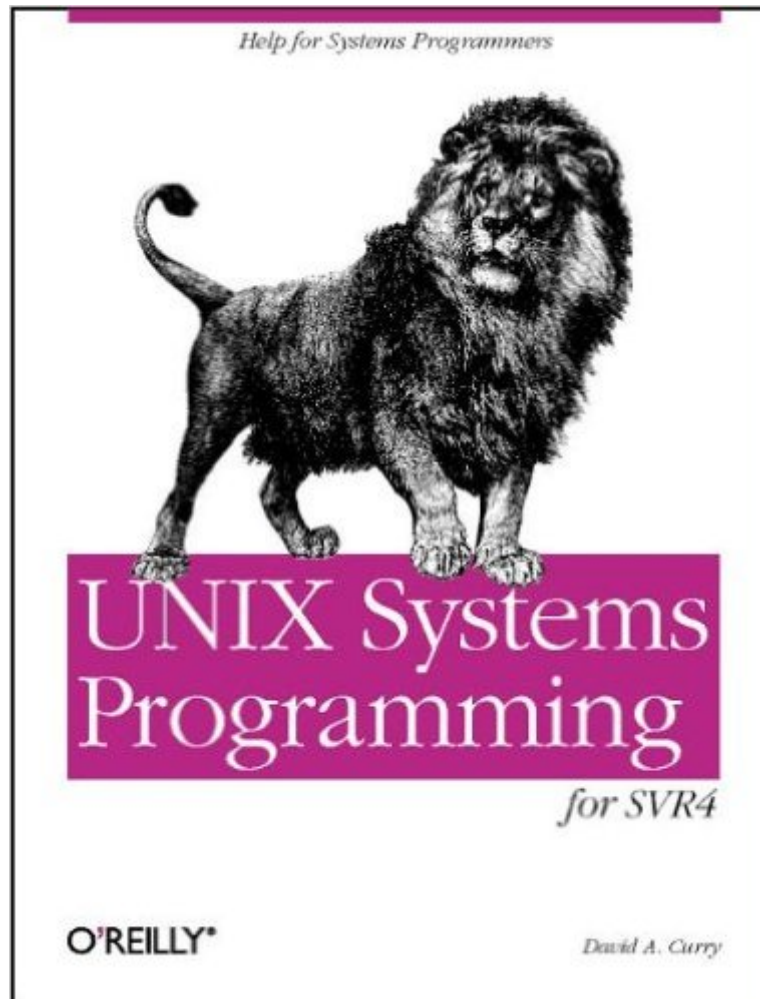# UNIX System Programming For System VR4 (Nutshell Handbooks)

Synopsis

Any program worth its salt uses operating system services. Even a simple program, if practical, reads input and produces output. And, most applications have more complex needs. They need to find out the time, use the network, or start and communicate with other processes. Systems programming really means nothing more than writing software that uses these operating system services.UNIX Systems Programming for SVR4 gives you the nitty-gritty details on how UNIX interacts with applications. If you're writing an application from scratch, or if you're porting an application to any System V.4 platform, you need this book.The first part of the book presents simple functions and concepts supported by numerous code fragment examples and short demonstration programs. These examples become building blocks for the application program examples that appear later in the book to illustrate more advanced, complex functions.UNIX Systems Programming for SVR4 is thorough and complete and offers advice on:Working with low-level I/O routines and the standard I/O libraryCreating and deleting files and directories, changing file attributes, processing multiple input streams, file and record locking, and memory-mapped filesReading, printing, and setting the system time and dateDetermining who is logged in, times users log in and out, how to change a program's effective user ID or group ID, and writing set user ID programsChanging system configuration parameters for resource limitsCreating processes, job control, and signal handlingUsing pipes, FIFOs, UNIX-domain sockets, message queues, semaphores, and shared memory for interprocess communicationReading and setting serial line characteristics including baud rate, echoing, and flow controlNetwork programming with Berkeley sockets, Transport Layer Interface (TLI), a less popular but more flexible interface to network programming, and the data link provider interface

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Customer Reviews

If there ever was a book that was badly advertised, this one is it. If we're to believe the cover and even the reviews on , it's just another book on Unix, when actually it's an essential Unix System V C libraries reference for C programmers. I haven't found anything remotely similar out there. I only bought it after flipping through the pages in a bookstore. It covers everything from file I/O through IPC. It contains tons of code that clearly show how to use each function. As it's a little dated, It doesn't cover pthreads or IPV6, but hopefully the author will make a second edition soon...and make sure that C programmers know that this book is what they're looking for!

This book is written in a very easy and understandable way. It explains main concepts, system calls and their parameters and how to use them. It lays an excellent ground for a quick start in UNIX systems programming and prepares for more in-depth material like books by R. Stevens. I would say that this book is a must-read for all starters.

This book isn't just a handy reference for programming in C in the UNIX environment; it's a useful reference for any C programmer. For example, the discussion of file I/O is very clear.

This book gives an excellent introduction to systems programming in unix. Within a couple of weeks of buying this book, I was able to design and implement a multi-process client server (socket based) application from scratch. The author also discusses the common C library functions used and the caveats there of. (for instance, the gets() function is a dangerous one!) Although I program a lot in windows NT, I still find this book to be a good reference, especially when porting applications from unix to NT. One thing that I wish the book had is a discussion on remote procedure calls (RPC).

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