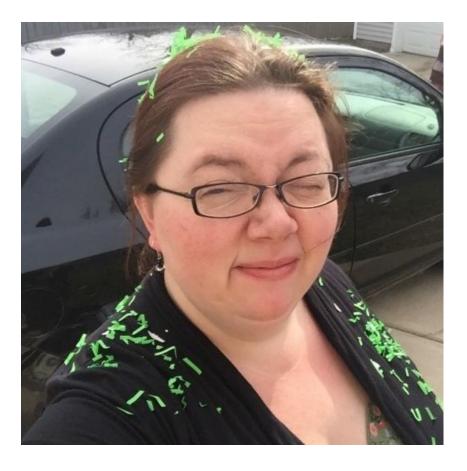


## The State of AlmaLinux

benny Vasquez





### hi, I'm benny

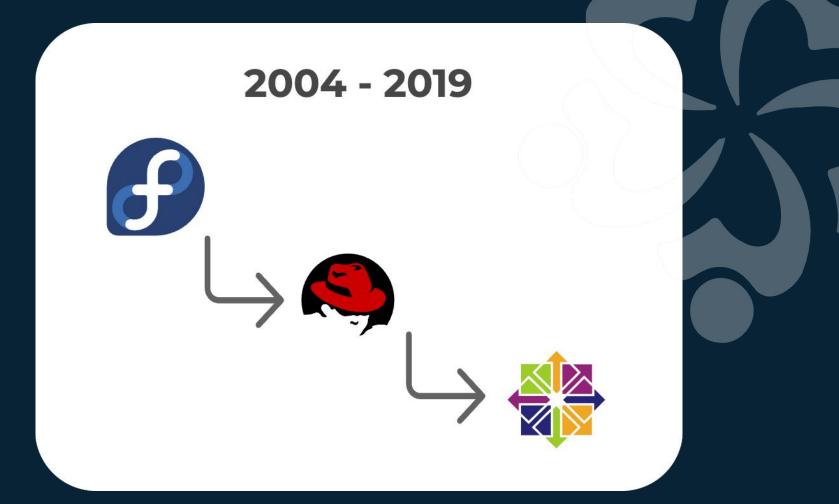
- Many years as a sysadmin
- Many years as a community builder
- Many years around open source
- Many years as a lover of Star Wars
- Many years as a lover of Sci-Fi
- social.linux.pizza/@benny
- ≥ benny@almalinux.org





## The history







### [CentOS-announce] Release for CentOS Linux 8 and CentOS Streams

#### Karanbir Singh

kbsingh at centos.org

Tue Sep 24 16:38:36 UTC 2019

- Previous message: [CentOS-announce] CESA-2019:2729 Critical CentOS 7 firefox Security Update
- Next message: [CentOS-announce] CEBA-2019:2871 CentOS 7 tzdata BugFix Update
- Messages sorted by: [ date ] [ thread ] [ subject ] [ author ]

We would like to announce the general availability of CentOS Linux 8 and the new CentOS Stream, on all architectures.

CentOS Linux 8

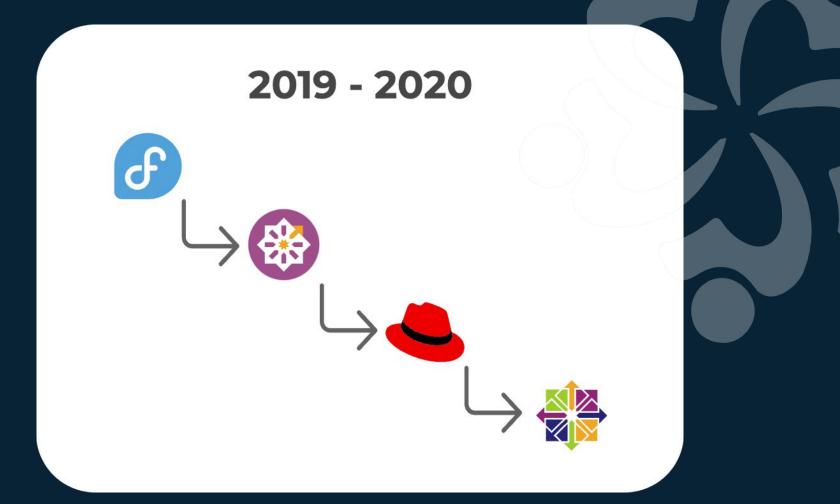
This is the first release for CentOS Linux 8 and is version marked as 8.0-1905, derived from sources published by Red Hat, delivered via git.centos.org

First, please read through the release notes at: http://wiki.centos.org/Manuals/ReleaseNotes/CentOSLinux8 - these notes contain important information about the release and details about some of the content inside the release from the CentOS QA team. These notes are updated constantly to include issues and incorporate feedback from the users and should be the first port of call for anyone looking to use CentOS Linux 8.

