

ISTQB Certification Foundation Level - Performance Testing Certification (20 Hr)

1. Basic Concepts

- 1.1 Principles of Performance Testing.
- 1.2 Types of Performance Testing
- 1.3 Testing Types in Performance Testing
 - Static testing
 - Dynamic testing
- 1.4 The Concept of Load Generation
- 1.5 Common Performance Efficiency Failure Modes and Their Causes

2. Performance Measurement Fundamentals

- 2.1 Typical Metrics Collected in Performance Testing
 - Why Performance Metrics are Needed
 - Collecting Performance Measurements and Metrics
 - Selecting Performance Metrics
- 2.2 Aggregating Results from Performance Testing
- 2.3 Key Sources of Performance Metrics
- 2.4 Typical Results of a Performance Test

3. Performance Testing in the Software Lifecycle

- 3.1 Principal Performance Testing Activities
- 3.2 Categories of Performance Risks for Different Architectures
- 3.3 Performance Risks Across the Software Development Lifecycle
- 3.4 Performance Testing Activities

4. Performance Testing Tasks

- 4.1 Planning
 - Deriving Performance Test Objectives
 - The Performance Test Plan
 - Communicating about Performance Testing
- 4.2 Analysis, Design and Implementation
 - Typical Communication Protocols
 - 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

4.3 Execution

4.4 Analyzing Results and Reporting

5. Tools

- 5.1 Tool Support
- 5.2 Tool Suitability