Deciding if Linux is Right for You

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Revision History

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This HOWTO to is meant for you if you are considering the Linux operating system, or wondering whether Linux has what you want in comparison to what you are currently using.

Disclaimer: I do not in anyway guarantee anything regarding this HOWTO. Whatever you do as a result of reading this HOWTO is at your own risk and most of the opinions provided are my own and may not agree with your ideas.You are free to choose whatever you like. I do not want to endorse any particular software over another.

If you have any doubts specifically pertaining to this HOWTO, you may contact me, Rahul <rahulsundaram AT yahoo.co.in>.

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1. About this document

This HOWTO has been written with the goal of making Linux comfortable to users accustomed to other operating systems like DOS or Windows. I have only tried to give you an overview. Don't use this as a HOWTO for learning Linux. I have tried to explain the Linux system relative to what you probably know in DOS and Windows. I have also tried to teach those features of Linux that are new as well as interesting.

1.1. New versions of this HOWTO

Newer versions of this HOWTO as soon as they are written are available from the Linux Document Project (LDP). Please use this link to make sure that you are reading the latest version of this HOWTO.

1.2. Feedback and corrections

This is the first public release version of this document and I may have made some mistakes or left some things out. I would like to keep updating this document periodically based on user feedback and suggestions. If you have any ideas that you feel would improve this document in any way then please email Rahul at <rahulsundaram AT yahoo.co.in>.

2. Introduction to Linux

The Linux operating system is basically a variant of the UNIX operating system, and Linux has probably all that UNIX offers and more. It is a multi−user, multitasking, network operating system which also has a user friendly GUI (Graphical User Interface). Linux is similar to Windows in many features but it has many unique aspects too, which I will cover shortly.

Linux is licensed under the GPL (General Public license) from the GNU organisation, under which the kernel is provided with the source code, and is available for free. This is called Open Source software. As a result, Linux is considered to be more secure and stable than closed source or proprietary systems like Windows because anyone can analyse the source code written in the C language and find bugs or add new features. One important point that should be noted is that even though the source is free, anyone is allowed to sell it for profit. This is what helps Linux in business areas.

Related Documents

- Linux FAQ
- UNIX and Internet Fundamentals

2.1. History of Linux development

Unlike many proprietary operating systems, like Windows, which are developed by a single company, Linux is developed by programmers all over the world through the Internet. Technically Linux means the core of the operating system that is called the kernel. This is available for free along with the source code written in C under the GPL (General Public License).

The kernel is capable of managing all the internal tasks such as allocating memory and taking care of devices attached to your computer like your keyboard, mouse and printer. It would not be possible to use the kernel independently without the co−ordination of various other tools like the shell, which provides the interface for the user and other utilities that you may use frequently. These software tools are also usually provided for free like the kernel with Linux.

2.2. Is Linux Right for you

It depends on who you are and what you would like to do. I have to admit that Linux is not an all−purpose operating system and it would probably be more suited for some people and not−so−pleasing for others. If you are a person using your computer for some entertainment at home and are satisfied with your Windows system there are no compelling reasons for switching over to Linux, but you do have a choice now. There are several reasons to consider Linux. If you are student, like me, then you can use Linux at home and even in college to understand the commands and even the internal workings of UNIX systems. In case you want to see how Linux differs from your present DOS/Windows system I have provided a comparison below.

2.3. Acquiring the software

If you have decided to install Linux you have a lot of choices on how to do it. Please decide on how to proceed before actually trying it out. For new users, buying a packaged CD is highly recommended

2.3.1. Build your own Linux system

This one is a tough thing to do but if you are the adventurous type you may wish to try building your own Linux system. If you have no prior experience with UNIX systems, then this option is certainly not recommended. Your best bet would be Linux From Scratch (LFS), available from Linux From Scratch.

2.3.2. Download a distribution of Linux for free

I don't consider this to be a feasible option unless you have a very fast connection. You may need to download the ISO images, which amount to a gigabyte of files or even more. If you would like to try out Linux then you may wish to download and try distributions that fit into a floppy or are really small.

2.3.3. Get a paid version from a vendor

This one would be your choice if you are new to Linux and don't know someone who can install Linux for you. You get a lot of tools, manuals, service and support.

