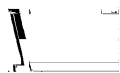


Using This Book



Do not configure or build your kernel with superuser permissions enabled!

This warning is the most important thing to remember while working through the steps in this book. Everything in this book—downloading the kernel source code, uncompressing it, configuring the kernel, and building it—should be done as a normal user on the machine. Only the two or three commands it takes to install a new kernel should be done as the superuser (*root*).

There have been bugs in the kernel build process in the past, causing some special files in the */dev* directory to be deleted if the user had superuser permissions while building the Linux kernel.* There are also issues that can easily arise when uncompressing the Linux kernel with superuser rights, as some of the files in the kernel source package will not end up with the proper permissions and will cause build errors later.

The kernel source code should also never be placed in the */usr/src/linux/* directory, as that is the location of the kernel that the system libraries were built against, not your new custom kernel. Do not do any kernel development under the */usr/src/* directory tree at all, but only in a local user directory where nothing bad can happen to the system.

* This took quite a while to fix, as none of the primary kernel developers build kernels as root, so they did not suffer from the bug. A number of weeks went by before it was finally determined that the act of building the kernel was the problem. A number of kernel developers half-jokingly suggested that the bug remain in, to help prevent anyone from building the kernel as root, but calmer heads prevailed and the bug in the build system was fixed.