CentOS Stream

When the CentOS Project announced it was joining forces with Red Hat in January 2014, we put an emphasis on how the new relationship would "(drive) forward development and adoption of next-generation open source







#### **CentOS Project shifts focus to CentOS Stream**

The future of the CentOS Project is CentOS Stream, and over the next year we'll be shifting focus from CentOS Linux, the rebuild of Red Hat Enterprise Linux (RHEL), to CentOS Stream, which tracks just ahead of a current RHEL release. CentOS Linux 8, as a rebuild of RHEL 8, will end at the end of 2021. CentOS Stream continues after that date, serving as the upstream (development) branch of Red Hat Enterprise Linux.

Meanwhile, we understand many of you are deeply invested in CentOS Linux 7, and we'll continue to produce that version through the remainder of the RHEL 7 life cycle.

CentOS Stream will also be the centerpiece of a major shift in collaboration among the CentOS Special Interest Groups (SIGs). This ensures SIGs are developing and testing against what becomes the next version of RHEL. This also Home / Blog

/ CentOS Project shifts focus to CentOS Stream

Search

#### Recent Posts

- > CentOS Hyperscale SIG Quarterly Report for 2023Q2
- > CentOS ISA SIG Performance Investigation
- > CentOS Board Meeting Recap, August 2023
- > CPE Quarterly Update Q2 2023
- > Open To All





Jan 14, 2021 5:09:43 AM



Igor Seletskiy Igor Seletskiy is a renowned expert in the web hosting and cybersecurity industry, with over two decades of experience. As the CEO and founder of CloudLinux, he has been instrumental in developing cutting-edge security solutions for shared hosting providers. Igor is also the driving force behind Imunify360, a comprehensive, automated security suite designed to protect Linux web servers. His expertise and innovative approach make him a trusted voice in the field, offering valuable insights on the critical role of web hosts in ensuring WordPress website security.

Open-source

#### AlmaLinux is born!!



Alma means "soul" in many Latin languages, including Spanish and Italian. The word comes from the Latin word almus, which means "nourishing, kind".

#### A soulful community

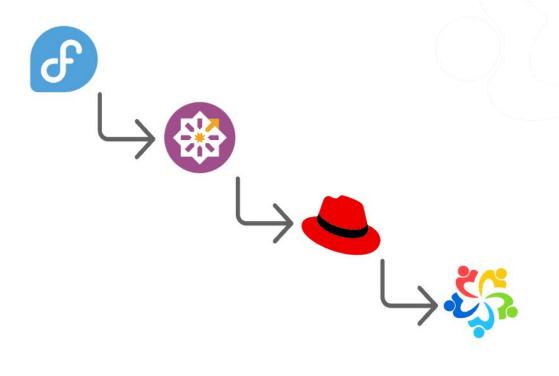
No tech community is as soulful and as passionate as the Linux community. It is a caring, collaborative, nourishing community that turned the efforts of an individual into software that powers the world.

The story of Linux starts with the personal story of Linus Torvalds who, in 1991, announced that he was developing a free UNIX-like kernel for x86 machines – a kernel he called Linux. A kernel for the community.

Developers quickly saw the potential of a free, open-source UNIX kernel. Step by step, members of an incredibly passionate

