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The Art of Knowledge.

RH442/EX442 Red Hat Enterprise Performance Tuning with Exam

Course Length
5 Days

TE1509_20121204

Course Description: Red Hat Enterprise Performance Tuning (RH442) 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 bench-marking utilities, methods for analyzing system and networking performance, and tuning configurations for specific application loads. The EX442 exam will be administered on the 5th day.

Who Should Attend: RH442 is aimed at experienced Linux system administrators responsible for maximizing resource utilization through performance tuning and RHCEs interested in earning a Red Hat Certification of Expertise, or an Red Hat Certified Architect (RHCA).

Prerequisites: Participants in RH442 should already be familiar with Red Hat Enterprise Linux. Recommended minimum competency level is completion of the RHCE or equivalent knowledge.

Benefits of Attendance: Upon completion of this course, students will be able to:

- Understand the implications of system architecture on system performance.
- Use methods for testing the effects of performance adjustments (benchmarking).
- Use open source benchmarking utilities.
- Understand and use methods for analyzing system performance and networking performance.
- Use tuning configurations for specific application loads.

Course Outline:

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
Understanding and analyzing 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
Tuning memory and network performance using a database application as an example

Power usage tuning
Tuning systems with power consumption in mind

Virtualization Tuning
Tuning 'host' and 'guest' for efficient virtualization