2.3.4. Get help from a friend of yours to install his copy on your machine (yes, its legal)

Many new users do this. You can just try using the stuff without getting bogged down with the dirty information about installation and all its hassles. Modern installations like Mandrake and SuSe are as simple as Windows, but it is always useful to have a Linux Guru by your side. You may need them at some point.

2.4. Distributions

When people use the name Linux they are probably referring to a particular distribution of Linux. There are several software packages provided for Linux over the Internet but selecting and downloading one is a complicated task not necessarily manageable for new users who want to try out Linux. This is exactly where a distribution kicks in.

A distribution is a set of software packages that are tested and provided on CD by a company for a small fee just like Windows. The advantages of using distributions are the support and manuals, as well as the fact that Linux can be specialised for use in a particular area. For example, if you would like using Linux for embedded systems a distribution may offer just the right amount of required software, leaving out optional things like the graphical user interface. So you get what you want instead of a general package for all users.

So again we are left with a huge choice of distributions (there were some 200 distributions listed recently but many of them are for very specialised purposes). The mainstream distributions, which are seemingly popular, are RedHat, SuSE, Caldera and Debian. This may be dependent on your locality. Check out your favourite computer stores nearby for more information. Among these distributions RedHat seems to be most widespread.

Caldera is probably more suited for those who are already using Windows. SuSE is a German based distribution known for its large number of bundled packages and support. Debian is unique because its not owned by a company and it's a non−profit volunteer−based distribution developed solely by users.

There are many others like the Mandrake distribution that thrive to provide more user friendliness. Mandrake

was originally based on RedHat. Mklinux provides a very small distribution, which can be used to try out Linux initially. There are also several websites like LinuxLinks.com, which provide more current information.

Related Documents

CD−Distributions−EN−HOWTO

2.5. Application,Tools and Utilities

File Browser − Windows Explorer

KDE has an integrated file manager called Konqueror, which also doubles as an Internet browser. Most of the popular formats such as text files and and images have in−built support and open within Konqueror itself. Several of the features are similar to Windows Explorer so you wouldn't be left out.

Gnome has a simple yet powerful file manager called GNU Midnight Commander (GMC). Newer distributions of Linux offer an alternative called Nautilus which has a very impressive interface. It seems to have even replaced the traditional Control Center bundled with Gnome.

Control Panel

Windows has a central resource for configuring the Windows settings called the Control Panel, with several applets. Windows XP has organised this into related tasks similar to the Nautilus file manager in Linux. Both KDE and Gnome havesimilar Control Centers. Linuxconf is another administrative tool, which helps to do some tasks in an easy manner without relying on the command line for each and every thing.

Utilities

KDE and Gnome offer utilities similar to Notepad, Wordpad, Calculator, Clock, Character Map, Resource Monitor, and so on. I prefer using KWrite in comparison with Gedit. There are a number of other miscellaneous tools and choices available.

System Tools − Scandisk and Disk defragmenter

The Linux file system is designed so as to reduce fragmentation. You need not worry about your files getting fragmented due to this feature. There are some defragmenters but they are definitely not meant for casual use. When you do not shutdown the Linux system, Linux runs a program called fsck (file system check) which is similar to Scandisk. You may also need to run this manually if files get severely damaged. Look into the tool's man (manual) page for more information.

Developers

Software developers and programmers will be comfortable with Linux. KDeveloper and Glade are useful as graphical development environments with built−in help and other tools. Linux comes with compilers for every language you could ever imagine from ADA to C, C++ and Java. KDE has an IDE called KDEvelop, which offers an alternative to Windows IDEs. Gnome has a visual interface for jumpstarting graphical applications. Klyx from Borland is a multi−platform tool similar to Visual Basic which runs on both Linux and Windows.

