

Red Hat Security: Linux in Physical, Virtual, and Cloud (RH 415)

COURSE OVERVIEW:

Maintaining security of computing systems is a process of managing risk through the implementation of processes and standards backed by technologies and tools. In this course, you will learn about resources that can be used to help you implement and comply with your security requirements.

Course content summary

- Manage compliance with OpenSCAP.
- Enable SELinux on a server from a disabled state, perform basic analysis of the system policy, and mitigate risk with advanced SELinux techniques.
- Proactively identify and resolve issues with Red Hat Insights.
- Monitor activity and changes on a server with Linux Audit and AIDE.
- Protect data from compromise with USBGuard and storage encryption.
- Manage authentication controls with PAM.
- Manually apply provided Ansible Playbooks to automate mitigation of security and compliance issues.
- Scale OpenSCAP and Red Hat Insights management with Red Hat Satellite and Red Hat Ansible Tower.

WHO WILL BENEFIT FROM THIS COURSE?

System administrators, IT security administrators, IT security engineers, and other professionals responsible for designing, implementing, maintaining, and managing the security of Red Hat Enterprise Linux systems and ensuring their compliance with the organization's security policies.

PREREQUISITES:

Be a Red Hat Certified Engineer (RHCE®) or demonstrate equivalent Red Hat Enterprise Linux knowledge and experience.

COURSE OBJECTIVES:

As a result of attending this course, you should be able to use security technologies included in Red Hat Enterprise Linux to manage security risk and help meet compliance requirements.

You should be able to demonstrate these skills:

- Analyze and remediate system compliance using OpenSCAP and SCAP Workbench, employing and customizing baseline policy content provided with Red Hat Enterprise Linux.
- Monitor security-relevant activity on your systems with the kernel's audit infrastructure.
- Explain and implement advanced SELinux techniques to restrict access by users, processes, and virtual machines.
- Confirm the integrity of files and their permissions with AIDE.
- Prevent unauthorized USB devices from being used with USBGuard.
- Protect data at rest but provide secure automatic decryption at boot using NBDE.
- Proactively identify risks and misconfigurations of systems and remediate them with Red Hat Insights.
- Analyze and remediate compliance at scale with OpenSCAP, Red Hat Insights, Red Hat Satellite, and Red Hat Ansible Tower.

COURSE OUTLINE:**Manage security and risk**

- Define strategies to manage security on Red Hat Enterprise Linux servers.

Automate configuration and remediation with Ansible

- Remediate configuration and security issues with Ansible Playbooks.

Protect data with LUKS and NBDE

- Encrypt data on storage devices with LUKS and use NBDE to manage automatic decryption when servers are booted.

Restrict USB device access

- Protect system from rogue USB device access with USBGuard.

Control authentication with PAM

- Manage authentication, authorization, session settings, and password controls by configuring pluggable authentication modules (PAMs).

Record system events with audit

- Record and inspect system events relevant to security, using the Linux kernel's audit subsystem and supporting tools.

Monitor file system changes

- Detect and analyze changes to a server's file systems and their contents using AIDE.

Mitigate risk with SELinux

- Improve security and confinement between processes by using SELinux and advanced SELinux techniques and analyses.

Manage compliance with OpenSCAP

- Evaluate and remediate a server's compliance with security policies by using OpenSCAP.

Automate compliance with Red Hat Satellite

- Automate and scale your ability to perform OpenSCAP checks and remediate compliance issues using Red Hat Satellite.

Analyze and remediate issues with Red Hat Insights

- Identify, detect, and correct common issues and security vulnerabilities with Red Hat Enterprise Linux systems by using Red Hat Insights.

Perform a comprehensive review

- Review the content covered in this course by completing hands-on review exercises.

SUNSET LEARNING INSTITUTE (SLI) DIFFERENTIATORS:

Sunset Learning Institute (SLI) has been an innovative leader in developing and delivering authorized technical training since 1996. Our goal is to help our customers optimize their cloud technology investments by providing convenient, high quality technical training that our customers can rely on. We empower students to master their desired technologies for their unique environments.

What sets SLI apart is not only our immense selection of trainings options, but our convenient and consistent delivery system. No matter how complex your environment is or where you are located, SLI is sure to have a training solution that you can count on!

Premiere World Class Instruction Team

- All SLI instructors have a four-year technical degree, instructor level certifications and field consulting work experience.
- Sunset Learning has won numerous Instructor Excellence and Instructor Quality Distinction awards since 2012

Enhanced Learning Experience

- The goal of our instructors during class is ensure students understand the material, guide them through our labs and encourage questions and interactive discussions.

Convenient and Reliable Training Experience

- You have the option to attend classes at any of our established training facilities or from the convenience of your home or office with the use of our HD-ILT network (High Definition Instructor Led Training)
- All Sunset Learning Institute classes are guaranteed to run – you can count on us to deliver the training you need when you need it!

Outstanding Customer Service

- Dedicated account manager to suggest the optimal learning path for you and your team
- Enthusiastic Student Services team available to answer any questions and ensure a quality training experience