

# Performance Testing with LOADRUNNER

## Performance Testing Process

- Performance Testing Introduction
- Performance Testing Process
- Performance Test Requirements
- Performance Test Planning
- Performance Analysis and Report
- Proof of Concept

## LOAD RUNNER

- Planning an Effective Load Test
- Automation Framework
- Load Runner Installation
- LR Architecture
- Components in Load Runner
  - Virtual User Generator
  - Controller
  - Analysis
  - Load Generator
  - Agent Process

### **Virtual User Generator:**

- Recording Script for Web
- Recording Levels
- Enhancing Script
- Replay & Play Back
- Script Functions
- Protocol Specific Functions
- General LR Functions
- Transactions
- Purpose of Transactions
- Transactions after Recording
- Actions
- Multiple Actions
- Debugging
- Check Points

- Text Check Points
- Image Check Points
- Parameterization
- Playback Problems
- Correlation
- Automatic Correlation
- Manual Correlation
- Run-Time Settings
- Iterations
- Logs
- Multi Threading

### **Controller:**

- Scenario Design
- Manual Scenario
- Goal Oriented Scenario
- Scenario Schedule
- Schedule by Scenario
- Schedule by Group
- Load Behaviour
- Ramp-up
- Duration
- Ram-down
- Effective Test Design
- Complex Scenarios
- Users Mix Distribution
- Runtime Setting in Controller
- Performance Metrics
- Client Side
- Performance Metrics
- Test Executions

### **Analysis:**

- Analyzing Results
- Summary Report
- Calculation of 90<sup>th</sup> Percentile
- Hits per second
- Through put
- Transaction Summary
- Client Side Graph Analysis
- Server Side Graph Analysis
- Graph Settings

- Filers and Drilldown
- Granularity
- Merging
- Auto Collate
- Analyze the Root Cause of Bottlenecks
- Tuning Recommendations
- Generating Report
- OS level (CPU & Memory Utilization)
- Client Side Metrics
- Server Side Metrics

#### Operating Systems

- Windows( Perfmon)

#### Code/Query Profiling Tools

- Oracle: AWR Report