2.6. Additional Resources

- www.linux.org − A place to get yourself familiar with the operating system.
- www.linux.com − The Linux equivalent to Microsoft.com.
- www.linuxlinks.com − Could be referred to as the only Linux portal.
- www.tldp.org − The Linux Documentation Project is the ultimate resource for all kinds of documentation, including this one.
- www.desktoplinux.com − Linux on the Desktop.
- www.linuxppc.com − Linux for the Apple Macintosh systems.
- www.slashdot.org − The ultimate geek news site for Linux and open source software lovers.
- www.sourceforge.net − This site hosts a lot of open source projects,most of them related to Linux.
- www.freshmeat.org − This is the one you want if you love to get your hands on the latest and the greatest in Linux.
- www.transgaming.com − Windows games that run on Linux.
- www.linuxgames.com − Linux games.
- www.happypenguin.org − More Linux games.
- www.gnu.org − The GNU is Not UNIX (GNU) organisation that continues to develop many of the important tools for Linux. Linux is distributed under the GPL (GNU Public License), so it can be called the external affairs team for Linux.
- www.google.com/linux − Google search engine for Linux.
- www.tldp.org/LDP/gs/gs.html − Linux Installation and Getting Started is a bit outdated but provides an excellent introduction and history.
- sunsite.dk/linux−newbie/lnag_benefits.html − Linux Newbie Administrators Guide is an up−to−date reference for New Linux Users.

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3. Comparison of Linux with MS−DOS, Windows 9x and NT

3.1. Linux Vs MS−DOS

DOS was the first operating system I learned to use. I remember a test by my tutor in which one had to create a hierarchical set of directories. This probably sounds trivial to anyone familiar with graphical user interfaces, but then the scenario was very different. It even looks ancient by today's standards. Windows 95 hadn't been released at that time, and Linux was unheard of in India. I liked DOS much better than Windows 3.1, which looked quite flimsy and unstable, not to mention that it was a big memory hog. DOS is quite different from Linux in many ways.

DOS does not provide any graphical user interface and you have to learn at least a dozen commands with its numerous options to do some basic tasks like copying a file or moving between the directories. Even a minor spelling mistake can result in a "Bad command or file name" error.

DOS does not support the concept of multi−users; each and every user has to customise the system according to his need every time he wants to work on it. It was also not a multitasking system. This meant that you could not check out the value of a calculation when typing a letter without closing that application first.

DOS also does not have any in built security features. This was acceptable as long as you did not want a networking system. There was other variants of MS−DOS, like PC−DOS from IBM and some others, which tried to add the missing features. Some of the deficiencies have been resolved using third party utilities but basic limitations like the arcane 640kb−memory limit and single−tasking were not acceptable to many.

Now in case you are wondering why anyone would care to use DOS, I will point out some advantages. Basically DOS has had very different goals from that of Linux. It was a very cheap system (as far as cost is concerned) and it was quite usable with its minimalist set of features. It was a simple system to work with. There weren't too many complications to worry about if you didn't want to develop anything on it. It was arguably the world's most popular operating system and it had a comfortable number of applications for common tasks.

3.1.1. Files and directories

The files in Linux can be very long, up−to 255 characters like Windows, and they do not always have extensions. The executable files are identified through an attribute rather than the extension. File extensions are less important to Linux than for DOS and Windows, since Linux usually identifies files by a unique identification code called the magic number that depends on the file type.

Directories are similar to that of DOS and follow a hierarchical structure. The path names are separated by forward slashes (/)in Linux whereas DOS and Windows uses back slashes (\). For example:

```
% cd /mnt/cdrom
```

A / denotes the root and .. stands for the parent directory, similar to DOS.

In bash shells, the ~ symbol maybe used to jump to the home directory quickly. For example:

```
% cd ~
```

3.1.2. Linux shell

Several of the DOS commands have Linux equivalents. The Linux shell is similar to the DOS command line but is far more powerful, and I found that it was also more workable with features like colour highlighting and friendlier navigation capabilities, depending on the particular shell you are using.

Most Linux distributions come with the Bash (Bourne Again SHell) as the default. There are several others, like the Korn shell and the C shell. They are usually similar. It's recommended that you learn to work with one shell completely before trying out the others. Things usually get complicated if you want to run shell scripts, which are similar to batch files (files with the .bat extension) under DOS.

