

- 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

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### 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

### 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

