

Nos situamos en la carpeta de descargas

```
root@hugogd-VirtualBox:/home/hugogd/Descargas# pwd
/home/hugogd/Descargas
root@hugogd-VirtualBox:/home/hugogd/Descargas#
```

Nos descargamos el Kernel que vamos a usar en mi caso el 6.8.1

```
root@hugogd-VirtualBox:/home/hugogd/Descargas# ls
KERNEL_ANTIGUO  linux-6.8.1.tar.gz
root@hugogd-VirtualBox:/home/hugogd/Descargas#
```

Descomprimos el archivo del kernel

```
root@hugogd-VirtualBox:/home/hugogd/Descargas# ls
KERNEL_ANTIGUO  linux-6.8.1  linux-6.8.1.tar.gz
root@hugogd-VirtualBox:/home/hugogd/Descargas#
```

Entramos dentro de la carpeta del kernel

```
root@hugogd-VirtualBox:/home/hugogd/Descargas# cd linux-6.8.1
root@hugogd-VirtualBox:/home/hugogd/Descargas/linux-6.8.1#
```

Hacemos la copia de main.c

```
root@hugogd-VirtualBox:/home/hugogd/Descargas/linux-6.8.1/init# ls -l | grep main
-rw-rw-r-- 1 root root 38669 mar 15  2024 main.c
-rw-r--r-- 1 root root 38669 dic  3 15:47 main.c.copia
root@hugogd-VirtualBox:/home/hugogd/Descargas/linux-6.8.1/init#
```

Modificamos el kernel para saber lo que queremos que nos salga

```
root@hugogd-VirtualBox: /home/hugogd/Descargas/linux-6.8.1/init
GNU nano 6.2 main.c.copia *
{
    char *command_line;
    char *after_dashes;

    set_task_stack_end_magic(&init_task);
    smp_setup_processor_id();
    debug_objects_early_init();
    init_vmlinux_build_id();

    cgroup_init_early();

    local_irq_disable();
    early_boot_irqs_disabled = true;

    /*
     * Interrupts are still disabled. Do necessary setups, then
     * enable them.
     */
    boot_cpu_init();
    page_address_init();
    pr_notice("%s", linux_banner);
    early_security_init();
    setup_arch(&command_line);
    setup_boot_config();
    setup_command_line(command_line);
    setup_nr_cpu_ids();
    setup_per_cpu_areas();
    smp_prepare_boot_cpu(); /* arch-specific boot-cpu hooks */
    boot_cpu_hotplug_init();

    pr_notice("Kernel command line: %s\n", saved_command_line);
    pr_notice("CHACHO00000 QUE S'HA INSTALAO EL KERNEL\n");
    pr_notice("B000000000000000000000M\n");
    pr_notice("Compilado por: Hugo Gallardo Domingo\n");
    /* parameters may set static keys */
    jump_label_init();
    parse_early_param();
    after_dashes = parse_args("Booting kernel",
                             static_command_line, __start__param,
                             __stop__param - __start__param,
                             -1, -1, NULL, &unknown_bootoption);
}
```

Creamos el parche

```
root@hugogd-VirtualBox:/home/hugogd/Descargas/linux-6.8.1/init# diff -u main.c main.c.copia > parcheHUGO.patch
root@hugogd-VirtualBox:/home/hugogd/Descargas/linux-6.8.1/init# ls
build-version  do_mounts.h      initramfs.c  main.c          noinitramfs.c  version-timestamp.c
calibrate.c    do_mounts_initrd.c  init_task.c  main.c.copia    parcheHUGO.patch
do_mounts.c    do_mounts_rd.c     Kconfig      Makefile        version.c
root@hugogd-VirtualBox:/home/hugogd/Descargas/linux-6.8.1/init#
```

Aplicamos el parche y comprobamos que se a aplicado

```
root@hugogd-VirtualBox: /home/hugogd/Descargas/linux-6.8.1/init# patch -p1 < parcheHUGO.patch
can't find file to patch at input line 3
Perhaps you used the wrong -p or --strip option?
The text leading up to this was:
-----
|--- main.c      2024-03-15 19:19:29.000000000 +0100
|+++ main.c.copia      2025-12-03 15:52:04.457482243 +0100
-----
File to patch: main.c
patching file main.c
root@hugogd-VirtualBox: /home/hugogd/Descargas/linux-6.8.1/init# grep -n "Hugo" main.c
908: pr_notice("Compilado por: Hugo Gallardo Domingo\n");
```

