

<epam>

Linux family

CentOS Linux Essentials



TRAINING
C E N T E R

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Linux distribution definition

Linux distribution comprises:

- Linux kernel
- GNU tools and libraries
- additional software
- documentation
- window system
- window manager
- desktop environment

Distributions can be:

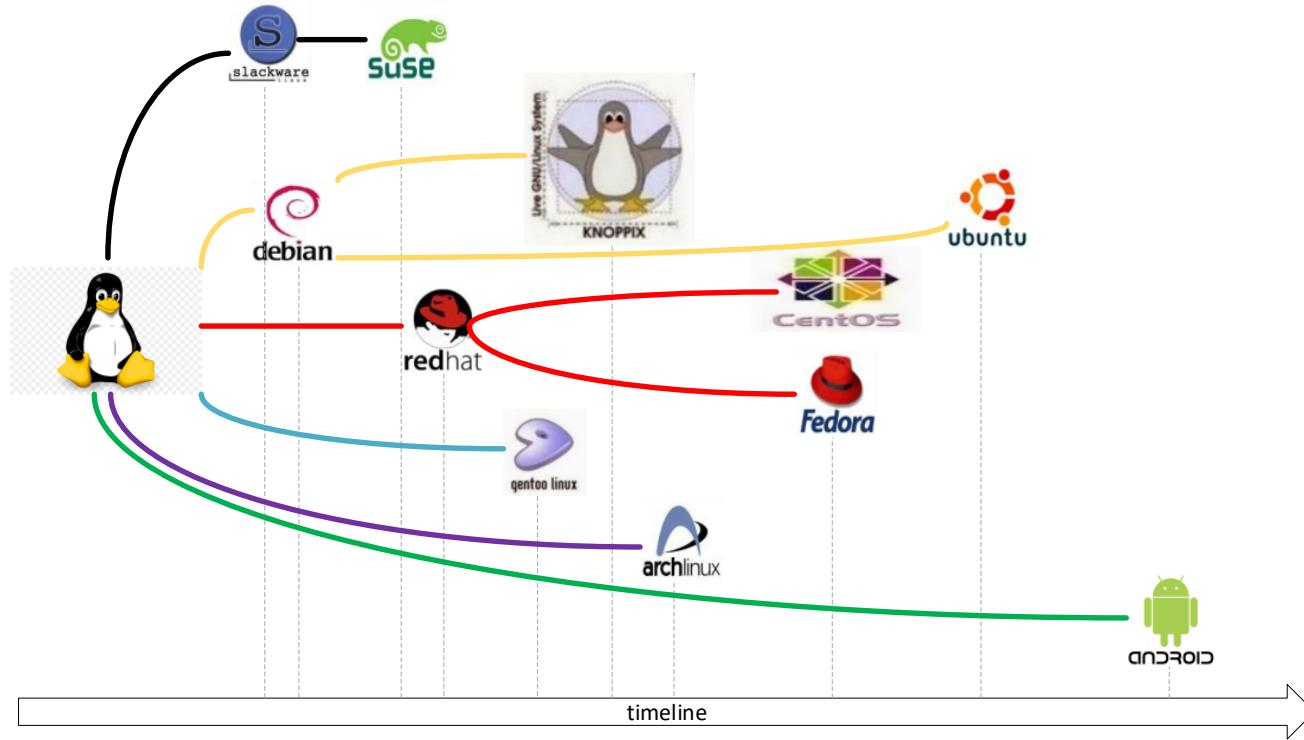
- commercially-backed
- community-driven

How Linux distribution can be characterized

- Release policy (fixed or rolling)
- Supported architectures
- Default system components
- License type
- The number of packages in repository
- Level of package modifications
- Branch of the Linux tree

Branches of the Linux tree

There are six main branches (Debian-, Redhat-, Slackware-, Gentoo-, arch-, android-based)



