



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

**Duration: 4 Days** 

# Course description

### Performance tuning and capacity planning for Red Hat Enterprise Linux

Red Hat Performance Tuning: Linux in Physical, Virtual, and Cloud (RH422) teaches senior Linux® system administrators the methodology of performance tuning. This course 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.

#### 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.