Nix, State of the Union

Eelco Dolstra & Ron Efroni Rotman

With Ryan, Théophane, Rok, Tom
And virtual slides from Silvan and Guillaume

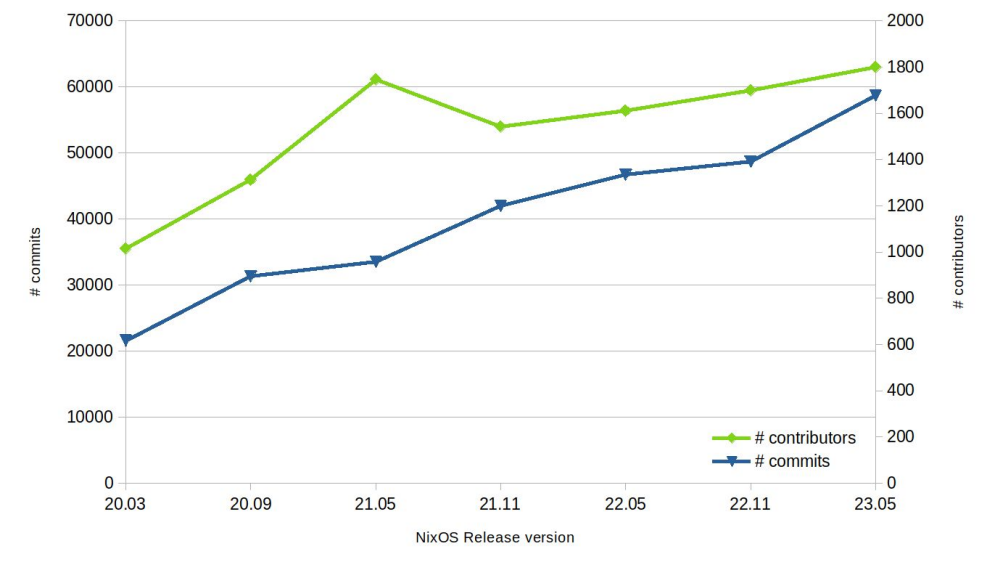
Welcome to NixCon NA 2024!

- Organisers
- The SCALE team!
- All volunteers
- ?? live
- Hundreds with us virtually
- 2 Nix packed days for the first time in North America

Nix Data - Growth!

