

# You as a human deserve to use FLOSS!

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# WELCOME

We proudly present you this first issue of **MOSS: Your Monthly FLOSS Magazine** - the online publication for Free Libre Open Source Software (FLOSS) by Maldives Open Source Society.

**MOSS: Your Monthly FLOSS Magazine** will be published on the 7th of every month, each issue can be downloaded for free on our website [www.moss.org.mv](http://www.moss.org.mv). Enjoy your time! We are looking forward to read your feedback. Thank you and happy reading!

# WHAT IS MOSS?

Maldives Open Source Society (MOSS) is a not for profit organization registered in the Republic of Maldives to support, advocate, oversee and promote the use, implementation and development of Free Libre Open Source Software (FLOSS) within the country. The name MOSS was coined after a long debate on finalizing a name for the organization.

MOSS is an initiative of the Maldives Linux User Group (MLUG) and had it's early history and projects run under MLUG's resources, although ironically, MLUG is now a member of MOSS and oversees it's operations and developments.

Thus the name of this magazine as **MOSS: Your Monthly FLOSS Magazine**, indicates this as the voice of MOSS. All articles are contributions of MOSS members and the spirit runs at heart. Our aim is to empower all people to freely connect, create and share in a digital world that is participatory, transparent, and sustainable. For more information on MOSS and it's activities visit [moss.org.mv](http://moss.org.mv)

# HOW TO CONTRIBUTE!

## = How to contribute =

Everyone and anyone is welcome to contribute to the MOSS Magazine. You can email articles to [magazine@moss.org.mv](mailto:magazine@moss.org.mv). Our editors will moderate the articles for the magazine and contact you if needed.

In addition to articles you can also submit news, comments, your FLOSS experiences, hardware/software reviews, questions, screenshots, photos or interesting links to the email address.

## = Article Submission Guidelines =

The only condition for contribution of articles is that they must be related to Free Libre Open Source Software (FLOSS).

## = Rules for articles =

1. You can use any software to write your articles, preferably OpenOffice.org
2. All images can be in JPG, PNG and SVG, images should be good in quality and full-size.
3. Articles for now must be in English, don't worry if your English is not too good, we will proof read it for you.
4. You can use a pen-name, your nickname or use your real name, whichever you are comfortable with, but each article must have a writer identity (Important for reader feedback!). If you want your email address publicised along with the identity, indicate it too.



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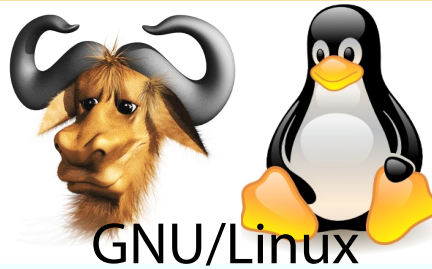
# You as a human deserve to use FLOSS!

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(Though there are differences in ideas, this article is inspired by various speeches of Richard M. Stallman).

As a member of Maldives Open Source Society (MOSS) the most effort-ful thing to come across on a day to day basis is to explain what is Free Libre Open Source Software (FLOSS). So in this article I would like to explain as briefly as possible what is FLOSS, what it stands for and why software should be free.

Before I head jump into the topic let me touch the topic of Software Source Code for people who have little to no technical knowledge. A coder or programmer is a person who write or rather make software that we use with a computer. This includes games, applications like word processors or web browsers and even Operating Systems, like Ubuntu. These programs are like commands that tell the computer what and how to do things based on user interactions. While the program is the end result that we see, all programs start as source codes. A programmer writes source code using a programming language like C or Java. This source code is then compiled to a lower-level called assembly language, than again this assembly code is assembled to a much lower-level called machine language. Machine language is the format that a computer can understand. The machine language is in 1's and 0's, which is the only two digits that the computer can understand. However, if we humans try to work in 1's and



0's it would take days and extraordinary amount of knowledge even to do minor modification, which today's even some of the advanced coder's do not have. So software source code is a format of the program that makes it easier for a programmer to learn, make changes and modification with less time. Also software source code can be converted to a program anytime with the use of proper tools.

Now coming back to the topic of FLOSS, let us ask the question, why should a software source code be free? As far as the coders are concerned the idea runs around the concept of sharing, more importantly learning and growing by sharing with each other. It can be easily understood by the concept of freedom of speech. We have the freedom to say what we want, respectfully, and correct anyone when necessary. We all will agree to the fact that sharing and helping is good! Why should we recreate the same idea/codes over and over again when we can share with each other, gather our knowledge and together build bigger better programs?

From a users point of view what FLOSS stand for is that any source code should respect the users freedom to run, copy, distribute, study, change and improve upon it. If I am to use the software, if and when needed I must have the means to see what it does with my information. For example, in the case of the Government, it holds critical information about the country, citizens and national security, hence it is logical to know how these data are treated, moved around or how secure it is. The bottom line question to ask here is, can you really trust your computer with close source software? At the same time it is not logical for the Government to develop the same programs for different agencies, while they can help each other by sharing source codes or using FLOSS. So basically FLOSS does not necessarily mean it is zero cost, but rather it mean software that is free as in freedom.

To be more specific we can look at it as stated in the GNU License, FLOSS should give the software user the following freedoms:

**Freedom 0:** The freedom to run the program, for any purpose.

**Freedom 1:** The freedom to study how the program works, and adapt it to your needs (Must have access to the source code for this).

**Freedom 2:** The freedom to redistribute copies so you can help your neighbor.

**Freedom 3:** The freedom to improve the program, and release your improvements to the public, so that the whole community benefits (Must have access to the source code for this).

So as stated before FLOSS does not mean that it comes at zero cost, but it gives the user of the software additional freedoms. So you can even buy FLOSS or get it for free, which ever case it is, you will always have the freedom to see what is inside, learn how it works, improve if needed, share it with others or even sell it. However, in making modification and selling, you are also asked to share the modified source code with others as well, so everyone will benefit by your modifications.

However, FLOSS does not mean all coders in the world should be volunteers and work for free. In the contrary coders and people who redistributes should charge as much as they can for FLOSS. In reality FLOSS is about the community, the benefit for all. Anyone who use or benefits of FLOSS should contribute either financially or any mean possible to the continued development of FLOSS. This can mean users donating for the coders, or hiring coders for extra features. This can also mean people who distribute the FLOSS giving back a part of the profit to the development of FLOSS. Many businesses or even individuals will not have sufficient

knowledge to install or setup sophisticated software. This bring an avenue to generate profit by giving installation and support services. In practice information technology is not a product, it is a service, so let us treat it like one. And this service is not limited to individuals, small to large firms can make a business case out of it. It is more sensible to pay the real people who are behind the coding and providing the support rather than one big

It is our human right to help and share with one another, openly and freely, even when it comes to using software.

entity, in helping to form a business monopoly. This also open doors to add new features, bug fixing and modifications that the users need, to which people can charge. Since the groundwork was free, it is only ethical to give back the modification so everyone else can also benefit from it. Software development is a continues process, and these kinds of opportunities will always exist as long as people use software. As far as I can see, future is made up for the use of software for a very long time to come.

Personally based on my experience I know this is rather a difficult concept for people to understand, specially us Maldivians. That is because I think we have unlearned the beauty of sharing and working together. From Male' to Atolls to Islands there are enough signs of our reluctance to sharing and helping one

another. I don't want to know whether this is how we have done things in the past or why, how or when we learned to stop sharing and helping. All I know is it is never too late to start living as a community, with a spirit to help and care for one another. All I know is we live in a world here today where we are exposed to computers each and everyday. If a friend ask me to give a certain program or teach how a program works, I believe it is

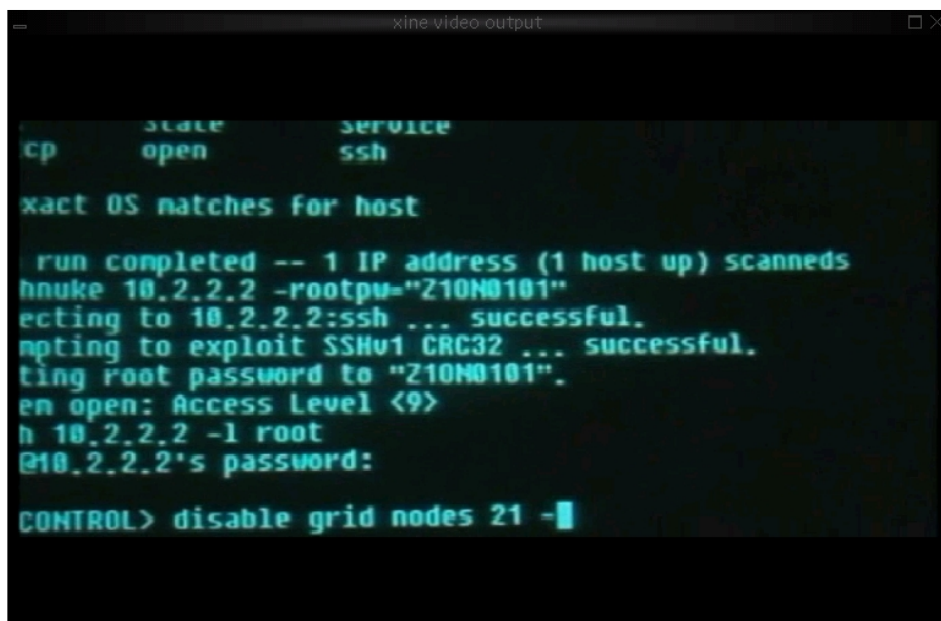
my duty to help. Maybe that is the reason why we have a sharing community of cracked software. But illegal sharing of cracked software does not make a good community. We all should aspire to live an ethical life with pride and dignity. As far as software is concerned the only solution that I see for this is FLOSS.

It is our human right to help and share with one another, openly and freely, even when it comes to using software. In today's world sharing software is a part of 'loving thy neighbor'. You as a human must have a right to learn how a software that you use works, and to teach anyone who is interested in learning. You as a person with freedom of choice must have the right to hire anyone you want to fix your software when it does not work. You as a human deserve to use FLOSS.



# The Story of Mr. Shell

Adolf



```
xine video output
state      service
tcp        open      ssh

exact OS matches for host

run completed -- 1 IP address (1 host up) scanned
hnuke 10.2.2.2 -rootpw="Z10M0101"
ecting to 10.2.2.2:ssh ... successful.
mpting to exploit SSHv1 CRC32 ... successful.
ting root password to "Z10M0101".
en open: Access Level <9>
h 10.2.2.2 -l root
@10.2.2.2's password:
CONTROL> disable grid nodes 21 -|
```

something in Mr. Sh. A deep desire to convert his friends to his kind. Like a vampire bite. So he started.

"You see my friends. There is no viruses here on my laptop, and this black and white screen you see is called a terminal. It gives you supernatural powers. That is why I am always playing with it. I love it". "Now what the heck is a terminal", Mr. N asked.

"A terminal is a program that lets you access a shell. Now a shell is a program that lets you to execute commands in various wonderful ways to create magic. To be precise a command is no different than any other program that you use. Firefox, games, notepad or whatever except the program only accept text as input and it prints text as output. Think of it as a ghost that you can't see but talk to. Not too long ago a computer would have been a very dull thing for the bunch of you".

