## Debian

### How to compile a custom kernel in Debian Lenny / Etch?

This is usually quite straight forward, since Debian brings utilities with it to do this:

aptitude install build-essential kernel-package fakeroot libncurses5-dev bzip2

cd /usr/src wget "http://www.kernel.org/pub/linux/kernel/v2.6/linux-2.6.36.tar.bz2" tar -jxf linux-2.6.36.tar.bz2 cd linux-2.6.36 cp /boot/config-`uname -r` ./.config

After that you can either run make menuconfig, or just use your favorite editor to change the config accordingly.

This step is optional, so if you do not want to change any parameters, you don't have too. If there are new values available, which haven't been within pervious kernels, you will be prompted while building the kernel anyhow.

fakeroot make-kpkg clean fakeroot make-kpkg --append-to-version=.gosil kernel image

The kernel build will take a while, afterwards you just need to install it using dpkg -i and do not forget to update the initrd:

update-initramfs -c -k 2.6.36.gosi1 update-grub

Notes:

You might encounter a few problems, here are the solutions for some of them:

#### **Error Message**

"error: zlib.h: No such file or directory" Iguest.c:21:25: error: sys/eventfd.h: No such file or directory

#### Solution

aptitude install zlib1g-dev

disable the pravirtualized guest support in the kernel config: "Processor type and features": "Paravirtualized quest support" = N (this needs to be done in Lenny because it comes with older libc6 which omits sys/eventfd.h)

The UTS Release version in include/linux/version.h Download this and install it, even if you run does not match current version

Lenny..

Unique solution ID: #1085

Author: n/a

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