



Montevideo, Uruguay 2023

**PERCONA  
UNIVERSITY**

Open Source Databases Meetup

In partnership with

**1950LABS**

# Welcome



Peter Zaitsev,  
Founder at Percona  
24 October 2023



Montevideo, Uruguay 2023

**PERCONA**  
UNIVERSITY







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# Bring Percona University to Your City!



# Cloud of Freedom or Cloud of Serfdom ?



Montevideo, Uruguay 2023

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# My Prospective

- **Involved in Open Source since late 1990s**
- **Early Staff member of MySQL AB**
- **Founder, until recently CEO at Percona**
- **Investor, Advisor, Mentor in Open Source Businesses**
- **Open Source Advocate**

# Better

Everything being Equal Open  
Source is a better choice

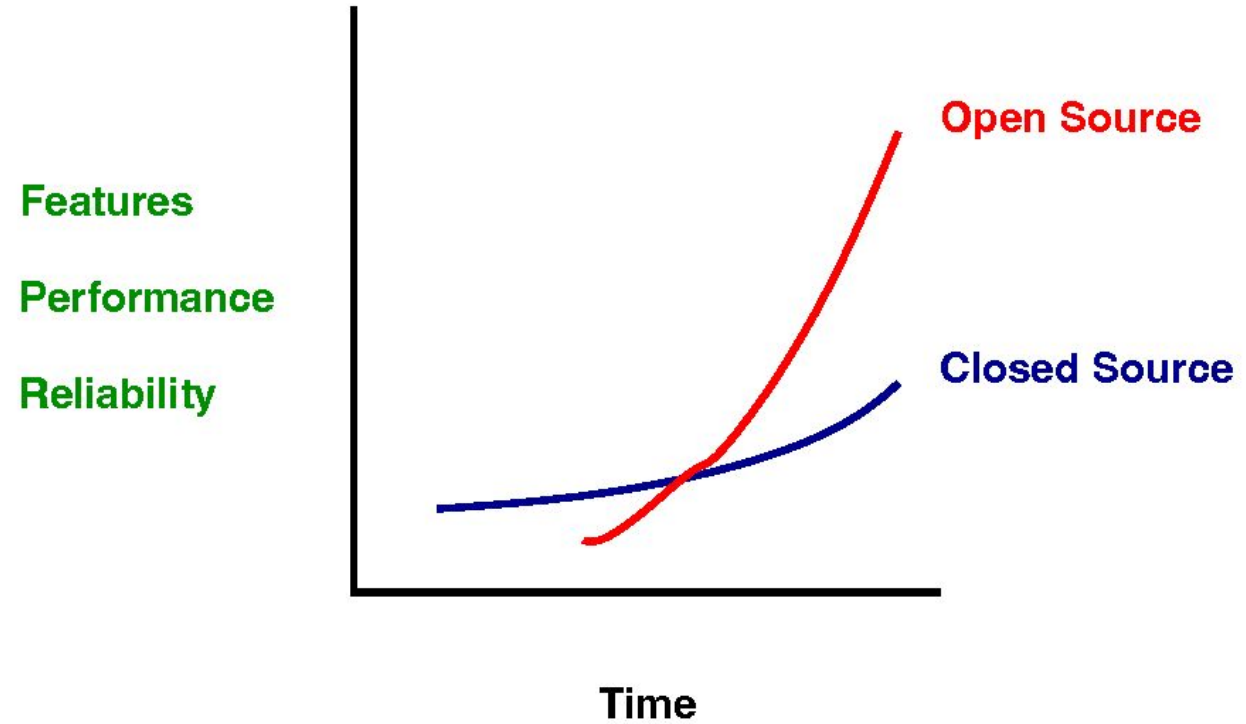


# Investment

**It is smarter to invest in your resources in making Open Source better rather than paying for Proprietary Software**

# Open Source and Proprietary

## Rise of Open Source



12 / 51

<https://momjian.us/main/writings/pgsql/forever.pdf>



Have we  
been here  
before ?





