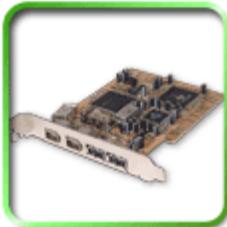


HARDWARE SUPPORT ON LINUX

GNU/Linux has come a long way since it was first introduced, including installation ease of use on Ubuntu that's surpassing that of Microsoft's, but it still has a few critics about its somewhat lacking hardware compatibility. The reason for this is because hardware manufacturers pay little attention to anything other than Windows regarding drivers. In fact, even Mac OS X lacks support for most third party computer hardware. But unlike Mac OS X, Linux's thriving open development community delivers new drivers almost on a daily basis! Below, we take a look at some product lines that will work with little or no extra work under Linux:



Linux will work with all x86-compatible CPUs, including PowerPC (Mac) ones.



Linux will support most PCI Firewire and USB cards. Be selective and do research before you buy.



Linux will support all motherboards, although some older VIA or SIS-based motherboards from around 2001-2004 might ship with buggy BIOS firmware.



Linux supports most optical drives. However, if you are specifically seeking HD-DVD or Blu-Rayburning, you will need to use the commercial NeroLinux 3.x application to

acquire the ability at this time.



All flash memory is supported properly as long as your distribution uses a newer kernel release. If so, there is a very good chance that external flash storage units will work out of the box.



All IDE hard drives are supported, and all SATA hard drives are supported on more recent kernel versions.



All wired input devices are supported, but also Bluetooth-based ones too after a bit of fiddling. For non-standard mice you will have to manually edit / etc / Xorg / xorg.conf to add support for them.



All PCI or USB-based Ethernet cards are supported. USB hubs are supported automatically. However, the majority of WiFi hardware won't work out of the box. WiFi cards require both a driver and firmware in order to operate.

While drivers usually exist, the firmware is considered proprietary property of the manufacturer and it can't be legally included in a distro. To install this firmware, you will have to either hunt down the appropriate files on the internet, or buy specific cards that other users have marked

as "compatible out of the box" for the distribution you are using.



All computer monitors work out of the box, although for widescreen monitors while running under the Intel i8xx/i9xx chipset, some extra tweaking might be required to force the monitor to go to its correct maximum resolution.



Most printers and scanners are supported in their basic mode (e.g. printing plain text). For extra features or pro photography you might want to purchase older models which had their Linux driver mature more during the past few 2-3 years.



Most sound cards work out of the box on Linux, especially the cheaper ones (usually all cheap models adhere to the AC97 standard so they are all compatible to some degree). Pro sound cards might prove more of a challenge though



All graphics cards work in 2D mode under Linux. For 3D support, it is more advisable to use 1-2 year old graphics cards which are more compatible with the open source drivers rather with the less-supported proprietary drivers from ATi/nVidia. Intel is the only graphic card manufacturer that offers plenty of their specs to the Linux developers to

write complete drivers so many prefer these onboard Intel cards under Linux



Only about one-third of the webcams in the market today work with Linux, and very few of them work out of the box. For most, you will have to find and manually install a driver. It is not clear if you would like to do all this work though because except the Ekiga VoIP application, no other popular IM/VoIP application supports webcams under Linux.



The vast majority of these devices work out of the box with Linux, because in reality USB VoIPphones are nothing but "USB sound cards" in a phone-like enclosure. Please note though that while the listen/talk part will work, the buttons of these phones won't be supported (e.g. you can't press the "hangup" button to hangup a VoIP phone call, and you can dial using the handset's buttons).



If you are on 56k dialup modem service, then you might want to reconsider if you want to use Linux or not. Ninety-five percent of the modems sold today are "winmodems", that is, they work only with Windows. Few of them have Linux drivers that are unfortunately not terribly stable. If you can find a real, hardware-based modem, go for it, but chances are that what's left in the market are mostly

win/softmodems rather than the kind of 56k modems we
used to buy back in 1999.

Overall, as long as you stay away from dialup modems, don't need a webcam, and you don't mind
hunting for some WiFi firmware, Linux should be able to cater to any modern user.

Source: <http://www.geeks.com/techtips/2007/techtips-14OCT07.htm>