3.1.3. Running DOS programs under Linux (DOS emulation)

There is a DOS emulator called dosemu www.dosemu.org for Linux that is capable of running DOS programs under the Linux operating system. This software is still under development; you may wish to try it out though. It is known to be fairly usable at least for some applications. If you are looking for Linux just to use DOS programs for free then try using FreeDOS www.freedos.org. That should be much better than Linux.

3.2. Linux vs. Windows 9x and NT

As I have said before Windows is more or less similar to Linux. When people are introduced to Linux they are at first intimidated by the system. It has different kinds of graphical interfaces and things don't always work as they are expected to. When users look at me in a puzzled manner I demonstrate in some easy ways how common tasks like changing the desktop wallpaper or playing a song is similar to Windows. The problem with this kind of approach is that the users complain very soon that Linux doesn't offer them much more than Windows does :−).

I agree with them to a certain extent on this. There are some limitations to what you can expect from an operating system. You just can't expect Linux to work like a 3D−shooter game or something. Of course, there are many differences in the shell, the choice of user interfaces and the philosophy and goals of the operating system. Linux is developed as a open system in which the source code of the core Linux system (kernel) is available for anyone for free but how this could affect the end user is difficult to explain initially.

The user interface is probably the first thing you notice when you begin to use the Linux system. Windows offers a single, monolithic user interface, which is more or less the same across all the versions. In contrast, Linux has two major desktop environments called KDE (www.kde.org) and Gnome (www.gnome.org). KDE has a built−in window manager, while Gnome is supported by many, such as Sawfish and Enlightenment.

The decision of choosing one among the desktop environments and windows managers is left to you. Some of them can run efficiently in a system with low amounts of memory and some of them are designed to look like a game console. KDE would be more similar to Windows, and Gnome with the Enlightenment window manager was fancy enough for me. Try out some of the popular ones before making the decision.

Let's take a look at Windows in more detail so that you can clearly make out the differences.

3.2.1. Versions of Windows

Windows has two major series, a desktop oriented series (Windows 9x) And a network oriented series (Windows NT).There are also other versions like Windows CE for embedded systems.

Windows 9x series

Before Windows 95 was released, all versions of Windows until version 3.1 were graphical platforms on top of DOS. This offered limited capability for multitasking and the Program Manager interface was cluttered with no distinct hierarchy. Windows 95 was a 32−bit operating system and a major improvement in user interface with its "Desktop" concept adapted from the Macintosh user interface. It also offered limited compatibility with previous versions of Windows and DOS. Stability was also improved Windows 98 and Windows ME offered some more features though nothing major was added. The more recent version called Windows XP is considerably more stable due to incorporating the Windows 2000 kernel, and is comparatively friendlier and easier due to an attractive interface.

Windows NT series

Windows NT is considerably stable but demands more resources. It supports the Intel architecture, and at one time the Digital alpha and MIPS processors, but I believe those have been dropped now. It managed to replace UNIX in small−scale networks due to the similarity to the popular Windows 95 interface. The latest incarnation called Windows 2000 provides a few more administrative utilities and services.

3.3. Additional resources

- FreeBSD vs. Linux vs. Windows gives a side−by−side comparison at http://people.freebsd.org/~murray/bsd_flier.html
- Information on the GNOME desktop project is available at http://www.gnome.org
- Information on the KDE desktop project is available at http://www.kde.org
- Linux Installation and Getting Started is a bit outdated, but provides an excellent operating system comparisons, at http://www.tldp.org/LDP/gs/gs.html
- LinuxWorld.com provides scenario comparisons of Windows and UNIX type systems at http://www.linuxworld.com/site−stories/2001/1018.tco.html

4. Similar Windows and Linux Applications

It would be of no use if the operating system was a good one but didn't have the necessary applications to perform your day−to−day activities, like sending an email to your friend or listening to songs on your computer. I have provided a list of common tasks and Linux applications for them along with their Windows counterparts.

4.1. Internet Applications

Accessing the Internet is as almost as simple as Windows. Both KDE and Gnome provide integrated dial−up managers similar to Windows. However, make sure that your modem is supported before trying to access the net through Linux.

Browser − Internet Explorer (IE)

In Windows, Internet Explorer is usually pre−packed with Windows. In Linux, you have many choices. You can use Konqueror, Mozilla, Netscape, Opera or Galeon. Mozilla is the better alternative to Netscape, and is bundled with almost all the distributions. Mozilla has made significant improvements in stability and to the user interface.