Comentamos los TIMEOUT de /etc/default/grub

```
root@hugogd-VirtualBox: /home/hugogd/Descargas/linux-6.8.1/init
GNU nano 6.2 /etc/default/grub *
# If you change this file, run 'update-grub' afterwards to update
# /boot/grub/grub.cfg.
# For full documentation of the options in this file, see:
# info -f grub -n 'Simple configuration'

GRUB_DEFAULT=0
#GRUB_TIMEOUT_STYLE=hidden
#GRUB_TIMEOUT=0
GRUB_DISTRIBUTOR=`lsb_release -i -s 2> /dev/null || echo Debian`
GRUB_CMDLINE_LINUX_DEFAULT="quiet splash"
GRUB_CMDLINE_LINUX=""

# Uncomment to enable BadRAM filtering, modify to suit your needs
# This works with Linux (no patch required) and with any kernel that obtains
# the memory map information from GRUB (GNU Mach, kernel of FreeBSD ...)
#GRUB_BADRAM="0x01234567,0xfefefefe,0x89abcdef,0xefefefef"

# Uncomment to disable graphical terminal (grub-pc only)
#GRUB_TERMINAL=console

# The resolution used on graphical terminal
# note that you can use only modes which your graphic card supports via VBE
# you can see them in real GRUB with the command 'vbeinfo'
#GRUB_GFXMODE=640x480

# Uncomment if you don't want GRUB to pass "root=UUID=xxx" parameter to Linux
#GRUB_DISABLE_LINUX_UUID=true

# Uncomment to disable generation of recovery mode menu entries
#GRUB_DISABLE_RECOVERY="true"

# Uncomment to get a beep at grub start
#GRUB_INIT_TUNE="480 440 1"

[ 33 líneas leídas ]
^G Ayuda      ^O Guardar    ^W Buscar     ^K Cortar     ^T Ejecutar   ^C Ubicación  M-U Deshacer
^X Salir      ^R Leer fich. ^_ Reemplazar ^U Pegar      ^J Justificar ^/ Ir a línea  M-E Rehacer
```

Hacemos el update-grub para que se apliquen las modificaciones

```
root@hugogd-VirtualBox:/home/hugogd/Descargas/linux-6.8.1/init# update-grub
Sourcing file `/etc/default/grub'
Sourcing file `/etc/default/grub.d/init-select.cfg'
Generating grub configuration file ...
Found linux image: /boot/vmlinuz-6.8.0-87-generic
Found initrd image: /boot/initrd.img-6.8.0-87-generic
Found linux image: /boot/vmlinuz-5.15.0-43-generic
Found initrd image: /boot/initrd.img-5.15.0-43-generic
Found memtest86+ image: /boot/memtest86+.elf
Found memtest86+ image: /boot/memtest86+.bin
Warning: os-prober will not be executed to detect other bootable partitions.
Systems on them will not be added to the GRUB boot configuration.
Check GRUB_DISABLE_OS_PROBER documentation entry.
done
root@hugogd-VirtualBox:/home/hugogd/Descargas/linux-6.8.1/init#
```

