

Pick My Project!
Lessons Learned from
Interviewing and
Writing 20+ End User
Case Studies



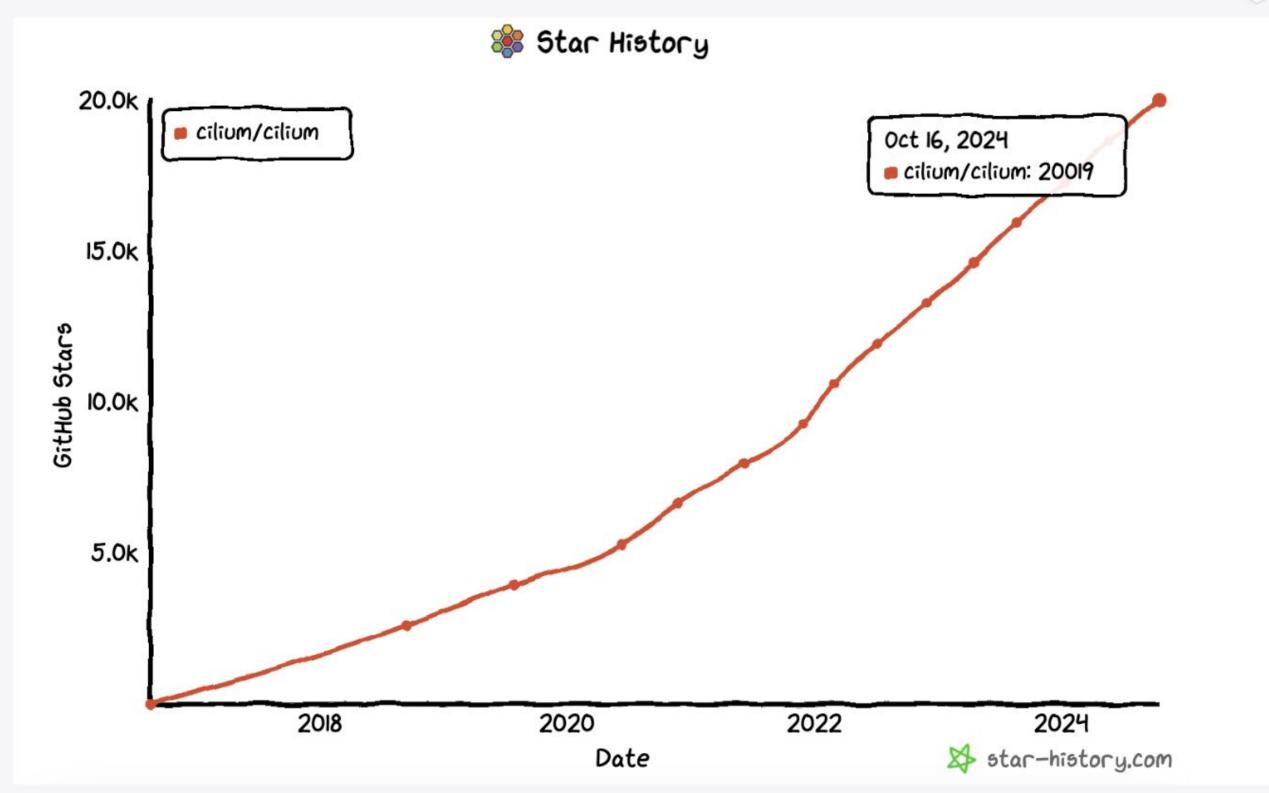
Bill Mulligan

FOSDEM Community Dev Room 2025

Live Demo



Cilium @ 20k

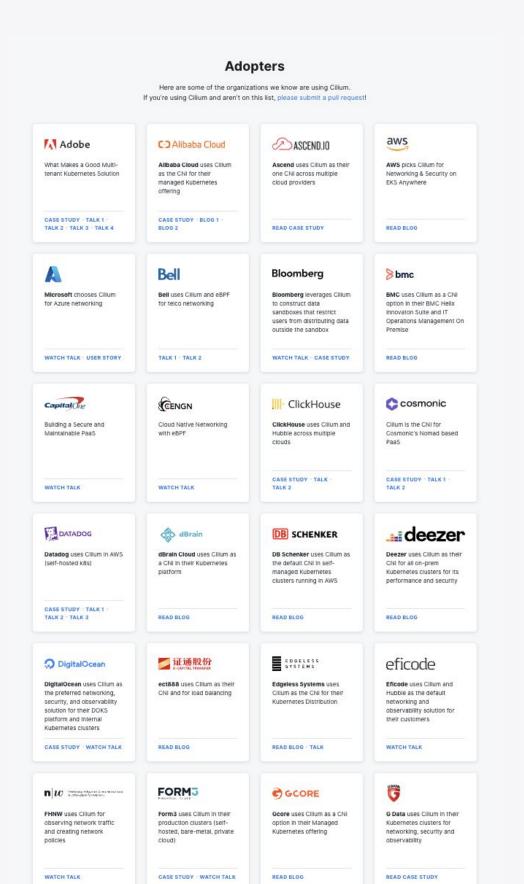


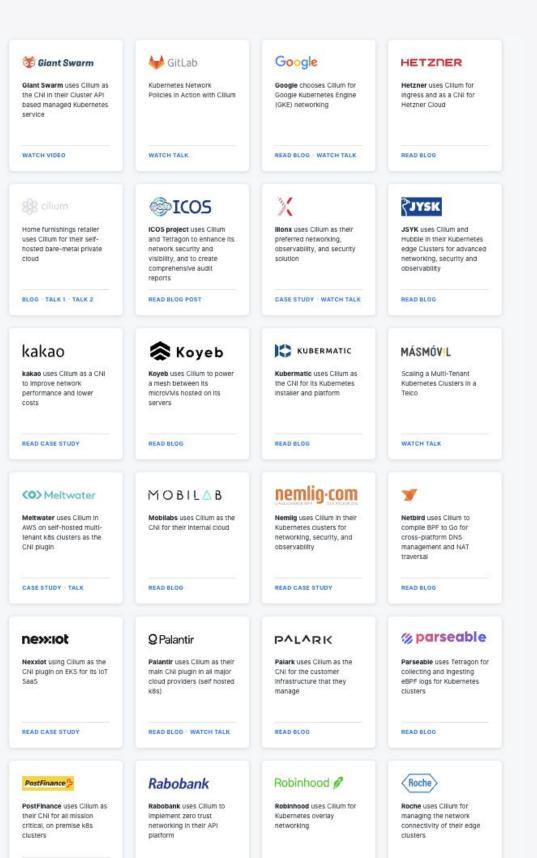


150+ public users, 75 public stories

CASE STUDY 2 - TALK

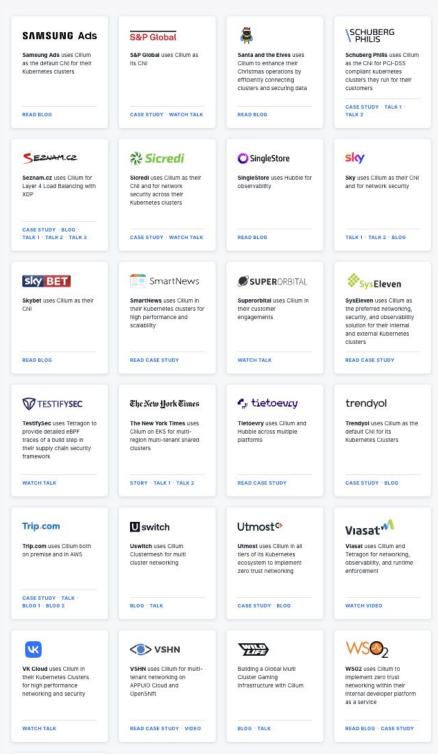
READ CASE STUDY





WATCH TALK

WATCH TALK



yahoo!

Yahoo uses Clilum for L4

North-South Load Balance for Kubernetes Services



What causes end users to choose an open source project?



Pick My Project!





Open in GitHub Codespaces

Cilium is a networking, observability, and security solution with an eBPF-based dataplane. It provides a simple flat Layer 3 network with the ability to span multiple clusters in either a native routing or overlay mode. It is L7-protocol aware and can enforce network policies on L3-L7 using an identity based security model that is decoupled from network addressing.

Cilium implements distributed load balancing for traffic between pods and to external services, and is able to fully replace kube-proxy, using efficient hash tables in eBPF allowing or almost unlimited scale. It also supports advanced functionality like integrated ingrees and earess gateway, bandwidth management and service mesh, and provides deep network and security visibility and monitoring.

A new Linux kernel technology called <u>eBPF</u> is at the foundation of Cilium. It supports dynamic insertion of eBPF bytecode into the Linux kernel at various integration points such as: network IO, application sockets, and tracepoints to implement security, networking and visibility logic. eBPF is highly efficient and flexible. To learn more about eBPF, visit eBPF.io.





Ξ



(A) Specific end user need and/or challenge drives real adoption



Case Studies as a Lens for Adoption



About

Projects

Training

Community

Blog & News

Join

Q

CASE STUDIES

CNCF end users are telling their stories to help elevate technical conversations to business objectives and challenges.

Read how our end users have leveraged cloud native technologies and CNCF projects to help their organizations.

Also see the Chinese translation of some of our case studies.

Got a cloud native story to share?

Read about our case study process and kick off your story.

