



Red Hat® Linux Troubleshooting (RH242)

Learn the essential techniques and tools for troubleshooting Red Hat Enterprise Linux.

Troubleshooting is both an art and a science. It is both an instinct and a technique. In this lab-intensive course, system administrators will learn techniques for troubleshooting a Linux system and how to use the troubleshooting tools available on Red Hat Enterprise Linux. Through hands-on labs, you will learn or improve your troubleshooting skills and gain additional experience by debugging live, virtualized systems.

What You'll Learn

- Troubleshooting techniques, including being prepared
- Troubleshooting hardware, including listing, testing, and analyzing devices
- Troubleshooting applications, including diagnosing performance problems and investigating application and OS interactions
- Troubleshooting disks and file systems, including LVM, LUKS, ext3/4, and unauthorized changes
- Troubleshooting the network, including configuring, testing, and diagnosing problems with basic and advanced configurations
- Security, including working effectively with (and not against) security tools such as SELinux, authentication, and firewall
- Making the most of Red Hat support resources

Who Needs to Attend

Linux system administrators who understand installation and configuration of a Red Hat Enterprise Linux system and wish to deepen their understanding of troubleshooting on Linux

Prerequisites

- Red Hat System Administration I and Red Hat System Administration II
- RHCSA Rapid Track Course
- RHCSA certification or equivalent experience
- System administration knowledge under Red Hat Enterprise Linux, including:
 - Installation
 - Service management (using service and chkconfig, for example)
 - Basic system monitoring (using ps and top and perhaps meminfo and the /proc file system)
 - File system management (using fdisk and mkfs)
 - Basic troubleshooting (including managing log files and perhaps using hardware probing tools, such as ethtool and lspci)
- [Red Hat® System Administration I \(RH124\)](#)
- [RHCSA® Rapid Track Course \(RH199\)](#)

Follow-On Courses

There are no follow-ons for this course.

Course Outline

1. Being Proactive, Part 1

- Monitor log files, hardware, and file systems
- Monitor system and network performance

2. Being Proactive, Part 2

- Approaches to managing configuration changes and developing a recovery plan

3. Basic Troubleshooting Techniques and Procedures

- Recovery runlevels and rescue mode
- Work with advanced GRUB features

4. Hardware Issues

- Preempting hardware failures (looking for the signs)
- Protecting against hardware failures
- Redundant configurations
- Tools to help identify hardware failures and intermittent problems

5. File System Issues

- Locate unauthorized changes
- Audit software
- File system tuning and repair
- File recovery

6. Disk Issues

- Rescuing LVM volumes
- Maintenance of LUKS-encrypted volumes

7. Networking Issues

- Manual configuration of network cards
- Connectivity issues
- Network diagnostic tools
- Monitor packets
- Tune kernel parameters
- Troubleshoot SAN communication

8. Application Issues

- Tools and techniques for troubleshooting applications
- Common application problems and how to solve them

9. Security Issues

- Working effectively with (and not against) security tools
 - SELinux
 - Authentication
 - Firewall

10. Red Hat Resources

- Support options
- Knowledgebase
- Certified training
- Initiating support calls
- TAM support
- Developer support
- Bugzilla
- Support workflow
- Diagnostic and information-gathering tools

Further Information:

For More information, or to book your course, please Call/Email us on : - +254 713 027 191

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