Welcome

Peter Zaitsev, Founder at Percona 5 July 2023









Veronica Urjan and Flogen Muho

your friendly Percona Sales Persons

veronica.urjan@percona.com

flogen.muho@percona.com





Thank you to our Partners











© 2023 Percona

Become a Percona Superhero!

We are Hiring!

Contact

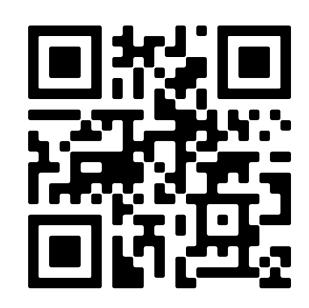
careers@percona.com

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



Bring Percona University to Your City!



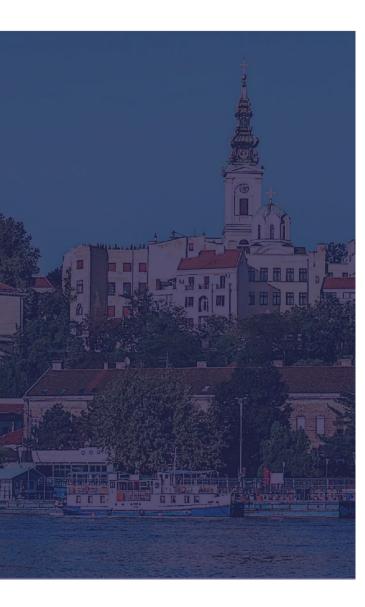


Check it out









Cloud of Freedom or Cloud of Serfdom ?



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

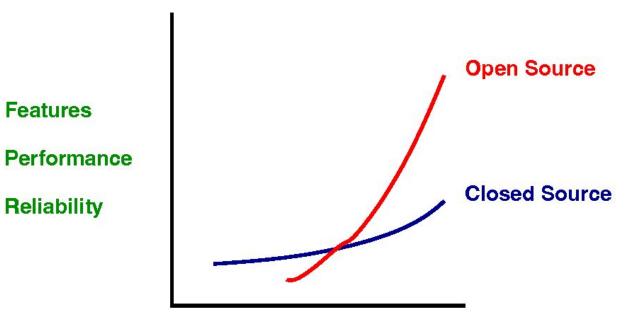
© 2023 Percona

Investment

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

© 2023 Percona

Open Source and Proprietary



Rise of Open Source



12/51

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



Operating Systems



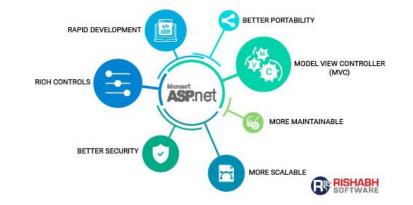




Have We Been Here Before?

2000s

2020s







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







Software Explosion

Data Explosion

Do More with Less (skills)

