

Red Hat Enterprise Performance Tuning

Duration 4 Days

COURSE DESCRIPTION

This course discusses system architecture with emphasis on:

- Understanding the implications on system performance
- Methods for testing the effects of performance adjustments
- Open source benchmarking utilities
- Methods for analyzing system and networking performance
- Tuning configurations for specific application loads

COURSE OBJECTIVES

As a result of attending this course, students should be able to obtain, analyze, and interpret system performance metrics, which the business can use to increase cost effectiveness, maximize application performance, and make better decisions about investment in hardware or cloud resources.

Students should be able to demonstrate the following skills:

- Describe how key Linux subsystems work
- Interact with applications
- Determine which tuning adjustments are relevant in different situations

COURSE OUTLINE

- **Introduction to performance tuning**
Understand the basic principles of performance tuning and analysis.
- **Collecting, graphing, and interpreting data**
Gain proficiency using basic analysis tools and evaluating data.
- **General tuning**
Learn basic tuning theory and mechanisms used to tune the system.
- **Limiting resource usage**
Allocate resources for best performance by limiting resource usage.
- **Hardware profiling**
Understand and analyze hardware.
- **Software profiling**
Analyze CPU and memory performance of applications.
- **Using SystemTap**
Use systemtap for profiling software.
- **Small file tuning**
Tune a server for a workload involving frequent reads and writes of small files.
- **Large memory workload tuning**
Understand memory management and tuning.
- **Tuning for a CPU-intensive workload**
Understand tuning for CPU-bound applications.
- **File server tuning**
Understand storage and network tuning in the context of a file server application.

- **Database server tuning**
Tune memory and network performance using a database application as an example.
- **Power usage tuning**
Tune systems with power consumption in mind.
- **Virtualization tuning**
Tune 'host' and 'guest' for efficient virtualization.
- **Red Hat Performance Tuning Comprehensive Review**
Do a comprehensive overview of the course.

PREREQUISITES

- Red Hat Certified Engineer (RHCE®) certification or equivalent experience
- Candidates who have not earned their RHCE can confirm they have the correct skills by passing our online skills assessment

WHO SHOULD ATTEND

- Senior Linux system administrators responsible for maximizing resource utilization through performance tuning.