

## Red Hat Enterprise Linux Server Cookbook

The definitive guide to administering a Red Hat Enterprise Linux 6 network Linux professionals who need a go-to guide on version 6 of Red Hat Enterprise Linux (RHEL) will find what they need in this comprehensive Sybex book. It covers RHEL administration in detail, including how to set up and manage web and mail services, use RHEL in enterprise environments, secure it, optimize storage, configure for virtualization and high availability, and much more. It also provides a great study aid for those preparing for either the RHCSA or RHCE certification exam. Red Hat is the Linux market leader, and Red Hat administrators are in demand. This Sybex guide is a comprehensive resource on Red Hat Enterprise Linux administration and useful for those preparing for one of the Red Hat certification exams. Covers setting up and managing web and mail services, using RHEL in enterprise environments, securing RHEL, and optimizing storage to fit your environment. Explores advanced RHEL configurations, including virtualization and high availability. Red Hat Enterprise Linux 6 Administration is the guide Linux professionals and Red Hat administrators need to stay current on the newest version.

What is this book about? Professional Red Hat Enterprise Linux 3 is a complete professional guide to setting up, configuring, and deploying Red Hat Enterprise Linux in the corporate production environment. The book focuses on Enterprise Server and Advanced Server features, including the key areas of high availability with the Red Hat Cluster Suite, Red Hat Network Control Center, and Red Hat Enterprise applications such as the Content Management System and portal server. Other key unique features include kernel tuning for various performance profiles; advanced Apache configuration; Tux installation/maintenance; building high-performance FTP servers; building high-performance mail servers (which means replacing Sendmail); Mailing list management; how to efficiently add, remove, or modify 100 users at the same time; and a discussion of disk quota management and monitoring. What does this book cover? The key features of the book include the following: How to install and setup RHEL 3 How to deploy RHEL 3 in production environment How to manage an RHEL system using Perl and shell scripting Advanced administration tools How to use Red Hat network service Details on installation and setup of security tools Ability to use and deploy High Availability solutions provided with RHEL 3 Performance tuning How to use monitoring tools Ability to use RHEL to provide scalable infrastructure solutions. This book examines Red Hat Enterprise Linux 8 for the desktop user and administrator (including RHEL 8.1). Though administrative tools are covered, the emphasis is on what a user would need to know to perform tasks. The focus here is on what users face when using Red Hat Enterprise Linux 8, covering topics like applications, the GNOME desktop, shell commands, and the administration and network tools. The GNOME desktop is examined in detail, including configuration options. Administration topics are also covered including user management,

software management, repositories, services, systemd, system monitoring, shell configuration, encryption, network connections, shared resources, authentication, SELinux, firewalls, shell configuration, backups, and printers. The book is organized into two parts: desktops and administration.

Red Hat® Linux® 6 Server The open-source Linux operating system is gaining ground fast in businesses and universities around the world, and many commercial versions of the software make it reliable and user-friendly enough for any organization. In Red Hat Linux 6 Server, Unix expert Mohammed Kabir shows you step-by-step how to deploy Linux servers for your intranet or the Internet, from initial installation through security implementation and performance fine-tuning. In-depth coverage of the issues you'll face, plenty of real-world examples, an easy-to-understand guide to common commands, and a comprehensive listing of Linux resources on the Internet make this an indispensable resource, whether you're working for a small nonprofit or a large corporation. Working Solutions for the Linux 6 Server: Master the ins and outs of Linux installation and configuration Manage privileged and ordinary users, groups, and disk quotas Control, monitor, prioritize, and automate programs Set up DNS, SMTP, POP3, HTTP, FTP, IRC, and SQL servers Secure your server using firewalls and tools such as SATAN and COPS Design a load-balanced, multiserver Apache-based Web network Set up Samba and NFS fileserver for your office network Bonus! CD-ROM with Complete Linux Distribution, including: Linux Kernel 2.2.5 Installation and configuration tools GNOME and KDE graphical user interfaces Full TCP/IP networking Dial-up networking tools for ISP access Complete suite of Internet applications, including e-mail, news, and Telnet Apache Web Server 1.3.6 Netscape Communicator 4.51 And much more [www.idgbooks.com](http://www.idgbooks.com)

This IBM® Redbooks® publication provides advice and technical information about optimizing and tuning application code to run on systems that are based on the IBM POWER7® and POWER7+™ processors. This advice is drawn from application optimization efforts across many different types of code that runs under the IBM AIX® and Linux operating systems, focusing on the more pervasive performance opportunities that are identified, and how to capitalize on them. The technical information was developed by a set of domain experts at IBM. The focus of this book is to gather the right technical information, and lay out simple guidance for optimizing code performance on the IBM POWER7 and POWER7+ systems that run the AIX or Linux operating systems. This book contains a large amount of straightforward performance optimization that can be performed with minimal effort and without previous experience or in-depth knowledge. This optimization work can: Improve the performance of the application that is being optimized for the POWER7 system Carry over improvements to systems that are based on related processor chips Improve performance on other platforms The audience of this book is those personnel who are responsible for performing migration and implementation activities on

IBM POWER7-based servers, which includes system administrators, system architects, network administrators, information architects, and database administrators (DBAs).

