Open Source Community

Introduction to GNU/Linux and FOSS history

Agenda;

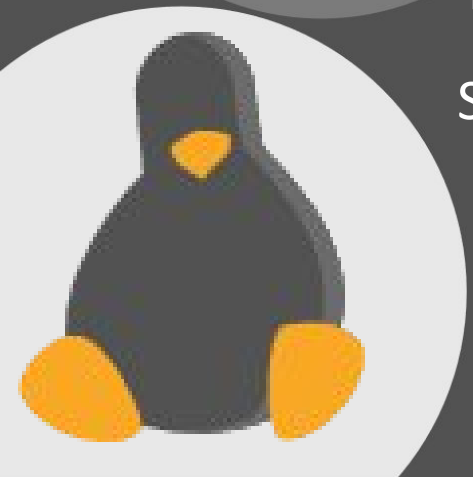
What is operating System

History of GNU/Linux

Why Linux

Linux Distribution

Some important Terminology



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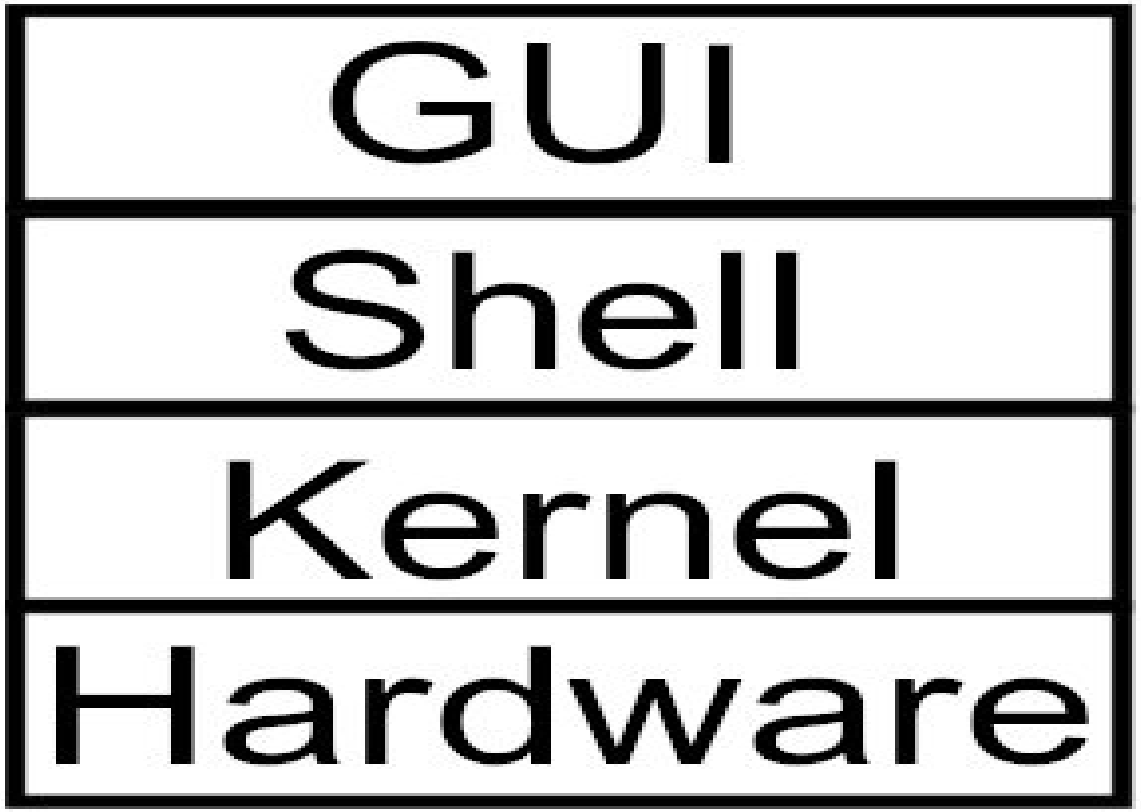
Operating Systems

The GUI: Graphical User Interface, used to allow the user to interact with the system by using a graphical interface.
The Shell: Allows the user to use the OS by typing commands.
The Kernel: The core of the OS, responsible for memory management, and communication with the hardware.



