

# Java Performance Tuning Ed 1

**CODICE**

D82344GC10

**DURATA**

3 Giorni

**PREZZO**

1.800,00€ (iva escl.)

**LINGUA**

Italiano

**MODALITÀ**

Virtual Classroom  
Corso in aula

**SCHEDULAZIONE**

- A Richiesta

**PREREQUISITI**

Java SE 7 Fundamentals

Java SE7 Fundamentals

Suggested Prerequisites

Developing Applications for the Java EE 6 Platform

Java SE 7 Develop Rich Client Applications

Java SE 7 Programming

Java SE 7: Develop Rich Client Applications

Sviluppo di applicazioni per la piattaforma Java EE 6 (FJ-310-EE6)

**Audience**

Java Developer

Java EE Developer

Support Engineer

System Administrator

Technical Consultant

**OBIETTIVI**

Describe basic principles of performance

Describe the operation of generational garbage collection

List the garbage collectors available in Java including the G1 collector

Monitor performance at the JVM and application level

Monitor and analyze Java application performance using Java Mission Control and Flight Recorder

Monitor operating system performance on Solaris, Linux, and Windows

Profile the performance of a Java application

Tune garbage collection in a Java application

Apply basic performance tuning principles to a Java application

## CONTENUTI

Course Overview

Introduce course

Java Virtual Machine and Performance Overview

JVM Overview

What is Performance?

Performance Methodology

The JVM and Java Garbage Collection

HotSpot GC Basics

The GC Aging Process

G1 GC

Java Garbage Collectors

Garbage Collecting Algorithms

Types of GC Collectors

JVM Ergonomics

Command Line JVM Monitoring

GC Monitoring Options

JIT Monitoring Options

Mission Control and JVM Monitoring Tools

Monitoring with VisualVM

Monitoring with Mission Control

Java Flight Recorder

Creating Flight Recordings

Analyze a Flight Recording

Monitoring Operating System Performance

Monitoring CPU Usage

Monitoring Memory Usage

Monitoring Network I/O

Monitoring Disk I/O

Monitoring Processes

Performance Profiling Tools

Overview of Profiling Tools

CPU Profiling

Heap Profiling

Troubleshooting Performance Issues by Profiling

Memory Leak Profiling

Detecting Memory leaks

Detecting Contention and Locking Issues

Garbage Collection Tuning

Tuning with Serial GC

Tuning with Parallel GC  
Tuning with Concurrent GC  
Tuning with G1 GC  
Language Level Concerns and Garbage Collection  
Object Allocation  
Working with Large Objects  
Explicit Garbage Collection  
Finalizers  
Memory Leak Detection Tools

#### Object References

##### **Description:**

This Java Performance Tuning with Mission Control and Flight Recorder training helps you build a conceptual background for Java garbage collection. Expert Oracle University instructors will teach you how it applies to Java garbage collectors on the Hotspot JVM, including the new G1 garbage collector.

##### Learn To:

Monitor, profile and tune your Java applications.

Use command line and visual tools to perform these tasks.

Get hands on practice with Visual VM, Java Mission Control, Flight Recorder and the NetBeans IDE.

Use these tools and techniques to analyze Java 7 and earlier JVMs.

Effectively apply tools like Java Mission Control and Flight Recorder to your daily work.

##### Benefits to You

By investing in this course, you'll learn how Java garbage collection works and how it affects your applications. You'll develop the knowledge to select the appropriate garbage collector and performance goal for your applications.

Furthermore, you'll know how to use the new Mission Control and Java Flight Recorder tools to monitor and analyze your applications.

##### Live Virtual Class format

A Live Virtual Class (LVC) is exclusively for registered students; unregistered individuals may not view an LVC at any time. Registered students must view the class from the country listed in the registration form. Unauthorized recording, copying, or transmission of LVC content may not be made.

*Prezzi e corsi potrebbero subire variazioni; si consiglia di verificare sul sito [www.novanext.it/training](http://www.novanext.it/training).*