

Performance Testing is an important part of the software lifecycle and unlike other testing efforts it must be executed with software testing tools. This course explains how to define performance tests, how to execute them, and how to analyze them. The course is tool-agnostic and therefore concepts learned here can be applied to a variety of commercial and open source performance test tools.

By the end of this course, an attendee should be able to:

- Understand the basic concepts of performance efficiency and performance testing
- Define performance risks, goals, and requirements to meet stakeholder needs and expectations
- Understand performance metrics and how to collect them
- Develop a performance test plan for achieving stated goals and requirements
- Conceptually design, implement, and execute basic performance tests
- Analyze the results of a performance test and state implications to various stakeholders
- Explain the process, rationale, results, and implications of performance testing to various stakeholders
- Understand categories and uses for performance tools and criteria for their selection
- Determine how performance testing activities align with the software lifecycle

Who Should Attend?

- Test Automation Engineers
- Performance Testers
- Performance Test Engineers
- Systems Engineers
- Software Developers

Pre-Qualification for the Certification Exam

This course prepares you for the ISTQB Performance Testing (CT-PT) exam. After pre-qualification is completed, students will receive an exam voucher. The exam can be taken online from home/office or at a testing center. To schedule a personal certification planning consultation with one of our Training Advocates, contact our Client Support team.

Prerequisites

You must have obtained an ISTQB Foundation Level Certification (CTFL) to be eligible for the Performance Testing Certification.

Course Outline

Basic Concepts

Principles of Performance Testing

Types of Performance Testing

Testing Types in Performance Testing

- Static testing
- Dynamic testing

The Concept of Load Generation

Performance Testing Tasks

Planning

- Deriving Performance Test Objectives
- The Performance Test Plan
- Communicating about Performance Testing

Analysis, Design and Implementation

- Typical Communication Protocols

Common Performance Efficiency Failure Modes and Their Causes

Performance Measurement Fundamentals

Typical Metrics Collected in Performance Testing

- Why Performance Metrics are Needed
- Collecting Performance Measurements and Metrics
- Selecting Performance Metrics

Aggregating Results from Performance Testing

Key Sources of Performance Metrics

Typical Results of a Performance Test

Performance Testing in the Software Lifecycle

Principal Performance Testing Activities

Categories of Performance Risks for Different Architectures

Performance Risks Across the Software Development Lifecycle

Performance Testing Activities

- Transactions
- Identifying Operational Profiles
- Creating Load Profiles
- Analyzing Throughput and Concurrency
- Basic Structure of a Performance Test Script
- Implementing Performance Test Scripts
- Preparing for Performance Test Execution

Execution

Analyzing Results and Reporting

Tools

Tool Support

Tool Suitability

Price: \$1545