RH 442 Red Hat Enterprise Performance Tuning

4 days of training

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

This course can also help you prepare for the Red Hat Certified Specialist in Linux Performance Tuning exam (EX442).

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

COURSE OBJECTIVES:

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.