# Open Source in the Cloud

**But do not Cloud Vendors  
just make Open Source  
Easier ?**





# Old Strategy

“Embrace, extend, and  
extinguish”

# Usability and Ease of use

**New Frontier for the competition**





# Cloud only Skills

Increasingly “Open Source  
Experts” have only Managed  
Cloud Solutions Skills



# Cloud Vendor Push

1

**Using their  
Proprietary or  
Managed solutions  
as Best Practice**

2

**Increasing Price  
Difference for such  
Managed Solutions**

3

**Embracing Scaling  
by Credit Card**



# Venture Funded Open Source

**Often Abandon Open Source Licenses to Create  
~~Monopoly~~–Protect themselves from Unfair  
Competition from the Cloud.**



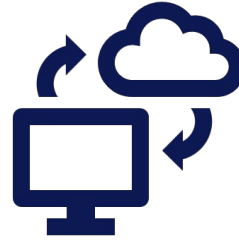
# Community Open Source

**Largely Embraces adoption by Cloud Vendors as it increases user base**





**Focus on last decade was  
growth at any cost**



**Pushing as much on third  
parties (Cloud Vendors) makes  
sense**



**No resource to put on Open  
Source requiring “elbow  
grease”**

# Growth at any Cost

# Subsidized Cloud

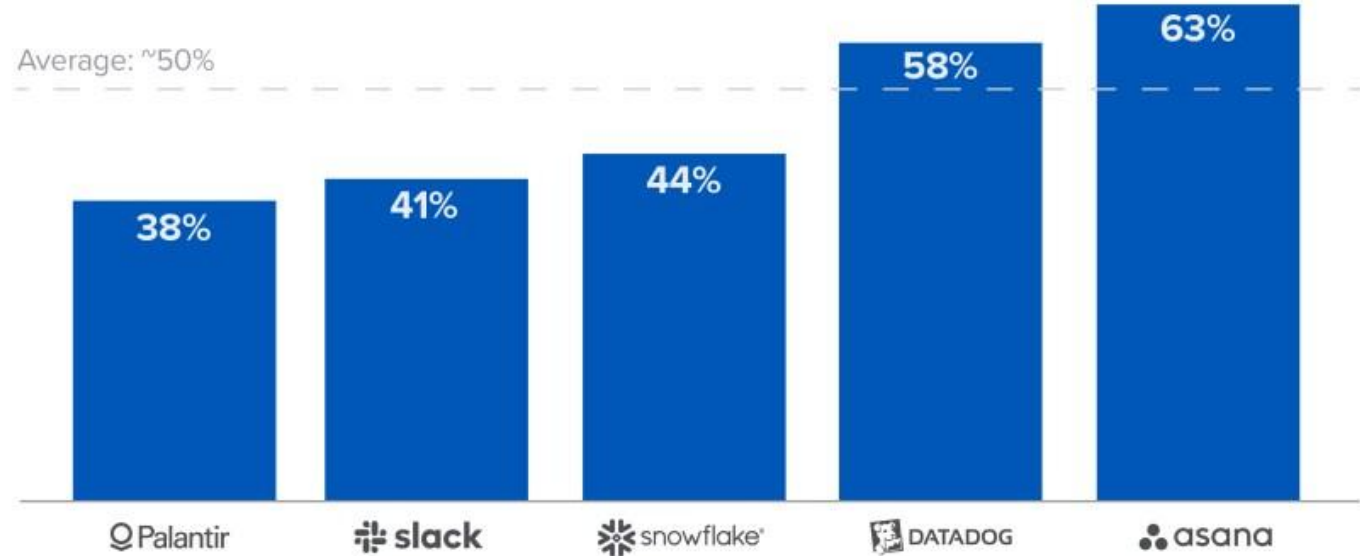
First does of Heroin is Free





# Things are Changing

## Estimated Annualized Committed Cloud Spend as % of Cost of Revenue



Source: Company S-1 and 10K filings

<https://a16z.com/2021/05/27/cost-of-cloud-paradox-market-cap-cloud-lifecycle-scale-growth-repatriation-optimization/>