Hacemos el menuconfig y quitamos la virtualización en el archivo de configuración

```
root@hugogd-VirtualBox:/home/hugogd/Descargas/linux-6.8.1/init# make menuconfig
make: *** No hay ninguna regla para construir el objetivo 'menuconfig'.  Alto.
root@hugogd-VirtualBox:/home/hugogd/Descargas/linux-6.8.1/init# cd ..
root@hugogd-VirtualBox:/home/hugogd/Descargas/linux-6.8.1# make menuconfig
HOSTCC  scripts/basic/fixdep
HOSTCC  scripts/kconfig/mconf.o
HOSTCC  scripts/kconfig/lxdialog/checklist.o
HOSTCC  scripts/kconfig/lxdialog/inputbox.o
HOSTCC  scripts/kconfig/lxdialog/menubox.o
HOSTCC  scripts/kconfig/lxdialog/textbox.o
HOSTCC  scripts/kconfig/lxdialog/util.o
HOSTCC  scripts/kconfig/lxdialog/yesno.o
HOSTCC  scripts/kconfig/mnconf-common.o
HOSTCC  scripts/kconfig/confdata.o
HOSTCC  scripts/kconfig/expr.o
LEX      scripts/kconfig/lexer.lex.c
YACC     scripts/kconfig/parser.tab.[ch]
HOSTCC  scripts/kconfig/lexer.lex.o
HOSTCC  scripts/kconfig/menu.o
HOSTCC  scripts/kconfig/parser.tab.o
HOSTCC  scripts/kconfig/preprocess.o
HOSTCC  scripts/kconfig/symbol.o
HOSTCC  scripts/kconfig/util.o
HOSTLD  scripts/kconfig/mconf
#
# using defaults found in /boot/config-6.8.0-87-generic
#
.config:10805:warning: symbol value 'm' invalid for ANDROID_BINDER_IPC
.config:10806:warning: symbol value 'm' invalid for ANDROID_BINDERFS

*** End of the configuration.
*** Execute 'make' to start the build or try 'make help'.

root@hugogd-VirtualBox:/home/hugogd/Descargas/linux-6.8.1#
```

Linux/x86 6.8.1 Kernel Configuration

Arrow keys navigate the menu. <Enter> selects submenus ---> (or empty submenus ----). Highlighted letters are hotkeys. Pressing <Y> includes, <N> excludes, <M> modularizes features. Press <Esc><Esc> to exit, <?> for Help, </> for Search. Legend: [*] built-in [] excluded <M> module < > module capable

```
General setup --->
[*] 64-bit kernel
Processor type and features --->
[*] Mitigations for speculative execution vulnerabilities (NEW) --->
Power management and ACPI options --->
Bus options (PCI etc.) --->
Binary Emulations --->
[ ] Virtualization ----
General architecture-dependent options --->
[*] Enable loadable module support --->
[*] Enable the block layer --->
Executable file formats --->
Memory Management options --->
[*] Networking support --->
Device Drivers --->
File systems --->
Security options --->
-* Cryptographic API --->
Library routines --->
Kernel hacking --->
```