There were no fancy graphics on the screen. There was no Graphical User Interface and all that was available was a Command Line interface through which you have to issue commands to perform specific tasks. There was no need for a mouse those days since everything was text-only. This method of instructing a computer to

Let's call him Mr. Sh. Sh was quite a character. If you look at him you will wonder what combination of genes this fellow Sh is. He was as pale as grey desert sky and dusk. He walked in short steps crouching as if at any moment he would run away on all fours. One may wonder if he is a vampire, but he was not. But we can genuinely suspect if he was an alien. He was so unlike a Human or animal. Nobody understood his mutterings and the gist behind his jokes. They called him a wizard. The title suits perfectly. He was a wizard. A "comp wiz".

One day Mr. Sh and his friends were at a coffee at Dolphin coffee shop. There were hot bubbling chicks all around. His friends were goggling and commenting about the asses and cleavages. Mr. Sh was lost into his laptop. He was ferociously typing at the keyboard so that an observer might conclude that he was

busy at work. No he too was goggling and getting stiff like the rest of his friends.

Mr. N was, who is one of the friends in company of Mr. Sh was very much frustrated that Mr. Sh never participated in their goggling and talks about chicks. He had several times tried to take Mr. Sh to see a psychiatrist to no avail. Mr. N thought of Mr. Sh as an incredibly intelligent person, but he never understood a thing about what he does or which world Mr. Sh lives in. Mr. N out of frustration said. "Sh. why are you so lost in that laptop. Are you in love with a virus? What is so lovable about a computer I don't understand? A computer has been mostly about trouble for me. It is a disease ridden thing. Viruses and bacteria infect it and destroy it. Slowly it dies away. Why are you interested?".

This question stirred up

perform a given task is referred to as "entering" a command: the system waits for the user to conclude the submitting of the text command by pressing the "Enter" key. A command-line interpreter then receives, analyses, and executes the requested command. Upon completion, the command usually returns output to the user in the form of text lines on the CLI. This output may be an answer if the command was a question, or otherwise a summary of the operation.

For example to find date and time. I enter the "date" command here like this:

```
Sh@Sh-laptop:~$ date
```

And it shows the following output on the screen. It's all text only yes. But very powerful.

```
Wed Dec 23 00:45:23 MVT 2009
```

What is a command-line interpreter you ask? It's a computer program that read lines of text entered by the user and interprets them in the context of the operating system. For example "cmd" is the default command-line-interpreter in Windows. Now I am not using cmd here. What I am using here is called Bash which stands for "Bourne-again shell". Which is the default shell used in most Linux/Unix systems. It will interpret and execute Unix commands. I will tell you some basic Unix commands now.

## First I will tell you the format of a Unix command.

To list the text files in the current directory I issue:

```
ls -l *.txt
```

ls: "ls" is the command for listing directory contents which accepts many options that will determine what result will be shown on the screen.

-l: "-l" is an option of the "ls" command. Command line options are single letters preceded by a single hyphen like "-l" which controls what the program will do. In this case "-l" tells the "ls" command to give a long list format with modification

```
"You see my friends. There is no viruses here on my laptop, and this black and white screen you see is called a terminal. It gives you supernatural powers. That is why I am always playing with it. I love it"
```

dates, file sizes and other information. If we didn't use "-l" the ls command would just have displayed a list of file names. We can gang together different options such as "-lt" which instructs ls command to show a long list format sorted by modification date, where newer files will be displayed on top of the result.

```
ls -lt *.txt
```

Then there is "option keywords", which is the same as options in functionality. The difference is that option keywords are preceded by two hyphens instead of one and that it is not limited to a single letter. It is just another way of specifying options.

For example:

```
ls --help
```

"--help" instructs the ls command to show a brief introduction to the ls command and it's usage.

The "\*.txt" is the argument of the ls command. Argument is the data which is fed into a command, on which the command would analyse and execute.

Think of "ls" as a bee. "-l" as the digestive system of it, and "\*.txt" as nectar consumed by the bee and the output on the screen as honey.

## 1.0 Today I will teach you the commands for:

- Listing files and directories
- Making Directories
- Changing to a different Directory
- The directories, and Pathnames
- More about home directories and pathnames

## 1.1 Listing files and directories

### ls (list)

When you first login, your current working directory is your home directory. Your home directory has the same name as your user name, for example: ee91ab, and it is

where your personal files and subdirectories are saved.

To find out what is in your home directory, type:

```
% ls
```

The ls command (lower-case L and lower-case S) lists the contents of your current working directory.

There may be no files visible in your home directory, in which case, the Unix prompt will be returned. Alternatively, there may already be some files inserted by the System Administrator when your account was created.

ls does not, in fact, cause all the files in your home directory to be listed, but only those ones whose name does not begin with a dot (.). Files beginning with a dot (.) are known as hidden files and usually contain important program configuration information. They are hidden because you should not change them unless you are very familiar with Unix!

To list all files in your home directory including those whose names begin with a dot, type:

```
% ls -a
```

As you can see, ls -a lists files that are normally hidden.

ls is an example of a command which can take options: -a is an example of an option. The options change the behaviour of the command. There are online manual pages that tell

you which options a particular command can take, and how each option modifies the behaviour of the command. (See later in this tutorial).

## 1.2 Making Directories

### mkdir (make directory)

We will now make a subdirectory in your home directory to hold the files you will be creating and using in the course of this tutorial. To make a subdirectory called unixstuff in your current working directory type

```
% mkdir unixstuff
```

To see the directory you have just created, type

```
% ls
```

## 1.3 Changing to a different directory

### cd (change directory)

The command cd directory means change the current working directory to 'directory'. The current working directory may be thought of as the directory you are in, i.e. your current position in the file-system tree.

To change to the directory you have just made, type:

```
% cd unixstuff
```

Type ls to see the contents (which should be empty).

### Exercise 1a

Make another directory inside the unixstuff directory called

backups.

## 1.4 The directories . (dot) and .. (dot dot)

Still in the unixstuff directory, type:

```
% ls -a
```

As you can see, in the unixstuff directory (and in all other directories), there are two special directories called (.) and (..).

### The current directory (.)

In Unix, (.) means the current directory, so typing:

```
% cd .
```

Note: there is a space between cd and the dot (.).

This command means, stay where you are (the unixstuff directory).

This may not seem very useful at first, but using (.) as the name of the current directory will save a lot of typing, as we shall see later in the tutorial.

### The parent directory (..)

(..) means the parent of the current directory, so typing

```
% cd ..
```

will take you one directory up the hierarchy (back to your home directory). Try it now.

Note: typing cd with no argument always returns you to your home directory. This is very useful if you are lost in the file system.

## 1.5 Pathnames

### **pwd (print working directory).**

Pathnames enable you to work out where you are in relation to the whole file-system. For example, to find out the absolute pathname of your home-directory, type `cd` to get back to your home-directory and then type:

```
% pwd
```

The full pathname will look something like this:

```
/home/its/ug1/ee51vn
```

which means that `ee51vn` (your home directory) is in the sub-directory `ug1` (the group directory), which in turn is located in the `its` sub-directory, which is in the home sub-directory, which is in the top-level root directory called `/`.

### **Exercise 1b**

Use the commands `cd`, `ls` and `pwd` to explore the file system.

(Remember, if you get lost, type `cd` by itself to return to your home-directory).

## 1.6 More about home directories and pathnames

Understanding pathnames

First type `cd` to get back to your home-directory, then type:

```
% ls unixstuff
```

to list the contents of your `unixstuff` directory.

Now type:

```
% ls backups
```

You will get a message like this:

```
backups: No such file or directory.
```

The reason is, `backups` is not in your current working directory. To use a command on a file (or directory) not in the current working directory (the directory you are currently in), you must either `cd` to the correct directory, or specify its full pathname. To list the contents of your `backups` directory, you must type:

```
% ls unixstuff/backups
```

```
~ (your home directory) .
```

Home directories can also be referred to by the tilde `~` character. It can be used to specify paths starting at your home directory. So typing:

```
% ls ~/unixstuff
```

will list the contents of your `unixstuff` directory, no matter where you currently are in the file system.

What do you think:

```
% ls ~
```

would list?

What do you think:

```
% ls ../..
```

would list?

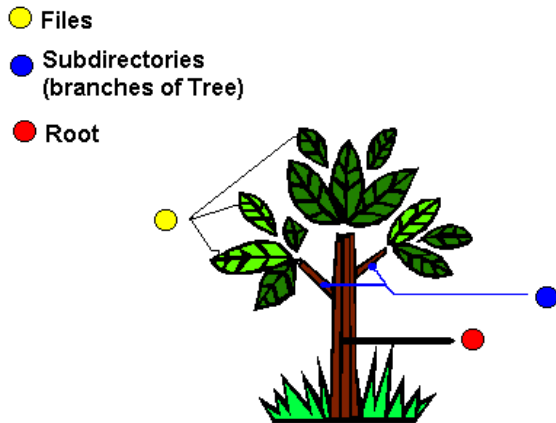
### Summary

Command	Meaning
<code>ls</code>	list files and directories
<code>ls -a</code>	list all files and directories
<code>mkdir</code>	make a directory
<code>cd directory</code>	change to named directory
<code>cd</code>	change to home-directory
<code>cd ~</code>	change to home-directory
<code>cd ..</code>	change to parent directory
<code>pwd</code>	display the path of the current directory



# The Linux Filesystem Standards

Cosmicflu



Linux File System is just like a tree

In previous times a major problem the different distributions and software packages of Linux faced was the unavailability of a standardized reference to a filesystem structure. This resulted in compatibility issues with different packages. Users faced problems integrating, compiling and running various software packages taken from different sources (FTP, Floppies etc) in different Linux distributions. Imagine a time where the location of critical files such as mount varied significantly with distributions!

This in part also effected the Linux related books being published; not many were being written since no writer could accommodate the various flavors of unrelated Linux distributions, where each distributor favored their own scheme for locating files in the filesystem structure. For example a book writer or even someone developing documentation for a custom

package will have to worry about specific locations of **passwd** file on one distribution verses another. It cannot be stressed the importance of knowing where to find important files and directories in a standard location in a world of ever changing and new Linux distributions popping up regularly.

Through this anarchy, emerged a dedicated group of people identifying themselves as the Linux File System Standard Group, and "FSSTND" (File System Standard) was born in late 1993. FSSTND is a documentation based on standardizing the locations of files and directories within Linux system and was among the first written standards for Linux. A draft was created after just six months, mainly drawing ideas from different filesystem layouts of the existing UNIX systems of the time such as BSD, SunOS and HP-UX.

Knowledge and common practices from available Linux distributions were taken into consideration as well thereby trying to achieve a universally accepted solution acknowledgeable by all. All this was being achieved through discussions on the Linux Mail-Net mailing list channel, keeping in line with the community development spirit; its development was as open as Linux itself.

Contributors to the document were in numbers and the document itself was being recognized as a viable source of filesystem standard by major Linux distributors.