E−Mail Client − Outlook Express, Eudora

For those familiar with Outlook and Outlook Express, an email client that has a very similar interface and a good set of features called Evolution http://www.ximian.com/products/ximian_evolution is available for free. Linux also supports many traditional UNIX email clients like pine, mutt and elm. In addition there are a number of email clients designed for the graphical environments (KDE and Gnome). KDE has an integrated email client called Kmail. Gnome users can be comfortable with Balsa.

Instant Messengers−AOL, Yahoo! and MSN

Yahoo! and America Online (AOL) provide Linux and Windows versions of their instant messenger clients. I would very much recommend a multi−instant messenger client called Gaim that has an AOL interface and support for MSN as well as Yahoo! users. I have been using the Yahoo! messenger in college for about a year and I found the chat room feature and some other gimmicks to be missing, but overall it seems to be good enough for a development release (version 0.99).

Download Manager − GetRight

Mget, which is a non graphical utility, can automatically resume downloads when they are interrupted. Caitoo is a download manager similar to GetRight. A better alternative would be Prozilla http://www.prozilla.genesys.so, as it significantly improves the transfer speed by downloading the same file in four parts. It does not integrate with the browser but it is very much functional. If you are using a modern browser like Konqueror it takes care of resuming downloads by itself

Firewall − ZoneAlarm

Linux has long since come with built−in firewalls such as iptables and ipchains. The RedHat distributions usually have options for configuring the firewall even during the setup. If you need more software like this you can freely download them from the Internet.

FTP Clients and Telnet − Cuteftp, WsFTP

Linux supports FTP as well as Telnet from the command−line. A better option would be the Midnight Commander (mc) which is similar to the Norton editor. These are more intelligent than the versions supplied with Windows NT and 2000. Gftp, with a graphical interface is also available.

IRC Client − mIRC

IRC is a form of chatting that is popular with the geeks more than other instant messaging clients. Graphical front−ends are available in large numbers. These may be complicated to use at first but are very much capable of doing all that you want.

Newsgroup Reader − Outlook Express

I don't know how many people use these under Windows. Linux development and usage is very much dependent on the coordination of users over the Internet. Newsgroups form the basis for some of important tasks. There are many such newsgroup readers for Linux. Pan is a classical utility, very popular among UNIX and Linux users. A more modern alternative would be Mozilla Mail or Ximian Evolution.

4.2. Multimedia Applications and Games

Multimedia is a specialised segment where users are mostly Apple Macintosh fans, especially so with the release of OS X. Beos tried to position itself as a multimedia operating system based on the Intel platform, but has been acquired by Palm.

Music Player − Winamp

XMMS is a Winamp clone for Linux that has the same the look and feel as well as the functionality. It even supports the Winamp plugins. Both KDE and Gnome have a lot of other players available but I have being only using XMMS. There are no shortage of command line players either.

Movie Player − Windows Media Player

Gnome has a built−in player called GTV, and several others are available depending on the particular format of the movie that you want to play. Mplayer is used for viewing the Microsoft formats. With the release of crossover office from http://www.codeweavers.com. Even support for the QuickTime movie format has been added.

CD Ripper and CD Burner − Nero

Cdparanoia is a good CD ripper for Linux. It seems to be in the development stage yet though many people are using it on production systems. It is known be to stable and robust. Cdrecord provides command−line CD burning software for Linux. Problems with CD burning such as buffer under runs have been dealt with and it's now a fast and effective task.

Image Browser− Acdsee32

Gqview is an excellent image browser for Linux, built for the Gnome desktop, but nevertheless usable under KDE. There are other image viewers also, namely KView, Electric Eyes, etc.

Image Editor − Adobe Photoshop

Gimp is a powerful image−editing software, which comes for free, along with the source. It is considered as a professional tool but lacks CYMK capability, which is used by the publishing media.

Games

Quake 3,Unreal Tournament and Doom are some of the popular 3D shooter games available for Linux. The number of games available for Linux is usually way behind Windows. Several commercial solutions are available from vendors such as Transgaming's WineX http://www.transgaming.com which is capable of running Windows−based games on Linux.

