



Buenos Aires, Argentina 2023

# PERCONA UNIVERSITY

Open Source Databases Meetup

In partnership with

UNGRES



# Welcome



Peter Zaitsev,  
Founder at Percona  
20 October 2023



Buenos Aires, Argentina 2023

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UNIVERSITY







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to  
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Michael Ritossa

your friendly  
Percona Sales Person

[michael.ritossa@percona.com](mailto:michael.ritossa@percona.com)

Cell 6572505630





# Become a Percona Superhero!



## We are Hiring!

Contact

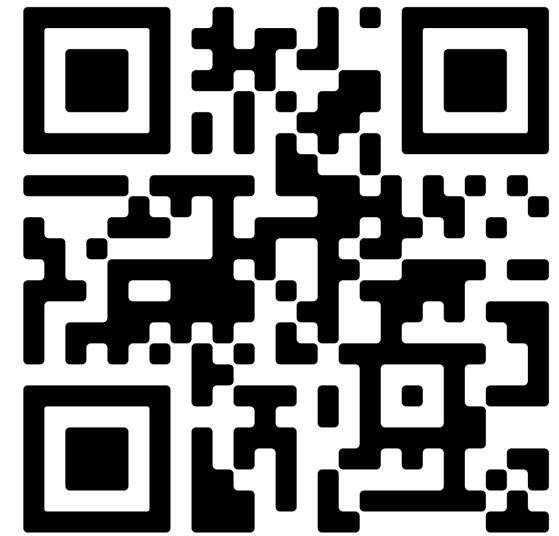
[careers@percona.com](mailto:careers@percona.com)

