
Network	<i>Speed simulation</i>	Use maximum bandwidth
Browser Emulation	<i>Simulate browser cache</i>	Cache URLs requiring content (e.g., HTMLs) Check for newer versions of stored pages every visit to the page
		Download non-HTML resources

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RUN-TIME SETTINGS INFORMATION			
TAB	WEB APPLICATIONS		
		Simulate a new user on each iteration	
Internet Protocol	<i>Proxy</i>	<i>No proxy (direct connection to the Internet)</i>	
	<i>Preferences</i>	<i>Checks</i>	Enable image and text check
		<i>Generate web performance graphs</i>	Hits per second and HTTP codes Response bytes per second (throughput)
		<i>Advanced</i>	Uncheck: File and line in automatic transaction names Check: Non-critical resource errors as warnings
	<i>Set Advanced Options</i>	HTTP version: 1.1 Keep-alive HTTP connections: YES Step timeout caused by resources is a warning: YES Parse HTML Content Type: ANY HTTP request connect timeout (sec): 120 HTTP request receive timeout (sec): 120 Step download timeout (sec): 120 Network buffer size: 12288	
<i>Content Check</i>	Check: <i>Enable ContentCheck during replay</i>		

Scenario Configuration

SCHEDULER INFORMATION							
Group Name	Script Name	Script Path	Quantity	Load Generator	Ramp Up	Ramp Down	Duration

RESULT INFORMATION		
Result file:	Automatically create a results director for every scenario execution	Spreadsheet (if any):

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Monitor Information

(Add as many as monitors or protocols depending on your application)

Protocol	Monitors	Server to be monitored (Production)	(Staging)	Parameters/Resources to be measured *
Http	Com objects			
	Database Server			
	Web Server			
	Application Server			

*Parameters for Database Server may be:

Open SQL connection

For Com objects may be:

Application Lifetime	Monitors the duration of the application in seconds.
Exception Frequency	Monitors the number of exceptions per second, in the five second polling period.

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Analysis of Results

Result would be provided in a HTML format and would be placed in a common folder where all the user can view the result.

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Comparison of response time under different Load Conditions

Done under different Server, number of user and database condition to base line the response time

Iterations	Number of users	Records in Database	Server Configurations	Transaction name	Average Response time
1	50	10,000	50 G HDD 1 GB Ram		

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Dependencies

Application Dependencies

List down any dependencies this application has which has to be taken care during load testing.

Maintenance Schedule

Any maintenance of the server which has to be taken care of.

User Notification

User to be notified before the start of load test and at the end of load test.

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Naming Convention to be followed

Please attach the document of the naming convention that is followed for the scripting.

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Reference Documents

- 1) Architecture Diagrams.
- 2) Test case document.
- 3) Test data document.
- 4) Naming convention.