NIXCON NA
PASADENA, CALIFORNIA
2024

The Nix community keeps growing 📈



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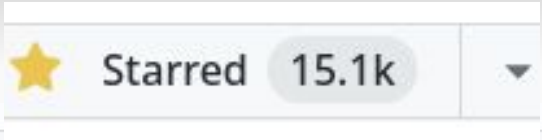
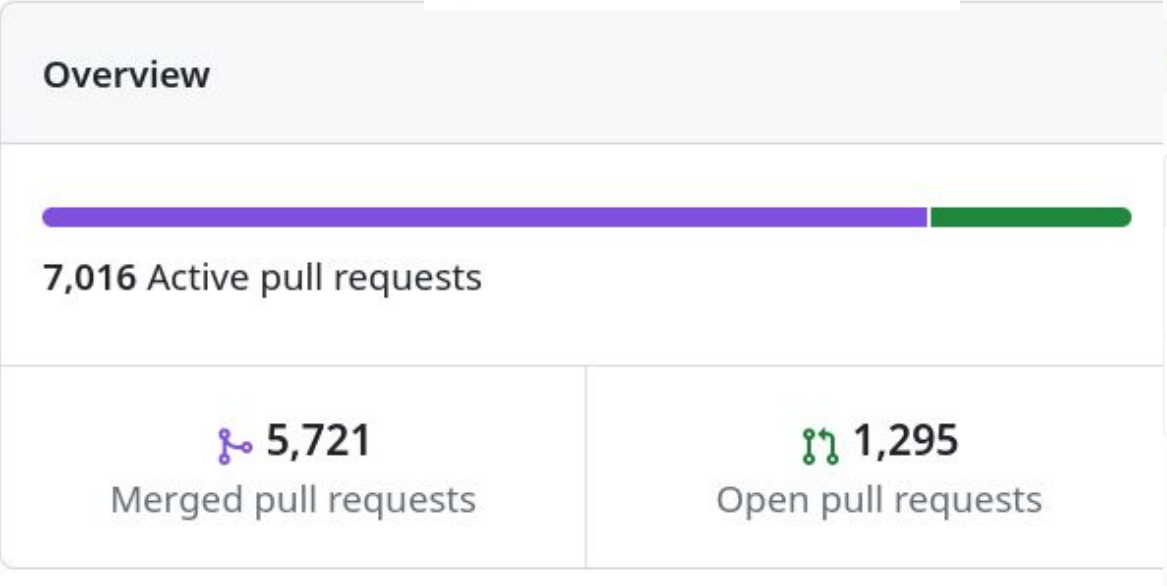
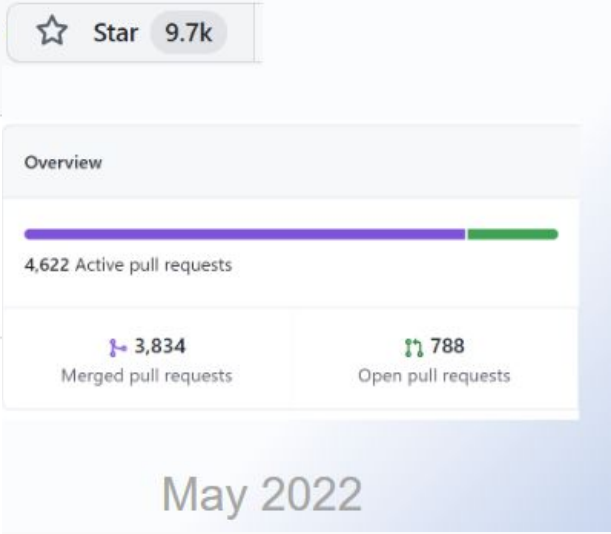
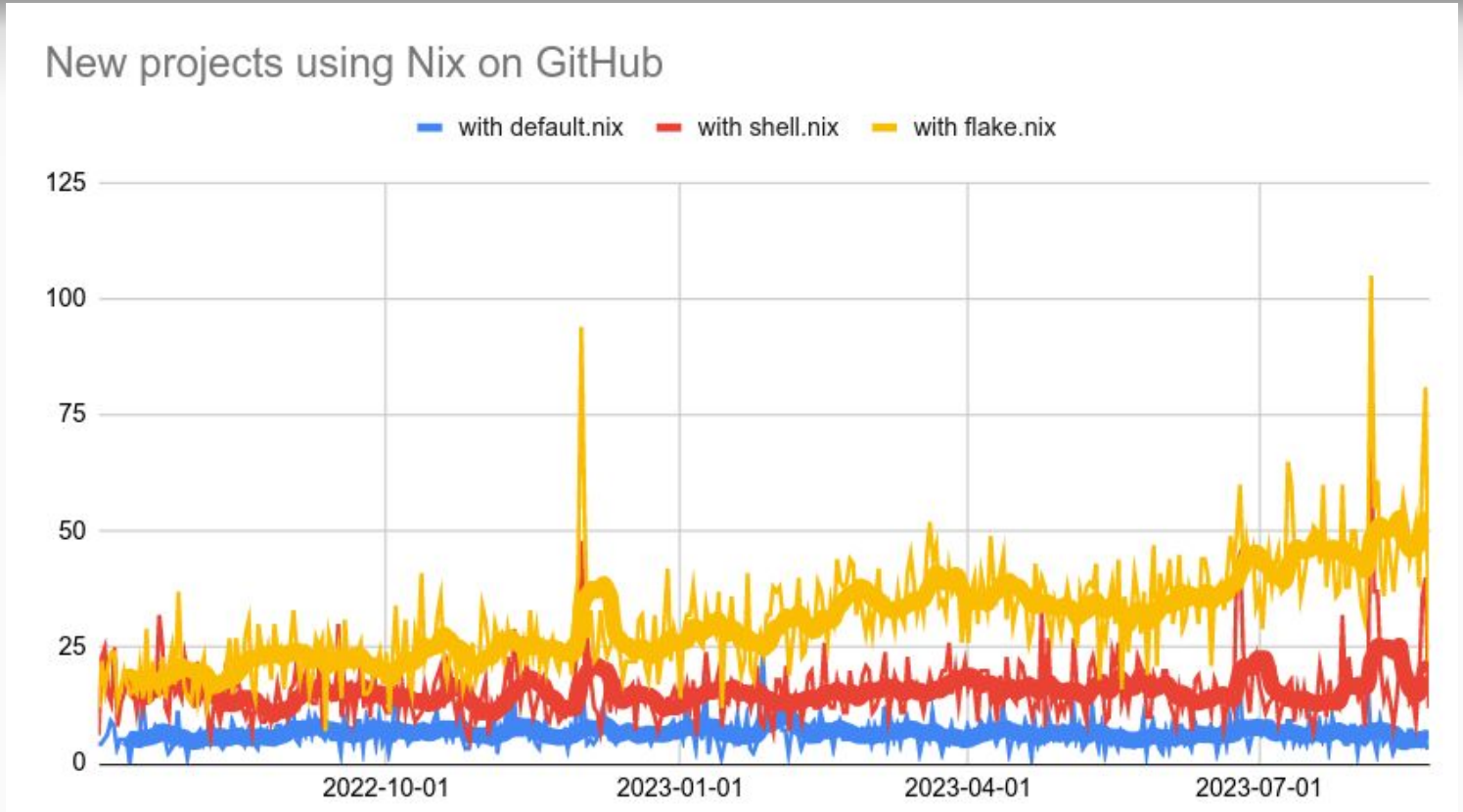