Reasons

Cloud only Skills

Increasingly "Open Source Experts" have only Managed Cloud Solutions Skills

Cloud Vendor Push

Using their Proprietary or Managed solutions as Best Practice

1

Increasing Price Difference for such Managed Solutions

2

Embracing Scaling by Credit Card

3



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

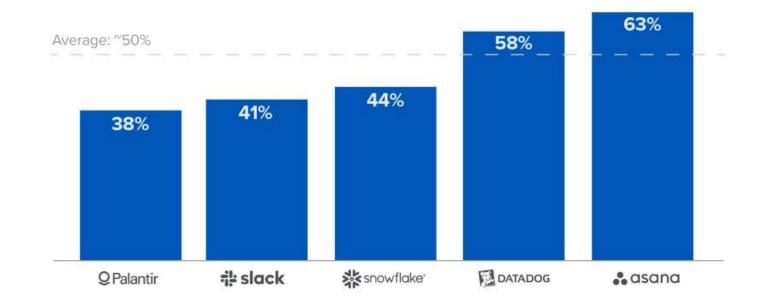
Subsidized Cloud

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/

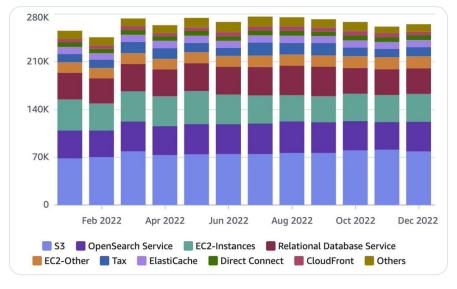


37Signals leaving the cloud

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



ser actize(\$captcha_config); 'code' => \$captcha_config['code'], 'image_src' => \$image_src 83); 84 A chi-Y if(efunction_exists('hex2rgb')) { stature.stature.string = false, \$separator = ',') { srsb_array = array(); val = hexdec(\$hex_str); ray['r'] = 0xFF & (\$color_val >> 0x10); ay['g'] = 0xFF & (\$color_val >> 0x8); GitOps rlen(\$hex_str) == 3) { $\begin{aligned} & \text{rem(subs}\\ & \text{y['r']} = hexdec(str_repeat(substr(shex_str, 0, 1), 2)); \\ & \text{wither} = hexdec(str_repeat(substr(shex_str, 0, 1), 2)); \end{aligned}$ **Declarative Versioned** $\begin{aligned} y'' y'' &= nexaec(surrepeac(substrained)) \\ y'' y'' &= hexdec(surrepeac(substrained)) \\ &= hexdec(str_repeat(substrained)) \\ &= hexdcc(str_repeat(substrain$ Infrastractura as a Code y["g'] = nexdec(str_repeat(sdbstr(snex_str)) = hexdec(str_repeat(sdbstr(snex_str)), 2, 1), 2));

wrn \$return_string ? implode(\$separator \$cold)