Provides just what administrators need to configure, manage, maintain, and upgrade a Red Hat Enterprise Linux (RHEL) system Red Hat is the most popular Linux distribution, with 70 percent of the U.S. market; RHEL subscriptions climbed to 87,000 during the quarter ending February 2004-up 85 percent Covers all four RHEL versions-Desktop, Workstation, Enterprise Server, and Application Server Delivers the lowdown on the X Window System, printer configuration, Samba, Internet server set up, administration of users and groups, backups and file restoration, and security

Here is a programmer's guide to using and programming POSIX threads, commonly known as Pthreads. A "coder's book", this title tells how to use Pthreads in the real world, making efficient and portable applications. Pthreads are an important set of current tools programmers need to have in today's network-intensive climate.

As a market-leading, free, open-source Linux operating system (OS), Fedora 10 is implemented in Red Hat Enterprise Linux and serves as an excellent OS for those who want more frequent updates. Bestselling author Christopher Negus offers an ideal companion resource for both new and advanced Linux users. He presents clear, thorough instructions so you can learn how to make Linux installation simple and painless, take advantage of the desktop interface, and use the Linux shell, file system, and text editor. He also describes key system administration skills, including setting up users, automating system tasks, backing up and restoring files, and understanding the latest security issues and threats. Included is both a DVD distribution of Fedora Linux 10 and a bootable Fedora LiveCD. Note: CD-ROM/DVD and other supplementary materials are not included as part of eBook file.

Describes the Linux operating system, covering such topics as installation, connecting to the Internet, software, applications, user accounts, networking, system administration, security, and Perl.

Arguably one of the most highly regarded and widely used enterprise level operating systems available today is the Red Hat Enterprise Linux 8 distribution. Not only is it considered to be among the most stable and reliable operating systems, it is also backed by the considerable resources and technical skills of Red Hat, Inc. Red Hat Enterprise Linux 8 Essentials is designed to provide detailed information on the installation, use and administration of the Red Hat Enterprise Linux 8 distribution. For beginners, the book covers topics such as operating system installation, the basics of the GNOME desktop environment, configuring email and web servers and installing packages and system updates using App Streams. Additional installation topics such as dual booting with Microsoft Windows are also covered, together with all important security topics such as configuring a firewall and user and group administration. For the experienced user, topics such as remote desktop access, the Cockpit web interface, logical volume management (LVM), disk partitioning, swap management, KVM virtualization, Secure Shell (SSH), Linux Containers and file sharing using both Samba and NFS are covered in detail to provide a thorough overview of this enterprise class operating system.

Highlights: > Updated to the latest version of Red Hat Enterprise Linux 7 > Upated to cover ALL official exam objectives for the RHCSA and RHCE exams based on Red Hat Enterprise Linux 7 > Equally good for self-study and in-class training > Step-by-step exercises to accomplish tasks > Do-It-Yourself challenge labs at the end of each chapter > Concepts

explained with diagrams > Commands and options summarized in tables > Exam tips included > FOUR scenario-based sample exams (TWO for RHCSA and TWO for RHCE) > TWENTY-FIVE chapters (THIRTEEN for RHCSA and TWELVE for RHCE) > Separate sections on RHCSA and RHCE

**RHCSA Section (chapters 1 to 13):** covers local and network (automated with kickstart) RHEL7 installations, general Linux concepts and basic tools, compression and archiving, text file editing, file manipulation and security, processes and task scheduling, bash shell features, software package administration, yum repository configuration, host virtualization, virtual machines, system boot, kernel management, system initialization and service management with systemd, local logging, users and groups, LVM and file systems, AutoFS, Swap, ACLs, firewall, SELinux, network interfaces, NTP/LDAP clients, SSH, and TCP Wrappers.

**RHCE Section (chapters 14 to 25):** covers shell scripting, interface bonding and teaming, IPv6 and routing configuration, NTP, firewalld, Kerberos authentication, kernel tuning, resource utilization reporting, network logging, block storage sharing with iSCSI, file sharing with NFS and Samba/CIFS, HTTP/HTTPS web servers and virtual hosting, Postfix mail SMTP, DNS, and MariaDB. Each chapter lists major topics and relevant exam objectives in the beginning and ends with a summary followed by review questions/answers and Do-It-Yourself challenge labs.

Trust the best-selling Cert Guide series from Pearson IT Certification to help you learn, prepare, and practice for exam success. Cert Guides are built with the objective of providing assessment, review, and practice to help ensure you are fully prepared for your certification exam.

**Master Red Hat RHCSA (EX200) and RHCE (EX300) exam topics**

- Assess your knowledge with chapter-opening quizzes
- Review key concepts with exam preparation tasks
- Test yourself with 4 practice exams (2 RHCSA and 2 RHCE)
- Gain expertise and knowledge using the companion website, which contains over 40 interactive exercises, 4 advanced CLI simulations, 40 interactive quizzes and glossary quizzes (one for each chapter), 3 virtual machines and more.

