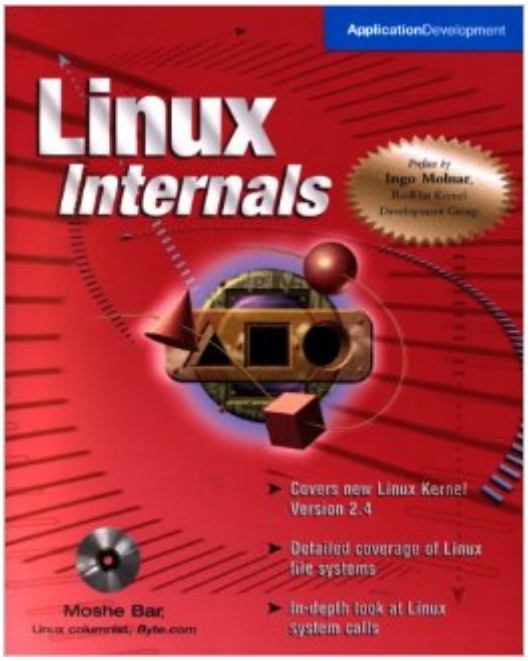
Linux Internals



Synopsis

-- Providing in-depth coverage of the source-code internals of Linux, this book gives a high-level explanation of how this operating system works and the knowledge needed to program and run it optimally.-- With a thorough knowledge of kernel programming and OS theory, readers will get the following: -- Performance and Tuning issues discussed, measured and explained-- Crisis-avoiding strategies for busy servers explained in detail-- Variations of different Linux versions are explained-- CD-ROM with code from the book and sample kernel enhancements-- Written by an expert active in the development of KhaOS, a secure version of Linux.

Book Information

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Customer Reviews

Here are some examples of the errors in this book; I gave up on it around page 50. It tries to distinguish between RISC and CISC but gets them backwards. Most of the underscores in the code listings have been replaced by spaces. It states that linked lists and arrays are the same thing. A table refers to the "Bite size" of processor architectures. Structurally, it jumps quickly into a deep description of x86 instruction scheduling without explaining why. There’s some useful information in there, if you can find it through the errors and poor organization. There are better books on the topic.

I was curious how one book could be oriented to both "Linux internals" and "application

development", and once I started reading this book, I realized my initial hunch was correct--it can’t. This book is purely about the internals of the Linux kernel, period. That’s not a bad thing, but people looking for a reference for app. development under Linux will be very disappointed.The author has an extremely terse style, which I found very annoying. Reading this book is like spending hours listening to one of your arrogant, techie friends who loves to explain things just well enough to impress you with his/her knowledge, but not well enough to help you understand the topic fully.The book’s cover blurb says that it covers kernel 2.4, but it doesn’t mention devfs, easily one of the more radical and significant changes in the release.Finally, I found numerous minor glitches throughout the book, like the table that lists the "bite size" of various architectures, when clearly "word size" was the intention.

This book is a mess. It does not appear to have been seen by a copy editor, as it is full of spelling mistakes and figure captions like "Please provide figure caption."It is also full of mistakes; even sample code is terribly defective, and wouldn’t even compile properly with recent kernels. As one trivial example, the return type of the function "cleanup_module()" is given as an "int" instead of a "void".A large fraction of the book is given over to pasting in large sections of the Linux kernel source; I wouldn’t be surprised if these pages were one third of the total. Given the fact that the kernel source changes all the time, this code was already out of date when the book was published. (This wouldn’t be a problem if the author had restricted himself to a stable production kernel of the 2.2 series, but the 2.4 kernel is prominently advertised on the cover.) This wholesale lifting and publishing of unaltered kernel code may not violate the GPL, but it is idiotic as any one following Linux kernel development knows one always has to look at the source itself to be accurate.I believe the wholesale inclusion of out of date source was done to pad out this rather flimsy book.Overall the author’s discussion is incomprehensible, without any clear plan. I feel sorry for Ingo Molnar who must have been duped into writing a forward; surely someone of his talent could not have looked at the whole book and said something positive.Don’t buy this book. Complain to the publisher that Linux is not well served by the publication of pasted together quickie books.This book is worse than worthless; it is misleading and inaccurate.

This is a surprising readable book considering that highly technical topics such as this are often difficult to write about. It is certainly a much better read than the other books about the Linux kernel currently in print. As the author points out in the preface, this book is not intended as a full source code commentary of the kernel, rather it focuses upon describing those parts of the kernel that are

relevant to performance issues of the OS and user applications. Certainly some esoteric topics of particular interest to kernel hackers are likely missing but on the other hand more practical topics such as filesystems (including JFS and LVM) and signal handling are well covered.The author’s writing style can be a bit obtrusive at times and it would have been nice if a good technical editor had also corrected some of the more glaring errors such as "next’ed" instead of "nested" or the overuse of the adverb "excellently". The extracts of code from the kernel are generally well selected and short enough to comprehend along the with associated discussion.Overall, I would recommend this book to someone already knowledgeable with Linux and familiar with C programming who would like to obtain a better grasp of how the kernel is designed and what the resulting implications are for the performance of the system.

This book was not edited. I believe they folded up the second draft and mailed it to bookstores. The author is also a very poor writer. Portions of the text remind me of the "All your base are belong to us" funnies or similar jokes about bad translations. I recommend that no one buy it; that the author be vigorously slapped with a large wet fish; and that the publishers and editors be exiled to some land without books or paper.This is the worst technical book I have EVER purchased.

(Expert's Voice in Linux) Linux: For Beginners - Step By Step User Manual To Learning The Basics Of Linux Operating System Today! (Ubuntu, Operating System) Embedded Linux Porting on ARM & RFID Implementation Using ARM SoC: Developing a flexible and agile Board Secure Package Linux with multiple applications