Developers at the Debian distribution were first in adopting the FSSTND, and the rest soon followed. Since the original release of the standard, most distributors have adopted it in whole or in part. The ease of integration of add-on packages within different distributions became instantly apparent. Consensus was generally reached in non binding understandings that all the major Linux distributions and packages were supposed to implement the FSSTND in their systems but the reality is, even today there are only a small number of distributions that adopt it fully due to various reasons.

Starting from version 2.0 of the FSSTND in 1997, it was renamed to "FHS" (File

Hierarchy Standard) and continues to develop and subsequent releases, apart from refinements of the original specifications, addresses a few additional ideas such as the multi-architecture issues that the FSSTND failed to incorporate. FHS was labeled as a major step in developing a more comprehensive version of the standard covering the UNIX/UNIX-based distributions in general, and not only focusing on Linux.

## The Standard

As mentioned in the FHS documentation, the standard is put together under the assumption that the operating system making use of the FHS compliant filesystem supports the basic security features found in UNIX systems; i.e, files can be easily categorized into two distinctions, sharable vs. unsharable and variable vs. static.

*“Shareable” files are those that can be stored on one host and used on others. “Unshareable” files are those that are not shareable. For example, the files in user home directories are shareable whereas device lock files are not. “Static” files include binaries, libraries, documentation files and other files that do not change without system administrator intervention. “Variable” files are files that are not static.”*

An example of a FHS-compliant system as given in the document is below:

The FHS explains the content and purpose for each of the primary directories. Below is a summary of important directories and what FHS says about them:

	sharable	unsharable
<b>static</b>	/usr /opt	/etc /boot
<b>variable</b>	/var/mail /var/spool/news	/var/run /var/lock

/

The contents of the root filesystem must be adequate to boot, restore, recover, and/or repair the system.

To boot a system, enough must be present on the root partition to mount other filesystems (since /usr, /opt, and /var are designed such that they may be located on other partitions or filesystems). Applications must never create or require special files or subdirectories in the root directory.

The following directories, or symbolic links to directories, are required or optional depending on the implemented system, in /. Those shaded in **red+bold** are optional ones.

### **/bin**

Contains the commands (such as **cat**, **cp**, **kill**, **mount**, **ps**, **su**, etc) which can be used by users and system administrators when no other filesystems are mounted.

No subdirectories should exist in /bin.

### **/boot**

All files required for boot process including the kernel (although the kernel can be located directly in /).

### **/dev**

Location of special or device files (eg: /dev/hda, /dev/cdrom)

### **/etc**

Contains configuration files; must be static and cannot be executable binaries.

/etc/opt: Configuration files used by add-on packages installed under /opt.

**/etc/X11**, **/etc/sgml**, **/etc/xml**: optional places to store host specific configuration files.

### **/home**

Users home directory where user data files are stored.

Can be located differently on various hosts, therefore packages should not depend on this location.

### **/lib**

Contains those shared library images needed to boot the system and run the commands in the root filesystem, ie. by binaries in /bin and /sbin.

**/media**

Contains subdirectories which are used as mount points for removable media such as floppy disks, cdroms, usb drives etc.

**/mnt**

Directly for temporarily mounting a filesystem.

**/opt**

Is reserved space for the installation of add-on packages.  
Configuration files for these packages should be located in /etc/opt.

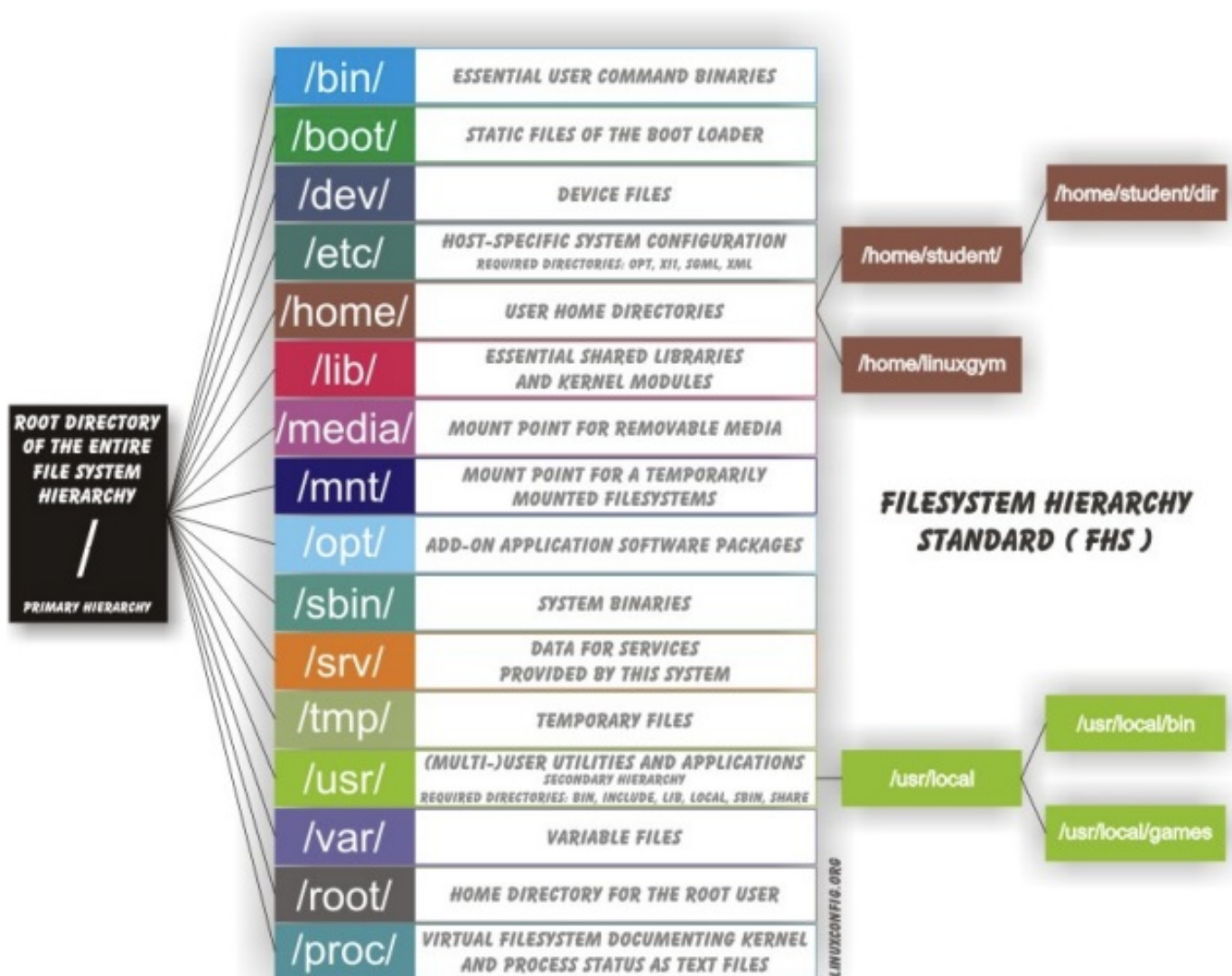
**/proc**

The proc filesystem is the de-facto standard Linux method for handling process and system information.

Virtual filesystem storing kernel and process status as text files.

**/root**

Home directory for root user and can be located differently on various hosts.



**/sbin**

Utilities used for system administration (and other root-only commands) are stored in /sbin, /usr/sbin, and /usr/local/sbin.

/sbin contains binaries essential for booting, restoring, recovering, and/or repairing the system in addition to the binaries in /bin.

Programs executed after /usr is known to be mounted are generally placed into /usr/sbin.

Locally-installed system administration programs should be placed into /usr/local/sbin.

**/srv**

Contains site specific data which is served by the system.

**/tmp**

A space made available for all packages that require keeping temporary files.

**/usr**

This is the second major section of the filesystem and is shareable, read-only data.

/usr/bin: Contains commands (mostly user commands, unlike in /bin) which are used by users and system administrators after other filesystems (other than minimal filesystems required for boot) are mounted.

/usr/include: Standard header files (include files) used by programs.

/usr/lib: Libraries for the binaries in /usr/bin and /usr/sbin.

/usr/sbin: Non-vital system binaries (unlike those in /sbin).

/usr/share: Read-only architecture independent data which will never be changed that will be used by packages.

**/usr/src:** Source code (eg: the kernel source with header files) may be placed in this directory.

**/usr/X11R7:** Reserved for X Window System

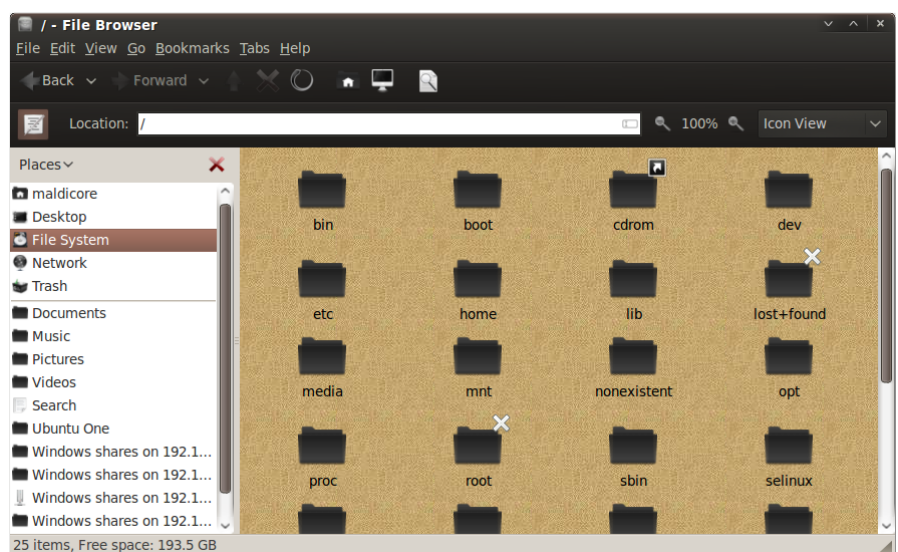
/usr/local: Used by the system administrator when installing software locally. Contains sub directories such as bin/, lib/, share/ etc. It needs to be safe from being overwritten when the system software is updated.

**/var**

Contains variable data files and are expected to change during normal operation of the system.

This includes spool directories and files, administrative and logging data, and transient and temporary files.

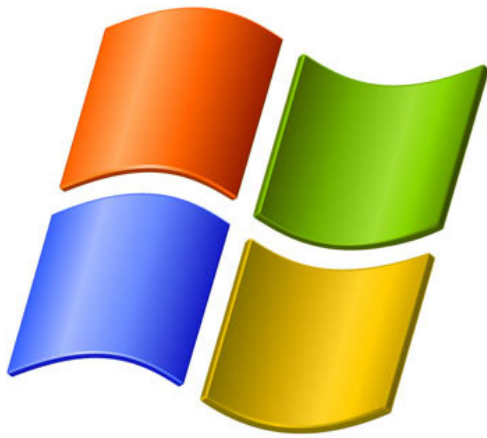
FHS has come a long way since the FSSTND days. It keeps on providing a good reference standard for filesystem architecture and has played a vital role in standardizing Linux. Grab a copy of the latest FHS documentation yourself from <http://www.pathname.com/fhs/>, and I can guarantee you that it should be an informative and interesting read and is essential, even if you do not have intentions in achieving guru status but simply are a user in the Linux world.