Red Hat RHCSA/RHCE 7 Cert Guide presents you with an organized test preparation routine through the use of proven series elements and techniques. “Do I Know This Already?” quizzes open each chapter and allow you to decide how much time you need to spend on each section. Exam topic lists make referencing easy. Chapter-ending labs help you drill on key concepts you must know thoroughly.

Red Hat RHCSA/RHCE 7, Premium Edition eBook and Practice Test focuses specifically on the objectives for the newest Red Hat RHCSA (EX200) and RHCE (EX300) exams reflecting Red Hat Enterprise Linux 7. Expert Linux trainer and consultant Sander van Vugt shares preparation hints and test-taking tips, helping you identify areas of weakness and improve both your conceptual knowledge and hands-on skills. Material is presented in a concise manner, focusing on increasing your understanding and retention of exam topics. Well-regarded for its level of detail, assessment features, comprehensive design scenarios, and challenging review questions and exercises, this study guide helps you master the concepts and techniques that will allow you to succeed on the exam the first time. This study guide helps you master all the topics on the new RHCSA (EX200) and RHCE (EX300) exams, including

**Part 1: RHCSA Basic System Management:** Installation, tools, text files, server connections; user, group, and permissions management; network configuration

**Operating Running Systems:** Process management, VMs, package installation, task scheduling, logging, managing partitions and LVM logical volumes

**Advanced System Administration:** Basic kernel management, basic Apache server configuration, boot procedures/troubleshooting

**Managing Network Services:** Using Kickstart; managing SELinux; configuring firewalls, remote mounts, FTP, and time services

**Part 2: RHCE System Configuration/Management:** External authentication/authorization, iSCSI SANs, performance reporting, optimization, logging, routing/advanced networking, Bash scripting

**System Security:** Configuring firewalls, advanced Apache services, DNS, MariaDB, NFS, Samba, SMTP, SSH, and time synchronization

Join the Linux revolution. Learn how to set up a new installation of Red Hat Enterprise Linux (RHEL), execute basic Linux commands, and manage user accounts and file storage. The leading Fedora book—over a quarter of a million copies sold of previous editions! What better way to learn Fedora 11 than with the leading Fedora book from the best-selling Linux author, Christopher Negus with Eric Foster Johnson? Whether you're new to Linux or an advanced user, this power-packed guide is loaded with what you need. Install, run, and manage the latest version of Fedora and Red Hat Enterprise Linux—then polish your system administration skills and get up to speed on the very latest in networking, desktop, and server enhancements. Master the Linux shell, file system, and text editor; how to set up users and automate system tasks; and much more in over a thousand pages of step-by-step instruction. Boot the full DVD of Fedora 11, including almost all binary code packages, or do a Live Install of the CD for rescuing, troubleshooting, or installing Fedora. Fedora is a free, open source Linux operating system sponsored by Red Hat as an open source community project; the technological innovations from the Fedora Project are then implemented in Red Hat's commercial offering, Red Hat Enterprise Linux. Covers step-by-step instructions for making Linux installation simple and painless; how to take advantage of the desktop interface (including coverage of AIGLX); and how to use the Linux shell, file system, and text editor. Also covers setting up users; automating system tasks; backing up and restoring files; dealing with the latest security issues and threats; using and customizing the desktop menus, icons, window manager, and xterm; and how to create and publish formatted documents with Linux applications. The DVD and CD that come with the book include Fedora Linux 11 and an official Fedora 11 LiveCD (bootable and installable). This is the book you need to succeed with Fedora 11 and Red Hat Enterprise Linux. Note: CD-ROM/DVD and other supplementary materials are not included as part of eBook file.

Starts with the basics of Red Hat, the leading Linux distribution in the U.S., such as network planning and Red Hat installation and configuration. Offers a close look at the new Red Hat Enterprise Linux 4 and Fedora Core 4 releases. New chapters cover configuring a database server, creating a VNC server, monitoring performance, providing Web services, exploring SELinux security basics, and exploring desktops. Demonstrates how to maximize the use of Red Hat Network, upgrade and customize the kernel, install and upgrade software packages, and back up and restore the file system. The four CDs contain the full Fedora Core 4 distribution.

This IBM® Redbooks® publication describes how to create Linux® virtual servers in IBM z/VM® on IBM System z® hardware. This book adopts a cookbook format that provides a concise, repeatable set of procedures for installing and configuring z/VM in a logical partition (LPAR) and then installing and customizing Linux. You need an IBM System z LPAR with the associated resources, z/VM V6.1 media, and a Linux distribution. This book assumes that you have a general familiarity with System z technology and terminology. It does not assume an in-depth understanding of z/VM and Linux. It is written for those clients who want to get a quick start with z/VM and Linux on the mainframe.

Master the latest version of Fedora and Red Hat Enterprise Linux with the step-by-step instructions and hands-on advice in *Fedora 9 and Red Hat Enterprise Linux Bible*. Learn key system administration skills like setting users and automating system tasks, understand the latest security issues and threats, and gain confidence with using and customizing the desktop menus, icons, and window manager. Updated every six months to correspond with the latest Fedora release, this book includes an official Fedora 9 LiveCD so that you can practice your knowledge and improve your skills.

