Performance, Load, and Stress Testing



- 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. The focus is on what a tester needs to know in order to be successful. We will address the more common pitfalls and mistakes that lead to the potential failure of the performance test. We will discuss the value of designing a proper test and the realities that accompany gathering the necessary data and information required to be successful. This course does not focus on problem analysis, tuning, debugging, or the use of particular tools. We will address the types of tools and their general usage within the performance testing process. Tools are important but are secondary to the planning, analysis and design of the performance testing requirements.

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

Infrastructure and Architecture

What must be part of the test? Target platform and systems Network configuration Scalability and extrapolation

Designing the Test

Defining the workload

- Transactions to be simulated
- Analyze factors affecting the load definition

Types of performance tests to be 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

Price: \$1495