<https://www.percona.com/about/careers>





# Bring Percona University to Your City!



Check it out





# Cloud of Freedom or Cloud of Serfdom ?



Buenos Aires, Argentina 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

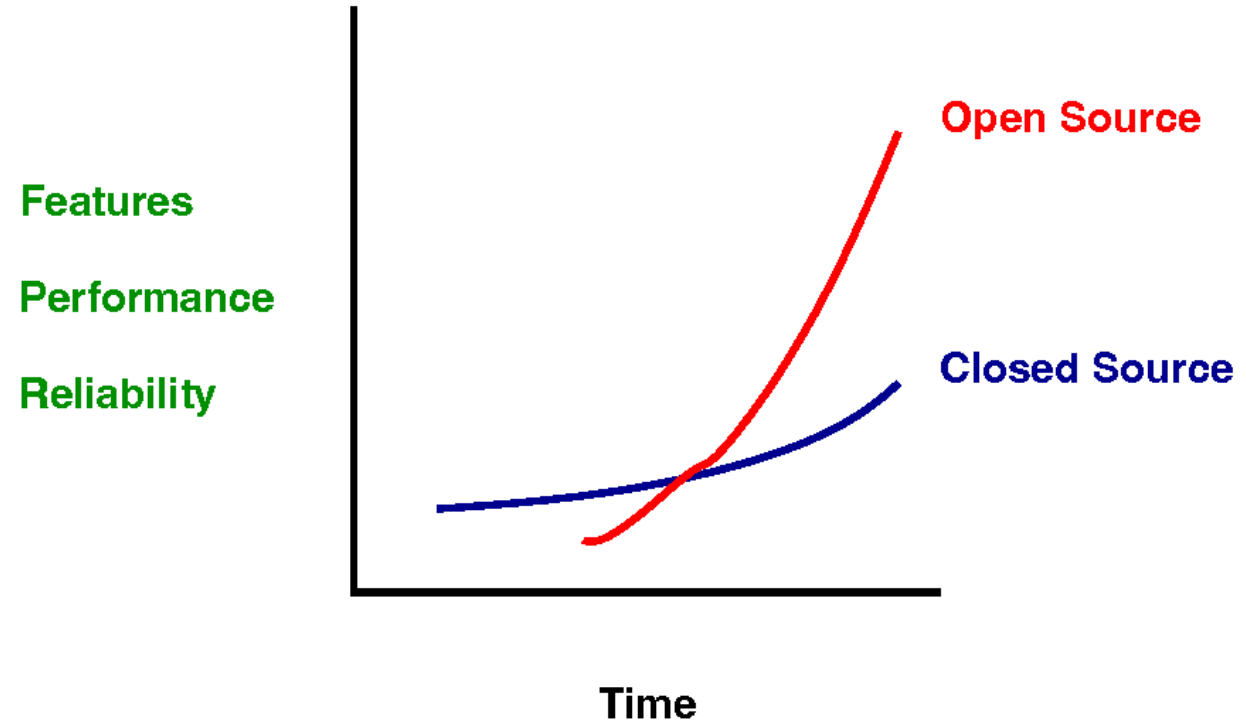


# Investment

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

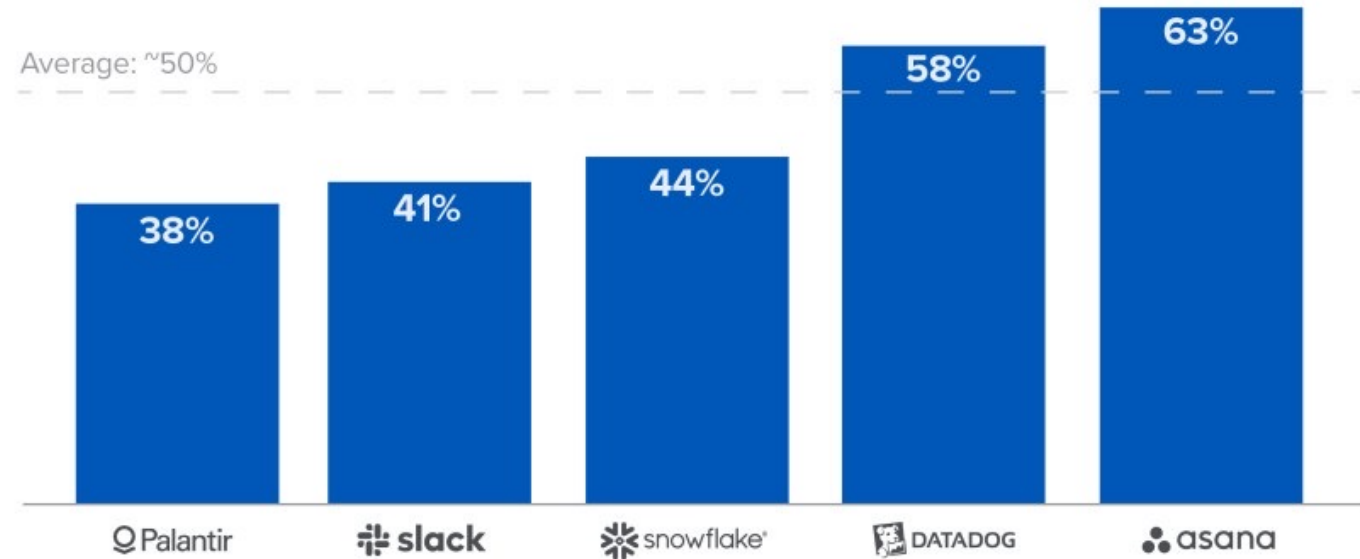
