

Preface

"Technical knowledge is not enough. One must transcend techniques so that the art becomes an artless art, growing out of the unconscious."

—Daisetsu Suzuki (1870-1966)

This is a book about Linux, a free, open source operating system that's changing the world of computing. In this book, we show how you can completely change the way you work with computers by exploring a powerful and free operating system. Linux goes against the traditional computing mainstream, being developed by a loosely organized group of thousands of volunteers across the Internet. Linux started as a real underground movement — guerrilla hacking, if you will — and brings a lot of excitement, discovery, and self-empowerment back into today's corporate-dominated computing culture. We invite you to dive in, enjoy yourself, and join the throng of people who know what it means to tweak your dot clocks and *rdev* your kernel image.

The Zen quote at the beginning of this preface summarizes our philosophy in this book. We're targeting readers who are inquisitive and creative enough to delve full-tilt into the world of Linux, and who want to get at the heart of the system. Linux represents a rebellion against commercial operating systems, and many of its users like living on the edge of the latest technological trends. Of course, the casual reader can set up and run a Linux system (or hundreds of them!) without much trouble, but the purpose of this book is to dig more deeply into the system — to bring you completely into the Linux mentality, to reach Linux "enlightenment." Rather than gloss over messy details, we explain the concepts by which the system actually works so that you can troubleshoot problems on your own. By sharing the accumulated expertise of several Linux experts, we hope to give you enough confidence to call yourself a true Linux Guru. (Your first koan: what is the sound of one user hacking?)

You have in your hands the fourth edition of *Running Linux*, and by most accounts this book is considered the classic text on installing, maintaining, and learning to use a Linux system. The first edition was published way back in 1996, and had its roots in a free book called *Linux Installation and Getting Started*, which is still floating around the Internet. Since then, *Running Linux* has gone through many improvements and changes to keep the text up-to-date with the latest developments in the Linux world. Kalle Dalheimer joined Matt Welsh and Lar Kaufman for the third edition, and has done most of the updates for this edition as well. Terry Dawson has contributed some material on security.

In this edition, we have completely updated the installation, configuration, and tutorial information to be up-to-date with the latest Linux software distributions (including Red Hat and its derivatives, SuSE, and Debian) and many application packages. The core of the book, however, has not changed much. This was intentional: in the first three editions we made a great effort to make the book as robust as possible, even though Linux itself is under constant development. No book can adequately capture *everything* there is to know about Linux. (You won't find chapters here on using Linux on the Space Shuttle, or on finding weaknesses in data encryption algorithms, although it's been done!) Our approach has worked remarkably well and has been preserved in this new, updated edition. We think this book will be of use to you for a long time to come.