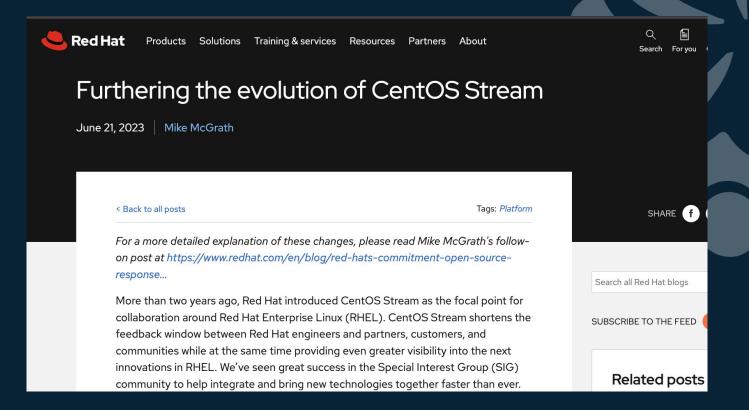


### Mar 2021 - Jun 2023





### June '23: no more sources





#### Pre-CentOS Stream (2004 - 2019)



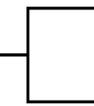




#### **After June 2023**











original by @carlwgeorge@fosstodon.org; adapted for AlmaLinux

## RHEL compatibility = freedom for AlmaLinux Additional repos for additional software





### RHEL compatibility = freedom for AlmaLinux

### Patching critical flaws outside of upstream



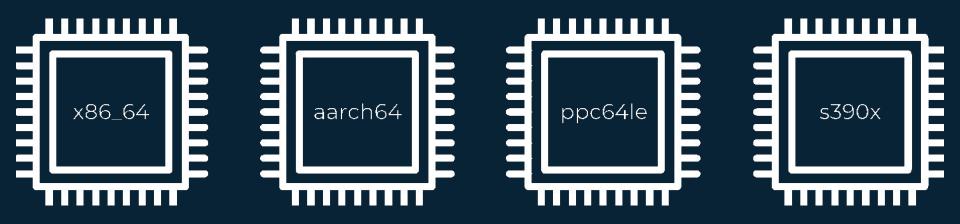


## RHEL compatibility = freedom for AlmaLinux Renewing support for upstream deprecated hardware

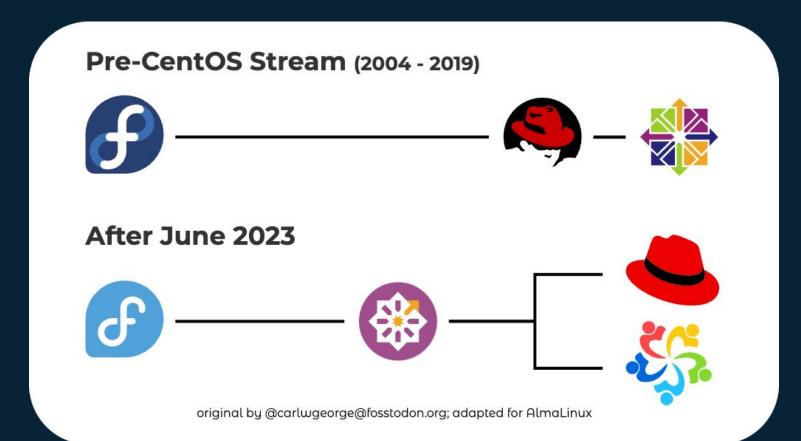
- aacraid Dell PERC2, 2/Si, 3/Si, 3/Di, Adaptec Advanced Raid Products, HP NetRAID-4M, IBM ServeRAID & ICP SCSI
- be2iscsi Emulex OneConnectOpen-iSCSI for BladeEngine 2 and 3 adapters
- hpsa HP Smart Array Controller
- Ipfc Emulex LightPulse Fibre Channel SCSI
- megaraid\_sas Broadcom MegaRAID SAS
- mpt3sas LSI MPT Fusion SAS 3.0
- mptsas Fusion MPT SAS Host
- qla2xxx QLogic Fibre Channel HBA
- qla4xxx QLogic iSCSI HBA



### Supported Architectures











Red Hat Universal Base Image (UBI)

https://cdn-ubi.redhat.com/content/public/ubi/dist/



- Exact RHEL sources and binaries
- 100% legal, no Red Hat Subscription required
- EOL after 10 years
- Updates every day
- Includes base system, Python, Perl, PHP, NodeJS, Java, Dotnet, ...

- Limited set of sources available:
  - 1511 packages for RHEL8 (~41%)
  - $\circ$  951 packages for RHEL9 (~39%)

IT/AINIT MUCH



Our decision: use every package available











- Upstream for RHEL and allows to get new package versions earlier
- 100% legal
- Available as src.rpm <u>https://kojihub.stream.centos.org/</u>
- Available as git repo <u>https://gitlab.com/redhat/centos-stream</u>

- Not all sources are the same as RHEL, may miss patches or include extra ones
- CVE updates usually delayed
- Not all packages available (example: Java 21)
- EOL after 5 years versus 10 years for RHEL, so no updates after 8.10 release

Our decision: use where applicable







RHEL clones



- No Red Hat Subscription required
- May contain exact RHEL sources

- Exact RHEL sources are not guaranteed
- Not clear where they get sources
- Delayed updates

