

Penguins on 45: Linux Live CDs

The concept of a live CD is quite simple: you drop a CD in the CDROM drive, reboot the computer, and the operating system on the CD gets loaded into memory. As with hard drive based distributions, Linux has achieved extraordinary diversity among live CDs. Many of them are specialized, including discs for forensics, rescue, clustering, bioinformatics, and many other purposes. Still others are intended as desktop replacements, and many, whether desktop or specialized, are non-English.

In general the best place to look for Linux Distributions is Distrowatch (<http://www.distrowatch.com/dwres.php?resource=cd>), who are planning a comprehensive listing of live CDs, but they currently recommend the list at FrozenTech (<http://www.frozentech.com/content/livecd.php>). A possible source for downloads is <http://www.linuxiso.org/>, but they have only a couple of Live CDs - you're usually better off finding downloads at the CD homepage. Once you have your ISO look at <http://www.linuxiso.org/viewdoc.php/howtoburn.html> if you're not sure how to burn it.

The best known and probably the best all around live CD is Knoppix. It's very mature and reliable, with a wide choice of window managers and applications. It's also easily modified, and has spawned an immense number of derivatives. MEPIS is another excellent desktop replacement - KDE only, but excellent application support (Flash, Java, and sound all work properly, and that's uncommon). MEPIS requires a machine with a lot of horsepower - I would recommend at least 1 GHz and 192 Mb of memory.

For recovery I use Knoppix mostly ("knoppix 2" at the boot loader will leave you in text mode); INSERT appears to be very good, and LNX-BBC is well-established but may have been abandoned - both fit on a credit card CD.

Among the 8 cm and credit card sized desktop replacements, Vector (8 cm), Damn Small (credit card), and Feather (credit card) are good - the biggest sacrifices you make are browsers (often Dillo or Links2) and office software (word processors and spreadsheets are available, but don't exhibit as wide a range of functionality).

FreeSBIE is worth a look if you want a taste of FreeBSD, and the "Ultimate Boot CD" is an excellent resource for any computer technician - it's not itself a Linux product, but includes many utilities and even several Linux boot discs.

YMMV ("Your Mileage May Vary") definitely applies here: the response you get from any given live CD will vary wildly depending on the hardware you try to run it on - newer laptops and their video cards can be particularly problematic.

I list several of the better discs I tried on the other page.

Linux:

Damn Small Linux (Knoppix-based, 49.0Mb): <http://www.damnsmalllinux.org/> A very small and fairly nice desktop replacement.

Darik's Boot And Nuke (floppy, tiny ISO): <http://dban.sourceforge.net/> Securely wipes hard drives, claims to be DOD standard.

Feather Linux (Knoppix-based, 61.6Mb): <http://featherlinux.berlios.de/> Appears to be VERY similar to Damn Small, but Feather manages a prettier desktop.

INSERT (Knoppix-based, 49.8Mb): http://www.inside-security.de/insert_en.html Best for rescue and security.

Knoppix (Debian-based, 699Mb): <http://www.knoppix.org/> Best for: desktop, demo, rescue.

LNX-BBC (47.6Mb): <http://www.lnx-bbc.org/> Best for rescue (fits on a credit card disk). Defaults to command line. Getting a little old.

MEPIS (Debian-based, 650Mb): <http://www.mepis.org/> (downloads are hard to find: look at <ftp://ftp.ibiblio.org/pub/linux/distributions/mepis/>) Best for: desktop, demo, but needs a fast machine.

Morphix (Knoppix-based, size varies): <http://www.morphix.org/> Several variants - different sizes and different purposes, usually good.

Overclockix (Knoppix-based, 697Mb): <http://overclockix.octeam.com/> Sloppy, but very pretty. Close the open ports after you boot!

Phlak (Morphix-based, 471Mb): <http://www.phlak.org/> Intended for security, fairly good.

Slax (Slackware-based, 177Mb): <http://slax.linux-live.org/> Good desktop replacement.

Vector Linux (Slackware-based, 264Mb): <http://vectorlinux.com/> Best for lightweight desktop. Vector is an HD distro, the live CD isn't up-to-date with the HD version.

Non-Linux:

Free SBIE (FreeBSD-based, 552Mb): <http://www.freesbie.org/> Driver problems (couldn't get NIC going), some menus in Italian.

Syllable (based on what was AtheOS, 114Mb): <http://www.syllable.org/> Poor hardware support. Uses several GNU utils, has their own browser.

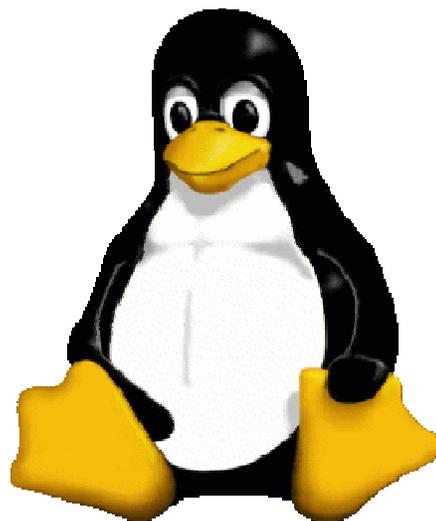
Ultimate Boot CD (133Mb):
<http://www.ultimatebootcd.com/> Cumulates test software and utilities for PCs on one disk. Highly recommended.

Not So Good:

Gentoo's live CD works fine, but is intended only for building and installing Gentoo.

MandrakeMove was the only live CD to successfully configure a two monitor system. It was also the only one to munge a file on my USB flash drive.

Suse's live CD is power hungry and failed on 4 out of 5 computers.



By Giles Orr (<http://www.gilesorr.com/>). Rock Eagle, October 2004.