Foreword

There are a lot of books about system administration out there. Why is this one special? We can think of two reasons.

First, it's good. The authors do real system administration on real systems with a lot of users, a lot of networking, and a lot of special connectivity. They've been at it long enough that they can still recall what a Unibus adaptor was and what was wrong with the DZ11 (no interrupts). They've lived in a "dirty" world with lots of different systems from lots of different vendors and lots of different versions of the operating system. They've been bitten by alligators of every type and persuasion. This is not a nice, neat book written for a nice, clean world. It's a nasty book written for a nasty world.

Second, it's comprehensive. There are a lot of good books about specific UNIX® topics (we know of a great book on <code>sendmail</code>, for example), but few books on the general problem of system administration that are worth their weight in dead trees.¹ The initial draft of the first edition of this book was called <code>UNIX System Administration Made Difficult</code>, which seemed appropriate: the "... Made Simple" style of books always seemed to gloss over so many details that they actually made the job harder.

The fact is that system administration *is* difficult. UNIX systems are tremendously powerful, and with power comes some measure of complexity. PCs get complicated too, when you start connecting them to networks, modems, printers, and third-party disks, and when you real-

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ize that you need to worry about topics such as backups and security. Suddenly, managing a PC starts to look a lot like administering a UNIX box: "It's easy! Just click here, then you have to turn off the printer to use the network (select here, pull down this menu, and click on "Disable" and "Apply"), then pull down this menu, then select the selector, type in your hostname here, then click here, here, and double-click here (dismiss that dialog box, it always gives that, I don't know why...), then pop up here, select that menu, enable the network, then go over there to start up the TCP/IP application, then—Woops! We forgot to set the network mask; no problem, just go back to the third menu selection and change the mask—Drat, that disabled the network, just fix that (click, drag, click)... Great, now start up the TCP/IP application again (click), and now you can use telnet! See, easy!"

By contrast, UNIX boxes have the network installed by default. It is set up once, and most users never see how the configuration is done. Unfortunately, system administrators are not "most users" and so we get to go through the messy process of setting it up.

The authors also have something to offer for those rare, calm moments when you have the chance to reflect on how to improve your environment to make your life a bit easier. For example, this book will help you tune your network to maximize throughput, minimize delay, and avoid single points of failure. It will also give you hints on how to let the good guys in while keeping the bad guys out.

Some people do have isolated UNIX boxes without networks, printers, modems, or maybe even third-party disk drives. If you are one of these rare birds, or you feel that your vendor's point-and-click graphical interface fills all your needs (and you aren't curious about what goes on behind the curtain), you may not need this book. It goes into detail about obscure things you may never need to know.

However, such simple environments make up a tiny and dwindling fraction of the real world. This is a book for the rest of us.

Eric Allman Marshall Kirk McKusick

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