# Some Differences Between Windows & Linux

Ibrahim Sobah



when you hit the button to open it, the signal from the key must be carried to the processor yet handling other interrupts properly. Then the processor calculates the location of the file and the information is put to proper streams from the storage through the volatile memory. It's still a very short description of how this task get done by a computer and that's where the OS comes into picture.

**B**efore we start to talk about the differences it's important to know what's common between them. Well, both are operating systems (OS) . An OS is an interface between hardware and user which is responsible for the management and coordination of activities and sharing resources of a computer, that acts as a host for computing applications run on a machine. As a host, one of the purposes of an operating system is to handle the resource allocation and access protection of the hardware.

An OS is the most essential software that runs on a computer, in fact, without it computer is practically lifeless. The basic functions of an OS are listed below.

- management and control of hardware peripherals such as hardware and software interrupts
- management and allocation of memory
- file management
- input and output handling

Listed above are some of the main tasks handled by the OS. However an OS is more than that, of course. To make a long story short, OS starts to work when you hit the power button on and finishes it's work when you shut it down. When you do your work on your computer, behind the scene OS is really busy making things easy and manageable for you.

Say, to open a document, the OS should first show you the list of files and directories and

So, how does these tasks get accomplished in Windows and Linux? Here is a short not-so-technical comparison of the differences between them.

## 1. Security!

It's one of the most important things you and



your system will need. Windows seems to be very friendly to viruses, Trojans, spyware and other forms malicious software. Windows is renowned for getting infected easily and providing a safe environment for the propagation of viruses! Linux does not seem to get affected by viruses. The main reason is the code of Linux is open (open source). Experts and developers all around the world keeps on testing and seeking for bugs to be fixed. It leads to a rich and a strong OS strengthened by the idea and work of thousands

of people. Like them, even you are free to input your idea into it if you have any. Moreover Linux has much more security enhancements compared to consumer-level Windows operating systems: for example even the basic file permissions and separate user accounts can greatly mitigate the damage caused by malicious software. That is to say even if a Linux system is infected by a virus, the whole system is not compromised.

For more security conscious minds there is the Security Enhanced Linux distribution provided by U.S National Security Agency, which contains advanced security features, beyond anything found in any Microsoft OS.

## 2. Migration

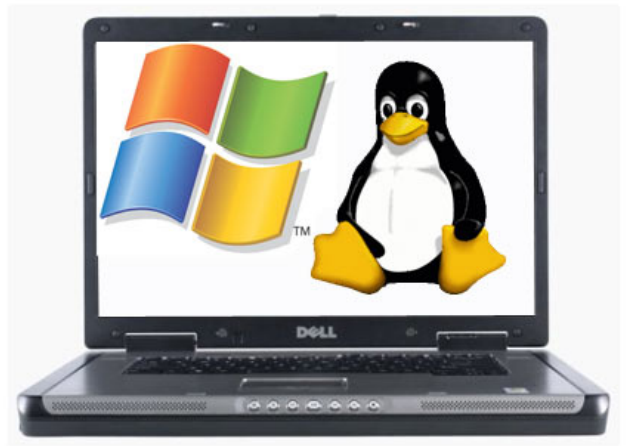
How are you going to transfer your files and personal settings if you use Windows XP now and want to, lets say, upgrade to Windows 7. Windows keeps your personal settings and folders located in different places. That is the reason for being it difficult to run a complete backup of files and settings. You would need a lot of time and manual work to effectively complete it. In Linux, if you make a backup of your "home" folder, you have got everything including your files and settings! It's simple and guaranteed!

## 3. Open for Customization

Ever wanted to boot your computer from your pen drive? Linux can fit into it and start your work right away without much hassle. An old unused computer can be converted to a secure web server or a files server without much memory or new hardware. There are many Linux Distros which can run on floppy drives, pen drive and even memory cards! Visit <http://www.pendrivelinux.com/> to find out more!

## 4. Open Source?

Windows is based on Microsoft's own marketing model which focuses more on appearance, look and being friendly to users; tasks at which they comparatively fail. Microsoft market-driven model of Windows seems to compromise the user security at the cost of forcing users into using their incomplete bug-ridden software. That is not to say all their software are bad. Microsoft Office is one example of a very usable software package. But the proprietary



development model where making money and deadlines compromise the security, usability and features means that most of their software is sub-par to open source software.

R&D works best in an open and free environment. Graphical User Interface (GUI) is something Microsoft laughably claims to have an upper hand. But it was Linux based OS's that included compositing window managers before any Microsoft Windows. Usability studies have shown that new computer users found Gnome user interface to be much more user-friendly than the disorderly and cluttered Windows GUI. There are rare circumstances where you need to reboot your computer even, unlike Windows OS's that need to be rebooted after even trivial tasks. Mostly in a Linux systems you reboot only when you upgrade or modify it's kernel.

Linux GUI is based on industry-standard network-transparent X-Windows specification. There a number of OS's like Ubuntu and Fedora with an appealing GUI. It isn't just the two of them, there are dozens out there. That's the result of being open source! When it's closed, you only get something that has been provided to you by the vendor! Do you want your windows closed in a free and open environment?

## 5. Free formats and your freedom

Microsoft Windows follows their own standards and formats for storing your valuable information. Once stored, those information can only be accessed by the tools that you have to buy from them. You are locked down to a certain

vendor, in this particular case its Microsoft. Microsoft Office formats, i.e office documents get saved under the extension of doc was desinged to be read by Microsoft products however their recent extensions such as docx released with MS Office 2007 is based on Open XML and ZIP compression. Surprisingly, under lot of pressure Microsoft seems to be slowly getting in to follow open standards! Sun's OpenOffice, KOffice or IBM's Lotus Symphony all follow free and open standards so that you will not be locked only to tools from a single vendor.

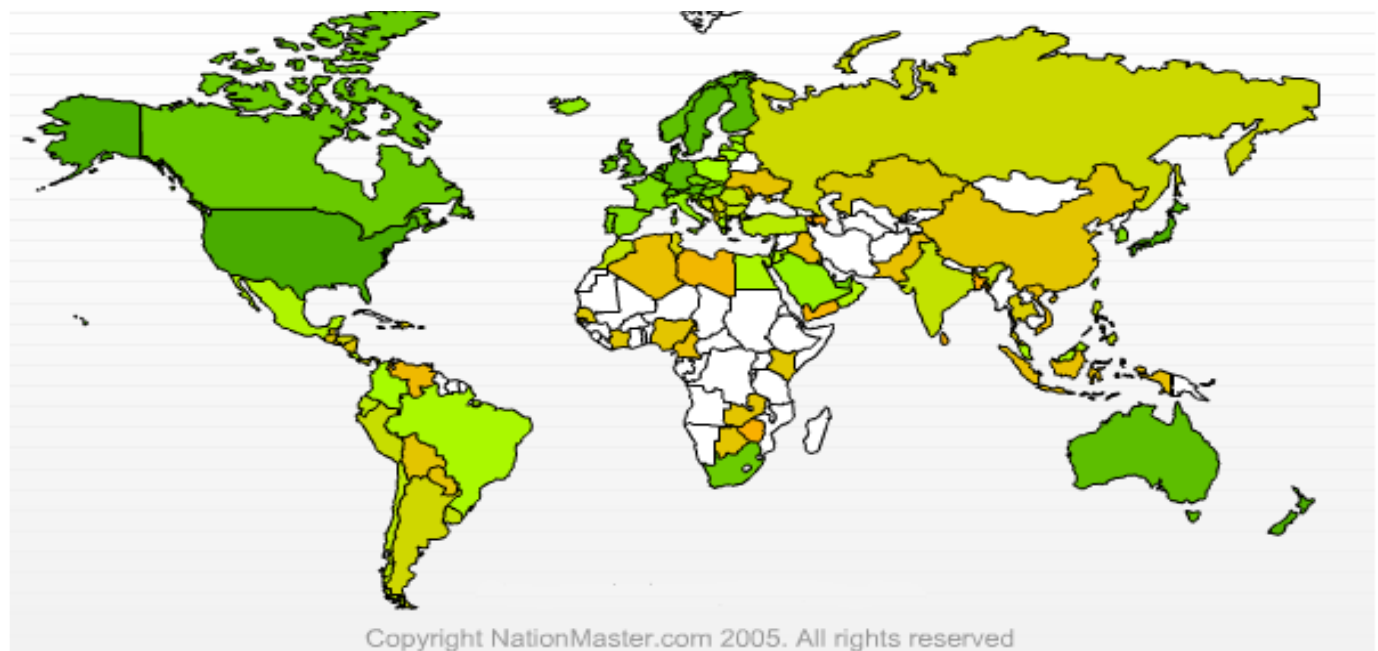
## 6. Free or not?

Money matters! Linux is 100% free but Windows is not. Companies can use the money they use to buy Windows for some other purposes like staff bonuses, buying more systems or other capital expenditure rather than spending them for licenses. Licensing issue would be a serious issue when the copyright laws come in effect here. Cracking and using pirated software isn't really a good practice in many ways. Using cracked software is stealing other people's property, to be more specific, intellectual properties. Will it be a crime if you steal someone's motorbike which costs USD3000? Definitely yes, it's a crime. What difference does it have when you download a cracked software worth of USD 3000 or even if its USD30?

Cracked software can harm you in many ways. Most of the times it contains Trojans or viruses. Sometimes, the software we used to crack other software can leech malicious code into your system.

## 7. Risk of license agreement violation

Just like you need a license to drive a bike, you need a license to use most software. Some are copyrighted (MS Office) yet other are copyleft (Linux). In Linux most software is free and you can enjoy the freedom without worrying about the license. Apart from the disadvantages that you get by violating the license, a smart lawyer can really pinpoint you as a software pirate if you use cracked software. It's serious! According to the most recent statistics released by nationmaster.com, software piracy rate is highest in Armenia with 93%\* and lowest in USA with 20%\*. Looking at our neighbors performance, Bangladesh ranks 2 with 92%\*, Sri Lanka ranks 6th with 90%\* India ranks 41 with 69%\* and how about us? The average weight is 60%\* which means that 6 in 10 is likely to be a software pirate around the globe! The graph below shows those figures for all the countries. The percentage values get to pure red when it is 100% and leads to pure green when its 0% with no software piracy. Note that the graph legend is limited between 100% and 20%.



Legend: **Top** 93 **Middle** 60 **Bottom** 20

(No data)

\* These figures are extracted from nationmaster.com.

\* URL:[http://www.nationmaster.com/graph/cr\\_i\\_sof\\_pir\\_rat-crime-software-piracy-rate](http://www.nationmaster.com/graph/cr_i_sof_pir_rat-crime-software-piracy-rate)



# My Perspective of Ubuntu 9.10

Adolf



and a lovely set of default wallpapers.

