

Performance, Load, and Stress Testing



Designed for system testers, system designers, system tuners, software engineers, QA professionals, and project leaders, this course provides an introduction to the complexities of software performance testing and delivers testing skills that participants can immediately apply back on the job.

- Understand the performance testing process: planning, preparation, execution, and reporting
- Relate performance testing to the development process
- Understand performance goals and objectives
- Learn how to deal with environment and architecture issues
- Define operational profiles and load definitions
- Understand and select the various types of performance tests
- Define and select appropriate measurements

In the Real World

This course provides an introduction to the complexities of software performance testing and delivers testing skills that participants can immediately apply back on the job. Using a real-world case study, you will encounter issues, decisions, and testing experiences comparable to those in your own work environment. Working through a series of discussion-based exercises—individually, in small teams, or as a group—you develop a workable strategy for performance testing an application/system. The focus of the exercises is on analysis of a situation and understanding the planning and design issues associated with performance testing. This course does not focus on problem analysis, tuning, debugging, or tools.

Who Should Attend

System testers, system designers, system tuners, software engineers, quality assurance

professionals, and project leaders who are involved in systems testing can benefit from this course. A working knowledge of system testing and quality assurance fundamentals is assumed, but no specific technical background (e.g., UNIX, TCP/IP) is required. This course is for beginning to intermediate skill levels relating to software performance testing. This is not an advanced course dealing with specific tuning and assessment issues.

Course Outline:

Fundamentals

Imperative to performance test

Performance testing track record

Performance Testing Process

Understanding how performance testing fits the development process

Approaches to the performance testing process

Costs of performance testing

Identify Performance Goals and Business Goals

Gather background information on the situation

Develop an understanding of the situation

Validate the test project need and feasibility

Exercise: Understanding Goals

Infrastructure and Architecture

What must be part of the test?

Target platform and systems

Network configuration

Scalability and extrapolation

Exercise: Assessing Infrastructure Issues

Designing the Test

Defining the workload

- Transactions to be simulated

- Analyze factors affecting the load definition

- *Exercise: Calculating Load Characteristics*

Types of performance tests to be run

Exercise: Selecting types of Tests to Run

Refining measurements

Response times, resource usage, etc.

Test Preparation

Set up the test infrastructure/architecture

Acquire the test scripts and data

Set up the tools

Test Execution and Reporting

Validate the tests and the tools

Prepare for the test execution

Execute the tests and collect the data

Present conclusions and recommendations

Assist the technical team after tuning and

Debugging

Reporting Performance Test Results

Class Schedule:

Sign-In/Registration 7:30 - 8:30 a.m.

Morning Session 8:30 a.m. - 12:00 p.m.

Lunch 12:00 - 1:00 p.m.

Afternoon Session 1:00 - 5:00 p.m.

Times represent the typical daily schedule. Please confirm your schedule at registration.

Price:
\$1545

Course Fee Includes:

- Tuition
 - Course notebook
 - Continental breakfasts and refreshment breaks
 - Lunches
 - Letter of completion
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