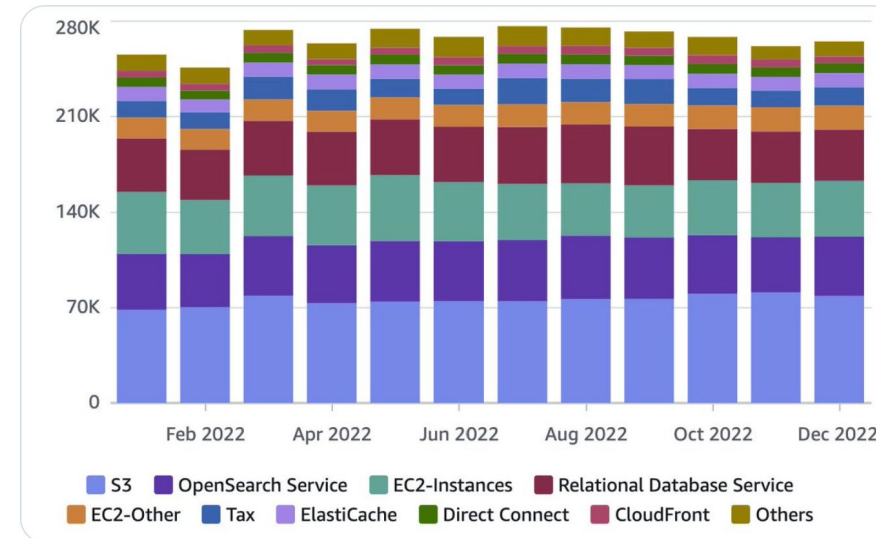
# 37 Signals leaving the cloud



DHH  
@dhh



We spent \$3,201,564.24 on cloud in 2022 at @37signals, mostly AWS. \$907,837.83 on S3. \$473,196.30 on RDS. \$519,959.60 on OpenSearch. \$123,852.30 on ElastiCache. This is with long commits (S3 for 4 years!!), reserved instances, etc. Just obscene. Will publish full accounting soon.