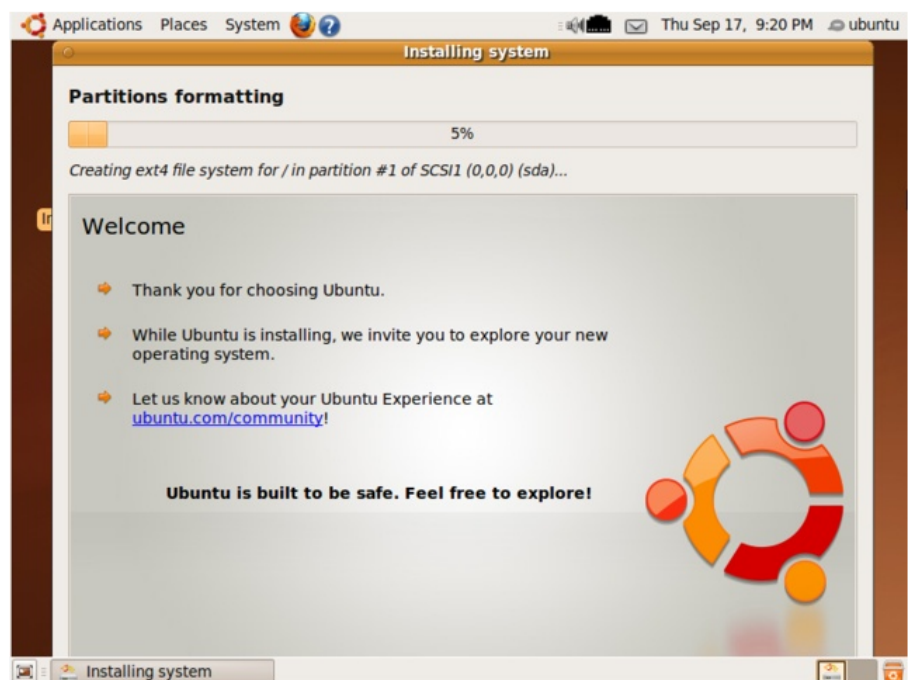
Ubuntu 9.10 replaces pidgin instant messaging client with Empathy which used Telepathy instant messaging framework. Look wise it retains the clean and simple look of pidgin. Feature wise it adds Voice/Video support as well as all the protocols supported by pidgin. Pidgin developers have been very conservative when it came to Voice/Video support. They have historically viewed pidgin as a text-only instant messaging client though recently Voice/Video support has been integrated to it as well.

This release integrates Ubuntu One Web service which lets you store online backups of your files and adds support for synchronizing contents from Evolution e-mail client, and

Ubuntu 9.10, codenamed Karmic Koala, was officially released on 29 October 2009. First the booting time seems to be faster than the previous release. But I will take an informative screen over the dull blinking Ubuntu logo any day. But for the vast majority of Ubuntu users that maybe an overwhelming amount of information. So another point of Ubuntu as a Distro for Human Beings.

changed so that text appears selectively on the right of the icon rather than below. There has to be something different in looks department that brings a unique quality to the distro. This release has great quality in icons, widgets, color scheme

The icons are great. The tango based icon set isn't as obtrusive as previous Human icons in 9.04. The icon set is more plain and suits well with the color scheme used in this release. The new dark brown and grayish color theme is easier on the eyes. Widget borders are less pronounced and the toolbar layout has been





notes from Tomboy note-taking application. Firefox bookmark sync is actively in development and is expected to be released soon as an update.

Palimpsest has replaced GParted as the default partition manager in 9.10, which is listed as "Disk Utility" under System/Administration menu. The layout of the devices and partitions are in a neat and easily understandable file-tree format in a left-hand panel and provides a more newbie friendly interface to modify parameters. Though it supports more file systems than GParted, it misses the option to resize partitions which maybe a good thing in some ways.

The network management interface is more usable as well as faster compared to the

previous release. Changing between networks takes much less time. The response time in connecting to remote machines, including Samba shares, is shorter.

For external devices a new "Safely remove Drive" option appears in addition to Unmount and Eject that existed before, the difference being that if you use Unmount the device will stay powered, but if you use Safely remove, it will turn off, resetting the peripheral port.

Ubuntu Software Center replaces "Add/Remove" application for Human users, which aims to retain the interfaces of similar commercial applications as well as to be more user friendly in adding and removing software. With 3 clicks you are able to install any software among the vast collection, provided by the Ubuntu repository databases.

## Pros:

- Ubuntu 9.10 is fast and responsive. Boot time is shorter than it used to be.
- A new fresh theme, with smarter icons, more wallpapers and better customization.
- Faster networking response, including Samba shares.
- Ubuntu 9.10 features a powerful and easy-to-use Software Center.

## Cons:

- Two boot splashes used, making the boot sequence appear cluttered and unprofessional. Ubuntu uses the Beta GRUB boot loader, which is contrary to its strategy and probably not responsible toward the end users.
- Many application crashed, including Firefox, which seg-faulted so frequently I had to install Google Chrome. This is the first time I have used Chrome, since they have just released the web browser for Linux, and I'm quite satisfied with it. GParted also crashed frequently especially when working with external drives.

## Conclusion:

There is not much progress when compared to Jaunty, except the Cosmetics.



# Linux Distributions

Adolf

You may have heard the word "distro" or "Linux distribution" every now and then if you are a regular follower of the MOSS mailing list. So what basically is a distro? A GNU/Linux distribution is nothing but a collection of software applications (database applications, media players, spreadsheets, word processors, games, webbrowsers, IM clients, network administration tools etc.) with a kernel making up a Unix-like Operating system (a Unix-like OS is one which behaves in a manner similar to a Unix System) this includes Linux, BSD, GNU/Hurd, Mac OSX etc. This article covers Distributions that uses the Linux kernel. All Linux distributions share the lone similarity that they all use the Linux kernel which is a very small part of the whole distribution. Individual distributions can bundle different tools and Interfaces from the vast pool of FLOSS software. This allows different distributions to be released to cater for different needs. One may bundle together software applications to make up a Firewall, or Include Network tools and release a distribution targeted towards Network Administrators, or release a collection of security-enhanced software packages to make up a Server Distribution and some Linux Distributions maybe optimised for size so that you can carry it in a USB flash drive. What is most popular is those distributions targeted towards end-users. Ubuntu is one distro targeted towards normal end-users. They include software packages that an end-user will need. A web browser, Spreadsheet, Word processor, instant messaging client, games and so on. These end-user distributions are generally tweaked to be more user-friendly so if you are generally ok with running a Windows PC at home, you will be much more satisfied in running Ubuntu or other end-user Linux Distribution.

## List of 20 Linux distributions for different needs.



### Tiny Core

[www.tinycorelinux.com](http://www.tinycorelinux.com)

Tiny Core Linux is a very small (10 MB) minimal Linux desktop. It is based on Linux 2.6 kernel, BusyBox, Tiny X, FLTK graphical user interface and JWM window manager, running entirely in memory. It is not a complete desktop, nor is all hardware completely supported; it represents only the core needed to boot into a very minimal X Window desktop, typically with wired Internet access. This minimal desktop can be extended by installing additional applications from online repositories.



[www.ubuntu.com](http://www.ubuntu.com)

Ubuntu is a complete desktop Linux operating system, freely available with both community and professional support. The Ubuntu community is built on the ideas enshrined in the Ubuntu Manifesto: that software should be available free of charge, that software tools should be usable by people in their local language and despite any disabilities, and that people should have the freedom to customise and alter their software in whatever way they see fit. "Ubuntu" is an ancient African word, meaning "humanity to others". The Ubuntu distribution brings the spirit of Ubuntu to the software world.



[fedoraproject.org](http://fedoraproject.org)

The Fedora Project is an openly-developed project designed by Red Hat, open for general participation, led by a meritocracy, following a set of project objectives. The goal of The Fedora Project is to work with the Linux community to build a complete, general purpose operating system exclusively from open source software. Development will be done in a public forum. The project will produce time-based releases of Fedora about 2-3 times a year, with a public release schedule. The Red Hat engineering team will continue to participate in building Fedora and will invite and encourage more outside participation than in past releases. By using this more open process, we hope to provide an operating system more in line with the ideals of free software and more appealing to the open source community.



### [www.linuxmint.com](http://www.linuxmint.com)

Linux Mint is an Ubuntu-based distribution whose goal is to provide a more complete out-of-the-box experience by including browser plugins, media codecs, support for DVD playback, Java and other components. It also adds a custom desktop and menus, several unique configuration tools, and a web-based package installation interface. Linux Mint is compatible with Ubuntu software repositories.



### [www.opensuse.org](http://www.opensuse.org)

The openSUSE project is a community program sponsored by Novell. Promoting the use of Linux everywhere, this program provides free, easy access to openSUSE, a complete Linux distribution. The openSUSE project has three main goals: make openSUSE the easiest Linux for anyone to obtain and the most widely used Linux distribution; leverage open source collaboration to make openSUSE the world's most usable Linux distribution and desktop environment for new and experienced Linux users; dramatically simplify and open the development and packaging processes to make openSUSE the platform of choice for Linux developers and software vendors.



### [www.mandriva.com](http://www.mandriva.com)

Mandriva Linux was launched in 1998 under the name of Mandrake Linux, with the goal of making Linux easier to use for everyone. At that time, Linux was already well-known as a powerful and stable operating system that demanded strong technical knowledge and extensive use of the command line; MandrakeSoft saw this as an opportunity to integrate the best graphical desktop environments and contribute its own graphical configuration utilities to quickly become famous for setting the standard in Linux ease of use. In February 2005, MandrakeSoft merged with Brazil's Conectiva to form Mandriva S.A., with headquarters in Paris, France. The company's flagship product, Mandriva Linux, offers all the power and stability of Linux to both individuals and professional users in an easy-to-use and pleasant environment.



### [www.debian.org](http://www.debian.org)

The Debian Project is an association of individuals who have made common cause to create a free operating system. This operating system is called Debian GNU/Linux, or simply Debian for short. Debian systems currently use the Linux kernel. Linux is a completely free piece of software started by Linus Torvalds and supported by thousands of programmers worldwide. Of course, the thing that people want is application software: programs to help them get what they want to do done, from editing documents to running a business to playing games to writing more software. Debian comes with over 20,000 packages (precompiled software that is bundled up in a nice format for easy installation on your machine) - all of it free. It's a bit like a tower. At the base is the kernel. On top of that are all the basic tools. Next is all the software that you run on the computer. At the top of the tower is Debian -- carefully organizing and fitting everything so it all works together.



### [www.sabayonlinux.org](http://www.sabayonlinux.org)

Sabayon Linux is a live DVD designed to transform a computer into a powerful Gentoo Linux system in less than 5 minutes. Gentoo Linux is a Linux distribution powered by a software install manager engine called "Portage". Besides functioning as a live DVD, Sabayon Linux can also be installed on a hard disk, acting effectively as an easy-to-use Gentoo installation disk. The live DVD includes a large range of desktop environments and open source software applications, such as KDE, GNOME, XFce, Fluxbox, KOffice, OpenOffice.org, FreeNX, amarok, Kaffeine, etc.