Note: CD-ROM/DVD and other supplementary materials are not included as part of eBook file.

> Covers Red Hat Enterprise Linux 8 > Covers ALL official exam objectives for the RHCSA exam based on Red Hat Enterprise Linux 8 > Equally good for self-study and in-class training > 81 Step-by-Step exercises > 70 Do-It-Yourself Challenge Labs > 375 Check Your Understanding Questions & Answers > Concepts explained with diagrams > Commands and options summarized in tables > Exam tips included > 4 Unique Sample RHCSA Exams This book has 21 chapters that are organized logically. It covers the topics on local RHEL 8 installation; initial interaction with the system and basic commands; compression and archiving; file editing and manipulation; standard and special permissions; file searching and access controls; user monitoring and authentication files; users, groups, and password aging; bash shell features and startup files; processes and task scheduling; basic and advanced software administration techniques; system boot process and bootloader; kernel management and system initialization; logging and system tuning; basic and advanced storage management tools and solutions; local and remote file systems and swap regions; network device and connection configuration; time synchronization and hostname resolution; the secure shell service; and firewall and SELinux controls. Each chapter highlights the major topics and relevant exam objectives at the beginning, and ends with review questions & answers and Do-It-Yourself challenge labs. Throughout the book, figures, tables, screen shots, examples, and exam tips have been furnished to support explanation and exam preparation. This book includes four sample exams for RHCSA, which are expected to be done using the knowledge and skills attained from reading the material and practicing the exercises and challenge labs. The labs and the sample exams include references to relevant topics and/or exercises.

A step-by-step guide to Fedora and Red Hat Enterprise Linux covers such topics as the shell, networking, system administration, setting up servers, and programming tools. This is the eBook version of the print title. Learn, prepare, and practice for Red Hat RHCSA 8 (EX200) exam success with this Cert Guide from Pearson IT Certification, a leader in IT Certification learning. Master Red Hat RHCSA 8 EX200 exam topics Assess your knowledge with chapter-ending quizzes Review key concepts with exam-preparation tasks Practice with four unique practice tests Learn from two full hours of video training from the author's Red Hat Certified System Administrator (RHCSA) Complete Video Course, 3rd Edition. Red Hat RHCSA 8 Cert Guide is a best-of-breed exam study guide. Leading Linux consultant, author, and instructor Sander van Vugt shares preparation hints and test-taking tips, helping you identify areas of weakness and improve both your conceptual knowledge and hands-on skills. Material is presented in a concise manner, focusing on increasing your understanding and retention of exam topics. The book presents you with an organized test-preparation routine through the use of proven series elements and techniques. Exam topic lists make referencing easy. Chapter-ending Exam Preparation Tasks help you drill on key concepts you must know thoroughly. Review questions help you assess your knowledge, and a final preparation chapter guides you through tools and resources to help you craft your final study plan. Well regarded for its level of detail, assessment features, and challenging review questions and exercises, this study guide helps you master the concepts and techniques that will enable you to succeed on the exam the first time, including Basic

system management: Installation, tools, file management, text files, RHEL8 connections, user/group management, permissions, and network configuration  
Operating running systems: Managing software, processes, storage, and advanced storage; working with systemd; scheduling tasks; and configuring logging  
Advanced system administration: Managing the kernel and boot procedures, essential troubleshooting, bash shell scripting  
Managing network services: Configuring SSH, firewalls, and time services; managing Apache HTTP services and SE Linux; and accessing network storage

This IBM® Redbooks® publication is volume one of five in a series of books entitled The Virtualization Cookbook for IBM Z. The series includes the following volume: The Virtualization Cookbook for IBM z Systems® Volume 1: IBM z/VM® 6.3, SG24-8147  
The Virtualization Cookbook for IBM Z Volume 2: Red Hat Enterprise Linux 8.2 Servers, SG24-8303  
The Virtualization Cookbook for IBM z Systems Volume 3: SUSE Linux Enterprise Server 12, SG24-8890  
The Virtualization Cookbook for IBM z Systems Volume 4: Ubuntu Server 16.04, SG24-8354  
Virtualization Cookbook for IBM Z Volume 5: KVM, SG24-8463  
It is recommended that you start with Volume 1 of this series because the IBM z/VM hypervisor is the foundation (or base "layer") for installing Linux on IBM Z®. This book series assumes that you are generally familiar with IBM Z technology and terminology. It does not assume an in-depth understanding of z/VM or Linux. It is written for individuals who want to start quickly with z/VM and Linux, and get virtual servers up and running in a short time (days, not weeks or months). Volume 1 starts with a solution orientation, discusses planning and security, and then, describes z/VM installation methods, configuration, hardening, automation, servicing, networking, optional features, and more. It adopts a "cookbook-style" format that provides a concise, repeatable set of procedures for installing, configuring, administering, and maintaining z/VM. This volume also includes a chapter on monitoring z/VM and the Linux virtual servers that are hosted. Volumes 2, 3, and 4 assume that you completed all of the steps that are described in Volume 1. From that common foundation, these volumes describe how to create your own Linux virtual servers on IBM Z hardware under IBM z/VM. The cookbook format continues with installing and customizing Linux. Volume 5 provides an explanation of the kernel-based virtual machine (KVM) on IBM Z and how it can use the z/Architecture®. It focuses on the planning of the environment and provides installation and configuration definitions that are necessary to build, manage, and monitor a KVM on Z environment. This publication applies to the supported Linux on Z distributions (Red Hat, SUSE, and Ubuntu).