GET STARTED



All Challenges

All Cloud Types

All Countries

All Industries

All Projects

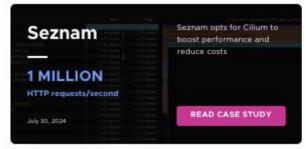
All Years

RESET

Cilium's 24 CNCF Case Studies

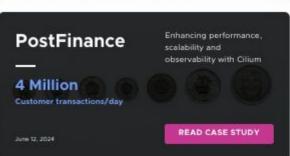


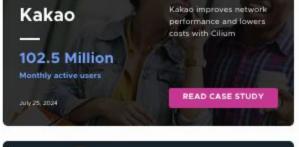








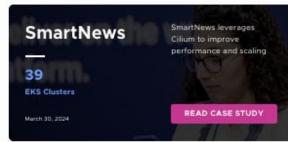




























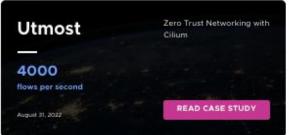
















Challenge, Solution, Impact

How Datadog uses Cilium & eBPF to power their data plane



Datadog runs 10s of clusters with 10,000+ of nodes and 100,000+ pods across multiple cloud providers. They began to reach a point where traditional networking tools were not up for the job anymore. iptables, IPVS, and cloud specific **CNIs** were not designed to power Datadog's data plane needs.



Datadog turned to Cilium as their CNI and kube-proxy replacement to take advantage of the power of eBPF and provide a consistent networking experience for their users across any cloud. They also implemented Cilium Network Policies to meet certifications and run in regulated environments.



With Cilium, Datadog is now able to scale up to 10,000,000,000,000+ data points per day across more than 18,500 customers. They are able to run their network at scale and keep their customers' data secure.



Challenges: Automation, Compliance,

Latency, Observability,
Performance, Scaling,

Security

Industry: Software

Location: North America

Cloud Type: Multi

Published: October 11, 2022

PROJECTS USED







Challenge: Top Reasons to Choose Cilium

- Performance/Scalability: Datadog, Clickhouse, Trip.com, Trendyol, SmartNews,
 Sicredi, PostFinance, Alibaba Cloud, DigitalOcean, Kakao, Seznam.cz
- Network Policy: Datadog, Utmost, Ascend.io, Clickhouse, Bloomberg, ilionx, Rabobank, WS02, Alibaba Cloud, DigitalOcean
- **Simplify the Stack**: Nexxiot, Ascend.io, ilionx, Kakao, Seznam.cz, SysEleven, Nemlig
- Self-service: ilionx, Rabobank, G Data CyberDefense
- Encryption: Ascend.io, WS02
- Observability: WS02, G Data CyberDefense
- Multi-cluster: Form3, Sicredi
- Richer Feature Set: Meltwater



Performance/Scalability

Unleashing the Power of Cilium CNI to Propel Trendyol's Performance Up to 40%!

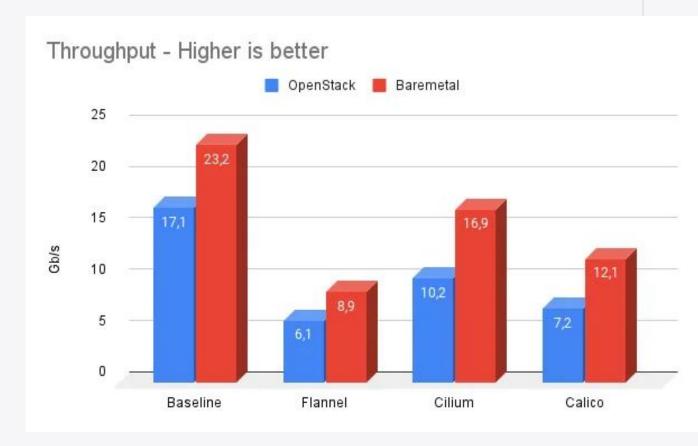
Trendyol implemented Cilium as the default CNI for the Kubernetes Cluster starting from version 1.26. Discover our journey.

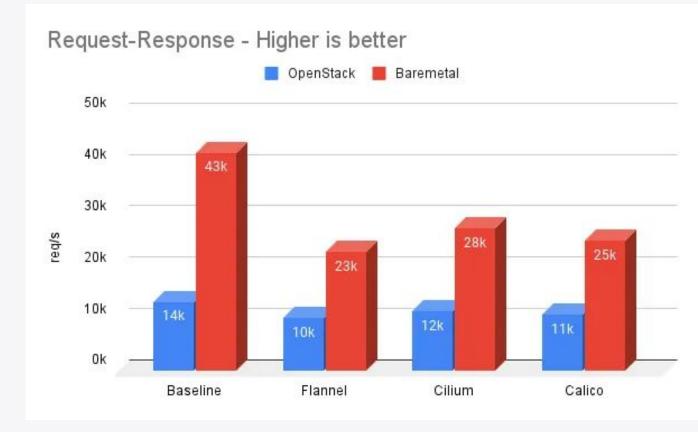


"We evaluated other CNIs, like Calico, but Cilium stood out primarily due to its performance. When we started performance testing Cilium, we found that its **performance remained** steady, even as cluster traffic surged. As our scale increased, Cilium didn't start degrading while other CNIs did."

Emin AKTAŞ, Platform Engineer, Trendyol

trendyol





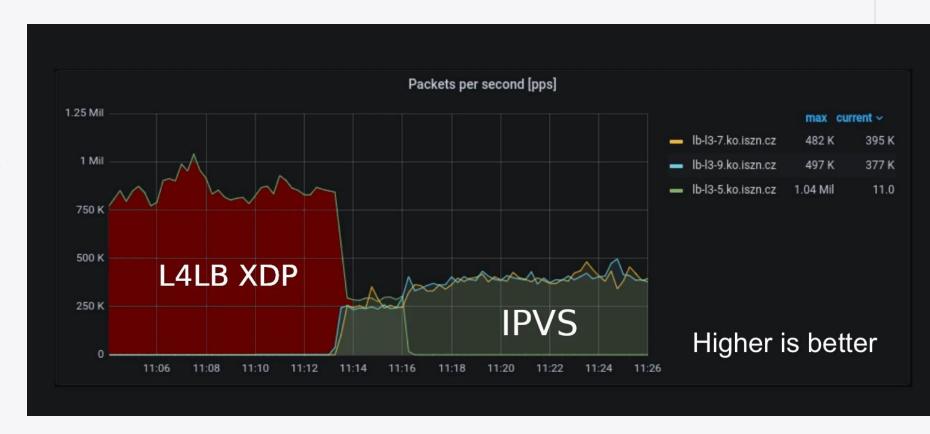


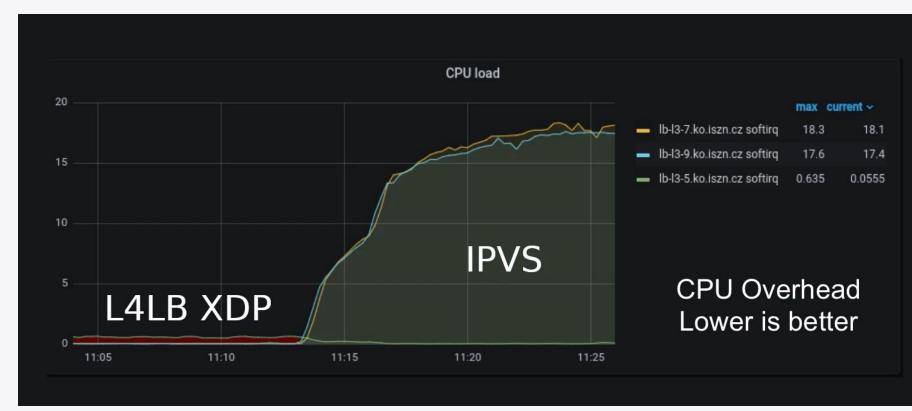
Performance/Scalability

"L4LB XDP at the driver layer with a majority of HTTP traffic (~90% of our traffic is HTTP requests) saves us an unbelievable amount of CPUs (72x) needed to handle our production traffic."

We have had Cilium's layer 4 load balancer running in production for a couple of years now. It works very well and has **saved us a lot of money.**"

Ondřej Blažek, Software Engineer, Seznam





Bloomberg

Network Policy

"We started by looking at some other tools, and we first used [the cloud provider CNI]. But we found that Cilium, with its host-based policies and its ability to replace what we had out of the box, was really valuable."

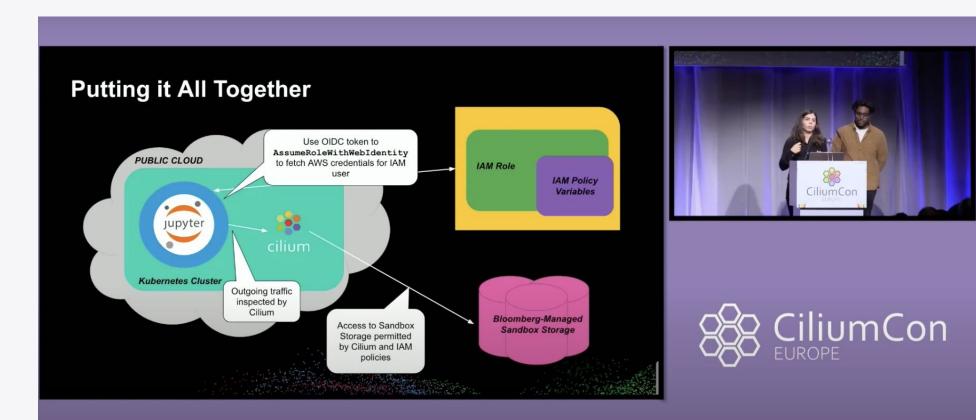
"When it was time for us to build a more explicit data sandbox and storage solution, we found it was a lot easier to do because we already had Cilium running as our CNI. It worked out super nicely and also unlocked the ability to offer additional features to our customers, like data replication."

Anne Zepecki

Team Lead for the BQuant Enterprise

Identity Management Team

Bloomberg



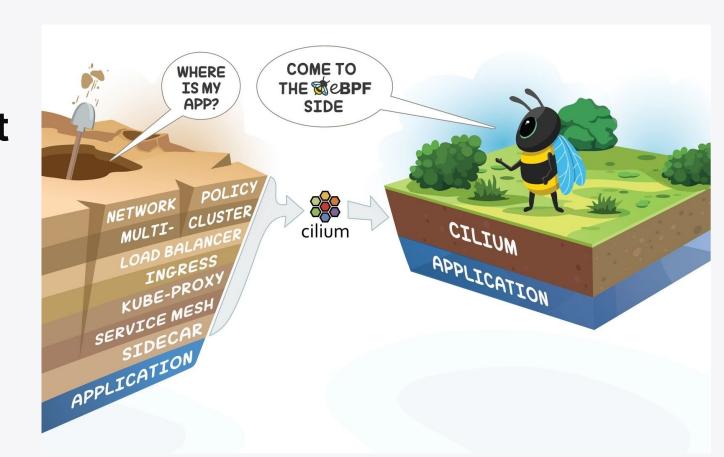


"You only need to install the CNI and all of a sudden you get the CNI networking component, network policies, observability, and L7 traffic on top with just one piece of software instead of having to install four or five different pieces of software."

"I think almost every feature that Cilium has is very interesting because it's implemented in the right place – that's why it's so good. If something can be done with Cilium versus something else, then we will choose Cilium."

Simon Pearce, Kubernetes & Cloud Consultant, SysEleven







Self-service



Rabobank

"We have **400 teams** and as the platform team, we don't always know which team is using which back end. We need the platform to be **fully self-service** for the teams because **otherwise**, **it would become unmanageable**."

"We had to migrate the 400 teams and it was a lot of work. That's also why we did a lot of automation, to make it easy for the users themselves. If you give teams the power, they already have the best knowledge of what they need to do. **With Cilium now in place, almost no maintenance needs to be done by our team**, besides upgrading Cilium once in a while."

Frank Potter, Rabobank





Encryption

"Spark was the other **reason that Cilium became a killer feature** that we needed to roll out across every cloud.

Why have Spark be doing encryption when what we really want Spark to be doing is processing data.

We chose to have a reasonable isolation of priorities and responsibilities and have Spark be focused on data processing and have the network layer be responsible for encryption."

Ascend Infrastructure





- You can roll your own many-component network encryption...
- ...or you can just turn on WireGuard in Cilium







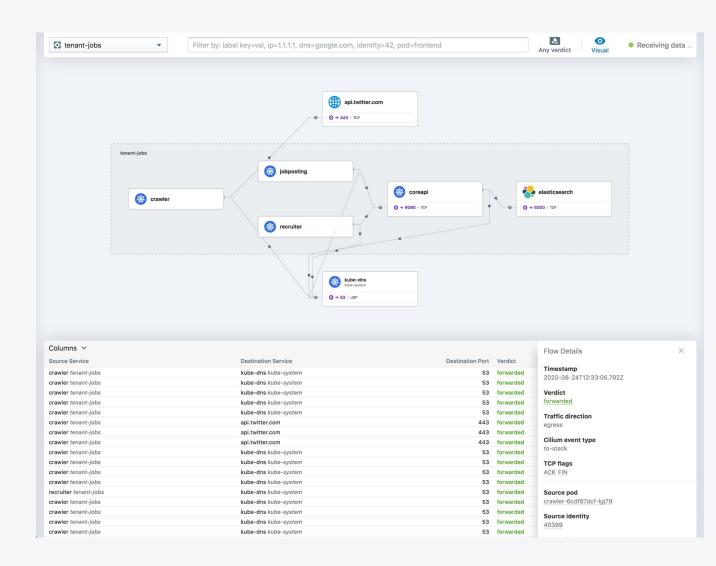
Joe Stevens, Member of the Technical Staff, Ascend.io



Observability

"We use Hubble in two scenarios. One is to **provide an observability view to our customers**. They can come to
our Choreo dashboard and view their observable data
like error count, request count, latency and the different
HTTP status codes.

Second, if a customer has some performance issues, we directly use the Hubble CLI to see where things are failing and what optimization we can do. Ultimately, we use Hubble CLI and its **observability data to optimize our network traffic, find out issues, and resolve them**."



Lakmal Warusawithana, Senior Director – Cloud Architecture, WSO2



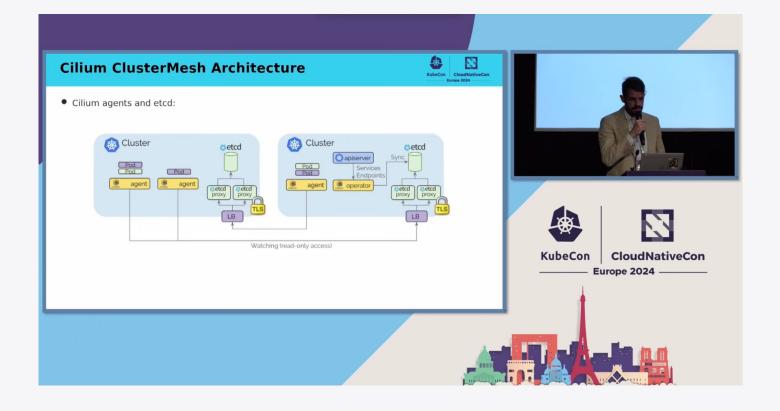


Multi-cluster

"Cilium Cluster Mesh gave us possibilities that we didn't have before. We can run the same application across our data centers and AWS. It provides us with a **consistent networking experience** wherever we need to go. We are expanding this capability for more applications because the **value is already proven**. Cluster Mesh works, it's fast, and it's reliable."

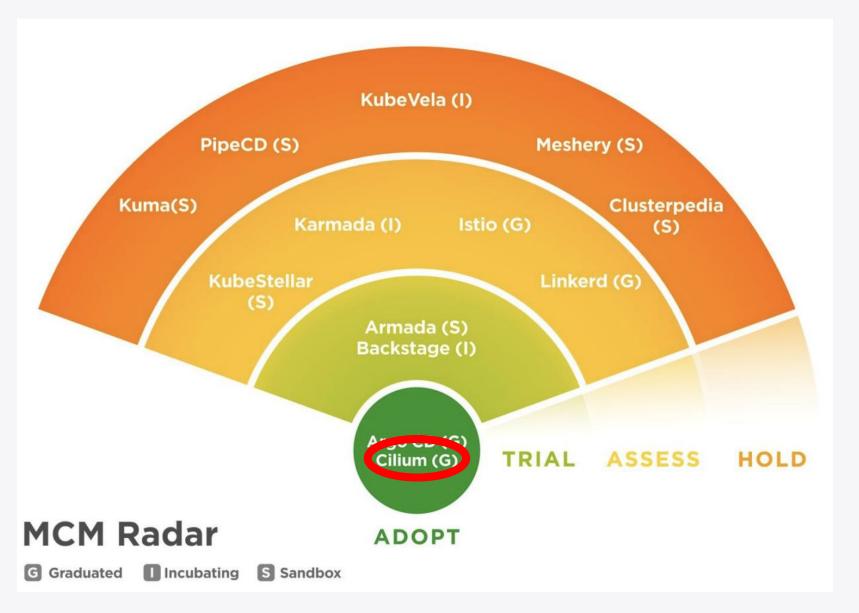
"Sicredi also has a multi-cloud strategy and Cilium Cluster Mesh is crucial for delivering this to the business."

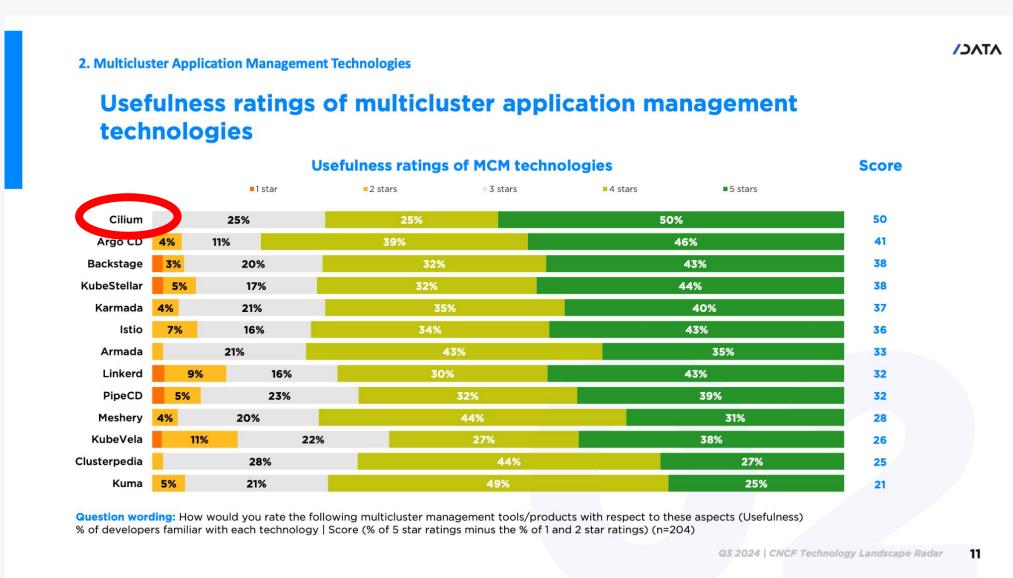
Matheus Morais, IT Infrastructure Analyst, Sicredi





CNCF Tech Radar - Multicluster Management





Cilium received **the highest usefulness score** (+50), as well as receiving no negative, 1 or 2 star, ratings.





Richer Feature Set

"We were not the only ones appreciating Cilium's technical superiority. All of this plus the **great pace of development** of the project pointed to Cilium being a great solution that we don't have to change in a year or two because changing your CNI is not fun."

"Cilium not only makes our situation a lot more stable, but more importantly it **opens doors to many features**. Cilium has already solved a lot of issues, but **what it opens up is even better**."

Simone Sciarrati, Principal Engineer, Meltwater



Solving future challenges

"Cilium provides more than just a CNI, it's a complete service mesh solution. To us, Cilium is a single solution that covers a large number of our platform feature requirements. Before, we couldn't find a single solution to all of our challenges but when we used Cilium, it was a perfect match. It provided all the network level functionality, all of the observability requirements, as well as the service mesh functionality."

"When it was time for us to build a more explicit data sandbox and storage solution, we found it was a lot easier to do because we already had Cilium running as our CNI. It worked out super nicely and also unlocked the ability to offer additional features to our customers, like data replication."



Business Outcomes 💸 💸

"Trying to understand what's going on with traditional tooling means, you probably throw three engineers at the problem for five hours while with Hubble you know what's happening in about three seconds. It was one of those very easy trade offs to explain to my CEO. We're going to encounter the cost of debugging, let's make it a lot less expensive."

"Cilium enabled us to acquire more sophisticated customers. Once you enter the small and medium business market, where some companies must meet certain benchmarks, policies, and regulations, having specific performance, security, and observability features becomes critical for them to even consider your product."

"With Cilium, our customers compare us differently with other managed Kubernetes provider now because our performance is much better."

ISOVALEN

Now part of C



Creating Compelling Case Studies

CNCF Process

Written Case Study Process

To empower our fast-growing end user community to tell their stories, case studies follow a self-service partnership model - leveraging internal knowledge and expediting the sign-off process, with editorial support and guidance provided by the CNCF.

The self-service partnership follows a five-step process:

1. Proposal

• End users submit a case study proposal

2. Review

- casestudies@cncf.io team reviews proposal within 20 working days
- If the proposal meets the criteria, the end user is sent a case study pack
- If the proposal doesn't meet the criteria, the casestudies@cncf.io team will provide feedback and the end user is invited to resubmit

3. Creation

- End user writes case study
- End user submits case study and collateral outlined in case study pack

4. Editing

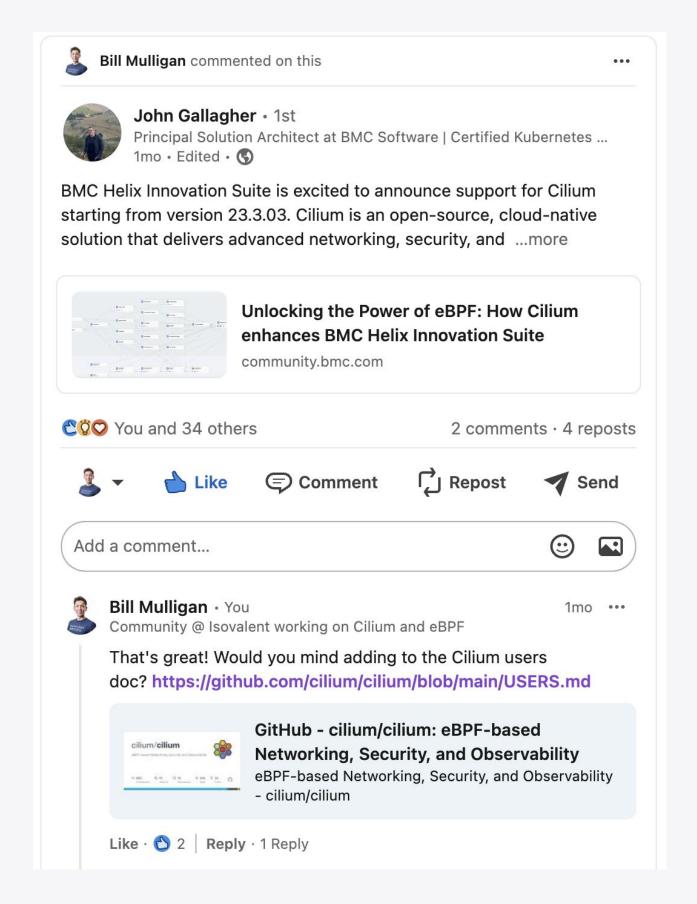
- CNCF reviews the case study and makes any necessary edits as suggestions
- Edits are based on the style guide and case study criteria
- End user is welcome to make further edits or additions to the case study
- End user confirms when the draft is final and manages any approval processes

5. Publishing

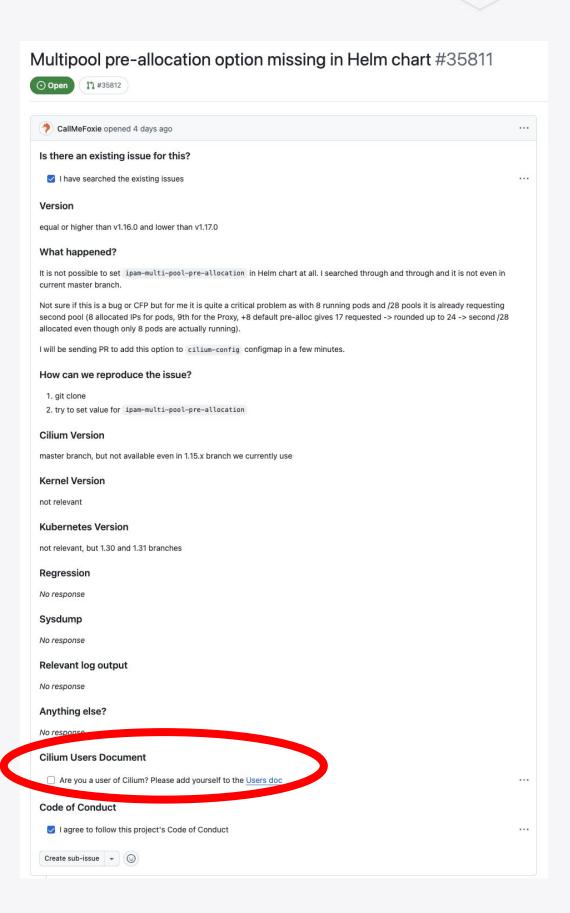
- CNCF prepares the case study for publication
- End user will receive a preview link, to view the case study before it goes live. This is an opportunity for final tweaks, but not to add further information.
- Case study is published to https://cncf.io/case-studies
- Promotion cycle begins



Reaching Out to Companies







Reaching Out to Companies

Have you added yourself to the Cilium Users doc? https://github.com/cilium/cilium/blob/main/USERS.md
Yes, I love supporting Cilium!
O No, but I will
My company doesn't allow it
Interested in contributing a user story?
Cilium regularly publishes case studies with <u>CNCF</u> . Case studies help other community members understand and adopt Cilium. They also help build the engineering brand of the end user company.
If you are interested in having your story featured, then please check the box and provide contact details or ping us on Slack.
l'm interested in sharing my use of Cilium in a user story
User Story Contact Details (e-mail, slack,)
Your answer
Any additional feedback
Your answer
Back Submit Page 4 of 4 Clear form



Interview Questions - Challenge

Tell me about what your company does.

 What does your current IT infrastructure and team look like?

 What is the challenge with your current setup which made you look for something different?



Interview Questions - Solution

- Now that you've realized you needed a new solution,
 what were you looking for in a solution?
- What made Cilium the best choice? Did you look at any other solution before choosing Cilium?
- What does the solution actually look like? Where does Cilium come in?
- How did you implement the solution?



Interview Questions - Impact

What is the value the solution now provides to you?
 How did it change your situation for the better?

What was the outcome for your business?

What do you plan to do to your setup next/in the future?



Interview To Case Study Tips

Record the interview to relisten and pull direct quotes

• Use other sources of information (if available) like blogs, videos, messages, ect.

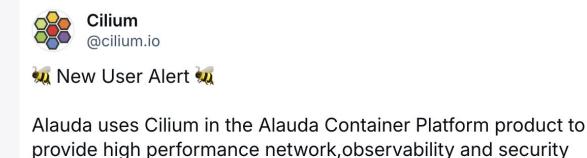
 A story is like a puzzle, you have pieces and you need to turn them into a story that flows





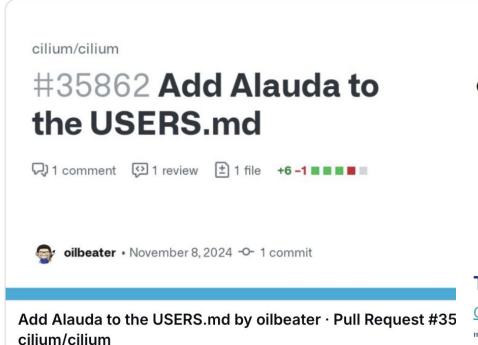
Promoting and Leveraging Case Studies

Social Posts + Newsletter



github.com/cilium/ciliu...

@ github.com



Please ensure your pull request adheres to the following guidelines:

November 8, 2024 at 4:29 PM 😤 Everybody can reply



0

Case Study: Seznam.cz

"Using Cilium as our complete networking solution has made things easier for all our users. It works very well and has saved us a lot of money"

Case Study: Kakao

"As an engineer, Cilium has lowered our costs for performance and networking"

eBPF Security Observability: Top Tetragon Use Cases (Part 1)

#3 will really shock you

Achieving PCI-DSS Compliance With Isovalent, Cilium, and Zero Trust

Case study from Schuberg Philis





Discover how Jar overcame the challenges of scaling Kubernetes networking on AWS-EKS with an exciting shift to Cilium powered by eBPF! ...more



How JAR Embraced Cilium for Scalable, Secure Networking on EKS

myjar.app

€♥ You and 31 others





Cilium @ciliumproject · Sep 4

"We chose Cilium because we were looking for a simple solution, a resilient solution, and one which is ready for day two operations."

Learn how @nexxiot runs integrated IoT hardware, software, and analytics with Cilium.



From cncf.io



Live Demo



Website

 Adopters page to showcase all users and quotes for homepage

 Add case studies to use case pages so people see how features work in production

 Create industry vertical pages to discuss common problems and the project solution



Summary

- People choose projects to solve an immediate problem/need
 - What is your project the best at?
 - How can you make that clear to potential users?
- OSS users have already benefited from the project,
 don't be afraid to ask for 30 minutes in return,
 people are friendly:)
- Focus on the business outcome and set up for the







Thank you!