If you like board games and puzzles better, you will definitely not be disappointed. On average, over 50 such games are bundled with Linux. I like Tuxracer, a simple 2D race game and Sokoban, a simple yet appealing strategical game, to make the time pass.

4.3. Miscellaneous applications.

Office Suites − Microsoft Office

StarOffice from Sun is the popular alternative. It has an integrated interface that can act as a virtual desktop and includes a word−processor, spreadsheet, presentation software, browser, as well as a e−mail client, rolled into a single application. One of the common complaints is that it is slow to load. This office suite has become a paid version starting from Staroffice 6.0. Sun now provides a open source (free) alternative called Openoffice (http://www.openoffice.org). If you just require a word processor for typing out letters and stuff you can try using Abiword (http://www.abiword.com).

Antivirus − Norton and Mcafee

Viruses are a much lesser threat to Linux. They are very few in number and they cannot affect the system files unless in a well configured system where you are not a root user (administrator). Linux is not immune to viruses but you shouldn't be worried about them as they don't possess a significant threat. I've never required an antivirus program, and it will probably remain that way for some time.

Maintenance Utility − Norton Utilities

Administrative things such as setting up user accounts and stuff is the only kind of maintenance required by Linux. Since Linux is designed to run in a server−unattended mode for several weeks it does not demand day−to−day attention like Windows. I am not aware of anything similar to Norton Utilities for the simple reason that it is not at all needed.

4.4. Additional resources

- RPM Find provides a large variety of Linux software in RPM format at http://www.rpmfind.net
- Sourceforge provides source code for upgrades and new Linux software projects at http://www.sourceforge.net

5. Frequently Asked Questions

- Is Linux harder to learn than Windows? / Is Linux user−friendly?

  Linux is a powerful and sophisticated operating system. If you just want to copy some files and watch movies (the latest versions are much better − KDE 3.01 and Gnome 2.0 as of this writing), then things would probably be at least as easy as Windows. Of course there are differences in the way files are displayed and some minor annoyances with the interface, and you have to be aware of that. However if you want to learn the internal details or improve the performance the system then the command line (terminal or shell) would be the only way out. People with some UNIX background would probably find everything similar. If you weren't that lucky then you would find the commands to be similar to DOS. The command line is far more powerful and is capable of achieving things you can't even dream up with a graphical interface. I would suggest that you stick with the graphical interface and try the command line later when you start feeling comfortable with the system. Dont let fear get into your way of exploring things. As a precautionary measure, backup critical files before changing them.
- My favourite software/hardware doesn't work in Linux. What do I do?

  Make sure there isn't a Linux version of your software. If it's a really famous application then there may be similar clones. Contact the software developer to ask whether something will be developed soon. If not, I am sorry, I can't help but just email me and I will try to let you know what I can find. If it's hardware, then try going to the hardware manufacturer's site to search for a Linux driver. Some manufacturers have started to support Linux. There may be unofficial versions too. Try using a search engine like http://www.google.com/linux for the latest drivers. If your hardware is very new there may not be anything available in Linux and you may need to wait for things to settle a bit before you start inquiring. Newer kernels usually support more devices. If your hardware isn't supported by the manufacturer or anybody else then there is probably not much that you can do other than bugging your manufacturer or writing your own device driver (though I wouldn't consider that an option for most of the users out there).
- Is Linux virus−free?

  No. Linux by itself is not immune to viruses, worms or Trojan horses but it uses a strict security system which reduces the effect of viruses unless you are running the system as a root user (which is never recommended). Linux viruses are very few, and in general you can be relatively sure that a virus won't attack your system. You don't need to use antivirus software. This may change in the near future when Linux becomes more popular, so you should be aware of the security and other related stuff anyway.
- Is Linux stable?

  Yes, but not crash proof. Linux machines are usually used more as servers than as desktop operating systems. It is known to be more stable than Windows. Instability is probably not much more than an irritation for desktop users, but can mean loss of productivity, money or even life for mission critical usage to others. Linux is often used for Web−servers or file−servers. The uptime (the amount of time after the last reboot) of these systems is usually in months or even years, and that by itself testifies the stability of Linux systems. It usually has fewer bugs than Windows. Even if an application crashes in Linux it probably won't bring the whole system down, unlike Windows.
- Is Linux secure?