First does of Heroin is Free





# 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/>

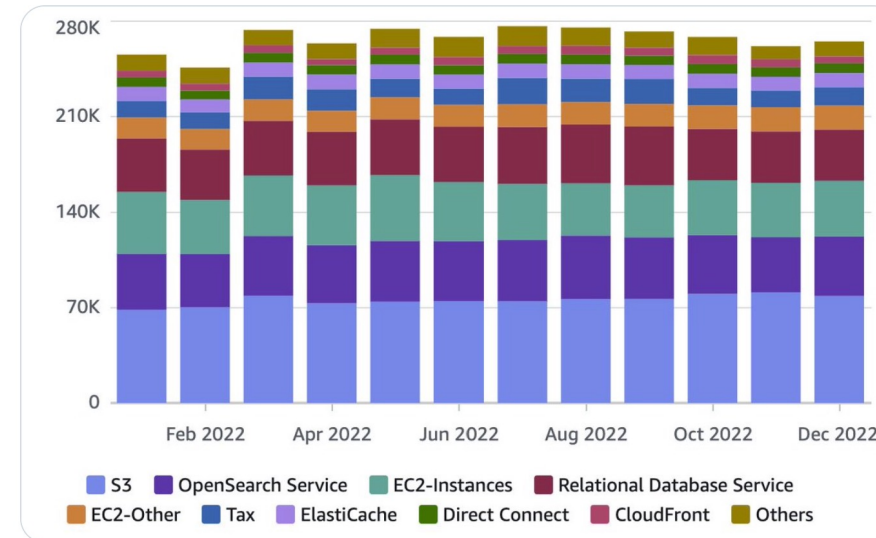
# 37Signals leaving the cloud



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>

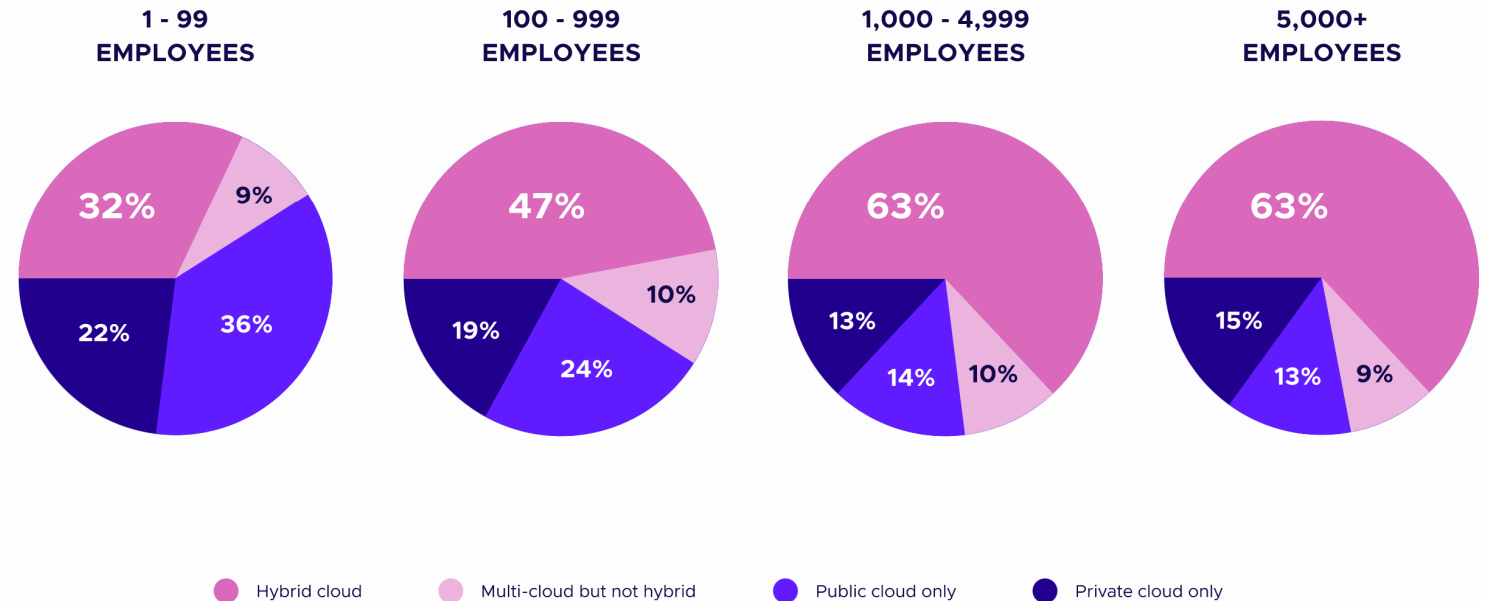


# GitOps

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/>