<Select>

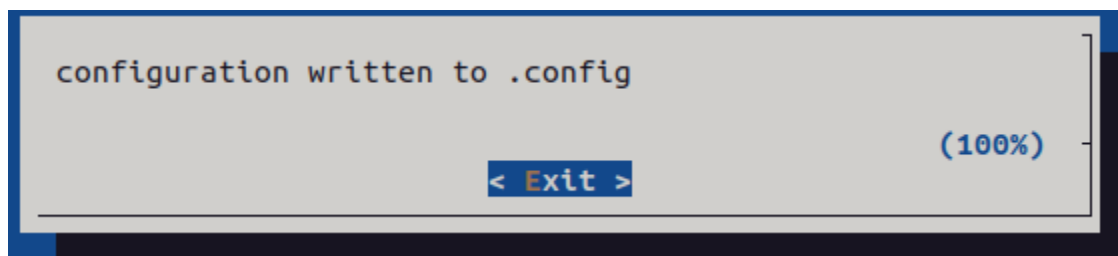
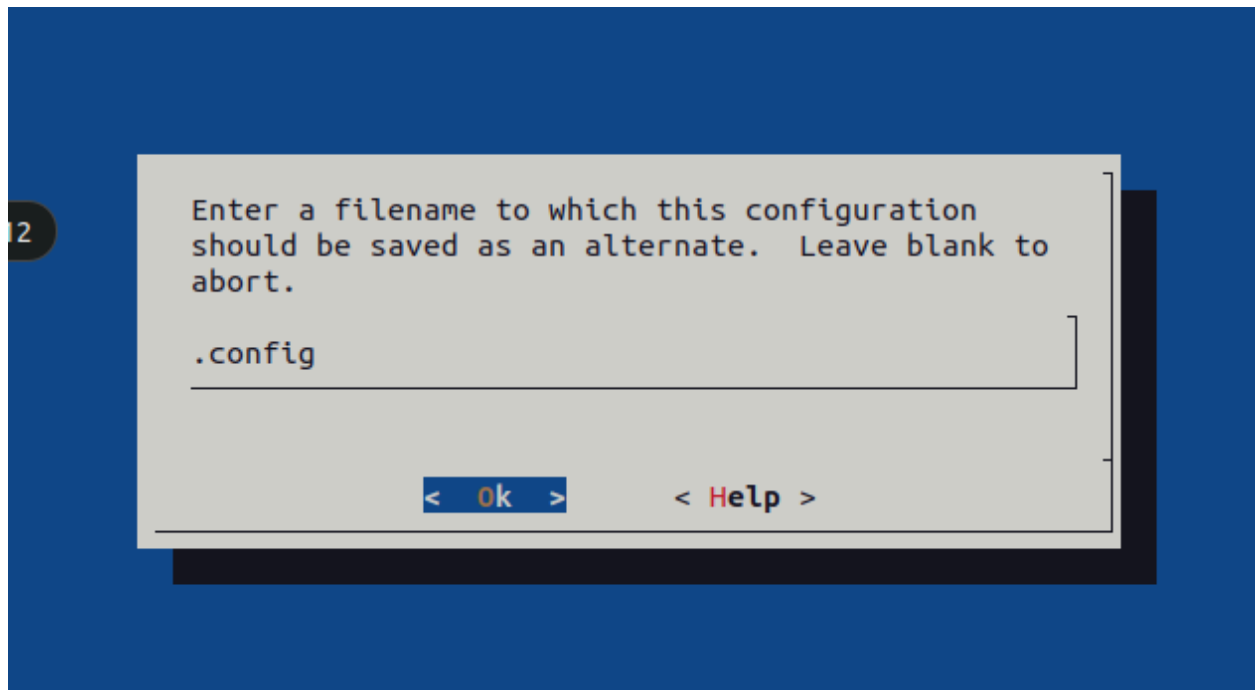
< Exit >

< Help >

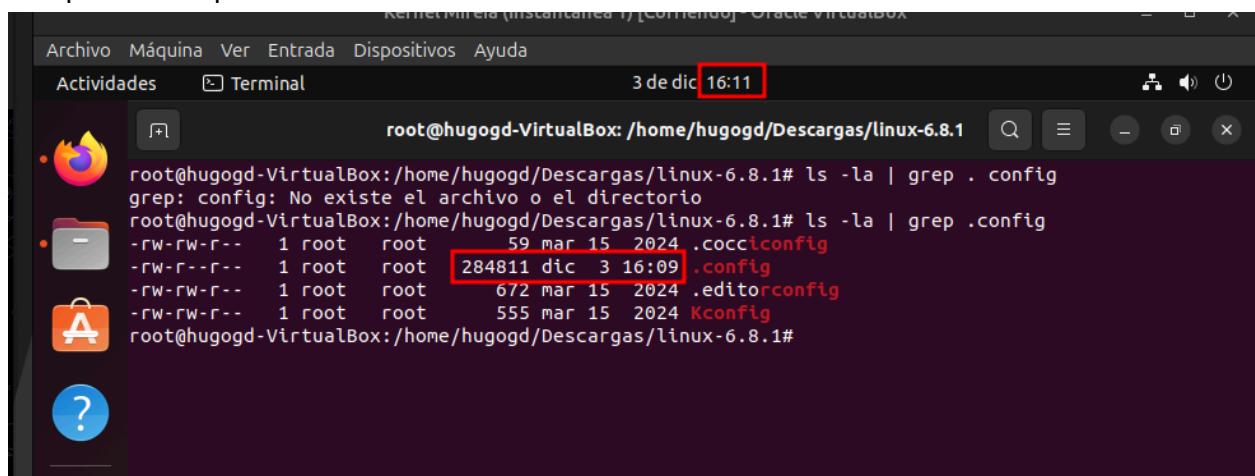
< Save >

< Load >

Guardamos en .config



Comprobamos que existe



Limpiamos compilaciones anteriores

```
root@hugogd-VirtualBox:/home/hugogd/Descargas/linux-6.8.1# make clean
```