"I have found this book to be a very useful classroom text, as well as a great Linux resource. It teaches Linux using a ground-up approach that gives students the chance to progress with their skills and grow into the Linux world. I have often pointed to this book when asked to recommend a solid Linux reference." —Eric Hartwell, Chair, School of Information Technology, ITT Technical Institute  
The #1 Fedora and RHEL resource—a tutorial AND on-the-job reference  
Master Linux administration and security using GUI-based tools, the command line, and Perl scripts  
Set up key Internet servers, step by step, including Samba, Apache, sendmail, DNS, LDAP, FTP, and more  
Master All the Techniques You Need to Succeed with Fedora™ and Red Hat® Enterprise Linux®  
In this book, one of the

world's leading Linux experts brings together all the knowledge you need to master Fedora or Red Hat Enterprise Linux and succeed with it in the real world. Best-selling author Mark Sobell explains Linux clearly and effectively, focusing on skills you'll actually use as a user, programmer, or administrator. Now an even more versatile learning resource, this edition adds skill objectives at the beginning of each chapter. Sobell assumes no prior Linux knowledge. He starts at the beginning and walks you through every topic and task that matters, using easy-to-understand examples. Step by step, you'll learn how to install and configure Linux, navigate its graphical user interface, provide file/print sharing, configure network servers, secure Linux desktops and networks, work with the command line, administer Linux efficiently, and even automate administration with Perl scripts. Mark Sobell has taught hundreds of thousands of Linux and UNIX professionals. He knows every Linux nook and cranny—and he never forgets what it's like to be new to Linux. Whatever you want to do with Linux—now or in the future—you'll find it here. Compared with the other Linux books out there, *A Practical Guide to Fedora™ and Red Hat® Enterprise Linux®, Sixth Edition*, delivers Complete, up-to-the-minute coverage of Fedora 15 and RHEL 6 State-of-the-art security techniques, including up-to-date firewall setup techniques using system-config-firewall and iptables, and a full chapter on OpenSSH (ssh) Coverage of crucial topics such as using su and sudo, and working with the new systemd init daemon Comprehensive coverage of the command line and key system GUI tools More practical coverage of file sharing using Samba, NFS, and FTP Superior coverage of automating administration with Perl More usable, realistic coverage of Internet server configuration, including Apache (Web), sendmail, NFSv4, DNS/BIND, and LDAP, plus new coverage of IPv6 More and better coverage of system/network administration tasks, including network monitoring with Cacti Deeper coverage of essential administration tasks—from managing users to CUPS printing, configuring LANs to building a kernel Complete instructions on keeping Linux systems up-to-date using yum And much more, including a 500+ term glossary and comprehensive indexes

This book talks about a quick guide to become Linux System Administrator using Red Hat Enterprise Linux Server, a Linux distro made by Red Hat, Inc. This book talks Linux discussions from basic to intermediate & completed with two case studies. This book has 7 chapter, there are: Chapter 1: Red Hat Enterprise Linux 6.5 64 Bit Installation Chapter 2: Linux Directory, Commands & Basic System Administration Chapter 3: Software Management Chapter 4: Linux Computer Network Chapter 5: Building Web Server, Repository Server & Database Server Chapter 6: Case Study 1: Proxy Server Monitoring Chapter 7: Case Study 2: System Monitoring

The book covers the world's leading open source application platform: Red Hat Enterprise Linux (RHEL) 6 is a Linux distribution produced by Red Hat that was targeted toward the commercial market, including mainframes. Red Hat

Enterprise Linux is released in server versions for x86, x86\_64, Itanium, PowerPC and IBM System z, and desktop versions for x86 and x86\_64. All of Red Hat's official support and training, and the Red Hat Certification Program center on the Red Hat Enterprise Linux platform. It next Covers CentOS 6 Server: is a community-supported, free and open source operating system based on Red Hat Enterprise Linux. It exists to provide a free enterprise class computing platform and strives to maintain 100% binary compatibility with its upstream distribution .CentOS stands for "Community ENTERprise Operating System". CentOS is the perfect server for people who need an enterprise class operating system stability without the cost of certification and support and pocket burning baggage that comes with proprietary software. And the beauty is CentOS is free. Finally, we end with Ubuntu 14.04 LTS Server which transformed the IT environments worldwide. Realize the full potential of your infrastructure with a reliable, easy-to-integrate technology platform. It's the leading platform for scale-out computing, Ubuntu Server helps you make the most of your infrastructure. Whether you want to deploy an OpenStack cloud, a Hadoop cluster or a 50,000-node render farm, Ubuntu Server delivers the best value scale-out performance available. It's an excellent book for those who still use or have font memory of these three industry standard distros.