Nix-based projects on GitHub



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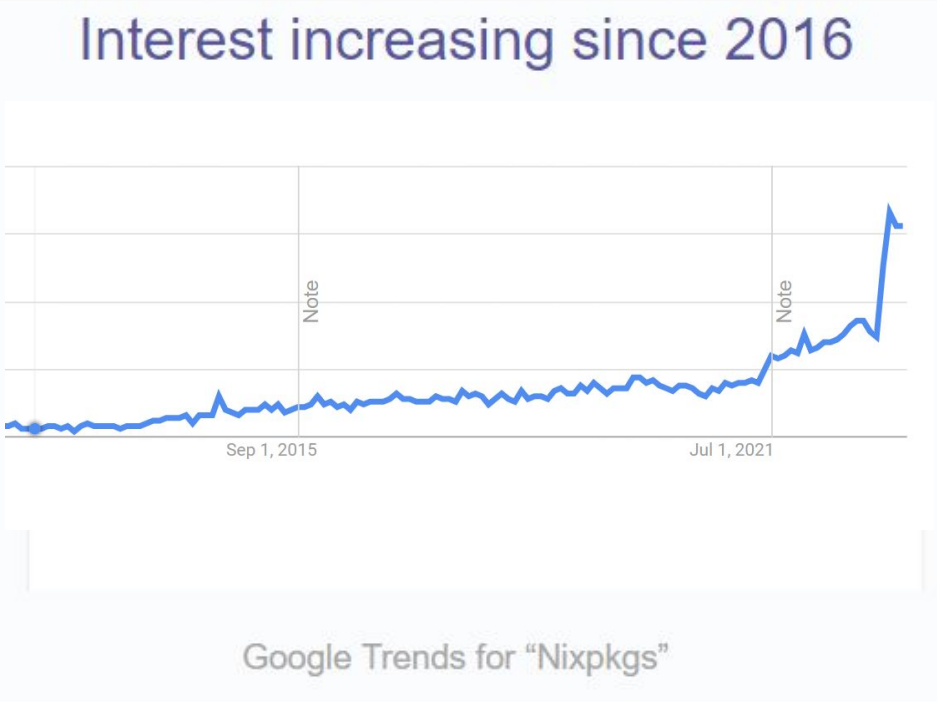


