

BRIEF CONTENTS

CONTENTS ix

PREFACE xxxi

1 WELCOME TO LINUX 1

PART I INSTALLING FEDORA AND RED HAT ENTERPRISE LINUX 21

2 INSTALLATION OVERVIEW 23

3 STEP-BY-STEP INSTALLATION 47

PART II GETTING STARTED WITH FEDORA AND RED HAT ENTERPRISE LINUX 91

4 INTRODUCTION TO FEDORA AND RED HAT ENTERPRISE LINUX 93

5 THE LINUX UTILITIES 137

6 THE LINUX FILESYSTEM 177

7 THE SHELL 213

PART III DIGGING INTO FEDORA AND RED HAT ENTERPRISE LINUX 243

8 LINUX GUIs: X, GNOME, AND KDE 245

9 THE BOURNE AGAIN SHELL 279

10 NETWORKING AND THE INTERNET 357

PART IV SYSTEM ADMINISTRATION 401

- 11 SYSTEM ADMINISTRATION: CORE CONCEPTS 403
- 12 FILES, DIRECTORIES, AND FILESYSTEMS 461
- 13 DOWNLOADING AND INSTALLING SOFTWARE 489
- 14 PRINTING WITH CUPS 511
- 15 REBUILDING THE LINUX KERNEL 537
- 16 ADMINISTRATION TASKS 549
- 17 CONFIGURING A LAN 579

PART V USING CLIENTS AND SETTING UP SERVERS 589

- 18 OPENSSSH: SECURE NETWORK COMMUNICATION 591
- 19 FTP: TRANSFERRING FILES ACROSS A NETWORK 613
- 20 **sendmail**: SETTING UP MAIL CLIENTS, SERVERS, AND MORE 639
- 21 NIS AND LDAP 667
- 22 NFS: SHARING FILESYSTEMS 697
- 23 SAMBA: INTEGRATING LINUX AND WINDOWS 719
- 24 DNS/BIND: TRACKING DOMAIN NAMES AND ADDRESSES 743
- 25 **iptables**: SETTING UP A FIREWALL 789
- 26 APACHE (**httpd**): SETTING UP A WEB SERVER 811

PART VI PROGRAMMING 855

- 27 PROGRAMMING TOOLS 857
- 28 PROGRAMMING THE BOURNE AGAIN SHELL 903

PART VII APPENDIXES 991

- A REGULAR EXPRESSIONS 993
- B HELP 1003
- C SECURITY 1013
- D THE FREE SOFTWARE DEFINITION 1033
- E THE LINUX 2.6 KERNEL 1037

GLOSSARY 1043

INDEX 1091