# Book Review: Mastering Red Hat Linux 9

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*Abstract*:

This article is a book review about:
Jang, Michael (2003) Mastering Red Hat Linux 9. Sybex, USA
Everything you need to know to use Red Hat Linux as a server or
desktop OS
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## At first glance

Nearly four pound Linux knowledge in paperback, comprising 976 pages, quite impressive for my
bookshelf. The author tries to address both the Linux newbie and the administrator. In the beginning I
wasn't really sure if this is a good approach, due to the fact that especially in the first chapters also very
simple and basic issues are explained in a very detailed way.
The book is delivered with two CDs containing a publisher's edition of Red Hat (not all packages are
included).

# Overview and structure

*Introduction*

**Part 1 - Installing Red Hat Linux**
Chapter 1 - Introducing Red Hat Linux
Chapter 2 - Preparing Your Hardware
Chapter 3 - Installing Linux Locally
Chapter 4 - Installing Linux Over a Network
Chapter 5 - Kickstarting Linux

**Part 2 - Linux Fundamentals**
Chapter 6 - Starting at the Command Line
Chapter 7 - A Filesystem Primer
Chapter 8 - Making the Shell Work for You

**Part 3 - Basic Linux Administration**
Chapter 9 - Administering Users and Groups Securely
Chapter 10 - Managing Packages with RPM
Chapter 11 - Configuring and Troubleshooting the Boot Process
Chapter 12 - Upgrading and Recompiling Kernels
Chapter 13 - The Administrative Nitty-Gritty
Chapter 14 - Backing Up Your System

**Part 4 - X Window Management**
Chapter 15 - Managing X Servers and X Clients
Chapter 16 - GNOME
Chapter 17 - KDE
Chapter 18 - GUI Applications
Chapter 19 - Red Hat Graphical Front Ends

**Part 5 - Basic Linux Networking**
Chapter 20 - A TCP/IP Primer
Chapter 21 - Managing Linux on Your LAN
Chapter 22 - Securing Your Linux Network

**Part 6 - Linux Network Services**
Chapter 23 - Remote Access and xinetd Services
Chapter 24 - DNS and DHCP
Chapter 25 - Printing with CUPS and LPD
Chapter 26 - Mail Services

**Part 7 - Linux File-Sharing Services**
Chapter 27 - FTP Clients and Servers
Chapter 28 - Linux Sharing Services: NFS and NIS
Chapter 29 - Making Samba Work for You
Chapter 30 - Web Services

**Appendix - Linux Command Reference**
*Index*

# Highlights

Generally the books offers very detailed explanations and descriptions. Often, every option and every line in a config file is addressed and explained, including lots of screen shots (maybe too many i.e. in the section describing the installation process or the kernel re-compilation).
What I found interesting in the first part, was especially the information concerning the troubleshooting while installation; i.e. that information concerning different issues can be found in the various console screens and log files. The book offers extensive instructions for installation and update of NFS, FTP and HTTP and tips for automatic installation. By the way, also the installation in text mode is explained (in the section about installation over network).
Most of the time, instructions are clear and brief. Commands are introduced often on a single page and cross references are established using notes.

The sections on administration are very comprehensive. Starting with user accounts (/etc/skel, /etc/login.defs), up to DNS configuration and sendmail installation. The book not only describes the installation and configuration of servers (FTP, HTTP, Mail, Samba, DHCP, ...) but also the respective client software (both text based and graphical). It's great that the book describes the different ways how someting can be done. That means that not only graphical front ends are described but also the tools for the command line. Additionally a chapter focuses on the Red Hat tools suite and another describes how to adapt the shell to your personal requirements.

A chapter which concentrates on kernel updates must not be missing in a linux book, especially extensive is the section about xconfig, containing lots of screenshots and descriptions.
The fact that CIDR is explained, has surprised me in a positive way, since my domain is networking.

It's astonishing that, in a book about Red Hat, Gnome and KDE are described in similar accurateness. Both chapters comprise about 50 pages. The reason may be the author, who declares himself as a KDE user. In addition to the control center, the KDE and Gnome programs (i.e. for multimedia) are explained extensively. For me it was interesting that i.e. the KDE Control Center is nothing but a front end to the /proc file system.
The author gives mainly in the first chapters very current information to Linuxtrends, i.e. which companies migrated to Linux, concerning also the Desktop market.
I found it interesting that the programs mediacheck and md5sum are provided for the examination of the installation CDs.
The bonuses chapters in the web are probably more a marketing gag than real enriching.

# Room for improvement

Sometimes the book seems to be very basic. Reason is, that often every step is explained, which might be a good idea when the issue is complicated. But due to the fact that the book is also addressed to beginners, of course everything needs to be explained. Quite funny is the section where it is explained how to use the Red Hat website; another funny paragraph describes the meaning of 800*600. My opinion is that the book simply lacks compactness, especially in the beginning, sometimes the author recurs.

When the question is discussed why to choose Linux, security is never mentioned - however, as far as I'm informed that's the crucial factor at least for public authorities.
I think, "tail -f" should be explained in the book, "locate" is mentioned only very briefly - these are commands that I use quite frequently. In the section about the "tar" command it might be important to address more specific the risk of loosing data unintentionally when using absolute paths.
The description of IPv6 is incomplete, hardware is described sometimes incorrect ("Bridge" in the chapter about networks). Router are addressed only very briefly.

The Linux Command Reference in the appendix is not complete, additionally it's quite complex, a bit confusing and therefore not really reasonable. The index the follows after the reference focuses mainly on the book, not on the appendix, f.e. "logresolve" which appears in the appendix apache section doesn't appear in the index.
I think the old r-tools like rsh and rcp shouldn't be explained that detailed. The newer and secure s-tools (ssh...) should be standard nowadays.
What I'm missing is a chapter for people who have used other Linux distributions before, it would be very interesting to point out the specific differences like directory structure, location of config files, and so on.

# Ergo...

Michael Jang manages quite well to do a balancing act between beginner and professional. To the beginner the book offers a well readable introduction with possibilities to learn in very different fields and directions. To the advanced user it offers usable knowledge regarding many different tasks and applications for system administration.
Maybe you shouldn't buy the book in order to get the short command reference in the appendix, I think I have seen better ones before. But when you need a reference book with very practical step by step instructions, you should consider purchasing it.

# Resources

- Jang, Michael (2003) Mastering Red Hat Linux 9. Sybex, USA Everything you need to know to use Red Hat Linux as a server or desktop OS

- Sybex Website for this book