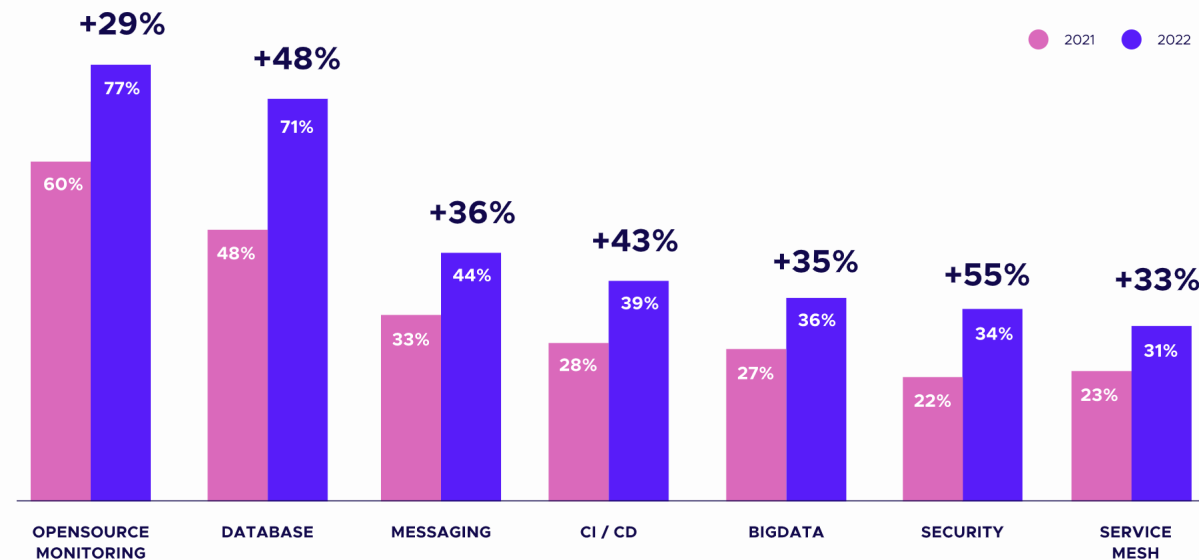


# Adoption Areas

## 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



**PERCONA**

Distribution for  
PostgreSQL

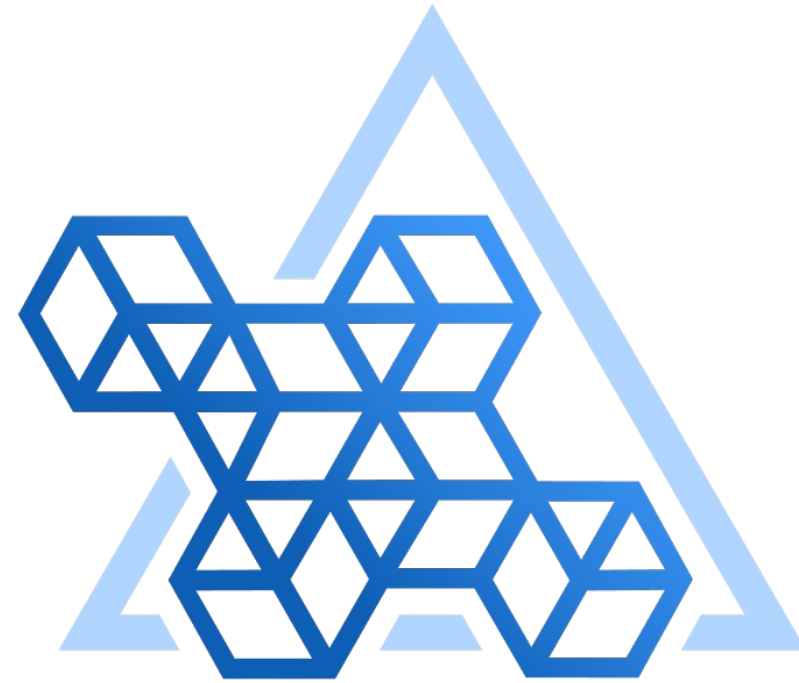


**PERCONA**

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!

<https://www.linkedin.com/in/peterzaitsev/>

<https://twitter.com/PeterZaitsev>

<http://www.peterzaitsev.com>