Preparamos las dependencias

```
root@hugogd-VirtualBox:/home/hugogd/Descargas/linux-6.8.1# make prepare
SYNC    include/config/auto.conf.cmd
HOSTCC  scripts/basic/fixdep
HOSTCC  scripts/kconfig/conf.o
HOSTCC  scripts/kconfig/confdata.o
HOSTCC  scripts/kconfig/expr.o
LEX      scripts/kconfig/lexer.lex.c
YACC     scripts/kconfig/parser.tab.[ch]
HOSTCC  scripts/kconfig/lexer.lex.o
HOSTCC  scripts/kconfig/menu.o
HOSTCC  scripts/kconfig/parser.tab.o
HOSTCC  scripts/kconfig/preprocess.o
HOSTCC  scripts/kconfig/symbol.o
HOSTCC  scripts/kconfig/util.o
HOSTLD  scripts/kconfig/conf
SYSHDR  arch/x86/include/generated/uapi/asm/unistd_32.h
SYSHDR  arch/x86/include/generated/uapi/asm/unistd_64.h
SYSHDR  arch/x86/include/generated/uapi/asm/unistd_x32.h
SYSTBL  arch/x86/include/generated/asm/syscalls_32.h
SYSHDR  arch/x86/include/generated/asm/unistd_32_ia32.h
SYSHDR  arch/x86/include/generated/asm/unistd_64_x32.h
SYSTBL  arch/x86/include/generated/asm/syscalls_64.h
HYPERCALLS arch/x86/include/generated/asm/xen-hypercalls.h
HOSTCC  arch/x86/tools/relocs_32.o
HOSTCC  arch/x86/tools/relocs_64.o
```


Iniciamos la compilacion

```
root@hugogd-VirtualBox:/home/hugogd/Descargas/linux-6.8.1# sudo make-kpkg --initrd kernel_image
kernel_headers
exec make kpkg_version=13.018+nmu2 -f /usr/share/kernel-package/ruleset/minimal.mk debian INITRD
=YES
===== making target debian/stamp/conf/minimal_debian [new prereqs: ]=====
This is kernel package version 13.018+nmu2.
test -d debian || mkdir debian
test ! -e stamp-building || rm -f stamp-building
install -p -m 755 /usr/share/kernel-package/rules debian/rules
for file in ChangeLog Control Control.bin86 config templates.in rules; do
    \
        cp -f /usr/share/kernel-package/$file ./debian/;
    \
done
cp: no se puede efectuar `stat' sobre '/usr/share/kernel-package/ChangeLog': No existe el archiv
o o el directorio
for dir in Config docs examples ruleset scripts pkg po; do
    \
        cp -af /usr/share/kernel-package/$dir ./debian/;
    \
done
test -f debian/control || sed -e 's/=V/6.8.1/g' \
-e 's/=D/6.8.1-10.00.Custom/g' -e 's/=A/amd64/g' \
-e 's/=SA//g' \
-e 's/=I//g' \
-e 's/=CV/6.8/g' \
-e 's/=M/Unknown Kernel Package Maintainer <unknown@unconfigured.in.etc.kernel-pkg.conf>
/g' \
-e 's/=ST/linux/g' -e 's/=B/x86_64/g' \
-e 's/=R/initramfs-tools | linux-initramfs-tool,/g' /usr/share/kernel-package
/Control > debian/control
test -f debian/changelog || sed -e 's/=V/6.8.1/g' \
-e 's/=D/6.8.1-10.00.Custom/g' -e 's/=A/amd64/g' \
-e 's/=ST/linux/g' -e 's/=B/x86_64/g' \
-e 's/=M/Unknown Kernel Package Maintainer <unknown@unconfigured.in.etc.kernel-pkg.c
onf>/g' \
/usr/share/kernel-package/changelog > debian/changelog
chmod 0644 debian/control debian/changelog
test -d ./debian/stamp || mkdir debian/stamp
make -f debian/rules debian/stamp/conf/kernel-conf
make[1]: se entra en el directorio '/home/hugogd/Descargas/linux-6.8.1'
```