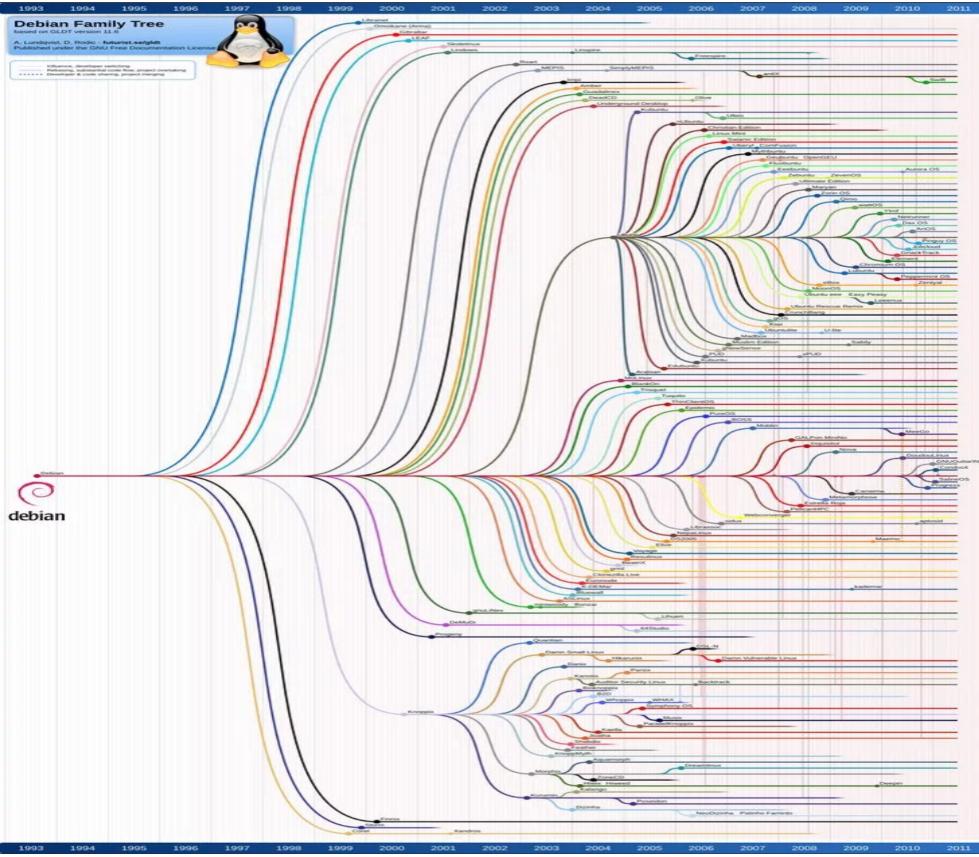
Division by package manager

Package manager	apt	yum (dnf)	pacman	pkgtool	Zipper	Portage	apk-tools
root commands	dpkg apt	rpm yum	pacman	upgradepkg installpkg	zypper	emerge	apk
Linux distribution	Debian Ubuntu	RHEL Centos fedora	Arch	Slackware	SUSE	Gentoo	Alpine

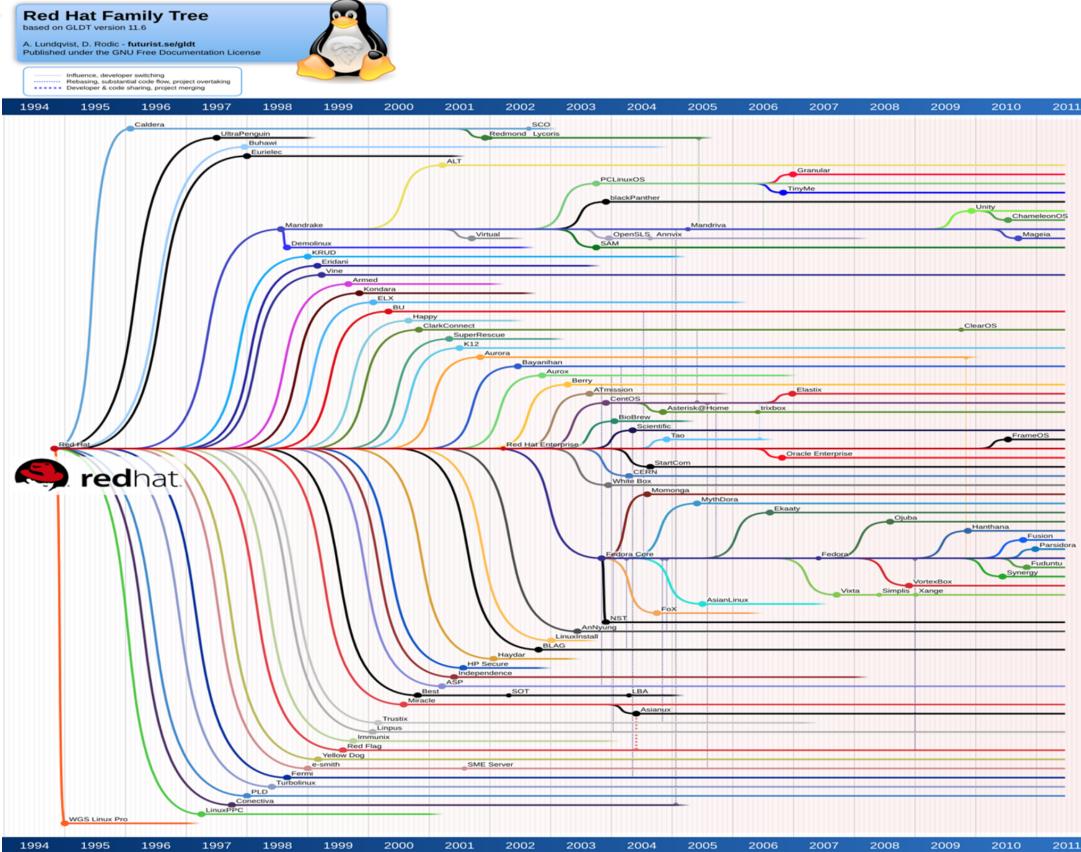
Repositories

- Each package manager has their own repository
- Each repository has a lot of mirrors
- Repositories can be official and community-based
- Each repository has own structure based on package manager requirements

Debian family



Red Hat Family



Notes

- Debian and RHEL require valid license for commercial use!
- Ubuntu has STS and LTS releases
- Centos is official fork of RHEL with community-based support
- Fedora is an edge product which has rolling-based releases.
- Amazon Linux is the centos fork with AWS-specific patches and environment configurations.

Other families

- Slakware, Gentoo, arch, android families are not shown in this course
- Alpine linux is niche distribution. Based on LEAF and commonly used in docker images, as image size is pretty small.

Future of CentOS

- <https://blog.centos.org/2020/12/future-is-centos-stream/>