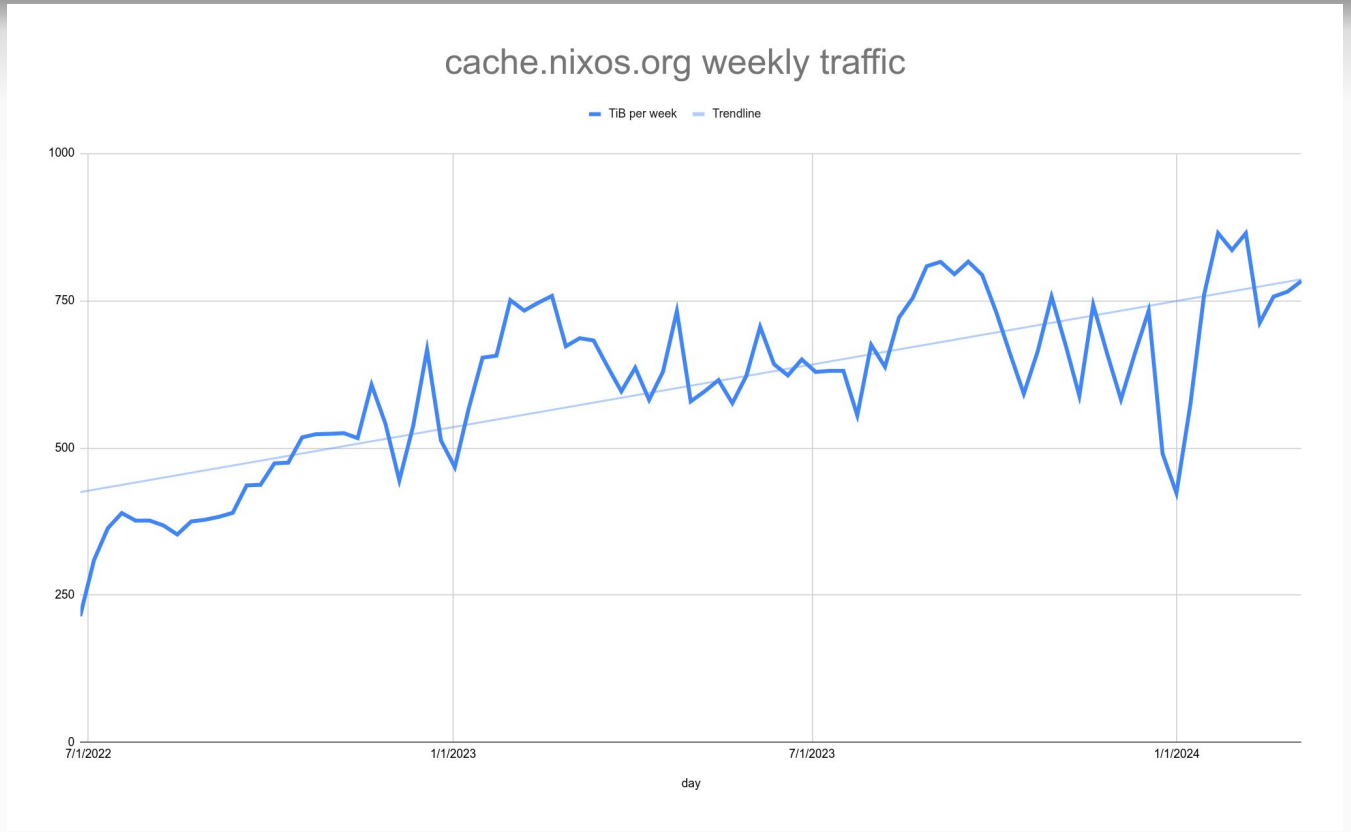
cache.nixos.org stats

- **399.3 TiB** Infrequent Access, **111.5 TiB** Standard

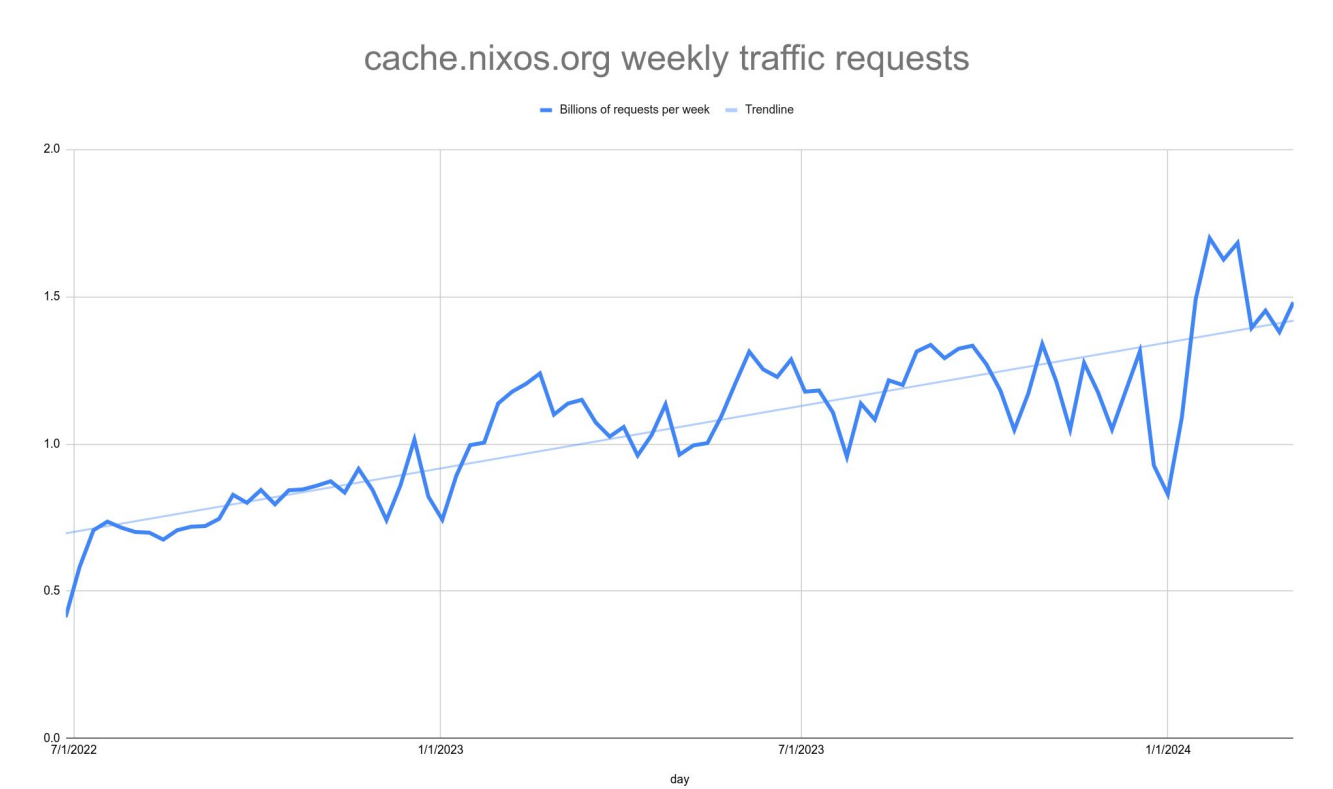
  (Sept 2023: **346.5 TiB** Infrequent Access, **114.1 TiB** Standard)

- **793M** objects
  (Sept 2023: **717M** objects)
- **68 TiB** AWS <-> Fastly traffic in August ‘23

Binary cache traffic



Binary cache traffic



The NixOS Foundation Responsibility

Keeping the lights on & Helping the light shine brighter

Nix Financials & Funding 2024

Profit

- Donations: €60,002.29
- NGI0: €46,777.61
- NixCon 2023 : €18,604.13

Loss

- AWS: €20,627.22
- Hetzner: €8,081.08
- Other hosting: €2,327.94
- Meetups: €7,569,26
- Accountants : €1,512.50
- Banking fees: €2,793.47
- Misc: €3,498.96

Costs Not on Balance Sheet - Fastly, Discourse (Flying Circus), Equinix Metal

Nix Fundraising Effort

A Self Sustainable Nix.