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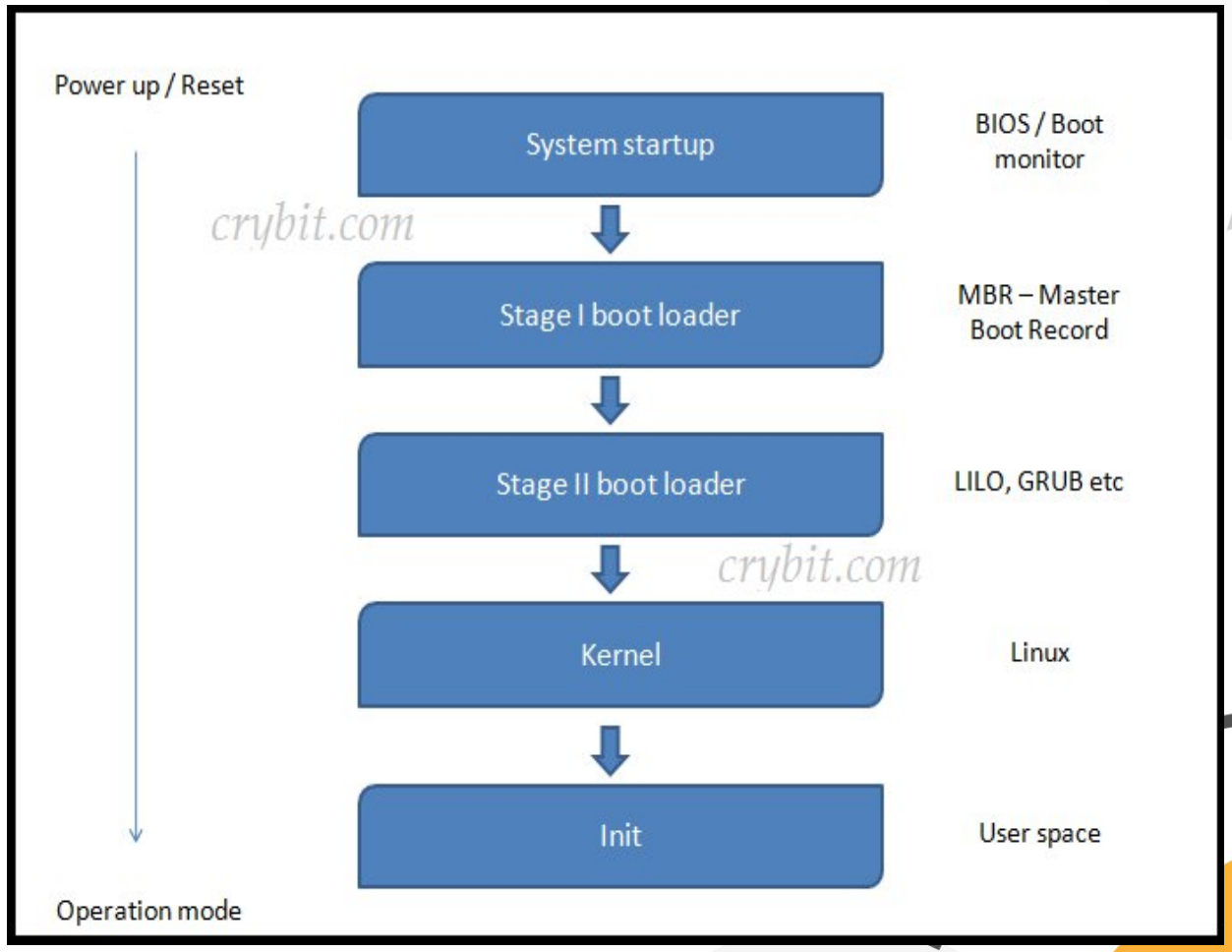
Boot Process

BIOS: Checks that the system is working properly and then executes the MBR/EFI.
MBR/EFI: MBR/EFI executes the bootloader (In the case of Linux, it is GRUB)
Bootloader(GRUB): The bootloader then checks the kernel and loads it.
Operating System: The rest of the operating system loads. (Kernel -init- etc)



