

# SEVEN STEPS to SOFTWARE > SAMADHI

## MIGRATING FROM WINDOWS TO GNULINUX

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**You** have a PC. You use it for browsing the internet using Internet Explorer. You sift for genuine emails on HotMail or Yahoo, use Outlook to pick up and send emails from your POP box, store contacts, and schedule appointments. MSN Messenger and Yahoo messenger services let you chat online, and you use Word for reports and business letters, Excel for spreadsheets, and PowerPoint to juice up your presentations. You want to do all this using Linux. Because.

**Fasten** your seatbelt. Here's how you can migrate to GnuLinux in seven steps. But first, you must backup all your data on a removable media, such as a CD or tape-drive. You are also advised to follow the suggestions published here on your own responsibility and risk. Please appreciate that migrating from entrenched habits to a new environment does not happen in a split-second. The computer becomes a fully-featured and capable GnuLinux system within a few hours. You are the one who takes time to adapt. You are the bottleneck. So get out of your own way. Allowing for your adaptation, a full migration could take about four weeks before you feel comfortable. All that is needed from you is a firm resolve to migrate for your own freedom, and the energy to take the first step towards this samadhi.

**Pack** your bags well. This journey of seven steps is full of adventure and excitement. You need the following essential cds which you could google-search and download from the web, or request from someone on a helpful linux mailing list near you. These cds are: **GnuWinII** that contains free and freedom-based software for windows; **Knoppix** which is a gnuLinux distribution that boots off your cd without installing anything on your hard disk, and comes loaded with thousands of free software; **RedHat 8** or higher cds, a mainstream gnuLinux distribution that contains over 8,000 free software and still counting. You could also choose another gnuLinux distribution instead of RedHat, such as Debian, Slackware, or from about 300 others. In case you like Knoppix, you can even install it on your hard disk. Instructions can be found on the knoppix website. Beyond these essential cds, I consider it mandatory that you have atleast a couple of good self-starter books and references on gnuLinux. Fortunately, in India these are sold at subsidised prices, so for about Rs 240 (US\$5) you could pick up the Peter Norton Complete Guide to Linux. I also recommend the Craig Hunt Linux Library series, the book titled 'Linux System Administration' by Vicki Stanfield and Roderick Smith, for about Rs 350.

**Think** of these books, purchased for a mere Rs 590, as life-savers. The handy reference they provide when you are really stuck, or when you need to figure out why something happens the way it happens in GnuLinux, is invaluable. It is also a good idea to get in touch with friends and colleagues who are existing gnuLinux users and willing to help. The moral support and the knowledge that someone else has already walked this path make yours much easier.

**Everybody** needs a guru. Even the guru you find will have several gurus he or she turns to in the community-driven world of GnuLinux. Once your PC is cruising along, you may find it worthwhile to join a Linux mailing list or two. You will be surprised at how prompt and helpful people are on mailing lists, and how willing to help you sort out and enrich your gnuLinux experience. If you work in an organization, you could suggest management to hire a full-time on-board Linux administrator, or to find one you can contract for services. By the way, you will find those CDs mentioned earlier, available for Rs 25 to Rs 50 each from members on linux mailing lists. The software is free-of-cost, this is what they charge for the time, patience, and energy they spend on their computers to toast CDs for you. Downloading a copy for yourself turns out more expensive and time-consuming than this, unless you have free bandwidth, and free time.

**Step 1** Boot your usual Windows. Pop in your **GnuWinII** cd, and discover loads of free-of-cost [muft], and freedom-based [mukt], software that run under Windows. Install the muft and mukt alternative to MSOffice, called OpenOffice.org. For the browser, install Mozilla. Choose whatever chat software you fancy from the choices. If you have any other proprietary windows software for which you find an alternative on GnuWinII, go ahead and install these too. Do take time out to read the stimulating articles provided on the cd. OpenOffice.org has a word-processor called Writer, a spreadsheet software called Calc, and a presentation software called Impress. Instead of Access, several alternative RDBMS packages are available, such as MySQL, PostGres, and more. Some lighter databases made by people can be moved to the spreadsheet Calc's built-in database features.

**Open**Office.org can open and save MSOffice file-formats. I recommend you open Word files, but save them in format called RTF, which stands for Rich Text Format. This is a cross-platform, open-anywhere file-format. Create all your documents in OpenOffice.org and only use MSOffice for opening a rare, troublesome document sent by some clueless colleague. Once opened in MSOffice, immediately save such documents into an earlier version of \*.doc, or else into \*.rtf, so you may use them under OpenOffice. Do pass a copy of OpenOffice.org to your colleagues. It's legal to do so.