Foundation - A Look Back

S3 grant with AWS and Long Term Funding Effort

Building up relationships - technical, financial, marketing/events

Grant and event funding program

Expanding NGI program and first program manager hire

Docs team funding and structure

STF funding

Financial reports

Nix Formal Fundraising

Team Empowerment

Foundation - A Look Forward

Empowering teams and individuals

- To make decisions
- To receive funding/grants

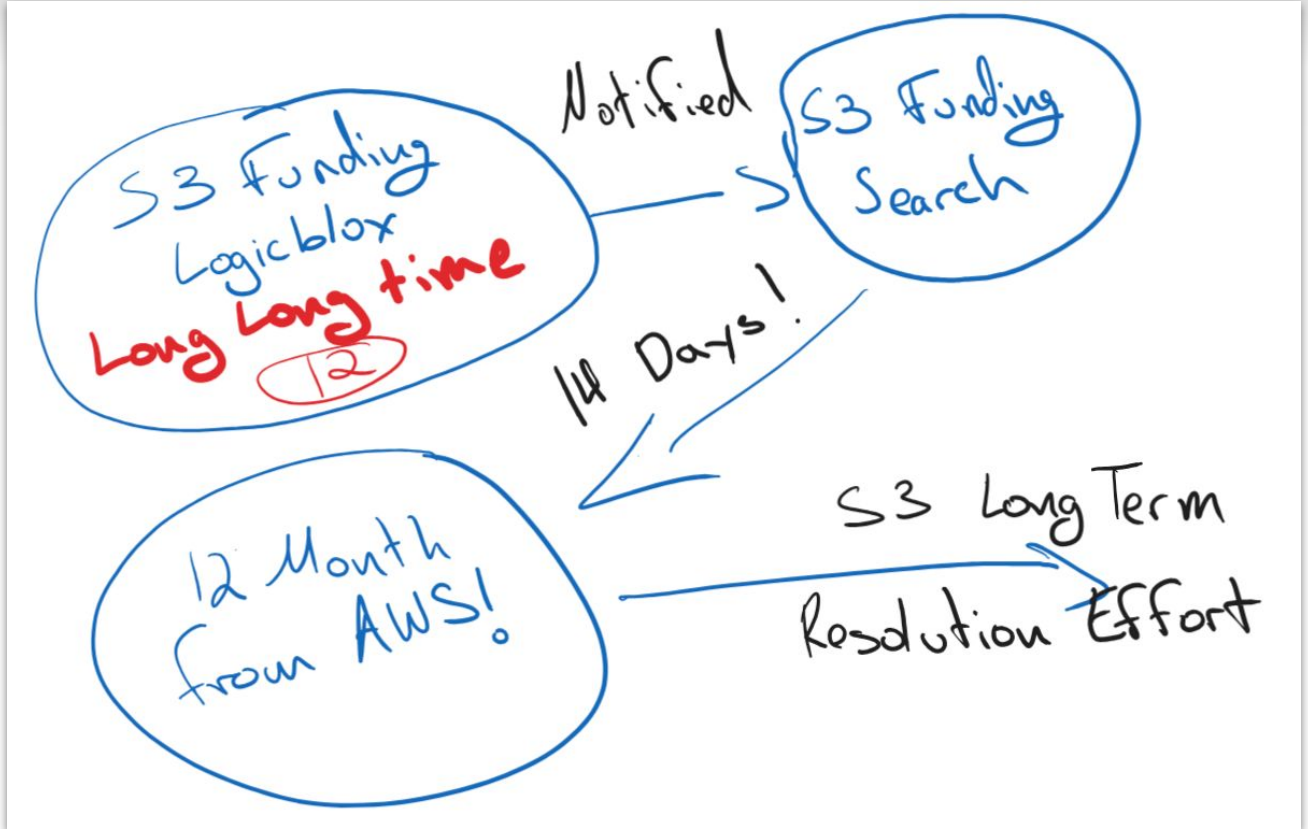
Increasing fundraising and Nix budget

Nix Infra/S3

Work on top community blockers! - Nix Governance Efforts

Sponsorship policies and relationship with external companies, Joint Effort

Nix S3 & CTA


S3 Funding
Logicblox
Long Long time
12
Notified
S3 Funding
Search
14 Days!
12 Month
from AWS!
S3 Long Term
Resolution Effort

New to Nix or Nix Curious - Welcome

Discourse

Matrix

Team and leads

Foundation

Nix.dev!

Nix Moderation Team

Mission: If you don't notice us, we succeeded.

- Jörg Thalheim (mic92)
- Martin Weinelt (mweinelt / hexa)
- piegames - New member!
- Ryan Hendrickson (rhendric) - New member!