### [www.archlinux.org](http://www.archlinux.org)

Arch Linux is an independently developed, i686-optimised Linux distribution targeted at competent Linux users. It uses 'pacman', its home-grown package manager, to provide updates to the latest software applications with full dependency tracking. Operating on a rolling release system, Arch can be installed from a CD image or via an FTP server. The default install provides a solid base that enables users to create a custom installation. In addition, the Arch Build System (ABS) provides a way to easily build new packages, modify the configuration of stock packages, and share these packages with other users via the Arch Linux User Repository.



### [www.mepis.org](http://www.mepis.org)

MEPIS Linux is a Debian-based desktop Linux distribution designed for both personal and business purposes. It includes cutting-edge features such as a live, installation and recovery CD, automatic hardware configuration, NTFS partition resizing, ACPI power management, WiFi support, anti-aliased TrueType fonts, a personal firewall, KDE, and much more.



### [eee.gentoo.org](http://eee.gentoo.org)

Gentoo Linux is a versatile and fast, completely free Linux distribution geared towards developers and network professionals. Unlike other distros, Gentoo Linux has an advanced package management system called Portage. Portage is a true ports system in the tradition of BSD ports, but is Python-based and sports a number of advanced features including dependencies, fine-grained package management, "fake" (OpenBSD-style) installs, safe unmerging, system profiles, virtual packages, config file management, and more.



### Ultimate Edition

### [www.ultimateedition.info](http://www.ultimateedition.info)

Ultimate Edition, first released in December 2006, is a fork of Ubuntu. The goal of the project is to create a complete, seamlessly integrated, visually stimulating, and easy-to-install operating system. Single-button upgrade is one of several special characteristics of this distribution. Other main features include custom desktop and theme with 3D effects, support for a wide range of networking options, including WiFi and Bluetooth, and integration of many extra applications and package repositories.



### [www.slackware.com](http://www.slackware.com)

The Official Release of Slackware Linux by Patrick Volkerding is an advanced Linux operating system, designed with the twin goals of ease of use and stability as top priorities. Including the latest popular software while retaining a sense of tradition, providing simplicity and ease of use alongside flexibility and power, Slackware brings the best of all worlds to the table. Originally developed by Linus Torvalds in 1991, the UNIX-like Linux operating system now benefits from the contributions of millions of users and developers around the world. Slackware Linux provides new and experienced users alike with a fully-featured system, equipped to serve in any capacity from desktop workstation to machine-room server. Web, ftp, and email servers are ready to go out of the box, as are a wide selection of popular desktop environments. A full range of development tools, editors, and current libraries is included for users who wish to develop or compile additional software.



### Puppy

### [www.puppylinux.org](http://www.puppylinux.org)

Yes, Puppy Linux is yet another Linux distribution. What's different here is that Puppy is extraordinarily small, yet quite full featured. Puppy boots into a 64MB ramdisk, and that's it, the whole caboodle runs in RAM. Unlike live CD distributions that have to keep pulling stuff off the CD, Puppy in its entirety loads into RAM. This means that all applications start in the blink of an eye and respond to user input instantly. Puppy Linux has the ability to boot off a flash card or any USB memory device, CDROM, Zip disk or LS/120/240 Superdisk, floppy disks, internal hard drive. It can even use a multisession formatted CD-R/DVD-R to save everything back to the CD/DVD with no hard drive required at all!



### [www.centos.org](http://www.centos.org)

CentOS as a group is a community of open source contributors and users. Typical CentOS users are organisations and individuals that do not need strong commercial support in order to achieve successful operation. CentOS is 100% compatible rebuild of the Red Hat Enterprise Linux, in full compliance with Red Hat's redistribution requirements. CentOS is for people who need an enterprise class operating system stability without the cost of certification and support.





### [www.kubuntu.org](http://www.kubuntu.org)

Kubuntu is an Ubuntu-derived distribution. The Kubuntu CDs are made up of Ubuntu's base plus KDE. You can get exactly the same effect by installing Ubuntu and adding the KDE packages from the Ubuntu archives.



### [www.zenwalk.org](http://www.zenwalk.org)

Zenwalk Linux (formerly Minislack) is a Slackware-based GNU/Linux operating system with a goal of being slim and fast by using only one application per task and with focus on graphical desktop and multimedia usage. Zenwalk features the latest Linux technology along with a complete programming environment and libraries to provide an ideal platform for application programmers. Zenwalk's modular approach also provides a simple way to convert Zenwalk Linux into a finely-tuned modern server (e.g. LAMP, messaging, file sharing).



### [www.crunchbanglinux.org](http://www.crunchbanglinux.org)

CrunchBang Linux is an Ubuntu-based distribution featuring the light-weight Openbox window manager and GTK+ applications. The distribution has been built from a minimal Ubuntu system and customised to offer a good balance of speed and functionality. CrunchBang Linux is currently available as a live CD; however, the best performance is achieved by installing it to a hard disk.



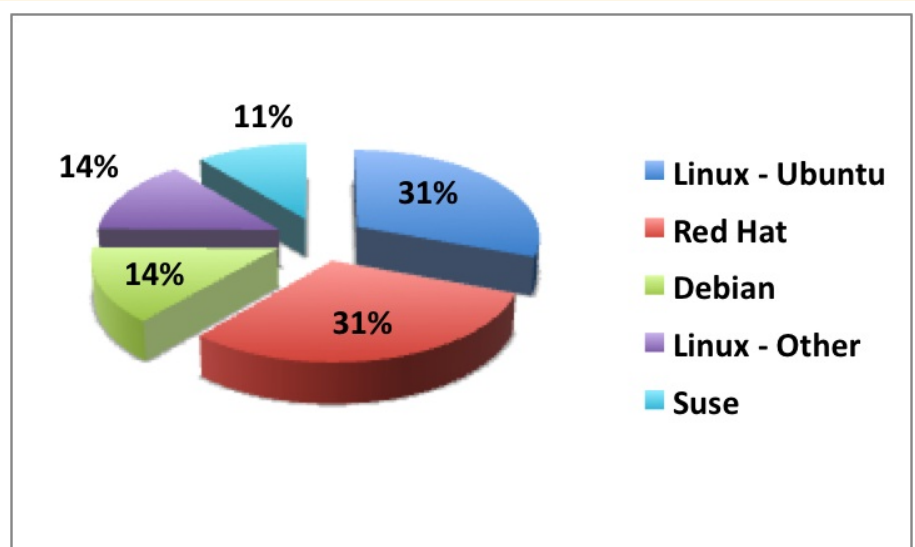
### [www.vectorlinux.com](http://www.vectorlinux.com)

Vector Linux is a small, fast, Intel based Linux operating system for PC style computers. The creators of Vector Linux had a single credo: keep it simple, keep it small and let the end user decide what their operating system is going to be. What has evolved from this concept is perhaps the best little Linux operating system available anywhere. For the casual computer user you have a lightening fast desktop with graphical programs to handle your daily activities from web surfing, sending and receiving email, chatting on ICQ or IRC to running an ftp server. The power user will be pleased because all the tools are there to compile their own programs, use the system as a server or perhaps the gateway for their home or office computer network. Administrators will be equally as pleased because the small size and memory requirements of the operating system can be deployed on older machines maybe long forgotten.



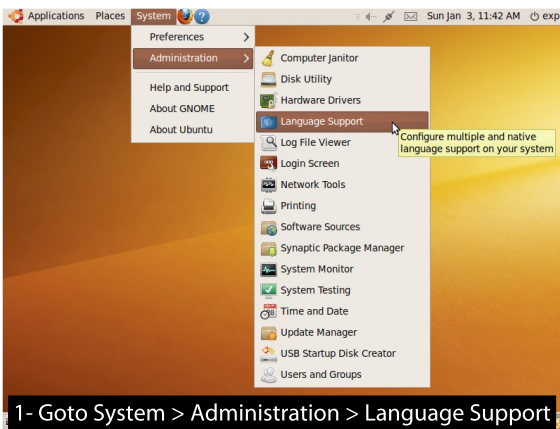
### [www.smoothwall.org](http://www.smoothwall.org)

SmoothWall is a family of Internet security products, designed to defend your users and your network from external attacks. SmoothWall Express is based on the Linux operating system. Linux is the ideal choice for security systems; it is well proven, secure, highly configurable and freely available as open source code. SmoothWall includes a hardened subset of the GNU/Linux operating system, so there is no separate OS to install. Designed for ease of use, SmoothWall is configured via a web-based GUI, and requires absolutely no knowledge of Linux to install or use.

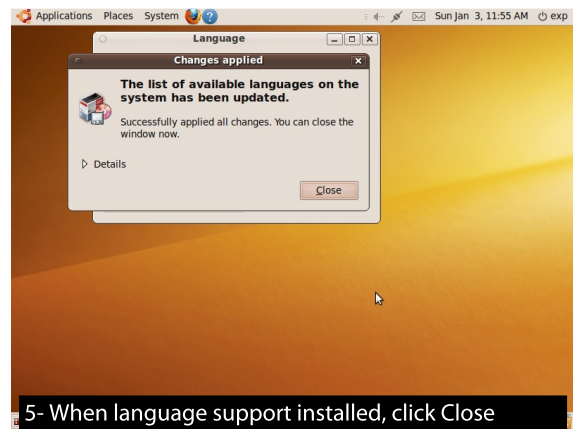


<http://blogs.alfresco.com/wp/ianh/2008/11/25/red-hat-and-ubuntu-continue-lead/>

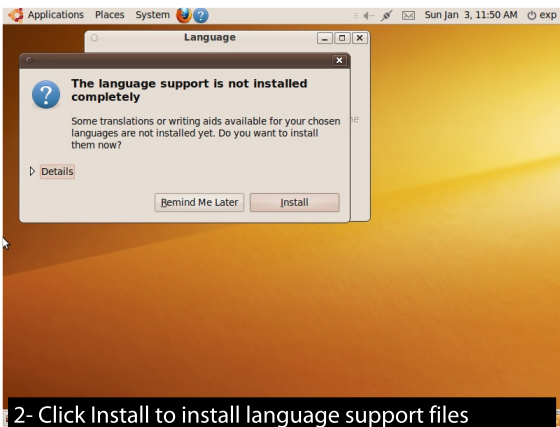
## Ubuntu 9.10: Localization to Dhivehi



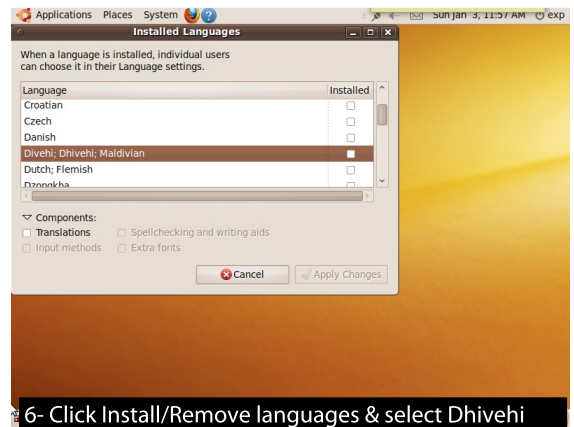
1- Goto System > Administration > Language Support