  Yes. It has fewer security related bugs than Windows. For reasons similar to what's stated in the previous answer, we need to have a secure system for servers. Linux was designed with security in mind ever since development started, so you can be pretty sure of the security under Linux. However

you should be aware that no operating system is 100% bug free or foolproof. If you are a system administrator you need to keep track of the security related issues through administrator's magazines, websites and newsletters.

- I know that Linux is free. Why should I pay to for it?

  Linux is available for free on the Internet and in computer magazine CDs. It is also usually legal to borrow a Linux CD from your friend for installation, but you need to spend money to buy Linux distributions like RedHat or Caldera. This makes sense because you get a huge collection of software that is bundled and extensively tested by these companies before distributing in CDs or over the Internet. You also usually get printed manuals, service and support from these companies (not available for free). You choose what you want. If you are new to Linux without any friends around who has used used Linux,I would suggest getting a paid version.
- I am using my Linux system at home. Why can't I run the system as a root user?

  No. Don't ever do it. Even when you are the only person using the Linux system it is always better to create another normal user with restricted rights. This is because the root user is an all−powerful person and the chances of him/her damaging a critical file or doing anything similar accidentally is very high (believe me, guys!!). Any mischievious program like a virus or trojan horse would not have any access to files that you do not, which ensures that the effect of the program would be minimal if any. Morever a cracker who manages to access your system through a network or the Internet would not be able to play with critical files. Unless you are installing software or doing anything else that requires you to be a root user don't do it. Even then its better to use the su(super user) command to do the task instead of logging in as root user.
- How do I maintain my Linux system?

  You may have got used to running programs like Scandisk and performing disk defragmentation periodically with your Windows system. Linux native file systems (usually ext2/ext3) have been designed to reduce fragmentation. That means that you don't need to worry about the files getting fragmented in your Linux system. There are defragmentation utilities for Linux but they are not meant for casual usage unlike Disk defragmenter. Just like newer versions of Windows, which forces scandisk to run everytime the system is not shutdown properly, Linux uses a program called fsck (file system check) which you may or may not have the option to cancel during system startup (that depends on your Linux distribution). RedHat version 7.2 and above ask your confirmation before running fsck. You do not need to run any antivirus software at all. So the amount of time you spend for maintenance is significantly less.
- Why don't many Linux files have extensions?

  The simple answer is that they are not really needed. In Windows, file types are identified by their extensions (for example .exe for executables and .doc for Word Documents). In Linux file types are usually identified with a unique identity called the magic number. We may also use file extensions. In Linux executable files are identified by a special flag, which is set for each and every file. In the command line, the **ls** command usually displays these files by a different colour. Under KDE or gnome use the file properties to identify the file type.
- Why do we need both KDE and Gnome?

  We don't. They are just alternative graphical interfaces. You can use any one of them of your choice. A KDE application can be used in Gnome or vice versa, with just a few basic files installed. Gnome development started after KDE for historic reasons. They both offer many similar features and competition is good for the end user (you). You can choose to run either of them as you wish.
- I don't want to use Linux. How do I remove it?

Pretty easy. You have to perform two steps.

1. Boot up in DOS using a boot disk/Startup disk (not the MS−DOS prompt/Command line provided by Windows) and then remove the Linux partitions using fdisk.(they are indicated as NON−DOS partitions).Re−create new partitions to fill up the free space.
2. Run the **fdisk/mbr** command to remove the boot−up options.

You may also change the filesystem type or remove the partitions using Linux fdisk but this is probably the easiest way.

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6. Useful resources for New users

- Linux Distributions
    - http://www.redhat.com
    - http://www.mandrake−linux.com
    - http://www.suse.de
    - http://www.debian.org
    - http://www.caldera.com
    - http://www.distrowatch.com − a bird's eye view of almost all the Linux distributions.
- Linux Desktop Environments
    - http://www.kde.org
    - http://www.gnome.org

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