7:08 AM · Jan 12, 2023 · 717K Views

341 Retweets 119 Quote Tweets 2,488 Likes

<https://twitter.com/dhh/status/1613508201953038337>

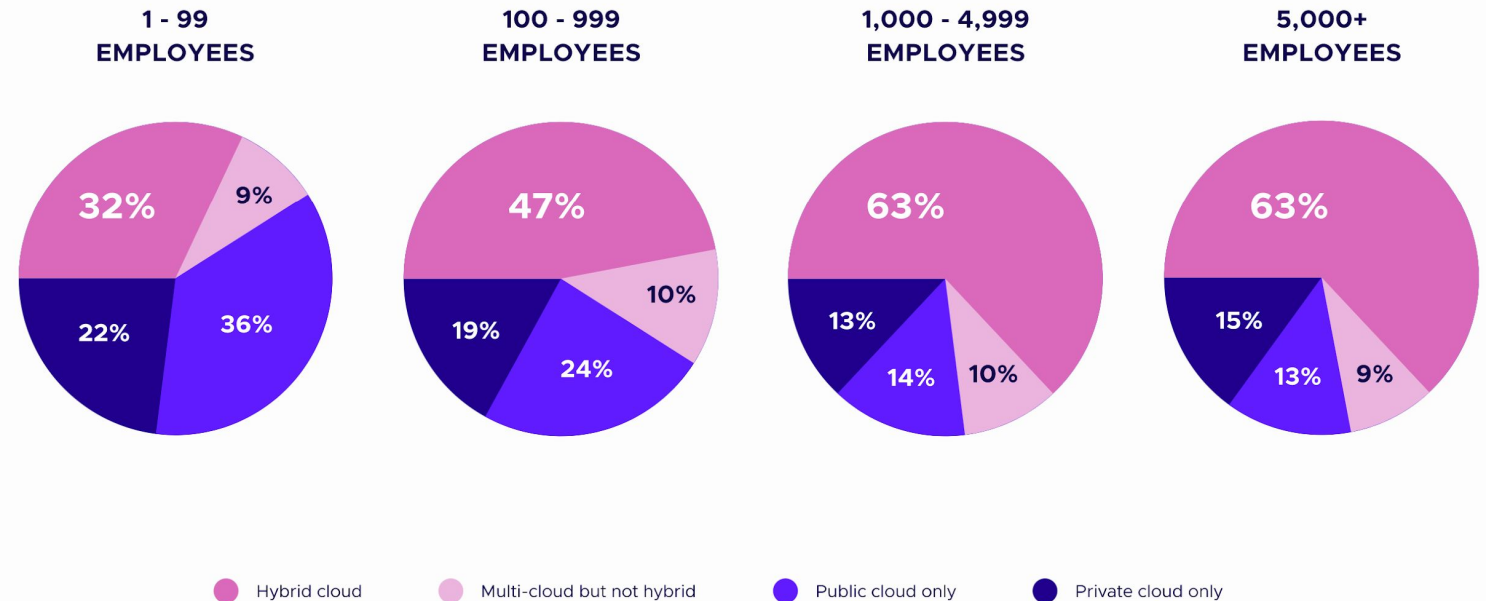


# GitOps

Declarative Versioned  
Infraestructura as a Code

# Hybrid Cloud

Which of the following combinations of data center and cloud architectures does your organization use?  
(By organization size)



<https://www.cncf.io/reports/cncf-annual-survey-2022/>

# Open Source Catches Up Again



- **Lock-in with Cloud Vendor**
- **Use Proprietary Solutions**
- **Highly Differentiated Cloud**
- **Hostage**
- **No Vendor Choice**



**CLOUD NATIVE  
COMPUTING FOUNDATION**

- **Freedom to Run Anywhere**
- **Use Open Source**
- **Cloud Is Commodity**
- **Customer**
- **Choice of Vendors**





# Giving Cloud Its Originally Intended Role of Commodity Infrastructure

## What is Cloud Computing?

An analogy: think of electricity services...

You simply plug into a vast electrical grid managed by experts to get a low cost, reliable power supply – available to you with much greater efficiency than you could generate on your own.

Power is a utility service - available to you on-demand and you pay only for what you use.



