

RH443

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

Course description

Performance tuning and capacity planning for Red Hat Enterprise Linux

Red Hat Performance Tuning: Linux in Physical, Virtual, and Cloud with exam (RH443) teaches and validates skills related to the methodology of performance tuning for senior Linux® system administrators. This offering discusses system architecture with an emphasis on understanding its implications on system performance, performance adjustments, open source benchmarking utilities, networking performance, and tuning configurations for specific server use cases and workloads.

This course is based on Red Hat® Enterprise Linux 8.

Prerequisites for this course

- Become a [Red Hat Certified Engineer \(RHCE®\)](#), or demonstrate equivalent experience

Outline for this course

Introduce performance tuning

Describe performance tuning concepts and goals.

Select performance monitoring tools

Evaluate the large selection of performance monitoring tools that are included with Red Hat Enterprise Linux.

View hardware resources

View and interpret hardware resource listings.

Configure kernel tunables and tuned profiles

Configure the operating system to tune for different workload requirements.

Manage resource limits with control groups

Manage resource contention and set limits for resource use on services, applications, and users using cgroup configuration.

Analyze performance using system tracing tools

Diagnose system and application behaviors using a variety of resource-specific tracing tools.

Tune CPU utilization

Manage CPU resource sharing and scheduling to control utilization.

Tune memory utilization

Manage settings for efficient memory utilization for different types of workloads.

Tune storage device I/O

Manage settings for efficient disk utilization in various use cases.

Tune file system utilization

Manage application efficiency for file system utilization.

Tune network utilization

Manage application efficiency for network utilization.

Tune in virtualization environments

Distinguish the requirements for tuning in virtualized environments.

Perform comprehensive review

Demonstrate skills learned in this course by observing system performance using the appropriate tools, evaluating system metrics, and configuring settings to improve performance.