**PDF** files can be created under OpenOffice.org. Just issue the 'Print' command from the File menu, and select the pop-up 'PDF Converter'. Do remember to 'Print to File.' It's that simple. That's how this document has been created. Once you gain familiarity with OpenOffice.org, with Mozilla the web-browser, and with other mukt software of your choice, you will find you have migrated away from MSOffice and Internet Explorer. More excitingly, new updates of these software are found on their websites far more frequently than you can imagine. Do check their sites on a weekly basis to stay abreast of developments, and every quarter you may find a newer version installed on your system.

**Step 2** Get ready to migrate from Windows, the OS. Place the **Knoppix CD** in your CD drive, reboot the machine, and ensure in your boot setup, that you have enabled the PC to boot from CD. This is done in the CMOS setup, which is accessed by pressing the Esc button on the top-right of your keyboard, or the 'del' button, immediately on restart. Check your motherboard details for more. In the on-screen menu, you will find an entry for 'boot sequence' and set it accordingly. When your PC boots with Knoppix, you will find the Penguin logo gracing the

top-left of your screen and a screenful of commands. At the bottom, you will find a prompt. Just press Enter and your machine will boot into Knoppix, your first tongue-tip taste of GnuLinux. In case you don't get to the graphics display of Knoppix, you probably don't have enough Video RAM. Just re-do the process, but at the boot prompt, read the Help files by pressing the stated F keys, and find out how to boot into a low-res (800 x 600) display.

**Use** Knoppix for all your work. You will find the familiar OpenOffice.org under Knoppix, so you can open your OpenOffice.org files created under Windows, and even legacy Word files, and continue working with them. By default, Knoppix boots entirely off the cd, and keeps your hard disks locked for read-only. You can see them on the desktop. Right-click and unlock the hard disks, or find out from the knoppix site's faq, on how to unlock the hard disks. It's quite simple. You can then save the files you are creating under Knoppix using OpenOffice.org, to your existing Windows hard disk. Ain't that cool!

**Modem** or office LAN? Read the reference books on how to configure Knoppix to access the internet. Use the familiar Mozilla to surf the net, even send and receive emails. Mozilla was Netscape Navigator in an earlier incarnation and has come back quite highly-evolved. Speaking of which, find the alternative to MS Outlook, called Evolution. Here you will find a highly-sophisticated email-client, a calendar and appointment-scheduler, a contacts database, and more, all rolled into one. Enjoy. IN the 'Internet' section of the Knoppix menu, you will find several alternative chat software that log into MSN and Yahoo and AOL simultaneously.

**MP3** and CD music never sounded better. The software decoders under GnuLinux are much better engineered according to some experts. Try them using XMMS, the muft & mukt WinAmp-like software, found under the 'Sound and Video' group under The Knoppix menu. In fact, you may already be listening to some free and 'open' music shipped with every Knoppix CD. Solitaire looks even better when played in the GnuLinux version, under the 'Games' section. Explore Knoppix to find out how many software packages it offers you. Muft and Mukt.

**Burn** CDs using the delightful K3B cd-burning software. This outclasses Nero in looks and features. It burns DVD discs too. Rejoice. You can rip audio cds and create MP3 if you wish.

**Travel** with a Knoppix CD wherever you go. Cybercafe, friend's home, client's office, seminars, branch office, school, or college. When you want to work on computers, just use your Knoppix and save yourself from the viruses, crashes, and other problems that afflict other people's PCs. Fellow PC users will be happy to give you access to their machine, since you don't invade their digital privacy or compromise their machines inadvertently. Carry your data, such as documents, presentations, and more, on a separate multi-session CD. For instance, copy your Impress slide presentation to the local hard disk, and then boot with Knoppix and run your slide-show. Be generous and give copies of Knoppix and GnuWinII to whoever requests for one. And this document.

**Step 3** Install GnuLinux under the Start menu of Windows. Get hold of MonkeyLinux, or DragonLinux. Either of these install under Windows like a regular software. Run them, and they give you the complete GnuLinux experience under Windows. However, as of this writing, these projects seem to be at then end of their lifespan. Knoppix provides you with the GnuLinux experience. You could refer to the Knoppix website on how to install Knoppix on your hard disk but as a dual-boot. You could also easily skip Step 3, and go straight to Step 4.

**Step 4** Take the Blue Screen of Death, you wake up in your cubicle and stare at the crash of your Windows machine on your desk. Take the Red Pill of RedHat, and I show you how deep the rabbit-hole goes.

Time to install both GnuLinux and Windows on your PC, making it dual-boot. Actually, it does not boot into both simultaneously, it asks you to choose either one at the boot prompt. It's about choice. To set up your machine, start by backing up all your data.