Open Source Community

Open Source and Linux History

MEMORABLE LINUX MILESTONES

CELEBRATING 20 YEARS OF LINUX

1991 — LINUS TORVALDS POSTS FAMOUS MESSAGE - *"HELLO EVERYBODY OUT THERE..."* - AND RELEASES FIRST LINUX CODE

1992 — LINUS LICENSES LINUX UNDER THE GPL, AN IMPORTANT DECISION THAT WILL CONTRIBUTE TO ITS SUCCESS IN THE COMING YEARS

1993 — SLACKWARE BECOMES FIRST WIDELY ADOPTED DISTRIBUTION

1996 — LINUS VISITS AQUARIUM, GETS BIT BY A PENGUIN AND CHOOSES IT AS LINUX MASCOT

1998 — TECH GIANTS BEGIN ANNOUNCING PLATFORM SUPPORT FOR LINUX

1999 — RED HAT GOES PUBLIC

2003 — IBM RUNS FAMOUS LINUX AD DURING THE SUPERBOWL

2005 — LINUS APPEARS ON THE COVER OF BUSINESSWEEK WITH A STORY THAT HAILS LINUX AS A BUSINESS SUCCESS

2007 — THE LINUX FOUNDATION IS FORMED TO PROMOTE PROTECT AND STANDARDIZE LINUX LINUS IS A FELLOW

2010 — THE LINUX-BASED ANDROID OS OUTSHIPS ALL OTHER SMARTPHONE OSES IN THE U.S. AND CLIMBS TO DOMINANCE

2011 — LINUX TURNS 20 AND POWERS THE WORLD'S SUPERCOMPUTERS, STOCK EXCHANGES, PHONES, ATMS, HEALTHCARE RECORDS, SMART GRIDS, THE LIST GOES ON

20 YEARS OF LINUX 1991-2011

THE LINUX FOUNDATION
http://www.linuxfoundation.org/

Open Source Community

Linux Distribution Families

Since Linux and GNU are both open source, many people from different communities have made different Linux Distributions. There are too many distributions to count, so we'll talk about the three main families:

Red Hat Family

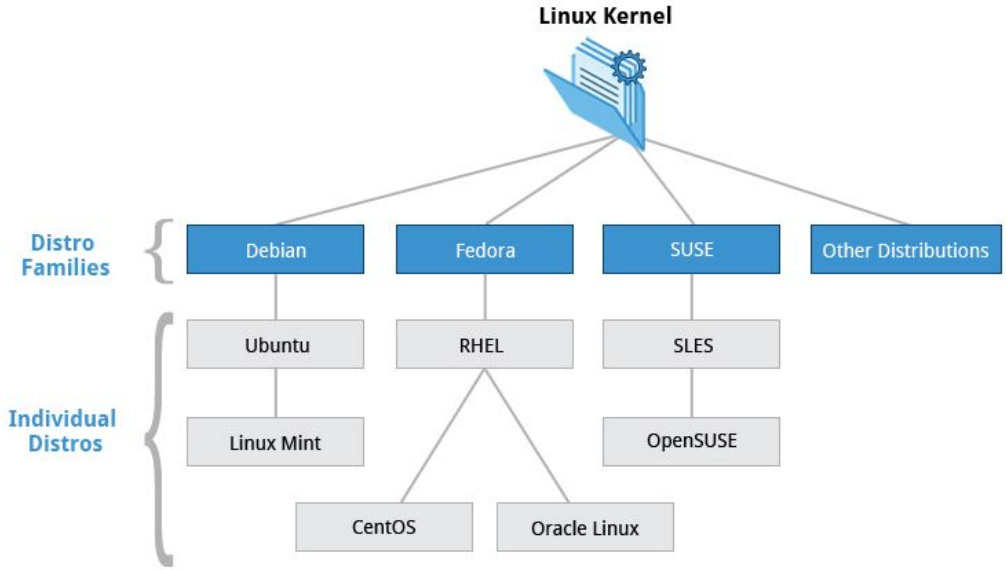
This family concentrated on the enterprise side of things, such as servers and company workstations.

Debian Family

The Debian family started with the home user in mind, the community wanted to make GNU/Linux available for the average user as much as it was for enterprises at the time.

Other distributions built for specific use cases

Distributions such as Arch Linux, openSUSE, SLES, Gentoo, and many others were made for specific use cases or optimisations based on what the community wanted.



Open Source Community

Why Linux?

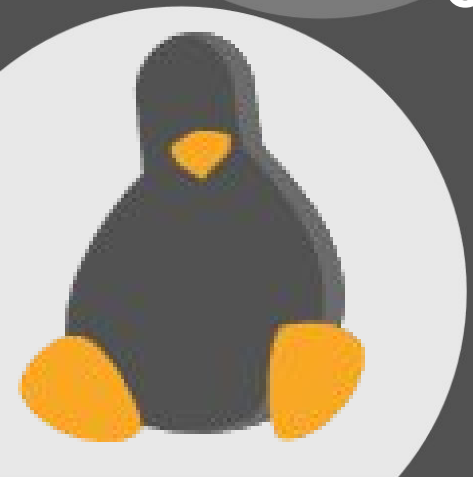
Why Linux?