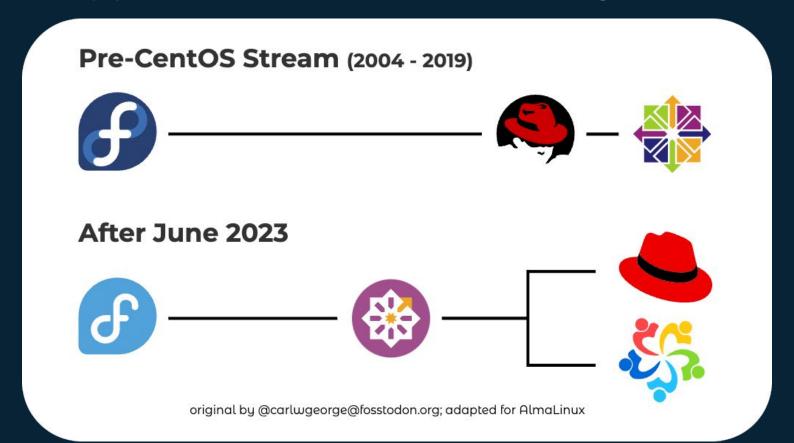
Our decision: use carefully (example: squid CVE-2023-46846 and CVE-2023-46847 patches from Oracle Linux)



### What happens when CentOS Stream goes EOL?



### What happens when CentOS Stream goes EOL?







## The governance



### The governance: the foundation





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GitHub ₫

Development •

Documentation >

Installation >

Migration >

The Foundation 🔻

#### AlmaLinux OS Foundation

We strive to be transparent

First board elections

The plans for the board

Assets and build environment

Minutes of AlmaLinux OS Foundation Board Meetings

Membership Committee

Election 2022

Election 2023

Google Summer of Code

Help and Support

#### **AlmaLinux OS Foundation**

The AlmaLinux OS Foundation is 501(c)(6) non-profit organization. It owns all assets related to AlmaLinux OS. It is governed by a set of Bylaws ...

#### We strive to be transparent

The goals of a Community-owned operating system needs to include transparency in all things. If you ever have a question, request, or need that isn't being satisfied through the available channels, you may always reach out to any member of the board for assistance. As of January 10th, 2023 the board has adopted a Code of Ethics ...

As of December 17, 2023, the foundation has a 9 board directors.

- benny Vasquez benny is the current Chair of the board of AlmaLinux OS Foundation
- Jack Aboutboul ☐ Jack is a current Director and Community Leader at AlmaLinux
- Simon Phipps ☐ Simon is a current Director at AlmaLinux and former president of the Open Source Initiative
- Daniel Pearson ☐ Daniel is a current Director at AlmaLinux and is the CEO of KnownHost, LLC (promoted from COO during the election window), a current AlmaLinux Gold Sponsor, serves on the AlmaLinux OS Foundation membership committee.
- Moshe Bar 🗹 Moshe is a current Director at AlmaLinux and is the CEO of CodeNotary, Inc., an AlmaLinux Gold Sponsor
- Alex Iribarren ☐ Alex is a current Director at AlmaLinux, and a penguin herder at CERN
- Jun Yoshida of Jun is a current Director at AlmaLinux, and is the driving force behind MIRACLE LINUX

Non-voting invited experts to the board



### The governance: the board

#### **BOARD OF DIRECTORS**



benny Vasquez
Chair, Board of Directors
AlmaLinux OS Foundation



Jack Aboutboul

AlmaLinux OS Community Manager

Microsoft, Inc



Jesse Asklund
Global head of Customer Experience
WebPros



Simon Phipps
open source advocate and a former
president of the Open Source Initiative



Moshe Bar CEO Codenotary Inc.



Daniel Pearson CEO KnownHost



Jun Yoshida
Corporate Officer
Cybertrust Japan



Alex Iribarren
Penguin Wrangler and Cloud Watcher
CERN



### The governance: the SIGs



#### **AlmaLinux Wiki**

Q

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Bugs 🖸

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#### About

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Help AlmaLinux OS

Documentation

Mirrors

#### Special interest groups (SIGs)

**Build System SIG** 

Cloud SIG

Core SIG

Infrastructure SIG

Live Media SIG

Marketing SIG

Migration SIG

The Process for Creating a New SIG\* in the AlmaLinux Community

Development >

**Documentation** 

#### Special interest groups

Special interest groups (SIGs) are teams within the AlmaLinux OS community that are focused on specific topics. Each SIG has its own channel on our Mattermost<sup>1</sup> chat server chat.almalinux.org<sup>1</sup>, but may communicate and work in different ways. Each SIG's details are found in the pages below.