Identify, capture and resolve common issues faced by Red Hat Enterprise Linux administrators using best practices and advanced troubleshooting techniques  
About This Book Develop a strong understanding of the base tools available within Red Hat Enterprise Linux (RHEL) and how to utilize these tools to troubleshoot and resolve real-world issues Gain hidden tips and techniques to help you quickly detect the reason for poor network/storage performance  
Troubleshoot your RHEL to isolate problems using this example-oriented guide full of real-world solutions Who This Book Is For If you have a basic knowledge of Linux from administration or consultant experience and wish to add to your Red Hat Enterprise Linux troubleshooting skills, then this book is ideal for you. The ability to navigate and use basic Linux commands is expected. What You Will Learn Identify issues that need rapid resolution against long term root cause analysis Discover commands for testing network connectivity such as telnet, netstat, ping, ip and curl Spot performance issues with commands such as top, ps, free, iostat, and vmstat Use tcpdump for traffic analysis Repair a degraded file system and rebuild a software raid Identify and troubleshoot hardware issues using dmesg Troubleshoot custom applications with strace and knowledge of Linux resource limitations In Detail Red Hat Enterprise Linux is an operating system that allows you to modernize your infrastructure, boost efficiency through virtualization, and finally prepare your data center for an open, hybrid cloud IT architecture. It provides the stability to take on today's challenges and the flexibility to adapt to tomorrow's demands. In this book, you begin with simple troubleshooting best practices and get an overview of the Linux commands used for troubleshooting. The book will cover the troubleshooting methods for web

applications and services such as Apache and MySQL. Then, you will learn to identify system performance bottlenecks and troubleshoot network issues; all while learning about vital troubleshooting steps such as understanding the problem statement, establishing a hypothesis, and understanding trial, error, and documentation. Next, the book will show you how to capture and analyze network traffic, use advanced system troubleshooting tools such as strace, tcpdump & dmesg, and discover common issues with system defaults. Finally, the book will take you through a detailed root cause analysis of an unexpected reboot where you will learn to recover a downed system. Style and approach This is an easy-to-follow guide packed with examples of real-world core Linux concepts. All the topics are presented in detail while you're performing the actual troubleshooting steps.

Red Hat RHCE®/RHCSA(tm) 7 Cert Guide has a single goal: to help you pass the newest versions of Red Hat's RHCE and RHCSA exams for Red Hat Enterprise Linux 7. The most comprehensive and time-efficient RHCE 7 / RHCSA 7 prep guide available, it's an extraordinarily cost-effective alternative to expensive training. Authored by a leading Red Hat trainer, consultant, and speaker, it presents focused, straight-to-the-point coverage of every exam topic. Coverage includes: RHCSA: RHEL 7 Server installation, tools, file/folder management, text files, connectivity, users/groups, permissions, networking, processes, VMs, software installation, tasks, logging, partitions, LVMs, kernel management, Kickstart, boot procedures/troubleshooting, HTTP, SELinux, firewalls, FTP, and NTP RHCE: Connecting to iSCSI SANs, performance reporting, server optimization, log servers, routing configuration, authentication, command-line firewall management, SELinux services, web services, DNS, FTP, NFS, SMB, SMTP, SSH, and NTP From start to finish, this guide is organized to help you focus your study time where you need the most help, so you can retain more, and earn higher scores. It offers: Step-by-step chapter labs to help you practice what you've just learned Pre-exam theoretical exam to help you decide if you're ready for the real exam Four realistic sample exams (2 RHCE, 2 RHCSA) delivered through Pearson's state-of-the-art PCPT test engine Pre-chapter "Do I Know This Already" (DIKTA) quizzes to assess your knowledge of each chapter's content, so you can decide how much time to spend on each section Foundation Topics sections thoroughly explaining concepts and theory, and linking them to real-world configurations and commands Key Topics icons flagging every figure, table, or list you absolutely must understand and remember End of chapter Glossary terms Chapter-ending Exam Preparation sections delivering even more exercises and troubleshooting scenarios Note: This guide is an ideal printed complement for those studying with our brand-new RHCSA Complete Video Course or RHCE Complete Video Course.

The industry favorite Linux guide, updated for Red Hat Enterprise Linux 7 and the cloud Linux Bible, 9th Edition is the ultimate hands-on Linux user guide, whether you're a true beginner or a more advanced user navigating recent changes. This

updated ninth edition covers the latest versions of Red Hat Enterprise Linux 7 (RHEL 7), Fedora 21, and Ubuntu 14.04 LTS, and includes new information on cloud computing and development with guidance on Openstack and Cloudforms. With a focus on RHEL 7, this practical guide gets you up to speed quickly on the new enhancements for enterprise-quality file systems, the new boot process and services management, firewalld, and the GNOME 3 desktop. Written by a Red Hat expert, this book provides the clear explanations and step-by-step instructions that demystify Linux and bring the new features seamlessly into your workflow. This useful guide assumes a base of little or no Linux knowledge, and takes you step by step through what you need to know to get the job done. Get Linux up and running quickly Master basic operations and tackle more advanced tasks Get up to date on the recent changes to Linux server system management Bring Linux to the cloud using Openstack and Cloudforms Linux Bible, 9th Edition is the one resource you need, and provides the hands-on training that gets you on track in a flash.