Home: https://github.com/NixOS/moderation

Contact: #moderation:nixos.org, community@nixos.org

Some things that happened this year:

- Nix community keeps being awesome
- Converted https://github.com/NixOS/moderation into our home
- We now manage the room onboarding into the space
- Conversations on how to handle moderation.
- Please get in touch with us!

Nix Infra Team

Mission: Support the build infrastructure

Members:

- Jonas Chevalier (zimbatm), lead
- Vladimír Čunát (vcunat)
- Martin Weinelt (mweinelt) - New member!
- Julien Malka (JulienMalka) - New member!
- Cole Helbling (cole-h) - New member!
- Sophie Tauchert (999eagle) - New member!
- Linus Heckemann (lheckemann) - New member!
- Eelco Dolstra (edolstra)

Home:https://github.com/nixos/infra

Channel: #infra:nixos.org

Achievements:

- Methodic cleanup of the infra repo (delroth, hexa)
- $700/month savings (delroth, hexa)
- Performance improvements of Hydra (delroth)

Next year:

- Expand the non-critical team
- Matrix server self-hosting
- Better Hydra?

Nix Marketing Team

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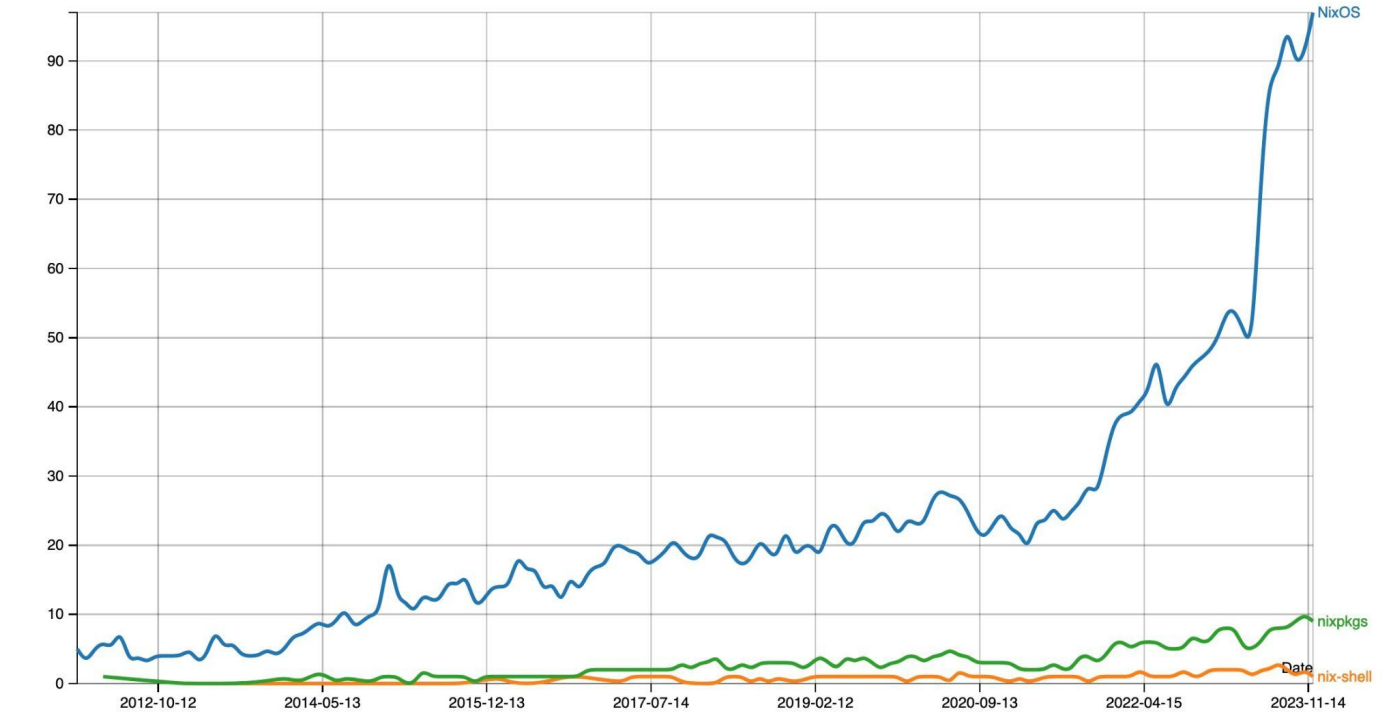
Google Trends

Note: data starts in 2012 because there is a huge unexplainable spike starting when the data begins in 2004 that seems suspect / incorrect.



