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Nintendo Wii and Tux
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[Nintendo Wii and Linux - Give It a Try Today!](#)

Requirements and installation instructions inside!

The GameCube Linux team [announced](#) a few days ago that they've managed to run Linux natively on the popular Nintendo Wii gaming console: "Last but not least, we have finally run natively Linux on the Nintendo Wii through Team Tweezers' twilight-hack. We have released a small usbgecko-enabled Proof of Concept mini-distro to prove it." Unfortunately, I can't test this distro for you guys, because I don't have what I need to get started, but I will write down the requirements and installation instructions for those of you who want to try it. Be aware that this is a simple Proof of Concept Linux distribution, it has no drivers for the Wii hardware, neither X11! Below are the requirements you'll need in order to install Linux on Nintendo Wii gaming console:

- a Nintendo Wii
- a SD card
- a SD card adapter for the Nintendo GameCube
- a USB Gecko adapter
- [Twilight Hack](#)
- the [Nintendo Wii Proof of Concept](#) code

First of all, you should install the Twilight Hack chainloader. You can find detailed installation instructions, to install the linux.elf file into your "loading" SD card at sector 2048 in the archive (download it from the above link).

```
[CODE=0]$ sudo umount /dev/your_device$ sudo dd if=linux.elf of=/dev/your_device bs=512 seek=20483961+1 records in3961+1 records out2028192 bytes (2.0 MB) copied, 1.35082 seconds, 1.5 MB/s$ sync[CODE=1]
```

Before booting linux.elf, make sure your "loading" SD card is inserted into memcard slot A. If you own a USB Gecko adapter, make sure it is inserted into memcard slot B and connected through a USB cable to your PC. You can use a terminal program to connect via USB Gecko to your wii-linux. It was tested with minicom under Linux (/dev/ttyUSB0, 115200 8N1). It is recommended to activate linewrap.

```
[CODE=0]$ sudo minicomWelcome to minicom 2.2.OPTIONS: I18n Compiled on May 2 2007, 10:11:26.Port /dev/ttyUSB0Press CTRL-A Z for help on special keys[CODE=1]
```

Boot the system At this stage, the twilight-hack ELF loader will load and boot linux.elf. You will start to see the typical start-up messages of Linux on your TV and, if you own a USB Gecko, on your terminal too. You should see:

```
[CODE=0]Wii ELF Loader v0.1-alpha2Copyright (C) 2003,2004,2008 tmbinc, segher, bushingCleaning up environmentClosing file descriptors .....done.OK.Slot A: SD card detectedSlot B: USBGecko serial interface detectedloading ELF file from SD...done!ng: 47f000000000: 7f 45 4c 46 01 02 01 00 00 00 00 00 00 00 00 elfLoading .text @ 0x80800000 (13664 bytes)Loading .data @ 0x80804000 (1941504 bytes)Clearing .bss @ 0x809de000 (8540 bytes)[CODE=1]
```

Here's how to log-in into the system Unfortunately, this will work only for USB Gecko users, so on your terminal program, you'll see a welcome screen like this:

```
[CODE=0]Wii-linux-PoC GNU/Linux 0.1 (none) usbgeckocon1 (none) login:At the login prompt you can enter the PoC credentials: user: root password: cube[CODE=1]
```

If you manage to do so, you'll get a command prompt:

```
[CODE=0] # [CODE=1]
```

Working with the system This Proof of Concept Nintendo Wii Linux system is based on busybox. There are a few symlinks to commands already created, but the busybox version supplied has support for a lot more commands. If you miss a command, try with 'busybox missing_command' or ask for help with 'busybox'.

```
[CODE=0]# busybox top[CODE=1]
```

The kernel supplied has support for hot-insertion and removal of SD cards, so you can extract your "loading" card and insert another one. Just make sure **YOU DON'T REMOVE A CARD WHEN IT'S MOUNTED**. Also, note that memory is still limited to MEM1 (24MB) and there is no support to power off the system at this moment. Therefore, you will have to hold the power button for several seconds when you want to shutdown the console. *The above installation instructions are copyright of the [GameCube Linux Team](#).* Here's Twilight Hack in action: