



Is OpenStack
still needed in 2023?

A hand holding a lit sparkler against a dark, splattered background. The sparkler is bright and glowing, with many sparks flying out. The background is dark with white splatters and a circular vignette effect.

Hello!

My name is Thierry Carrez

General Manager at the OpenInfra Foundation
Vice-chair at Open Source Initiative

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Is OpenStack
dead?



40+ million CPU cores

RETAIL/E-COMMERCE



FINANCIAL SERVICES



ACADEMIC/RESEARCH



TELECOM



ENERGY/TRANSPORTATION/GOVERNMENT



MANUFACTURING



WEB & ENTERTAINMENT



PUBLIC CLOUD



Deployments > 1 M cores

LINE

@WalmartLabs

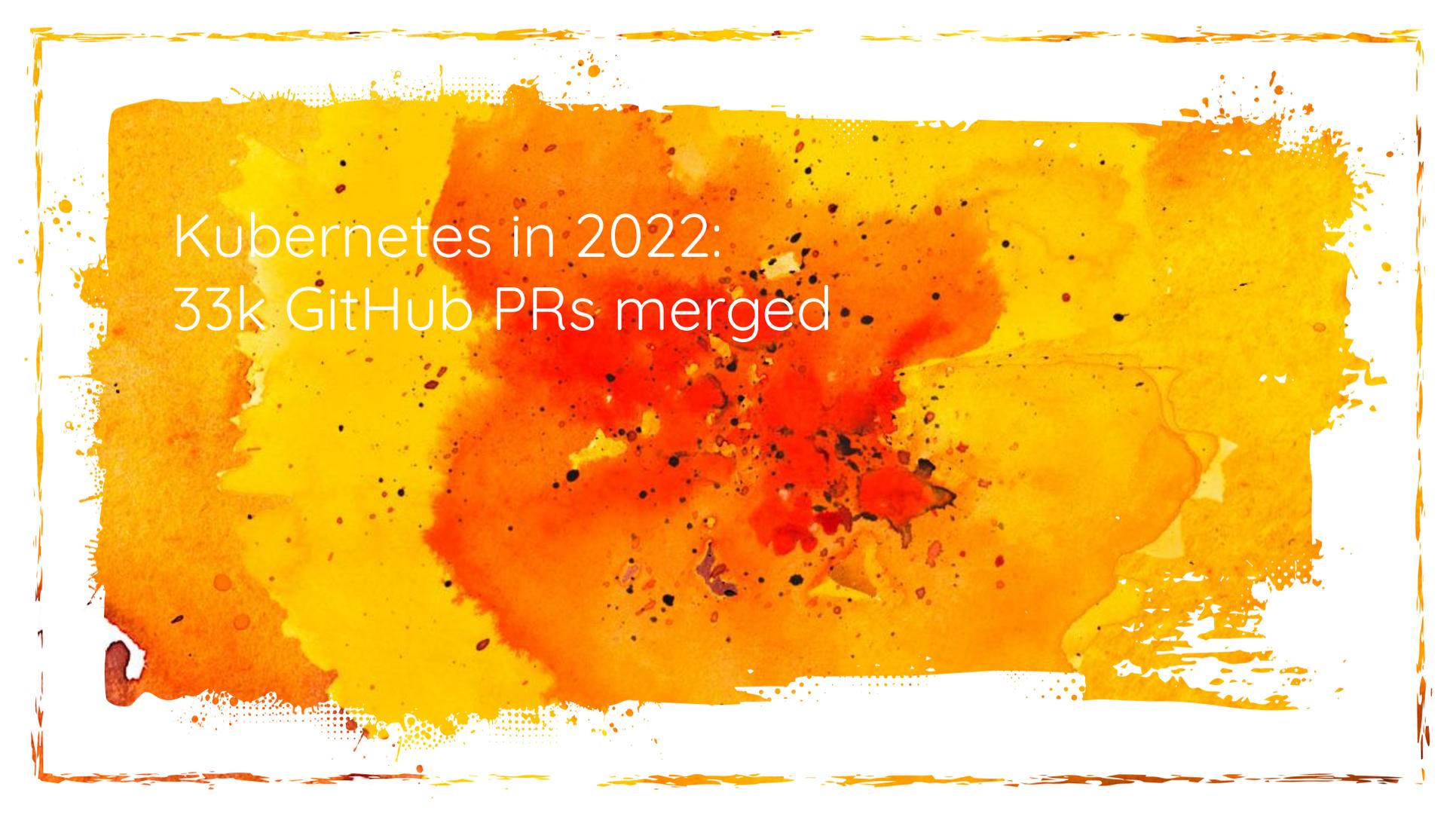


中国移动
China Mobile

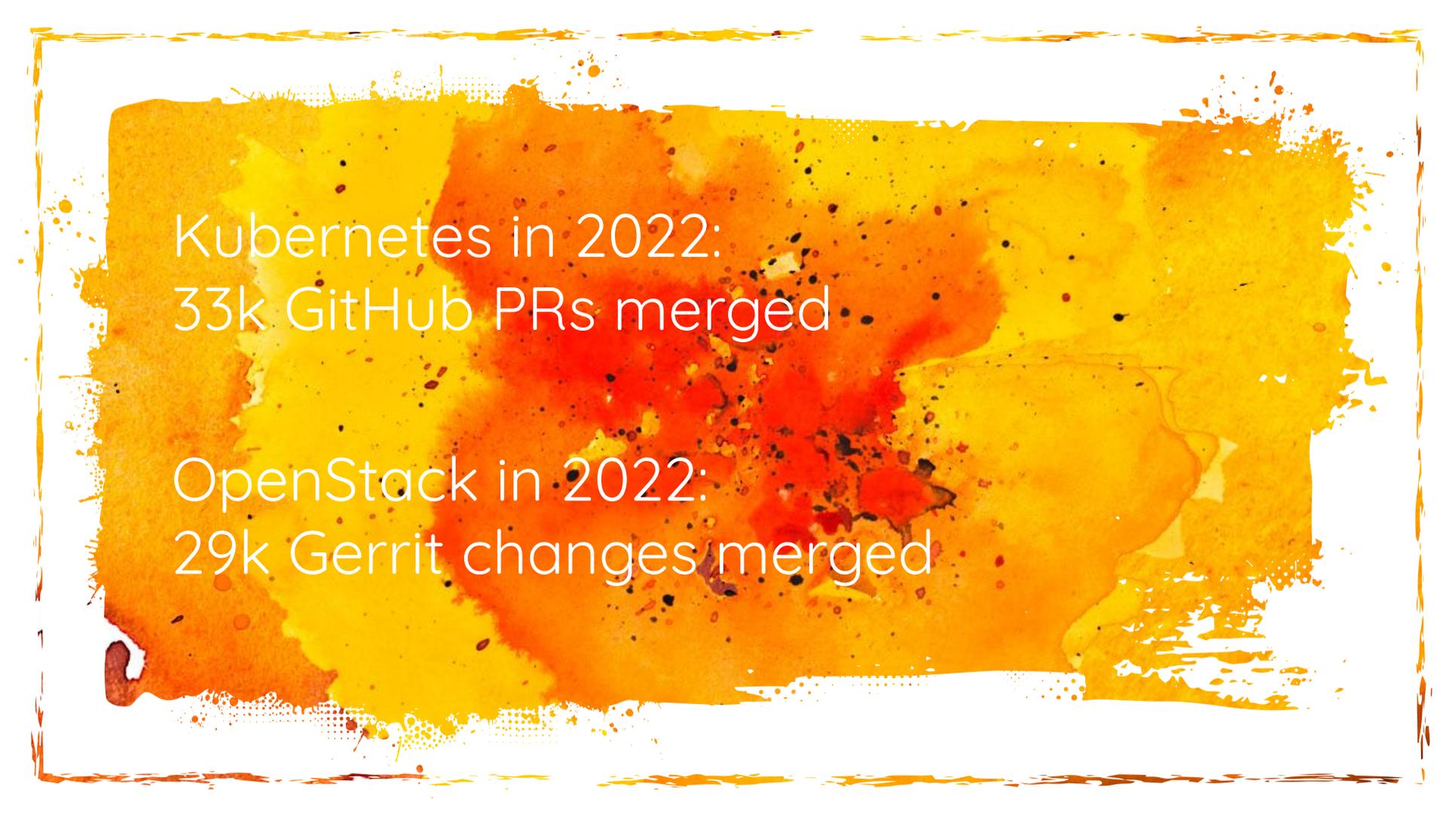
China
unicom中国联通

workday®

yahoo!



Kubernetes in 2022:
33k GitHub PRs merged



Kubernetes in 2022:
33k GitHub PRs merged

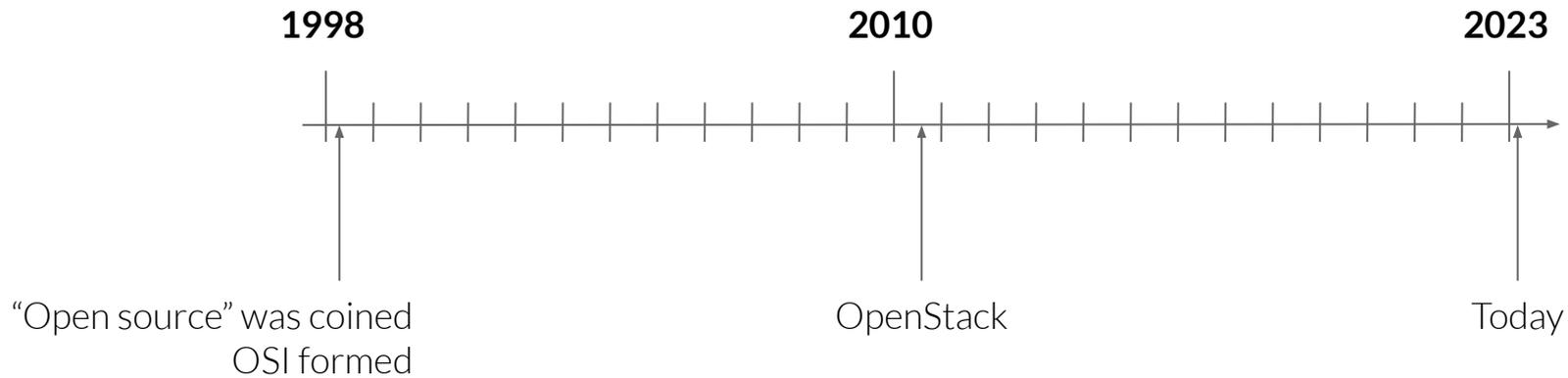
OpenStack in 2022:
29k Gerrit changes merged

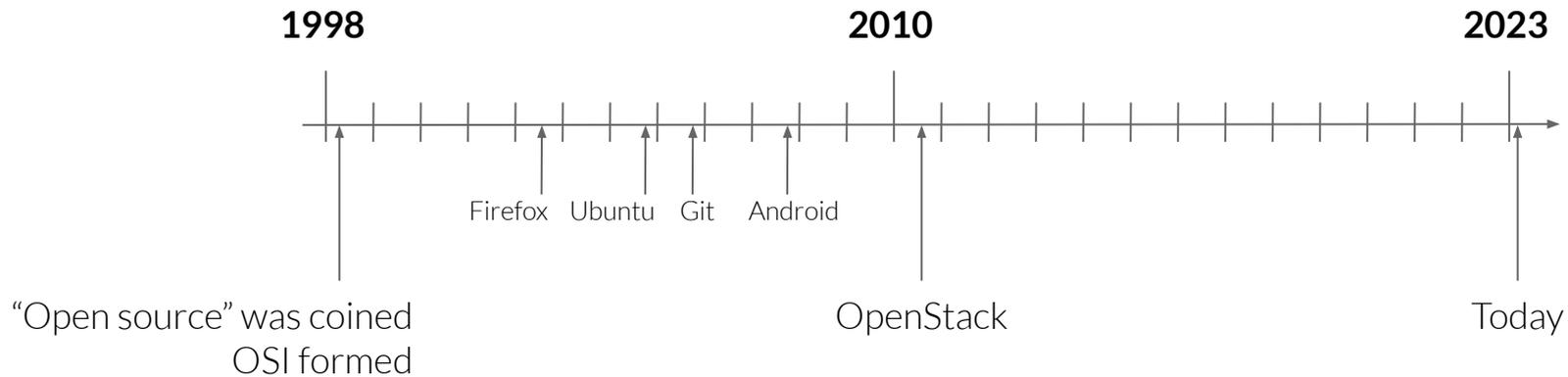
An OpenStack history



Back
in 2010...







The first 6 years

× Nova + Swift



The first 6 years

- × Nova + Swift
- × The Linux of the datacenter



The first 6 years

- × Nova + Swift
- × The Linux of the datacenter
- × Startups everywhere!



The first 6 years

- × Nova + Swift
- × The Linux of the datacenter
- × Startups everywhere!
- × More than 100k changes per year



The first 6 years

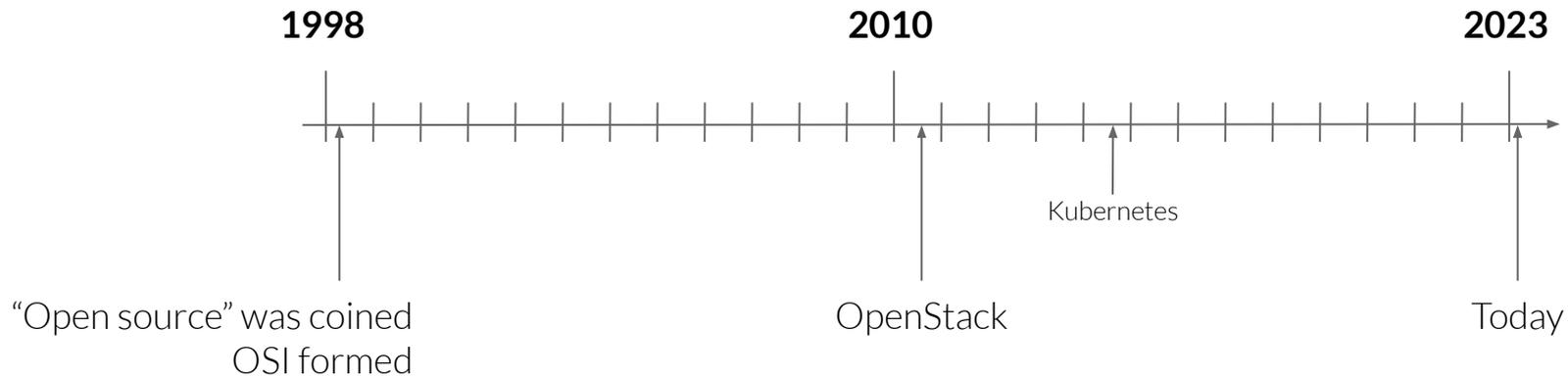
- × Nova + Swift
- × The Linux of the datacenter
- × Startups everywhere!
- × More than 100k changes per year
- × Scope creep



The first 6 years

- × Nova + Swift
- × The Linux of the datacenter
- × Startups everywhere!
- × More than 100k changes per year
- × Scope creep
- × Who is the user?





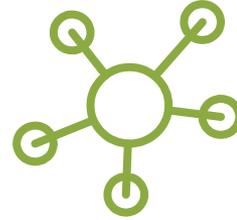
A welcome clarification

- × The advent of Kubernetes





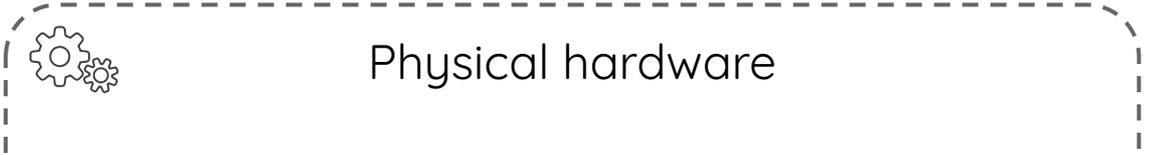
Users



Applications



Users



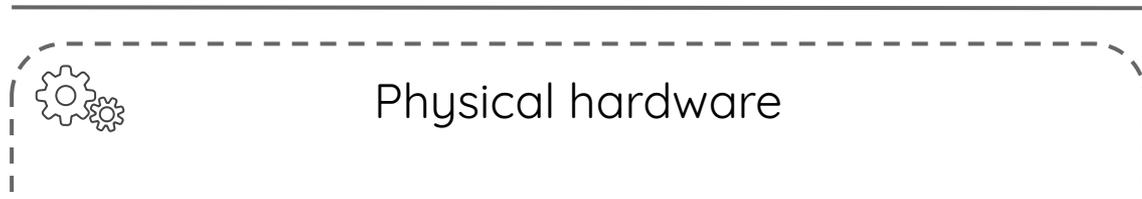
Physical hardware



Users



Application
developers
& deployers



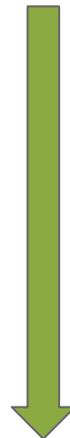
Physical hardware



Users



Application
developers
& deployers



Hardware virtualization



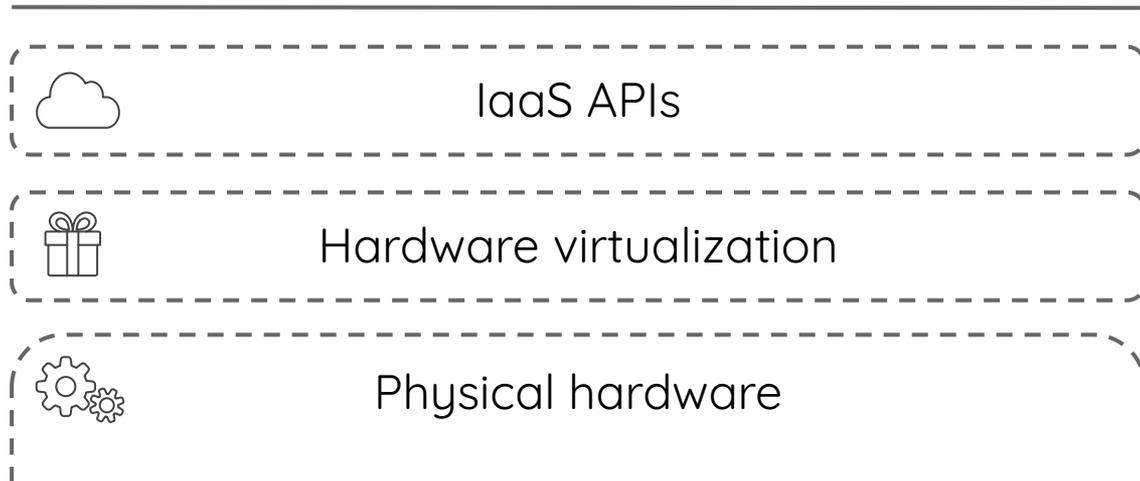
Physical hardware



Users



Application
developers
& deployers



IaaS APIs



Hardware virtualization



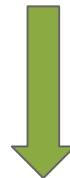
Physical hardware



Users



Application
developers
& deployers



Application deployment APIs



IaaS APIs



Hardware virtualization



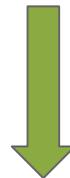
Physical hardware



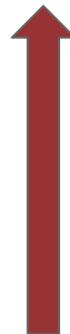
Users



Application
developers
& deployers



Infrastructure
providers





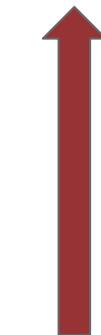
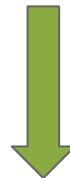
Users



Kubernetes



Application
developers
& deployers



Infrastructure
providers

A welcome clarification

- × The advent of Kubernetes



A welcome clarification

- × The advent of Kubernetes
- × Infrastructure is a given



A welcome clarification

- × The advent of Kubernetes
- × Infrastructure is a given
- × OpenStack is dead... to me



A black and white photograph of a railway track, viewed from an elevated perspective. The tracks curve to the right and recede into the distance. The ground between the tracks is covered in gravel. A large, white, brushstroke-like graphic element is overlaid on the left side of the image, partially obscuring the tracks and extending towards the center. The text "Providing infrastructure" is written in a clean, sans-serif font over the white graphic.

Providing
infrastructure



OpenInfra

FOUNDATION



OpenInfra

FOUNDATION



openstack®

Programmable infrastructure for VMs, containers and bare metal.



kata
containers

Secure, lightweight
CRI compatible
virtualized containers.



OpenInfra
Labs

Connecting open
source projects to
production



STARLINGX

Edge cloud computing
infrastructure for high
performance, ultra-low
latency applications.



CI/CD platform for
gating changes across
multiple
systems/repos.

OpenStack
relevance in the
next decade

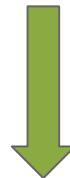




Users



Application
developers
& deployers



Application deployment APIs



IaaS APIs



Hardware virtualization

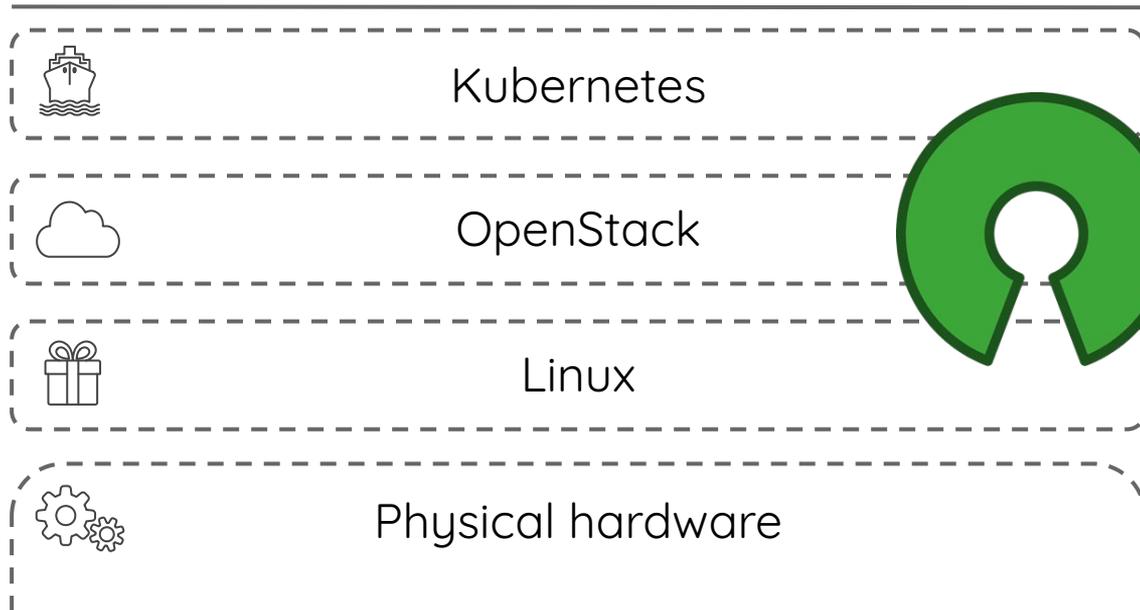


Physical hardware





Users



Application
developers
& deployers



Kubernetes



OpenStack



Linux



Physical hardware



LINUX

Open source **operating system** standard

OPENSTACK

Open source **cloud** standard

KUBERNETES

Open source **container orchestration** standard

INFRASTRUCTURE

Value proposition

- × Cost
- × Compliance
- × Capabilities





The Cost of Cloud, a Trillion Dollar Paradox

by Sarah Wang and Martin Casado

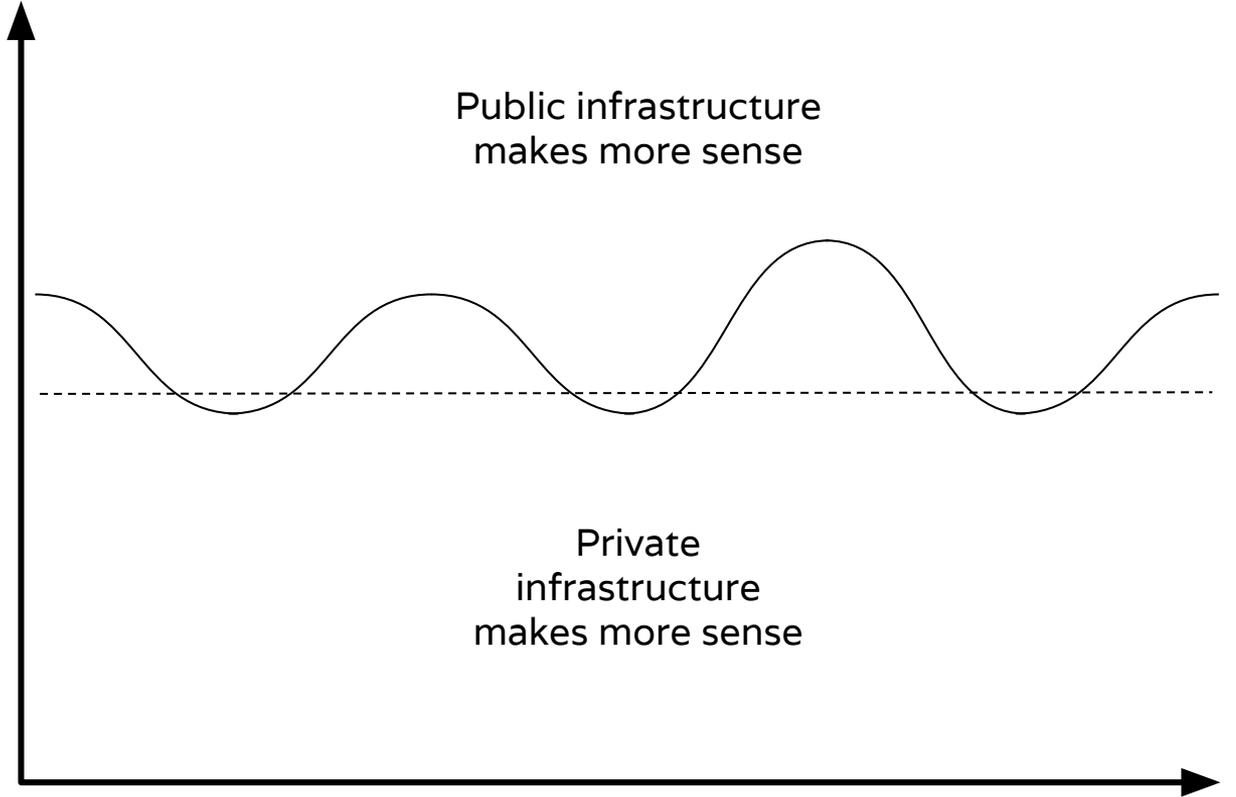
[cloud computing](#) · [enterprise & SaaS](#) ·
[networking](#) ·
[growth \(late stage venture\)](#) · [metrics](#) ·
[cloud infrastructure](#) · [trends 2021](#)



There is no doubt that the cloud is one of the most significant platform shifts in the history of computing. Not only has cloud already impacted hundreds of billions of dollars of IT spend, it's still in early innings and growing rapidly on a base of over **\$100B** of annual public cloud spend. This shift is driven by an incredibly powerful value proposition — infrastructure available immediately, at exactly the scale needed by the business — driving efficiencies both in operations and economics. The cloud also helps cultivate innovation as company resources are freed up to focus on new products and growth.

“Repatriation results in one-half to one-third the cost of running equivalent workloads in the cloud”

Number of cores



Public infrastructure
makes more sense

Private
infrastructure
makes more sense

Time

Digital Sovereignty

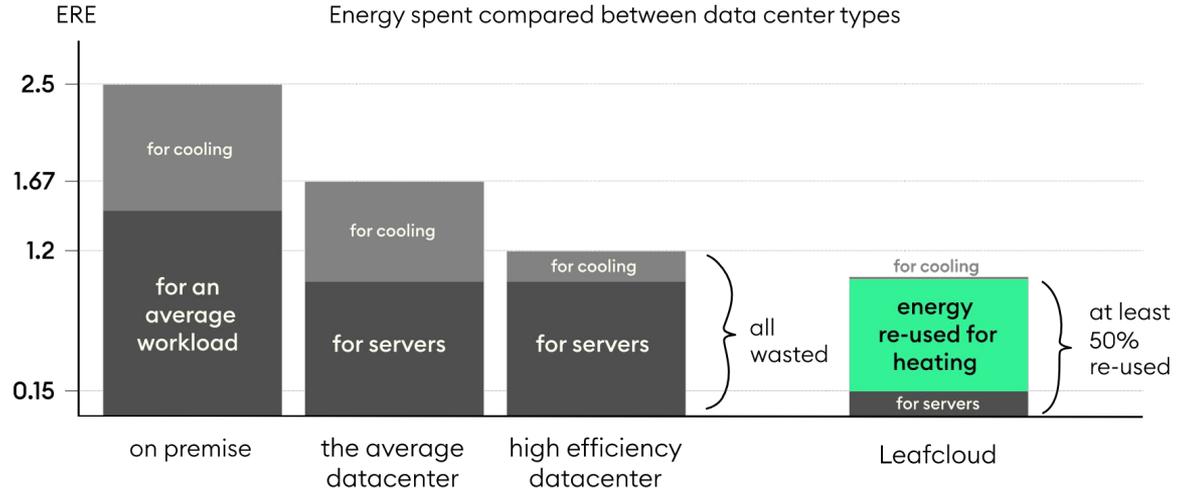
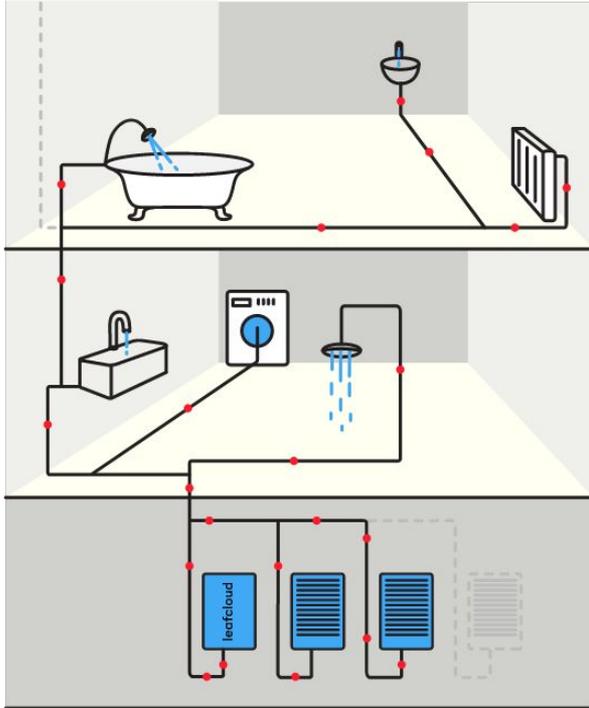


Innovation









In conclusion

× OpenStack is not dead



In conclusion

- × OpenStack is not dead
- × It might be irrelevant to you, though



In conclusion

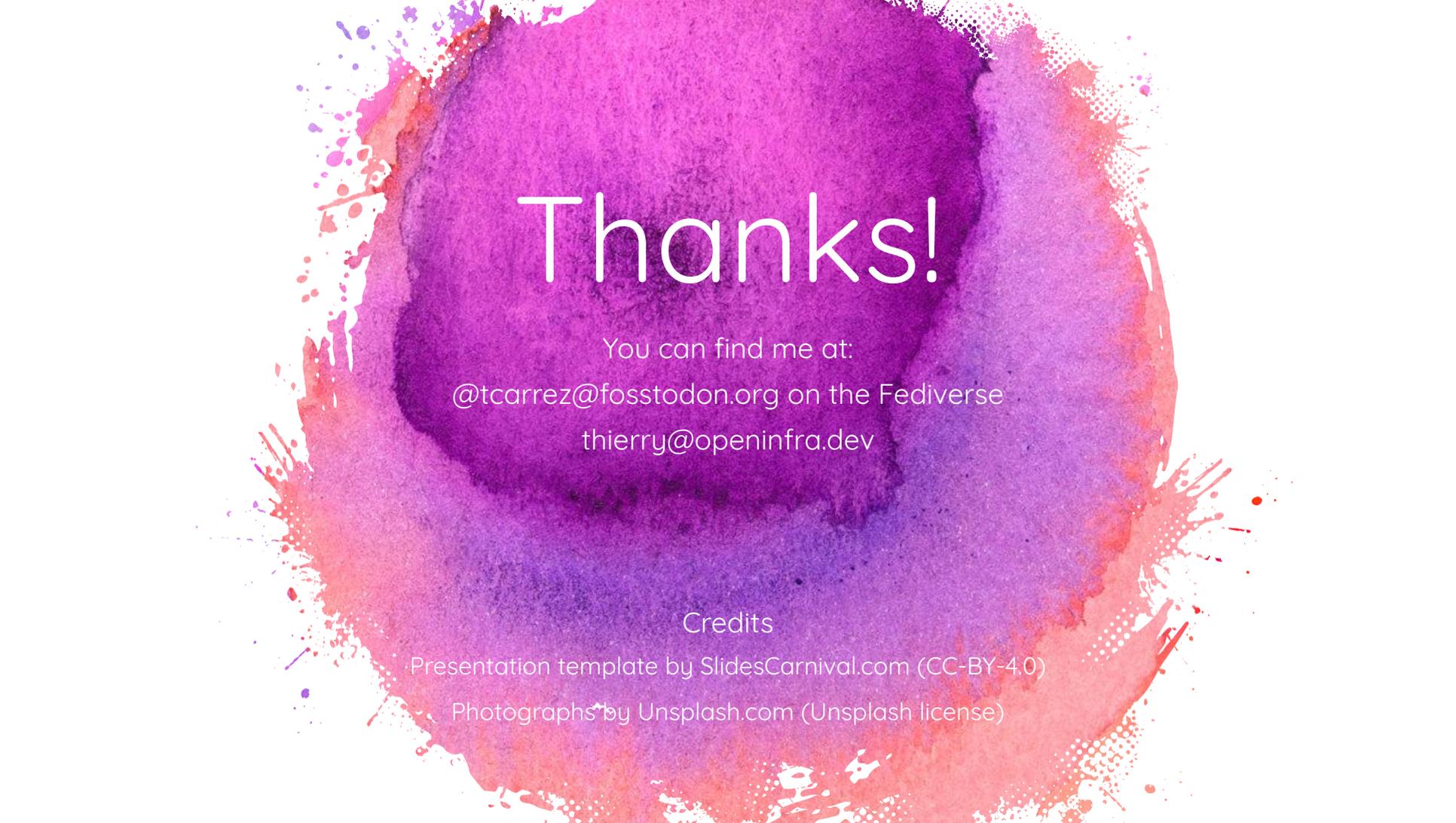
- × OpenStack is not dead
- × It might be irrelevant to you, though
- × It will not replace hyperscalers



In conclusion

- × OpenStack is not dead
- × It might be irrelevant to you, though
- × It will not replace hyperscalers
- × It is a necessary complement, though





Thanks!

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thierry@openinfra.dev

Credits

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