

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

Duration: 4 Days **Course Code:** RH442 **Delivery Method:** Virtual Learning

Overview:

Performance tuning and capacity planning for Red Hat Enterprise Linux

Red Hat Performance Tuning: Linux in Physical, Virtual, and Cloud (RH442) teaches senior Linux® system administrators the methodology of performance tuning.

This course is intended to develop the skills needed to improve infrastructure performance, increase system utilization, reduce downtime, and improve responsiveness to system failures.

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.

As a result of attending this course, you should be able to obtain, analyze, and interpret system performance metrics, then use these metrics to help increase cost effectiveness, maximize application performance, and make better decisions about investment in hardware or cloud resources.

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

Note: Starting January 1, 2026, Red Hat introduces RHLS-Course — a flexible subscription model now included with this catalog offering. This replaces the previous direct virtual class enrollment from Global Knowledge.

When you purchase this item, you'll receive an RHLS subscription at the course level, giving you the freedom to choose the schedule that works best and self-enroll in your selected class.

Your RHLS subscription includes:

- One live, instructor-led virtual session
- 12 months of self-paced learning access
- One certification exam with a free retake

Onsite Classroom-based sessions and closed course options remain unchanged.

Updated Jan2026

Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

Target Audience:

Senior Linux system administrators responsible for maximizing resource utilization through performance tuning

Objectives:

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| ■ After this course participants should be able to: | ■ Trace and profile system events and activities |
| ■ Analyze and tune for resource-specific scenarios | ■ Tune resource limits and utilization using systemd-integrated cgroups |
| ■ Applying tuning profiles with the tuned tool | ■ Gather performance metrics and benchmarking data |
| ■ Tune in virtual environments (hosts and guests) | |

Prerequisites:

- RHCE certification or equivalent experience is expected
- Take Red Hat free assessment to gauge whether this offering is the best fit for your skills [Red Hat Skills Assessment](#)

Testing and Certification

- Red Hat Certified Specialist in Linux Performance Tuning exam (EX442)

Follow-on-Courses:

None

Content:

Introduce performance tuning	Analyze performance using system tracing tools	Tune network utilization
■ Describe performance tuning concepts and goals.	■ Diagnose system and application behaviors using a variety of resource-specific tracing tools.	■ Manage application efficiency for network utilization.
Select performance monitoring tools	Tune CPU utilization	Tune in virtualization environments
■ Evaluate the large selection of performance monitoring tools that are included with Red Hat Enterprise Linux.	■ Manage CPU resource sharing and scheduling to control utilization.	■ Distinguish the requirements for tuning in virtualized environments.
View hardware resources	Tune memory utilization	Perform comprehensive review
■ View and interpret hardware resource listings.	■ Manage settings for efficient memory utilization for different types of workloads.	■ Demonstrate skills learned in this course by observing system performance using the appropriate tools, evaluating system metrics, and configuring settings to improve performance.
Configure kernel tunables and tuned profiles	Tune storage device I/O	
■ Configure the operating system to tune for different workload requirements.	■ Manage settings for efficient disk utilization in various use cases.	
Manage resource limits with control groups	Tune file system utilization	
■ Manage resource contention and set limits for resource use on services, applications, and users using cgroup configuration.	■ Manage application efficiency for file system utilization.	

Additional Information:

Official course book provided to participants

Further Information:

For More information, or to book your course, please call us on 00 971 4 446 4987

training@globalknowledge.ae

www.globalknowledge.com/en-ae/

Global Knowledge, Dubai Knowledge Village, Block 2A,First Floor, Office F68, Dubai, UAE