The following SIGs are already established:

- Build System The AlmaLinux OS build system developers and maintainers.
- Core The AlmaLinux OS distribution developers and maintainers.
- Cloud The AlmaLinux OS cloud and container images maintainers.
- Infrastructure The AlmaLinux OS infrastructure team.
- Live Media The AlmaLinux OS Live Media maintainers.
- Migration The AlmaLinux OS Migration maintainers.
- Marketing The AlmaLinux OS Marketing team.

#### **Additional Resources**

• Process For Creating New SIG - AlmaLinux OS Foundation SIG Lifecycle Guidelines.





## The community



### The first mirrors

















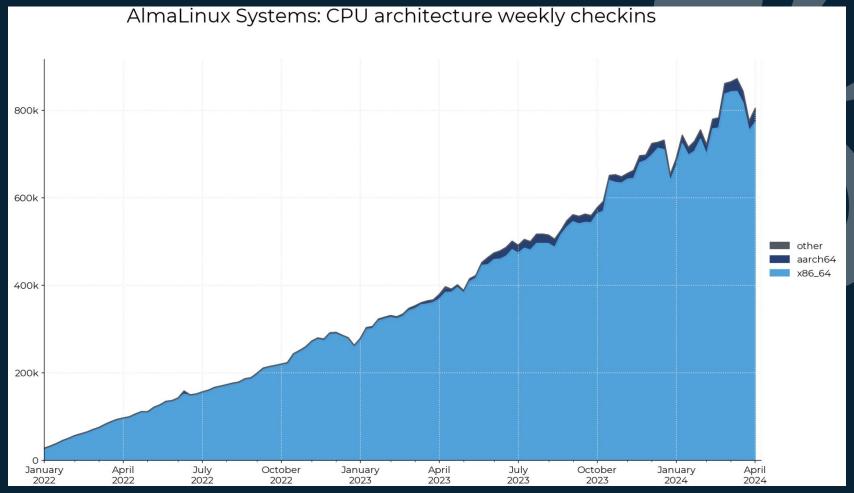




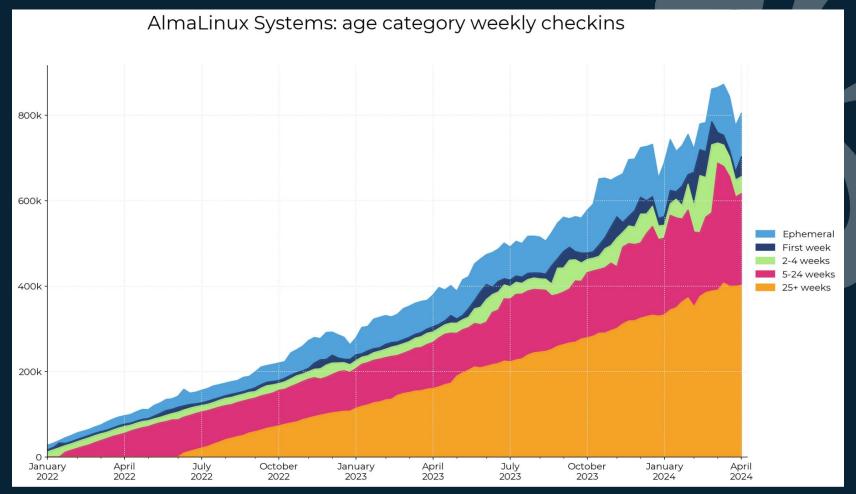




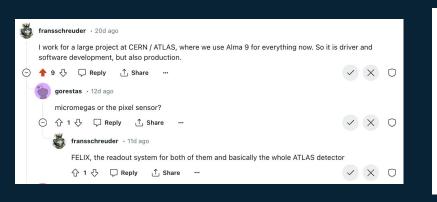


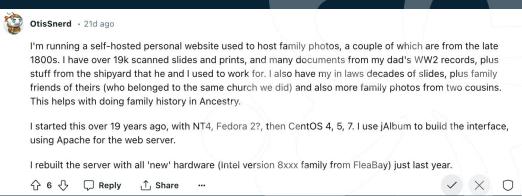














abotelho-cbn · 21d ago

Thousands of VMs. A few dozen gateways/routers. Over a hundred hypervisor nodes.







Reply







Dizzybro · 20d ago

Slowly migrating everything from CentOS7 to Alma9.

Once done it will be roughly 200-300 machines



5



□ Rep



are









# The State of AlmaLinux

benny Vasquez HEPiX Spring 2024

social.linux.pizza/@benny @bennyvasquez benny@almalinux.org