Nixpkgs Architecture

- Nixpkgs Architecture Team concluded
- Spirit lives on, @infinisil is continuing with work on `pkgs/by-name`, now used by >1.5k packages!
- Help needed to fix various architectural issues

Nixpkgs Architecture

#nixpkgs-architecture:nixos.org

181 members

How to help

- Engage with Nixpkgs issues labeled with

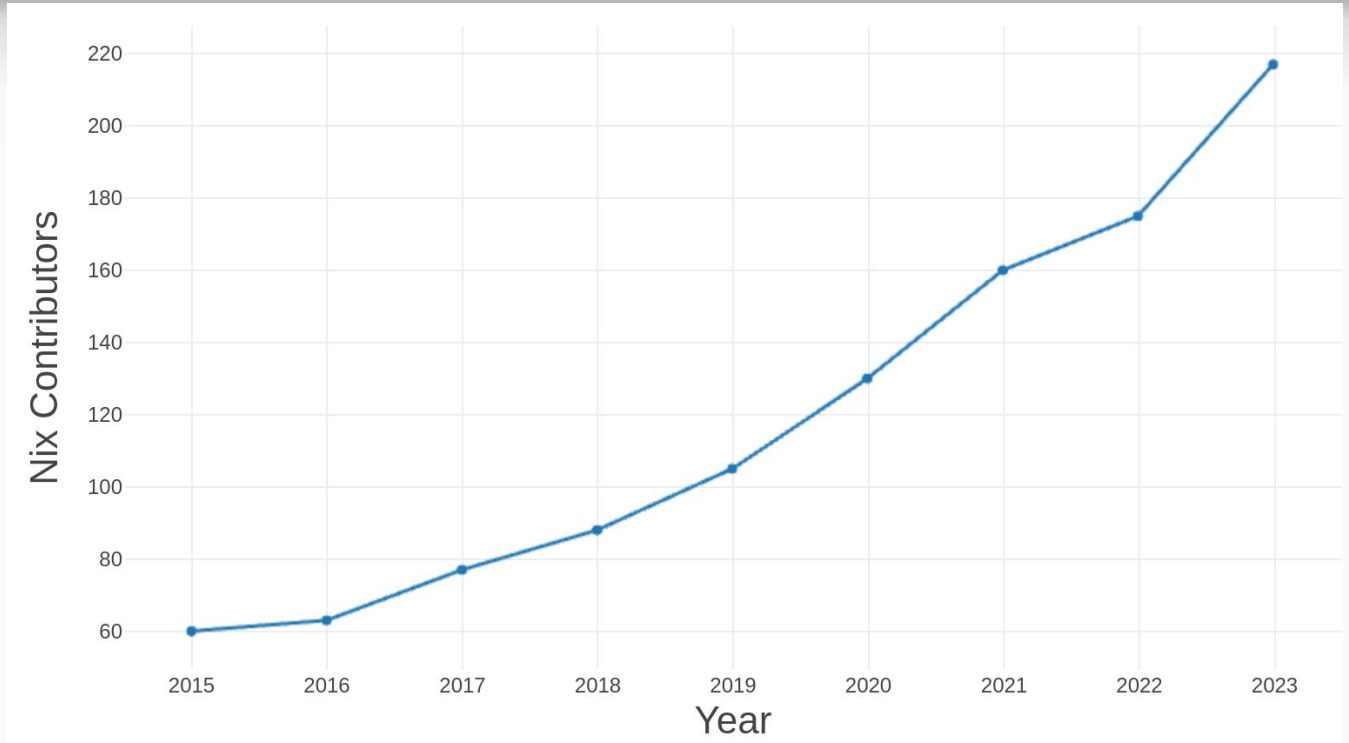
architecture

- Write design documents
- Synchronise in the Matrix channel
- Join @infinisil's weekly office hour (currently Monday 12pm PDT)

Team Empowerment - Making Progress

- Monthly meeting between team members across the whole community
  - Discuss cross-cutting problems
- Initial funding for the official teams
  - Also depending on fundraising
- Experimental declarative setup for the community structure
  - Making the whole thing more approachable