**Dual-Boot** by partitioning your hard disk. Download and use any of the several free partition software available from [www.ranish.com/part/](http://www.ranish.com/part/). The website also has excellent links to tutorials, techprimers, and other relevant information on partitioning and file-systems. QTParted is another great and free software, from [qtparted.sourceforge.net](http://qtparted.sourceforge.net). It claims to succeed where the popular and commercial PartitionMagic fails. I'd recommend keep about 5 to 10 GB for GnuLinux, and make a separate partition equal to twice your system's RAM, for something called the 'swap' partition. That's it. Once your partitions are made, just pop-in the RedHat 8 installer CD 1, and boot your PC. A helpful, friendly interface walks you through all the steps and smoothly installs RedHat8 on your hard disk. It even installs the boot-prompt that asks you to choose between Windows and GnuLinux at boot. This software could be either LILO or GRUB. I recommend GRUB. Read the reference books for more details, or in case of any hiccups. Once the installation starts, it usually takes about an hour to install the more than 8,000 software packages on your PC. What a high!

**Do** exciting things with your RedHat 8 such as use OpenOffice.org, browse with Mozilla, e-mail with Evolution, chat with GAIM or the other choices, play music with XMMS, watch videos with Mplayer, access your digital camera with ImageMagick or GIMP, backup your Nokia cellphone addresses with Kandy, your Palm Pilot with Jpilot, view PDFs with XPDF, design websites with Qanta+ or BlueFish, and program with dozens of developer tools. Applications for every conceivable task can be found under GnuLinux. Look for useful or exotic applications at [sourceforge.net](http://sourceforge.net), [freshmeat.net](http://freshmeat.net), and [savannah.org](http://savannah.org).

**Step 5** Live transparently in a world of Windows and GnuLinux across a network and on a dual-boot PC. GnuLinux seamlessly integrates with windows, macs, unix, handhelds, cellphones, digital cameras, printers, all types of internet access. None of them will know they just shook hands with a GnuLinux machine in a Windows world out there.

**Network Neighbourhood** under Windows needs you! Configure Samba in five minutes, so your GnuLinux machine can be accessed by all Windows users under Network Neighbourhood. They'll never know you use GnuLinux.

**Print** to Deskjets, laser printers, and more, shared on any Windows machine, from your PC. Use the helpful Printer Configuration wizard of RedHat 8.

**Access** your Windows C, D, or whatever drives directly under GnuLinux, so you don't have to boot out of GnuLinux and into Windows. Use the **mount** command. Type **man mount**, on a shell prompt to find out more.

**Outlook** emails and address book entries can be imported into Evolution from your windows partition, once you've accessed it using the **mount** command. Open Evolution, and choose **'import'** from the File menu.

**Step 6** Some applications won't have an alternative just yet on your GnuLinux. Some need to run on DOS or Windows for legacy reasons. Here's what you can do: Keep the Windows dual-boot with these applications installed, but remove all other disused or unneeded apps. In your place of work, you could also reduce the Windows machines to only those that require these applications. If you need some apps not on a daily-basis, you could use these at a cybercafe or bureau and pay a nominal charge. Or use them at your place of work on specially designated machines. Or borrow a friend or colleagues' PC if it's a one-off task.

**Must Have** that application? But do not want Windows under any circumstances? Try running that application under WINE, a lightweight Windows Emulator that is mukt and muft, and ships with mainstream GnuLinux distributions. Some applications like Photoshop are known to work with CrossOver, which is a commercial software that emulates Windows on top of GnuLinux.

**Recreate** that application from scratch to run natively under GnuLinux. Most likely, somebody is already doing this for your out there. Check [sourceforge.net](http://sourceforge.net), [freshmeat.net](http://freshmeat.net), [savannah.org](http://savannah.org). So its just a matter of time. Sit back and wait. If it's a custom-application, pick an existing application that is similar and comes close to the features you want from these websites. Then just hire a developer or a software firm to develop it for you, preferably under the GPL or LGPL. Check out [gnu.org](http://gnu.org) for more information on this Generic Public License (gpl).

**Step 7** Some day, you'll discover you hardly boot into the Windows lurking on your dual-boot machine. You don't need Windows at all, or tend to use it elsewhere. Congratulations. You have migrated. So follow the Seventh Step To Your Software Samadhi: Reformat the windows partition. Then, go to your friends, share your experience with them, invite them to see your machine, and share your CDs with them. Discover how GnuLinux goes beyond mere computing, by visiting [creativecommons.org](http://creativecommons.org), [magnatune.com](http://magnatune.com), and soon you'll discover an alternative world of muft and mukt books, e-books, music, movies, and more. That's when you may just realize that you have to be the change you want to see in the world.

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