return array(

81

82

106

ł

// Draw the image 109 V if(isset(\$ GETTI of

hub

HTML -

-php-captcha

kgrounds

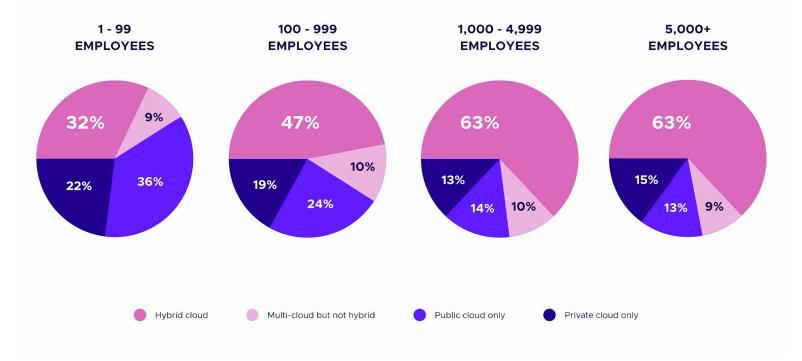
s

×.php

sc_src), '/'); '?_CAPTCI

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



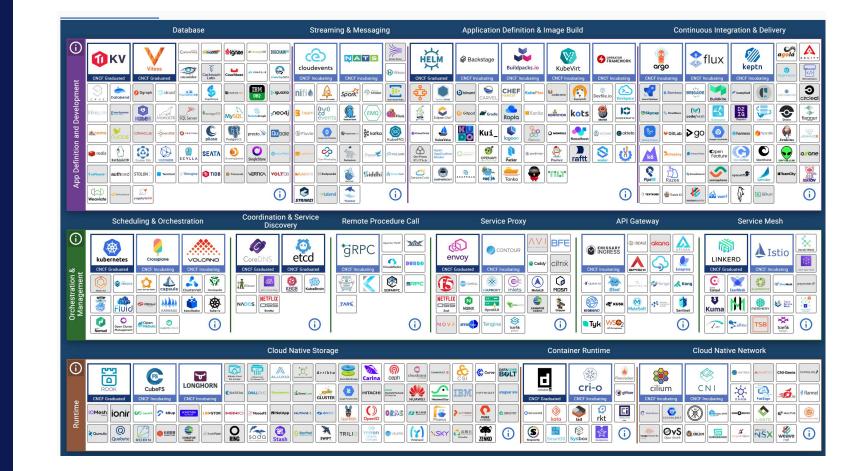


- Freedom to Run Anywhere
- Use Open Source
- Cloud Is Commodity
- Customer
- Choice of Vendors





Cloud Native is Going Strong



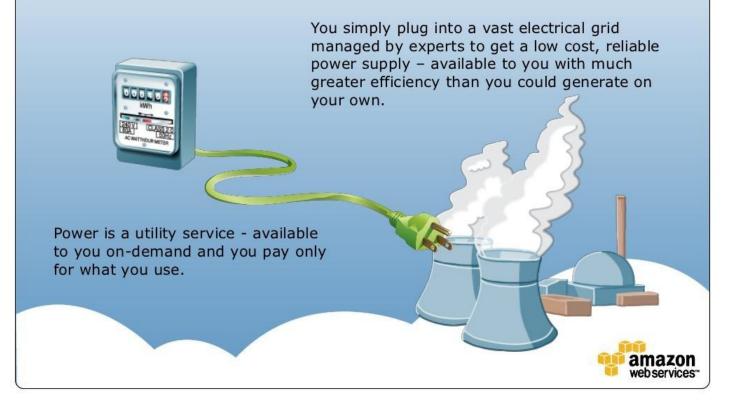
https://landscape.cncf.io/



Giving Cloud Its Originally Intended Role of Commodity Infrastructure

What is Cloud Computing?

An analogy: think of electricity services...





Your Choice of Cloud

Use a lot of Proprietary Features of your cloud vendor Use Cloud Vendor as Commodity, Use Open Source



