

README for code in *The Linux Programming Interface*

Gidday!

This is the code for the book "The Linux Programming Interface" and this is a note from me, the author, Michael Kerrisk.

For instructions on building the programs, see the file BUILDING.

For notes on changes that have been made to the code since it was published in the book, see the file CHANGES.

Source code licensing =====

All complete programs provided in this distribution are covered by the GNU General Public License (Version 3), a copy of which is contained in the file COPYING.gpl-v3, which should have arrived with this tarball. The library functions (in the lib/ directory) are covered by the GNU Lesser General Public License (Version 3); see the files COPYING.lgpl-v3 and COPYING.gpl-v3 provided with this tarball.

A note on the source code =====

The source code is available in two versions: "dist" and "book". The "book" version contains the program source files as published in the book. The source files in the "dist" version contain extra code beyond that published in the book. The differences between the "dist" and "book" versions are as follows:

- a) The "dist" versions of some programs contain extra comments. These additional comments were stripped out of the printed version to make the published versions of the programs shorter. (The book itself contains text describing the operation of the programs.)
- b) In a few cases, some changes have been incorporated into the "dist" versions to make it possible to compile programs on UNIX implementations other than Linux, so that you can try them out on other implementations if you wish. Where necessary, the additional code is conditionally compiled using the following platform-specific macros:

__linux__	Defined on Linux
__sun	Defined on Solaris
__FreeBSD__	Defined on FreeBSD
__NetBSD__	Defined on NetBSD
__OpenBSD__	Defined on OpenBSD
__APPLE__	Defined on Mac OS X
__hpux	Defined on HP-UX
__osf__	Defined on Tru64 UNIX (formerly DEC OSF1)
__sgi	Defined on Irix
__AIX	Defined on AIX

- c) In the "dist" version, some programs have extra functionality beyond that in the "book" versions. Where this is significant, comments in the programs explain the differences.

Subdirectories =====

Under the 'tlpi' directory are a number of subdirectories. Each subdirectory corresponds to one or more chapters of the book. The following paragraphs give brief notes on the contents of each subdirectory.

Note that in some cases, files are (hard) linked to appear in more than one directory. This is particularly the case for each of the files in the 'lib' directory, most of which are also linked in the directory of the chapter relating to that file.

Directory	Files for Chapter...
lib	This contains library routines used by other programs. The tlpi_hdr.h and error_functions.* files are located here.
progconc	3 (System Programming Concepts)
fileio	4 and 5 (File I/O)
proc	6 (Processes)
memalloc	7 (Memory Allocation)
users_groups	8 (Users and Groups)

proccred	9 (Process Credentials)
time	10 (Time)
syslim	11 (System Limits and Options)
sysinfo	12 (System and Process Information)
filebuff	13 (File I/O Buffering)
filesystem	14 (File Systems)
files	15 (File Attributes)
xattr	16 (Extended Attributes)
acl	17 (Access Control Lists)
dirs_links	18 (Directories and Links)
inotify	19 (Monitoring File Events)
signals	20 to 22 (Signals)
timers	23 (Timers and Sleeping)
procexec	24 (Process Creation), 25 (Process Termination), 26 (Monitoring Child Processes), 27 (Program Execution), and 28 (Further Details on Process Creation and Program Execution)
threads	29 to 33 (POSIX Threads)
pgsjc	34 (Process Groups, Sessions, and Job Control)
procpri	35 (Process Priorities and Scheduling)
procrs	36 (Process Resources)
daemons	37 (Daemons)
cap	39 (Capabilities)
loginacct	40 (Login Accounting)
shlibs	41 and 42 (Shared Libraries)
pipes	44 (Pipes and FIFOs)
svipc	45 (System V IPC)
svmsg	46 (System V Message Queues)
svsem	47 (System V Semaphores)
svshm	48 (System V Shared Memory)
mmap	49 (Memory Mappings)
vmem	50 (Virtual Memory Operations)
pmsg	52 (POSIX Message Queues)
psem	53 (POSIX Semaphores)
pshm	54 (POSIX Shared Memory)
filelock	55 (File Locking)
sockets	56 to 61 (Sockets and Network Programming)
tty	62 (Terminals)
altio	63 (Alternative I/O Models)
pty	64 (Pseudoterminals)
getopt	Appendix B: Parsing Command-Line Options