Red Hat Performance Tuning: Linux in Physical, Virtual, and Cloud with Exam

Code: RH443
Length: 5 days
URL: View Online

Red Hat® Enterprise Performance Tuning is designed to teach senior Linux® system administrators the methodology of performance tuning for Red Hat Enterprise Linux. This course discusses system architecture with an emphasis on understanding the implications of system architecture on system performance, methods for testing the effects of performance adjustments, open source benchmarking utilities, methods for analyzing system and networking performance, and tuning configurations for specific application loads.

Skills Gained

- Tuning for use-case scenarios (for example, HPC, large memory, database, file server, and so on)
- Tuning for power consumption
- Tuning virtual machines (host and guest)
- Tuning memory and caches
- Tuning CPU and memory utilization using cgroups
- Gathering performance metrics and other data for tuning purposes

Who Can Benefit

- Experienced Linux system administrators responsible for maximizing resource utilization through performance tuning
- An RHCE interested in earning a Red Hat Certification of Expertise or a Red Hat Certified Architect (RHCA) credential

Prerequisites

- RHCE certification or equivalent experience

Course Details

Introduction to performance tuning
Understand the basic principles of performance tuning and analysis.

Collecting, graphing, and interpreting data

Gain proficiency in using basic analysis tools and in evaluating data.

General tuning

Learn basic tuning theory and mechanisms used to tune the system.

Hardware profiling

Understand and analyze hardware.

Software profiling

Analyze CPU and memory performance of applications.

Mail server tuning

Learn about basic storage tuning using an email server as an example.

Large memory workload tuning

Understand memory management and tuning.

HPC workload tuning

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.