Nix maintenance team

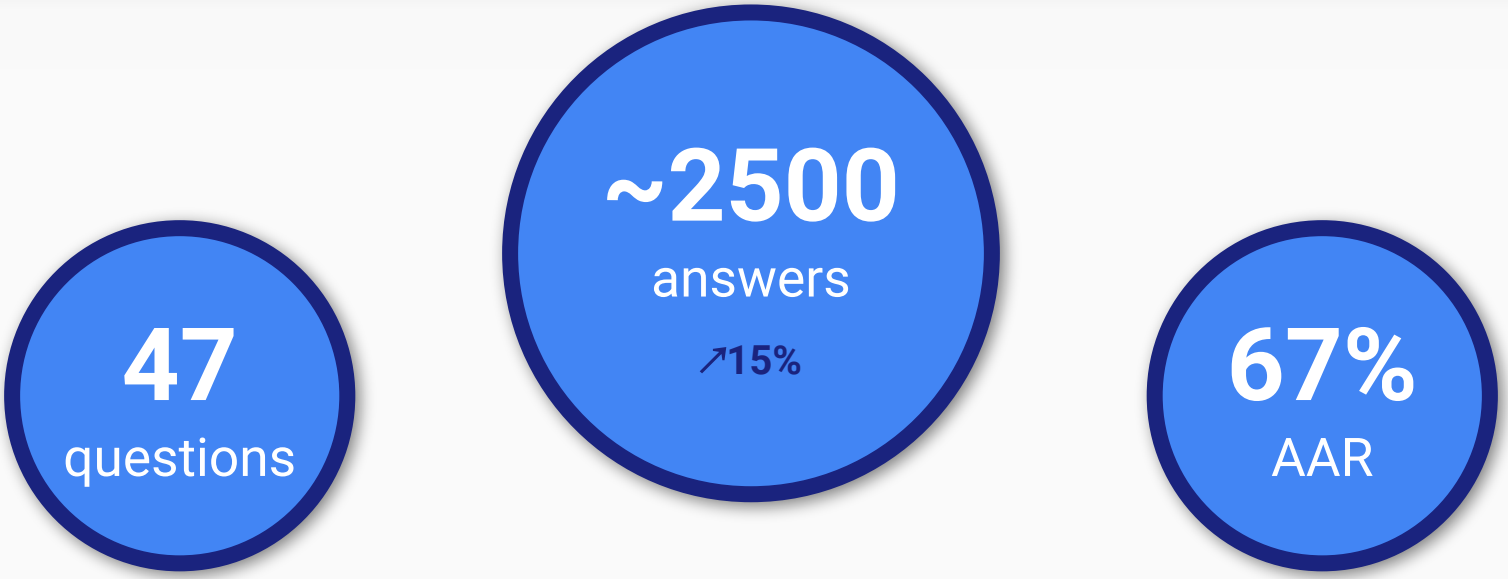


Nix maintenance team

> improving the contributor experience and attracting more maintainers

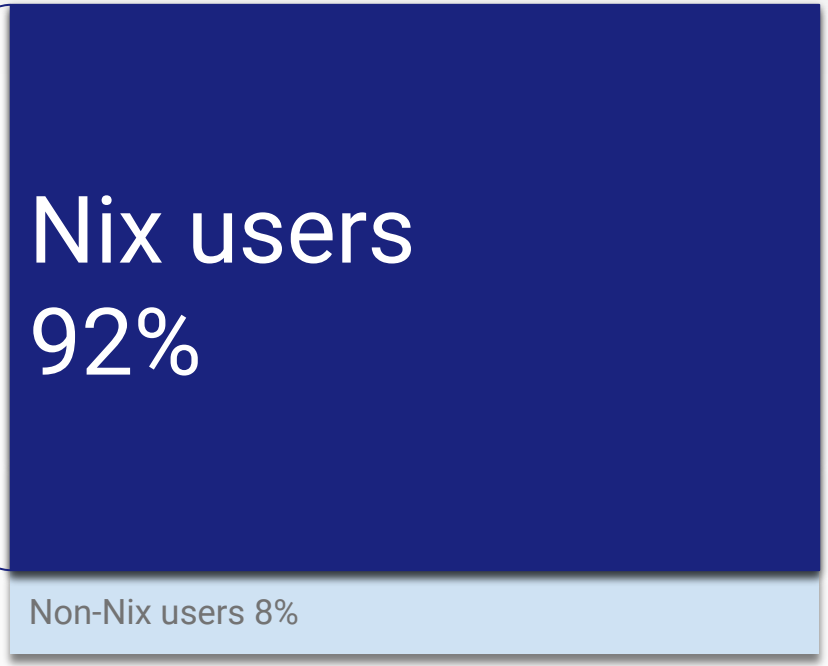
> Reduce the experimental feature surface. Incrementally stabilise what we can support indefinitely.

Survey Recap



Survey Recap

Nix users
92%



Survey Recap

Nix/NixOS is **loved** ❤️

- 📢 declarative configuration
- 🔄 atomic & reproducible

Nix/NixOS is **rough** 😩

- 💣 steep learning curve at every step
- 📚 needs more/better documentation
- 🛠️ no good out-of-the-box developer experience

Survey Recap

If Nix didn't exist, what would you use instead?

docker (200)

pacman (52)

guix (273)

debian (106)

arch (247)

fedora (70)

sadness/misery (7)

alcohol (6)

“become a goat herder” (1)

Survey Recap

Soon ⇒ publication of results

Next year ⇒ again and better !

Nix Community 2024

Will be announced on Discourse and socials later this spring.

Goals

- Describe the **evolution of the Nix community** over the years;
- Support Nix teams' strategies and operations by seeking to **provide concrete data to validate** or invalidate their assumptions.

Organization happening on Matrix #survey:nixos.org

Documentation lives in https://github.com/GuillaumeDesforges/nix-survey (to be moved to nix-community)

Release Management

NixOS 24.05 Uakari will be landing in November

Release Manager

One who will set the next release for success, working with all stakeholders in all subsystems in Nixpkgs.

Release Editor

One who will set the next release documentation, especially release notes, for success.

https://matrix.to/#/#nixos-release-management:nixos.org

The Nix Coin (physical Nix Pogs)

Thank you!

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