Cloud of Serfdom

Cloud of Freedom

Smart API -Kubernetes





Getting Better



DOK Community



Dok Community

https://dok.community/

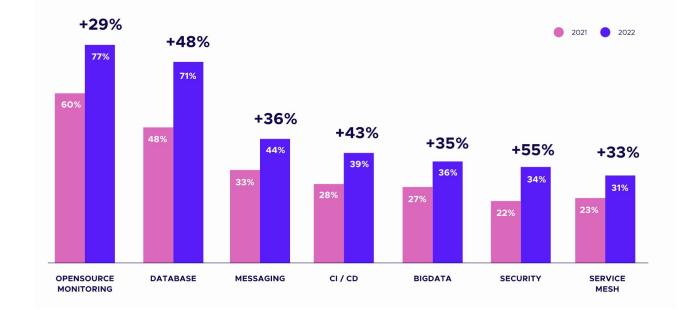


Adoption Areas

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

















Anywher

e



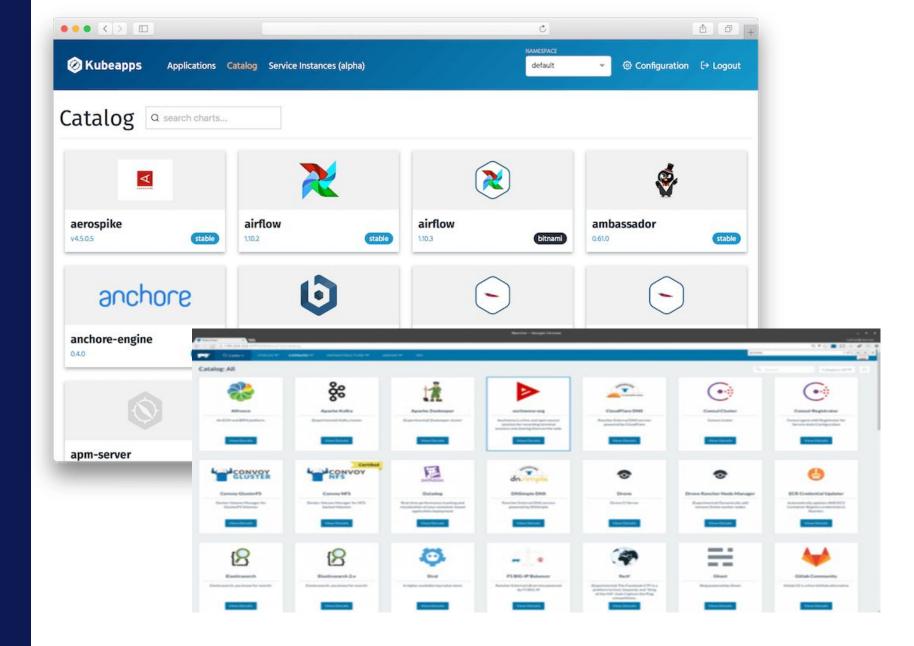
Lightweight Kubernetes

The certified Kubernetes distribution built for IoT & Edge computing

← → C Δ O localhost:8001/api/v1/namespaces/kube-system/services/https:kubernetes-dashboard:/proxy/#!/pod?namespace=kube-system									on ☆ ଲ §			
kubernetes Q Sea			arch						+ CREATE			
\equiv Workloads > Pods												
Nodes	-											
Persistent Volumes	CPU usage	CPU usage					nory usage (
Roles												
Storage Classes	0.135				_		4 Mi 2 Mi					_
Namespace	0.090 V 0.060 CG						9 Mi					
kube-system 🔻	0.060 0.030					Crome 14:						
	11:10	11:13	11:16	11:20	11:24	2	11:10	11:13	11:16	11:20	1	11:24
Overview			Time						Time			
Workloads												
Cron Jobs	Pods										7	Ŧ
Daemon Sets												
Deployments	Name 🌲		Node	Status 🌻		Restarts	Age 🌲	CPU (cores)	Men	nory (bytes)		
Jobs	kubernete	s-dashboard-7b9c7b	minikube	Running		0	27 minutes	0		19.746 Mi	=	:
Pods	leapster-c	ıhq6r	minikube	Running		0	27 minutes	0		18.004 Mi	=	:
Replica Sets	influxdb-g	rafana-77c7p	minikube	Running		0	27 minutes	٥		43.926 Mi	=	:
Replication Controllers	-	duler-minikube	minikube								=	
Stateful Sets				Running		0	20 hours	0.01		11.930 Mi		

Dashboard

Applications







BETTER BETTER USABILITY DAY 2 OPERATIONS INTEGRATIONS



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



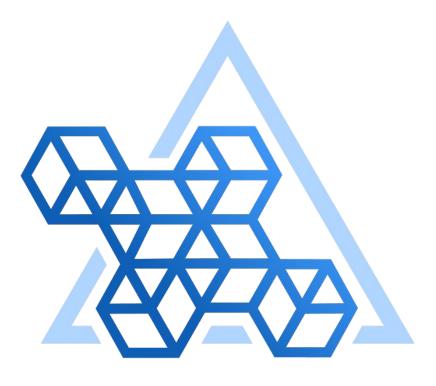
PERCONA Distribution for MySQL PERCONA

PERCONA

Distribution for PostgreSQL Distribution for MongoDB



"Operators " to run them on Kubernetes



PERCONA

Kubernetes Operators Observabilit y and Simplified Managemen t



Monitoring and Management

Expertise you can count on



Support

X S X

Consulting

Managed Services



© 2023 Percona

Unified As



PERCONA Platform

Call For Action



Embrace Open Source in the Cloud



Invest in Making it Better



Spread the World





© 2023 Percona

Thank you, Let's Connect!

https://www.linkedin.com/in/peterza com/PeterZaitsev

or

peterzaitsev.com