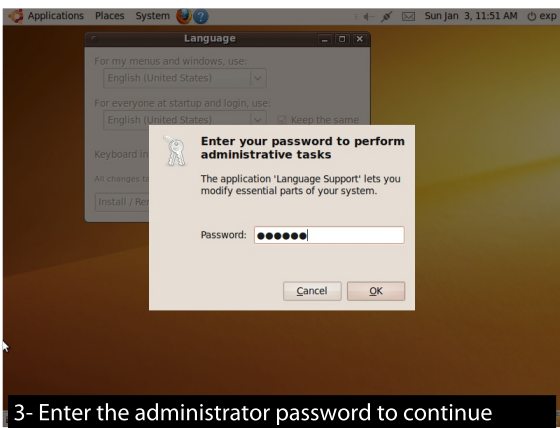
5- When language support installed, click Close



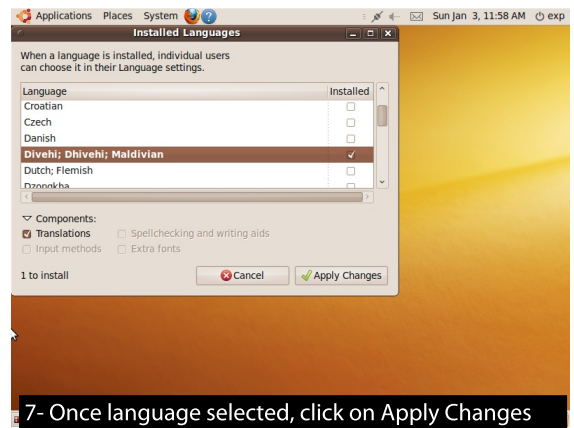
2- Click Install to install language support files



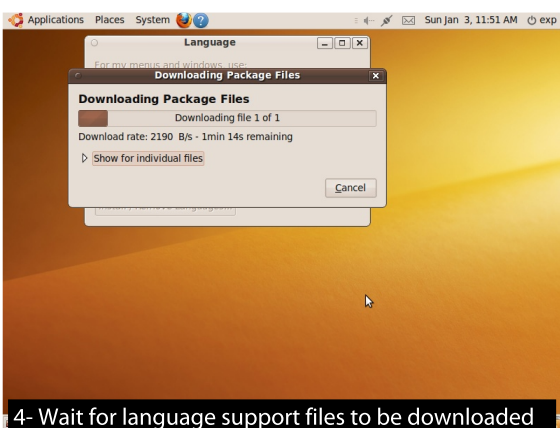
6- Click Install/Remove languages & select Dhivehi



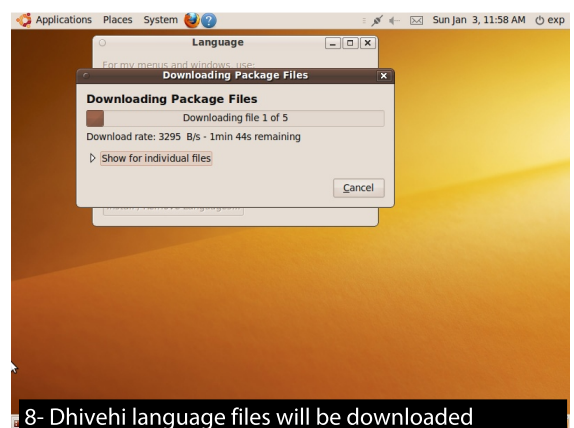
3- Enter the administrator password to continue



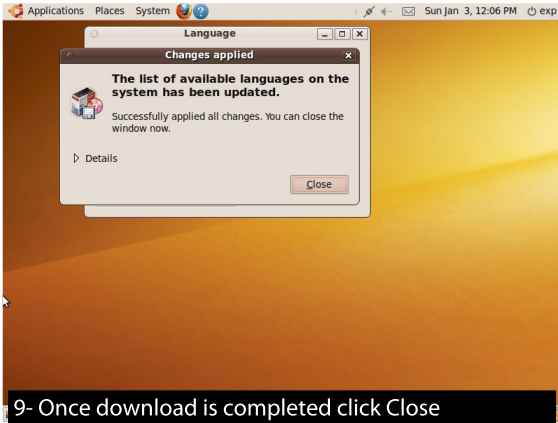
7- Once language selected, click on Apply Changes



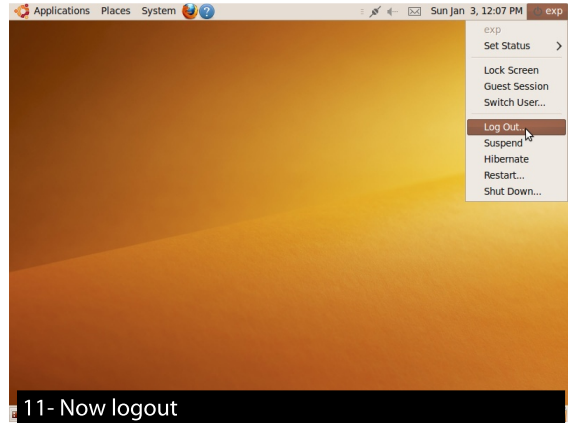
4- Wait for language support files to be downloaded



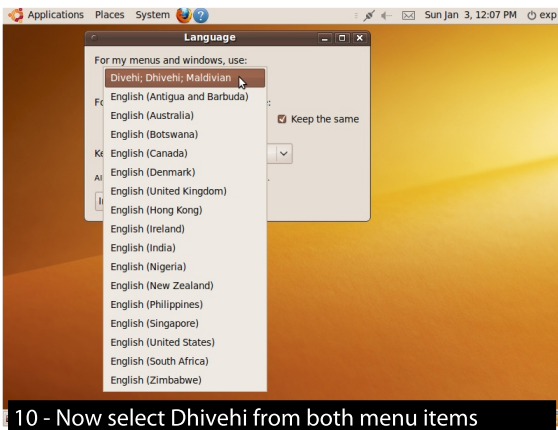
8- Dhivehi language files will be downloaded



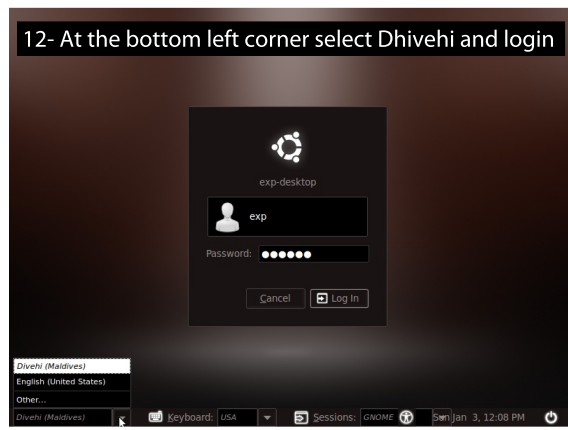
9- Once download is completed click Close



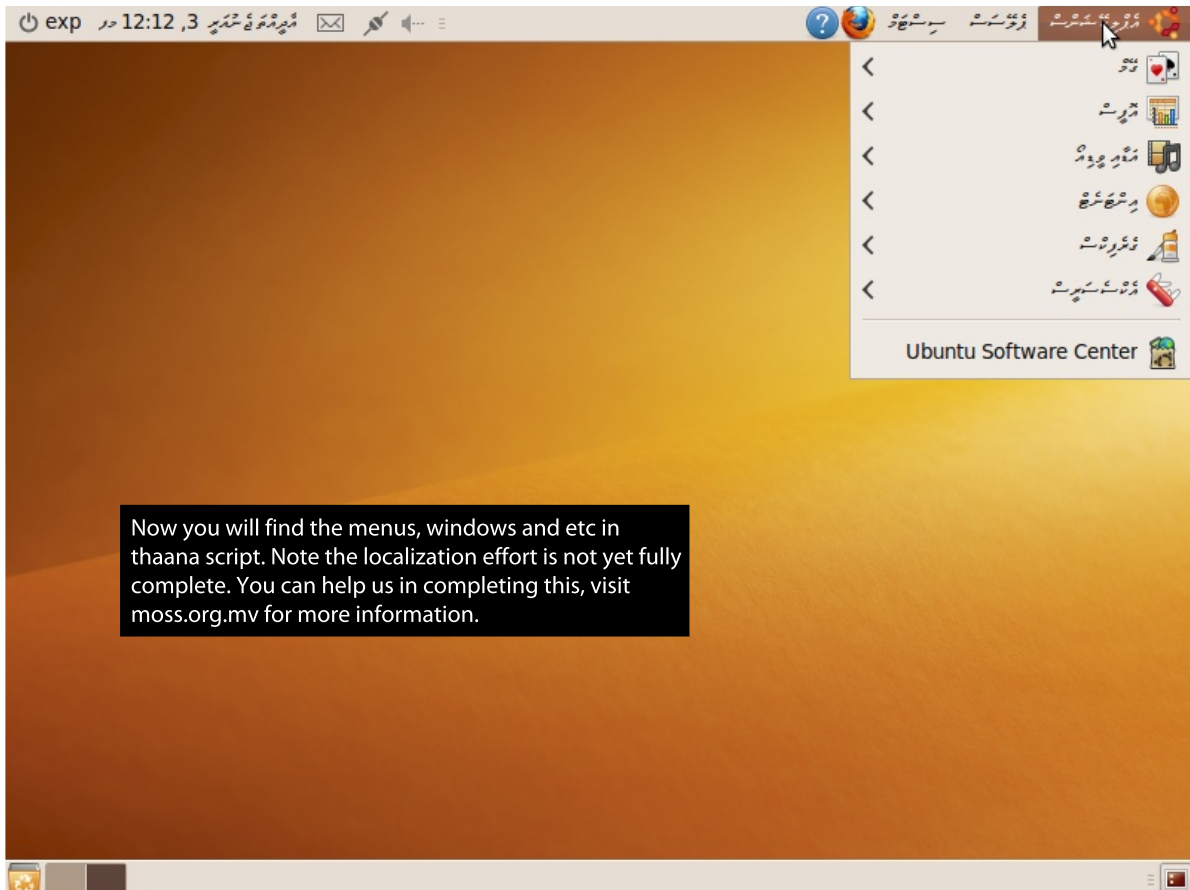
11- Now logout



10 - Now select Dhivehi from both menu items



12- At the bottom left corner select Dhivehi and login



Now you will find the menus, windows and etc in thaana script. Note the localization effort is not yet fully complete. You can help us in completing this, visit [moss.org.mv](http://moss.org.mv) for more information.



## A Community Coming of Age.



It has been an year since this little community began to become active and solid, the community being Maldives Open Source Society (MOSS). This was because of activities which began in two waves. One which spawned off after the Google Groups mailing list was created back in December 2008 together with a post on the 2nd of January, 2009 titled "1st MOSS Meetup", after the name was first coined in on the 27th of December, 2008. The second when the translation effort was taken for a spin on the 14th of April, 2009.

Since then most things have been discussed and come to terms through brainstorming and voting on the mailing list. This shows a strong tendency to keep things loosely coupled and in a very community oriented way with no special group of people deciding on the direction of it.

It was then decided to register MOSS as an NGO which was completed after a very long process on the 14th of July, 2009, which was a very joyful day for all of us since the legal aspects of our biddings can now be accepted, realized and accounted for. We held our first general assembly within the week on the 19th of July, 2009 and members for the steering committee were elected. The general assembly was held in the

evening at Ameeniyya School and was attended to by one of the honorary members of the community as well as new faces.