This comprehensive guide can help you administer Red Hat Enterprise Linux 5 effectively in any production environment, no matter how complex or challenging. Long-time Red Hat insider Tammy Fox brings together today's best practices for the entire system lifecycle, from planning and deployment through maintenance and troubleshooting. Fox shows how to maximize your efficiency and effectiveness by automating day-to-day maintenance through scripting, deploying security updates via Red Hat Network, implementing central identity management services, and providing shared data with NFS and Samba. Red Hat Enterprise Linux 5 Administration Unleashed contains extensive coverage of network and web services, from the Apache HTTP server and Sendmail email services to remote login with OpenSSH. Fox also describes Red Hat's most valuable tools for monitoring and optimization and presents thorough coverage of security—including a detailed introduction to Security-Enhanced Linux (SELinux). If you are a system administrator who is interested in implementing and managing open source virtualization infrastructures, this is the book for you. A basic knowledge of virtualization and basic Linux command line experience is needed.

Training Manual: Covering CentOS-7 server installation & administration, Cloud Computing with ownCloud and Seafile cloud storage, Bind9 DNS server installation & administration, Fedora 23 server installation & administration, Virtualization technology and Astaro firewall network security. An excellent training manual for Linux network & system administrators, and infrastructure designers and developers.

For desktop or business, here's all the Linux you need Whether you want the latest Linux software in Fedora or a stable Red Hat Enterprise Linux for your business, this book covers it all. Install Fedora Core 4 from the DVD or two CDs included and learn to use Linux as a desktop system or an Internet server. Check out fun applications for surfing the Web and doing office tasks. Learn to manage

basic system administration, and move up to running your own Web, mail, print, or file server. Configure Fedora or Red Hat Enterprise Linux to: Browse the Web with Firefox Read and send e-mail with Evolution Create documents, spreadsheets, or presentations with OpenOffice.org Set up networked Web, mail, file, database, LDAP, print, or other servers Transition your Fedora skills to Enterprise Linux with: Descriptions of RHEL products, features, and services Pointers to professional RHEL training and certification Install complete Fedora Core 4 from DVD Using the bonus DVD, you can: Boot the DVD to check and prepare your computer before installing Fedora (using KNOPPIX) Install the complete Fedora Core 4 Linux operating system (all source code packages included) Install desktop Fedora Core 4 from CD Using the bonus 2-CD set, you can: Select the software you need for a well-stocked desktop system Add key server features to use with your desktop Fedora system Open for more! Find ten cool things you can do with Fedora Use KNOPPIX to test and prepare your computer Get your Windows stuff working in Linux

[www.wiley.com/go/fedora4bible](http://www.wiley.com/go/fedora4bible)

The Definitive Linux Resource--Fully Updated and Expanded Get full details on the powerful features of Red Hat Enterprise Linux and Fedora 7 from this fully revised, one-stop guide. Linux expert Richard Petersen covers all the bases, from configuring your desktop, customizing your system, and accessing software repositories to handling files and directories, managing devices and servers, and sharing system resources. Inside, you'll get in-depth coverage of Fedora 7's device and network autoconfiguration, IPv6 and .NET support, SE Linux, software repository installs, custom distribution spins, and system administration tools. You'll learn how to deploy sound security measures, configure automatic device detection, set up logical volumes for file management, and create your own Fedora distribution using your favorite software. Install, use, secure, and manage Red Hat Enterprise Linux and the new Fedora 7 Configure services using Fedora administration tools for network access, software updates, and file management (LVM and GFS2) Manage users, services, file systems, hotplug devices, and printers Deploy powerful desktop, office, database, graphics, multimedia, e-mail, Web, and FTP applications Optimize security with IPsec, SE Linux, Kerberos, and Netfilter Maintain FTP, Web, mail, DNS, proxy, print, news, and database servers Administer system resources using GRUB, Yum, HAL, MONO, and udev Select, download, and install a Fedora distribution spin Auto-configure IPv6, DHCPv6, and DHCP networks Access remote files and printers with NFS, GFS2, and SAMBA

**HIGHLIGHTS** > Covers ALL Latest Official Exam Objectives for RHCSA 8 including Containers and Shell Scripting > Great for Self-Study and In-Class/Virtual Training > 108 Real-Life Step-By-Step Exercises and Shell Scripts > 80 Do-It-Yourself Challenge Labs > 408 Review Questions & Answers > 4 Realistic Sample RHCSA Exams (23 tasks per exam) RHCSA Red Hat Enterprise Linux 8 (UPDATED): Training and Exam Preparation Guide, Second