Privacy and Security

Good Development Environment

Free

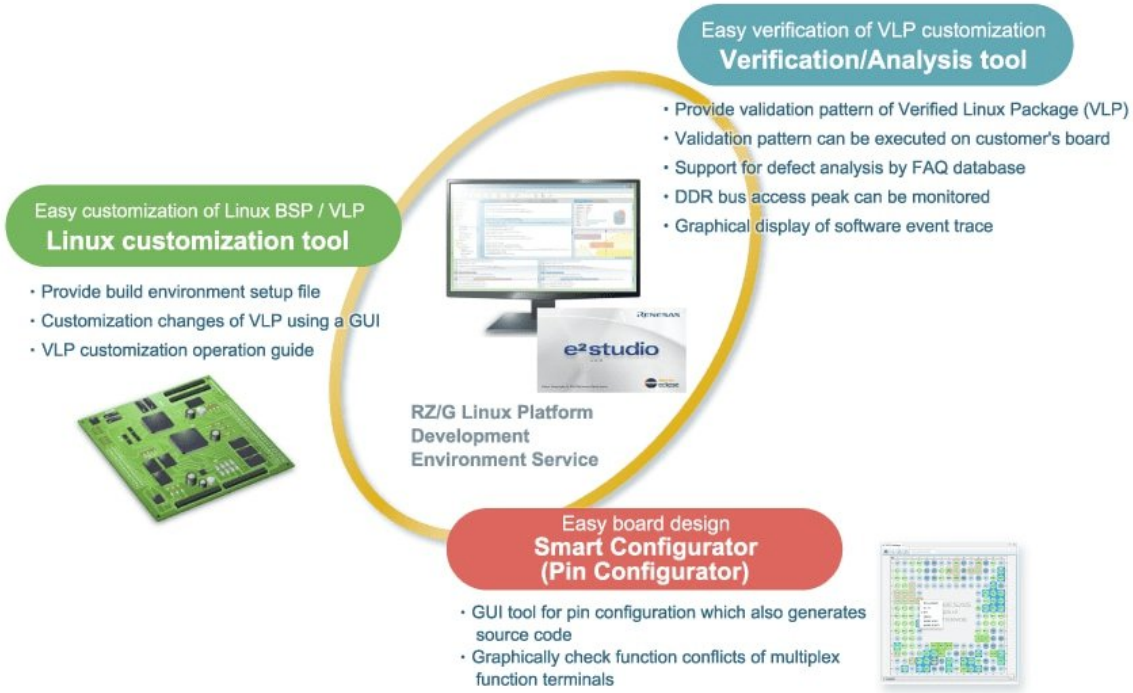
Customizable



Privacy and Security

The operating system respects the privacy of users to a really unique extent, once the system starts running everything that happens is under your control unless a third party services is used. That is mainly due to it being open source, so developers can’t hide spyware or force anything on the user, as they will be able to somehow avoid or change it.

Good Development Environment



Due to features like package managers, the command line, the operating system being very low on resource usage, customizability, and many more, GNU/Linux is a great development environment.

Free

GNU/Linux is both free as in freedom and free of charge, it has a lot of great alternatives for proprietary sofrware that people use daily.

Customizable

The operating system is very modular and customisable, which allows you to create your own customised system according to your needs.

Some Important Terminology

Kernel: The core of the operating system, responsible for memory and process management, and communication with the hardware .
Shell: One of the operating system layers that allows the user to use the OS by typing commands.
UNIX: A proprietary software operating system that was designed for servers, programmers, and HPC.
Linux: Free and open source kernel.
FOSS: Free and Open Source Software.
Proprietary Software: Closed source software that is copyrighted.
GNU: GNU's Not Unix, a free and open source operating system designed to replace Unix.
GNU/Linux: Used to refer to the GNU operating system when it is using the Linux kernel.
Linux Distribution: An operating system that is built on the Linux kernel or forked from an existing Linux distribution, like Ubuntu, Debian, Linux Mint, RHEL, etc..
Desktop Environment: The GUI that a Linux distribution uses to allow the user to interact with it without having to type commands.
Debian: A Linux distribution built for home users.
Red Hat Enterprise Linux (RHEL): A Linux distribution built forservers targeted at the enterprise side.
Ubuntu: A Linux distribution that is based on Debian, it is known to be very easy to use and very intuitive for new users.

Thank you

#Stay Safe#