We then went on to cater to some floating ideas here and there within the community together with working towards penetrating our cause within the government. By trying to convince the government to indicate equivalent opportunity for FLOSS in their software procurements, to mandating technical policies through the legislature. We introduced ourselves to the government's technical bodies and the ministry that is concerned with, Ministry of Civil Aviation and Communication. A presentation was prepared by a core team and was presented to the decision making people of those bodies and explained what FLOSS is, along with the benefits it can bring to the government as well as the society at large by adopting emerging technologies which are being embraced by FLOSS.

We were awarded a pilot project to migrate a department to FLOSS and to prove to them the equivalent capabilities of FLOSS and as a test bed to find implications that may arise when it will be adopted government wide. It was a successful project and as with small implications. But in general the issues that were faced, were little compared to the value lost in terms of time and effort in managing commercial infrastructures.

Some plans on public events have not been much successful yet, but there was a little event on the 11th of July, 2009 which was "World Population Day 2009". A mention about the possibility for MOSS to grab a stall from the event to promote as little as much of it's cause drove a few to prepare for the

event over night. It was a casual and a little event, but the members involved were able to connect with the children during the evening and convey a whole new dimension of possibility to them. We even got to promote the Edubuntu collection of educational applications and games and it was a huge attraction.

Software Freedom Day 2009 which is a global day celebrated amongst the FOSS communities for it's name sake overwhelmed us and we ran out of time to completely prepare for it and to properly get organized. So it was not a successful endeavor but I'm sure it will be for real this year as most of our focus is on advocacy to foster awareness about our cause. We're preparing for a public event soon, although I'm not exactly sure when that will be at the moment.

So that's a very little bit about the history of MOSS this year wrapped up and briefly packed. What I would like say is that people are getting involved and we're seeing new faces every once in a while. This is completely participatory and not compulsory. In this way, we'll be able to grow and create an environment for people who're born through software, whose lives are relative to the software they use and are able to share and contribute to that world in some way they can.

The best thing about the kind of community we are, is that regardless of the aspects of MOSS as an NGO, people are able to come along, relate to what they're interested in, do they're biddings and go away for a while. And if we're able to see that pattern more often in a repetitive manner, I believe that MOSS as a community has come to foster.

**By Inash Zubair**  
**25th December, 2009 10:56 AM**



# Monthly Summary of MOSS Meetings

December 2009

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## December 8, 2009

### Incubator Project

- Agreed on responsibilities for the NCIT Incubator project as outlined in the draft proposal.
- Additional ideas and suggestions were discussed along with various people to meet and steps to take.
- Decided to share the Incubator draft proposal on the mailing list.

### Open Day

- Decided to go ahead with the event at any cost with whatever resources we have.
- Agreed to prepare and give short presentations to schools, colleges, institutions on an ad-hoc basis.

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## December 13, 2009

### MOSS repository

- Members agreed that having a local repository to cater for the local needs like language packs, Maldives oriented customizations and software, etc will be beneficial. The packages can later be upstreamed to repositories of other distributions whenever they're deemed stable enough.
- Members discussed to create both deb and rpm repositories which should include source packages as well.
- Once the hosting is finalized, and repositories upped, we have to elect package maintainers, and a way that everyone in the community can submit content to the repositories.
- It was pointed out that one solution is to have an email address reserved for the purpose of use by the maintainers to which people can submit content, either as raw source code, or prepackaged as per developers' preference.

### FLOSS Magazine

- A new idea in the meeting was to create a monthly online magazine which will include information on FLOSS solutions, research and installation guides, Free software philosophy, introduction to the people behind FLOSS and more.
- Moreover the main target, members present in the meeting agreed, should be the focus on Maldivian needs.
- Interviews with companies who have successfully deployed FLOSS solutions, their success stories, the problems they faced in deployment and other issues can be covered.
- We can also borrow inspiration from other articles and present the ideas here in a manner that goes with Maldivian needs.

### Miscellaneous

- In the meeting with Mr. Ibrahim Ismail (Ibra), he opened the opportunity to merge MOSS day events into Open Day events planned by Mandhu College. This way we will be able to get more people to attend than if we were to have an event solely dedicated to FLOSS.
- The progress on approaching educational institutions were discussed.
- Discussed the idea of approaching MAB (Maldives Accreditation

Board) [<http://www.employment.gov.mv/mab/mab.asp>] to improve the IT education framework, specially what is included in the Certificate I, II, Advanced Certificate, Diploma and Advance Diploma as we see they need to be improved based on the face that the IT industry is way too dynamic to base on 4 year old frameworks. In addition, the introduction and injection of FLOSS in the curriculum.

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## December 19, 2009

- Discussed about conducting random advocacy presentations at institutes, organizations, academia and government offices. The presentations will be targeted towards potential IT users and consumers focused towards introducing the FLOSS concept, culture and it's traits.
- An earlier meeting with Mr. Ibrahim Ismail (Ibra) discussed about a potential computer lab at Mandhu College to lay an infrastructure for academical IT for teaching as well as research and development, and possibly provided all the resources, MOSS to manage and conduct research on shared topics.
- Discussed more about repository hosting and technical preparations in order to get there.

Discussed about localizing the Google search pages to Dhivehi.

- To complete the full support for Dhivehi in Ubuntu, it seems that we need to produce and complete a language support pack.
- Discussed about the NCIT incubation project and the proposal. The draft proposal is available on the mailing list.
- Visit Civicom for a status update, wrap up the migration project and prepare a final report for the community and for the ministry.
- Discussed more on the magazine idea and about the general framework for it and how we'll go about keeping it sustained towards educating our target audience.
- Decided to fire up the localization project a little bit to work on the major components of Gnome translation.
- It was decided that we create small work groups/committees to distribute different tasks to. The pool of members will be given the choice to volunteer to take over certain projects and tasks.

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## December 26, 2009

- Started off with discussing about the progress and the logistics for the magazine. It was decided that the title for the magazine will be just MOSS along with a slogan like "Monthly FLOSS Magazine".
- Decided that the deadline for article submission will be the end of the month and the first week of the following month will be spent on compiling the issue and publishing it (online).
- Website features proposed: fix password reset feature, membership fee collection process, blog feature: syndicate from member blogs, syndicate mailing list updates on the home page, and a unified syndication of the website.

## Our Mission

MOSS is an initiative to provide a collaborative platform and forum to promote and facilitate Linux and FLOSS. It's members are from the community, civil society, students abroad, professional bodies and businesses who promote the FLOSS concepts. It is aimed to help policy makers, commercial enterprises, and users to take advantage of the benefits of FLOSS. It also facilitates and administers FLOSS based projects like localization and translation of various FLOSS to Dhivehi.

MOSS thrives to promote the use of FLOSS everywhere. By everywhere we mean at Homes, Offices and Businesses. We believe that the use of FLOSS will bring great benefits such as:

- Elevate education and the overall experience by use of open educational systems.
- Increased sharing and collaboration within the community.
- Reduce overall software costs related to purchase and licensing.
- Reduced support costs.
- Empower developers and increase technical expertise.
- Reduce the boundaries that lie between software vendors and users.

## Our Vision

Our vision is to empower all people to freely connect, create and share in a digital world that is participatory, transparent, and sustainable.

## MOSS Needs Your Help!

This magazine is a result of lot of helping hands and contributions, thank you for it. To keep this alive we need your Articles, Opinions, Open Letters and Stories. We also need Reviews (games, apps & hardware), How-To articles (on any FLOSS subject) and any questions, or suggestions, you may have.

**Send them to: [magazine@moss.org.mv](mailto:magazine@moss.org.mv)**

**Deadline to send articles for the next release  
Sunday, January 31, 2010**

## How to Contribute to FLOSS

1. First give a try to FLOSS, see the beauty of freedom.
2. Create awareness with your friends, relatives and interested people.
3. Help others to learn how to use FLOSS.
4. Join MOSS and offer your help.
5. If you are up for it and got the skill you can help in development:
  - 5.1. Contribute by coding.
  - 5.2. Help find bugs and report them.
  - 5.3. Suggest new features, options and improvements.
  - 5.4. Help write documentation and corrections.
  - 5.5. Join the Ubuntu Localization Project.

## Mailing Lists

### Maldives Linux User Group/MOSS Mailing List

<http://groups.google.com/group/mlugmv>

### Launch Pad Dhivehi Translators Mailing List

<http://groups.google.com/group/divtranslators>

## Our Steering Committee

### President

Inash Zubair

### Vice President

Sofwathullah Mohamed

### Secretary

Mohamed Vishah

### Public Relation

Ibrahim Sobah

### Program Coordinator

Yusuf Abdulla Shunan

### Treasurer

Hussain Sharah

## This Magazine was created using FLOSS

### GIMP

<http://www.gimp.org/>



GIMP is an acronym for GNU Image Manipulation Program. It is a freely distributed program for such tasks as photo retouching, image composition and image authoring.

It has many capabilities. It can be used as a simple paint program, an expert quality photo retouching program, an online batch processing system, a mass production image renderer, an image format converter, etc.

GIMP is expandable and extensible. It is designed to be augmented with plug-ins and extensions to do just about anything. The advanced scripting interface allows everything from the simplest task to the most complex image manipulation procedures to be easily scripted.

### OpenOffice.org

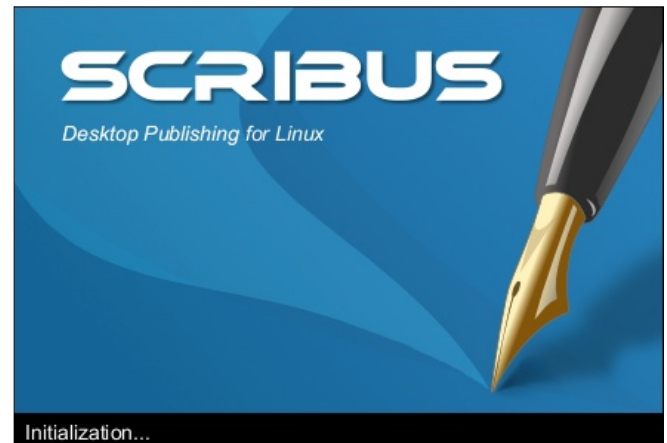
<http://www.openoffice.org/>



OpenOffice.org 3 is the leading open-source office software suite for word processing, spreadsheets, presentations, graphics, databases and more. It is available in many languages and works on all common computers. It stores all your data in an international open standard format and can also read and write files from other common office software packages. It can be downloaded and used completely free of charge for any purpose.

### Scribus

<http://www.scribus.net/>



Scribus is an Open Source program that brings award-winning professional page layout to Linux/UNIX, Mac OS X, OS/2 Warp 4/eComStation and Windows desktops with a combination of "press-ready" output and new approaches to page layout. Underneath the modern and user friendly interface, Scribus supports professional publishing features, such as CMYK color, separations, Spot Colors, ICC color management and versatile PDF creation.

### Ubuntu 9.10 Karmic Kola

<http://www.ubuntu.com/>



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<http://www.creativecommons.org/>



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