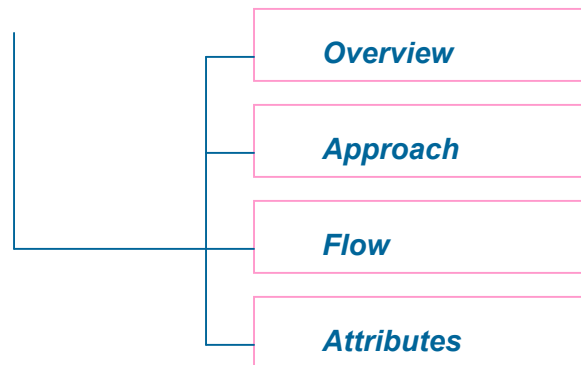


# SCALABILITY TESTING APPROACH



## INTRODUCTION

### Software Testing

Testing is not just finding out the defects. Testing is not just seeing the requirements are satisfied. Testing is a process of verifying and validating all wanted requirements are there in products and also verifying and validating any unwanted requirements are there in the products. It is also seeing any latent effects are there in the product because of these requirements.

***Testing is not just a phase in SDLC, but it is to be addressed in all phases.***

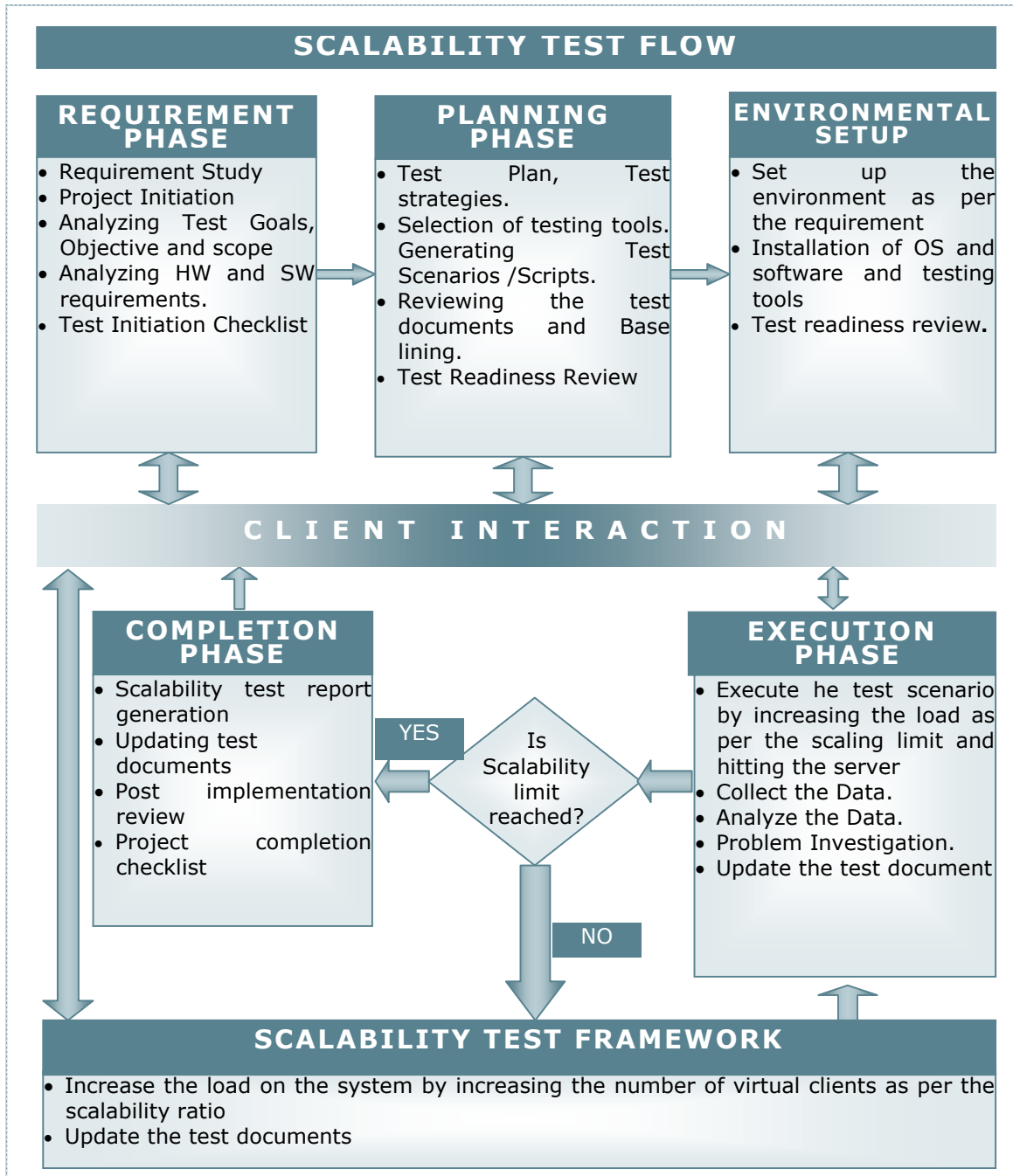
Scalability testing is to determine system behavior by increasing the load with a particular scaling ratio. For every scaling point all the performance attributes have to be determined. Also the factors affecting the application scaling capacity have to be determined.

## TRACE APPROACH

TRACE provides an integrated complete end-to-end scalability testing solution to its customers with its defined methodology and in-house testing tools. A well-defined end-to-end metric based process with proper entry and exit criteria focusing on the entire aspects of scalability testing is followed at TRACE.

The approach followed at Trace is based on determining the system behavior before reaching the stress point. This is done with a continuous iterative testing by increasing load. At each level all the performance attributes have been monitored and analyzed.

## SCALABILITY TESTING FLOW



## SCALABILITY TESTING ATTRIBUTES

Following are the only few attributes out of many that considered during the scalability testing

- Response Time
- Throughput
- Screen transition
- Time {Session time, reboot time, printing time, transaction time, task execution time}
- Hits per second, Request per seconds, Transaction per seconds
- Performance measurement with number of users.
- Performance measurement under load.
- CPU usage Memory usage {Memory leakages, thread leakage} Bottlenecks {Memory, cache, process, processor, disk and network}
- Network Usage {Bytes, packets, segments, frames received and sent per sec, Bytes Total/sec, Current Bandwidth Connection Failures, Connections Active, failures at network interface lever and protocol level}
- Web server {request and response per seconds, services succeeded and failed, server problem if any}

## 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

- **LoadTracer-** 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 91-44-23741823 / 9444160581  
Or visit our Web site at: [www.tracet.net](http://www.tracet.net)