

What is Linux and Free Software?

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First Steps to Linux

- Linus Torvalds: A student in Helsinki University, Finland. Year 1991.
- He uses Minix OS but he doesn't like some features of it.
- In August 1991 he sends a message to newsgroups.

Linux 0.0.1

Newsgroups: comp.os.minix

*From: torva...@klaava.Helsinki.FI (Linus Benedict
Torvalds)*

Date: 25 Aug 91 20:57:08 GMT

Subject: What would you like to see most in minix?

*I'm doing a (free) operating system (just a hobby,
won't be big and professional like gnu) for 386(486) AT
clones. This has been brewing since april, and is starting
to get ready. I'd like any feedback on things people
like/dislike in minix, as my OS resembles it somewhat
(same physical layout of the file-system (due to practical
reasons) among other things).*

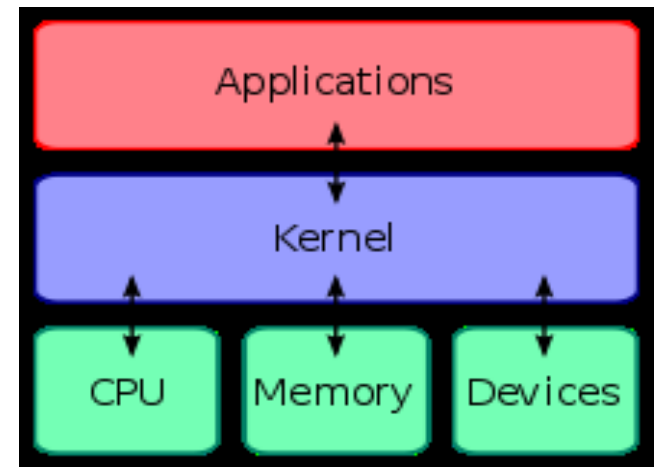
....

First Steps to Linux - II

- After this e-mail he begins to collect ideas.
- In October 5, 1991 the first version of Linux, Linux 0.0.2 is announced.
- It's quickly developed (and still continues to develop) with the help of thousands of people around the world.

What the Linux Really is?

- Linux is the kernel of GNU/Linux operating system.
- Kernel is the main component of an OS and it acts like a bridge between the applications and the data processing at hardware level.
- It is like a traffic police of system resources.



GNU/Linux Operating System

- A GNU/Linux operating system is composed of Linux kernel and many applications.
- Nearly everything you use as an end user on the OS (even the listing command) is a separate software.
- Today there are hundreds of (over 600) GNU/Linux operating system distributions are available.
- <http://distrowatch.com>

GNU Project

- In 1976 copyright laws in the USA begin to restrict software users.
- In 1983 Richard M. Stallman starts the GNU OS project which aims the software to be “free” and belongs to the public.
- The founding goal of the project was, in the words of its initial announcement, to develop "a sufficient body of free software [...] to get along without any software that is not free."

GNU Project - II

- GNU = Gnu's Not Unix
- Every kind of software is developed. E-mail clients, editors, compilers etc.
- GPL (General Public License) written by Richard Stallman for the GNU project to protect the freedom of free software.
- In 1992 the goal of making a free software operating system was achieved after the announcement of Linux kernel.

What is Free Software?

- Freedom 0: The freedom to run the program for any purpose.
- Freedom 1: The freedom to study how the program works, and change it to make it do what you wish.
- 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 (and modified versions in general) to the public, so that the whole community benefits.

Why Linux?

- Freedom,
- Reliable and powerful,
- Low/zero cost,
- No viruses,
- Different desktop environments (KDE, Gnome, XFCE etc.)
- Full support of multimedia codecs,
- Language support,

Why Linux? - II

- Hardware driver support,
- Easy operating system and application updates,
- Multi user on a single computer,
- No commercials, trial versions, license numbers etc.
- Easy and free access to many IDEs, compilers and debuggers,
- Opportunity for users to develop themselves.

Where to Use?

- PCs,
- Supercomputers,
- Video players,
- E-book readers,
- Watches,
- Smart home appliances (Fridges, ovens etc.),
- Mobile phones,
- ... everywhere.

Linux and Windows

- Linux and Windows can be installed on the same computer. It can be chosen which OS to use while booting.
- File systems of Windows (FAT 32, NTFS etc.) can be used by Linux. But the reverse is not true.
- MS Office files like Word, Excel and Powerpoint files can be opened and edited by the LibreOffice in Linux.

If You Have Some Problems With Linux...

- First ask Google.
- Ask forums, e-mail lists etc.

A list of Turkish help resources:

<http://www.linux.org.tr/yardim/>

- Communicate.

Resources

- www.linux.org.tr
- seminer.linux.org.tr
- www.gnu.org
- www.osalt.com
- wikipedia.org
- <http://distrowatch.com>



Thank you!