# Smart API – Kubernetes



# DOK Community



Dok  
Community

<https://dok.community/>

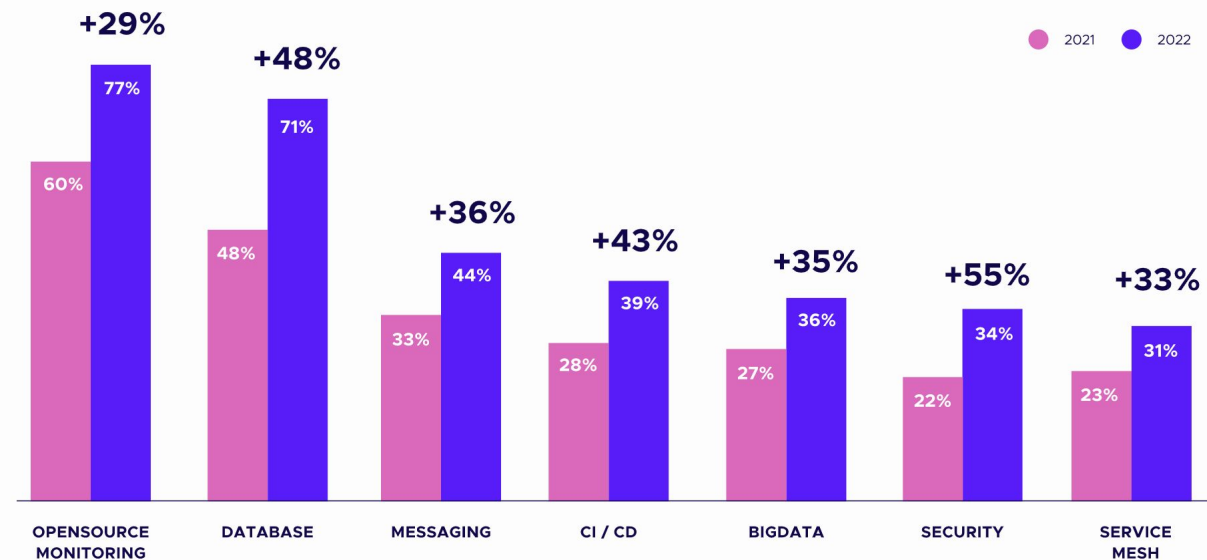


# Adoption Areas

## KUBERNETES GROWTH AREAS

Focusing on non-application workloads, enterprises used an increasing variety of technologies. This reflects the need to enhance Kubernetes with better observability, security, and service-to-service communications. Other technologies enable specific use cases like CI/CD tools or databases.

Across all categories, **open source projects rank among the most frequently used solutions.**



<https://www.cncf.io/reports/cncf-annual-survey-2022/>

# Kubernetes Powers many DBaaS



# Databases



# Data Has Gravity

**Hard to Move**

**Attracts/Pulls other  
Applications**

**Creates More Severe  
Vendor Lock-In**

**Should be your focus in  
Achieving your  
Freedom**



# Mission Critical Open Source Base Database Software



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Distribution for  
MySQL



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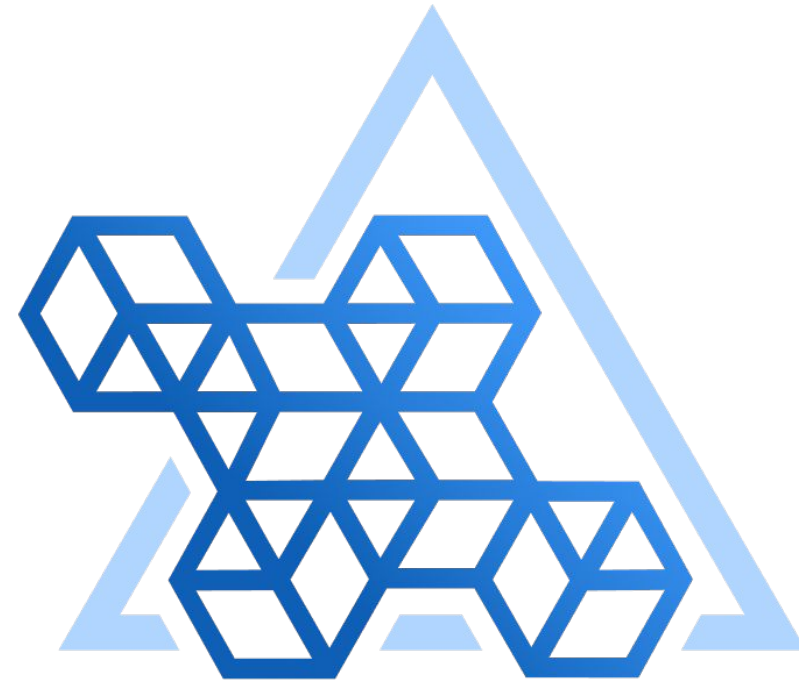
Distribution for  
PostgreSQL



**PERCONA**

Distribution for  
MongoDB

“Operators  
” to run  
them on  
Kubernetes



**PERCONA**

Kubernetes  
Operators



# Observability and Simplified Management



**PERCONA**  
Monitoring and  
Management

Percona  
Everest –  
Open Source  
DBaaS  
Powered by  
Kubernetes

**PERCONA**

Everest  
Product  
Documentation



<https://docs.percona.com/everest/>

Expertise you  
can count on



**Support**



**Consulting**



**Managed Services**



# Call For Action



**Embrace Open Source in the Cloud**



**Invest in Making it Better**



**Spread the World**



**Run Percona** 🏆

# Thank you, Let's Connect!

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