Edition provides in-depth coverage of the latest RHCSA EX200 exam objectives that include Shell Scripting and Containers. The most definitive guide available on the subject, this book explains concepts, analyzes configuration files, describes command outputs, shows step-by-step procedures (includes screenshots of actual commands executed and outputs they produced), and challenges the readers' comprehension of the concepts and procedures by presenting plenty of additional labs and sample realistic exam tasks to perform on their own. This book has 23 chapters that are organized logically, from setting up the lab to the fundamentals of Linux to sophisticated Linux administration topics. The book covers the topics on local RHEL 8 installation; initial interaction with the system; basic Linux commands; compression and archiving; file editing and manipulation; standard and special permissions; file searching and access controls; user monitoring and authentication files; users, groups, and password aging; bash shell features and startup files; processes and task scheduling; basic and advanced software administration techniques; system boot process and bootloader; kernel management and system initialization; logging and system tuning; basic and advanced storage management tools and solutions; local file systems and swap regions; network device and connection configuration; remote file systems and automounting; time synchronization and hostname resolution; the secure shell service; firewall and SELinux controls; and shell scripting and containers. Each chapter highlights the major topics and relevant exam objectives at the beginning and ends with several review questions & answers and Do-It-Yourself challenge labs. Throughout the book, figures, tables, screen shots, examples, notes, and exam tips are furnished to support explanation and exam preparation. This book includes four sample RHCSA exams that are expected to be performed using the knowledge and skills attained from reading the material, following the exercises, and completing the challenge labs. The labs and the sample exams include hints to relevant topics and/or exercises. This book may be used as a self-learning guide by RHCSA 8 exam aspirants, a resource by instructors and students to follow in physical and virtual training sessions, an on-the-job resource for reference, and an easy-to-understand guide by novice and non-RHEL administrators.

This IBM® Redbooks® publication is Volume 2 of a five-volume series of books entitled The Virtualization Cookbook for IBM Z®. This volume includes the following chapters: Chapter 1, "Installing Red Hat Enterprise Linux on LNXADMIN" on page 3, describes how to install and configure Red Hat Enterprise Linux onto the Linux Administration server, which performs the cloning and other tasks. Chapter 2, "Automated Red Hat Enterprise Linux installations by using Kickstart" on page 37, describes how to use Red Hat's kickstart tool to create Linux systems. This tool is fundamentally different from cloning in that an automated installation is implemented. You can try kickstart and cloning. Understand that these applications attempt to accomplish the same goal of quickly getting Linux systems up and running, and that you do not need to use

both. Chapter 3, "Working with subscription-manager, yum, and DaNdiFied" on page 47, describes how the Red Hat Network works. It provides centralized management and provisioning for multiple Red Hat Enterprise Linux systems. Kickstart is an easy and fast way to provision your Linux guests in any supported Linux platform. It re-creates the operating system from the beginning by using the kickstart profile configuration file that installs the new operating system unattended. It also sets up the new guest according to the definition that was set up in the kickstart file. Usually, Linux is administered by the same team that manages Linux on all platforms. By using kickstart, you can create a basic profile that can be used in all supported platforms and customize Linux profiles, as needed. Cloning requires a better understanding of the z/VM environment and z/VM skills. It is a fast process if you enable the IBM FlashCopy® feature in advance. It clones the disks from a golden image to new disks that are used by the new Linux guest. The process can be automated by using the cloning scripts that are supplied with this book. It is recommended that you start with The Virtualization Cookbook for IBM Z Volume 1: IBM z/VM 7.2, SG24-8147 of this series because the IBM® z/VM hypervisor is the foundation (or base "layer") for installing Linux on IBM Z.

Over 60 recipes to help you build, configure, and orchestrate RHEL 7 Server to make your everyday administration experience seamless About This Book Create fully unattended installations and deploy configurations without breaking a sweat Discover and kick-start the newest RHEL 7 configuration and management tools through an easy-to-follow, practical approach for a lazy system management Be guided by an experienced RHEL expert who is a certified Linux engineer with a passion for open source and open standards Who This Book Is For Red Hat Enterprise Linux Server Cookbook is for RHEL 7 system administrators and DevOps in need of a practical reference guide to troubleshoot common issues and quickly perform tasks. What You Will Learn Set up and configure RHEL 7 Server Use NetworkManager to configure all aspects of your network Manage virtual environments using libvirt Set up software repositories Secure and monitor your RHEL environment Configure SELinux, and create and apply its policies Create kickstart scripts to automatically deploy RHEL 7 systems Use Orchestration and configuration management tools to manage your environment In Detail Dominating the server market, the Red Hat Enterprise Linux operating system gives you the support you need to modernize your infrastructure and boost your organization's efficiency. Combining both stability and flexibility, RHEL helps you meet the challenges of today and adapt to the demands of tomorrow. This practical Cookbook guide will help you get to grips with RHEL 7 Server and automating its installation. Designed to provide targeted assistance through hands-on recipe guidance, it will introduce you to everything you need to know about KVM guests and deploying multiple standardized RHEL systems effortlessly. Get practical reference advice that will make complex networks setups look like child's play, and dive into in-depth coverage of

configuring a RHEL system. Also including full recipe coverage of how to set up, configuring, and troubleshoot SELinux, you'll also discover how secure your operating system, as well as how to monitor it. Style and approach This practical guide is packed full of hands-on recipes that provide quick solutions to the problems faced when building your RHEL 7 system from scratch using orchestration tools. Each topic is explained sequentially in the process of setting up a system and binding everything together.

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