KubeCon CloudNativeCon North America 2026

MAINTAINER SUMMIT

#KubeCon #CloudNativeCon

How the CNCF Project Maturity Journey Makes Projects Stronger

Jared Watts - Crossplane

Cortney Nickerson - Kyverno



Again....

KubeCon CloudNativeCon
North America 2026
MAINTAINER SUMMIT



Once more...



De ja vu….

KubeCon CloudNativeCon North America 2026 MAINTAINER SUMMIT



We’re baaaaaack…

KubeCon CloudNativeCon
North America 2026
MAINTAINER SUMMIT



Meet the Graduates that repeated a year

KubeCon CloudNativeCon North America 2026
MAINTAINER SUMMIT



Jared Watts

Crossplane · Graduated Nov 2025

Founding Engineer at Upbound, co-creator of the Crossplane and Rook projects, steering committee, core maintainer. The stubborn person who filed the Crossplane graduation application…twice.

Fun fact: author of 5 ***successful*** CNCF project maturity applications - 2 for Rook and 3 for Crossplane!



Cortney Nickerson

Kyverno · Graduated Mar 2026

Led the Kyverno community through graduation. CNCF Ambassador, co-organizer of CNCF Meetups, Conferences, KCDs, & too afraid to open the Graduation PR. Ever.

Fun fact: came to oss from the Dark Side (aka Sales)... I know right?!?

TOC STATUS, FIRST ATTEMPT

“Not ready. Will return.”

Crossplane: closed during due diligence.

Kyverno: withdrawn after maintainer changes.

Both came back. Both graduated.

Eventually…



Graduation is hard!



Two roads to the same diploma

KubeCon CloudNativeCon North America 2026 MAINTAINER SUMMIT

Crossplane

Feb 2024	Aug 2024	❌ Feb 2025	July 2025	Nov 2025
Graduation proposal, PR #1254	TOC changes the format. Re-apply #1397	Neutrality, survivability, ecosystem health	Concerns addressed. Re-apply #1788	Graduated

Kyverno

July 2022	Dec 2023	❌ Oct 2024	Dec 2025	Mar 2026
Incubating	First proposal, PR #1217. Audits done	Withdrawn - Maintainer org changes	Re-apply as #1967. Tech review #1988	TOC votes 9 of 11. Graduated

Sources: cncf/toc #1254, #1397, #1788, #1948, #1217, #1967, #1988

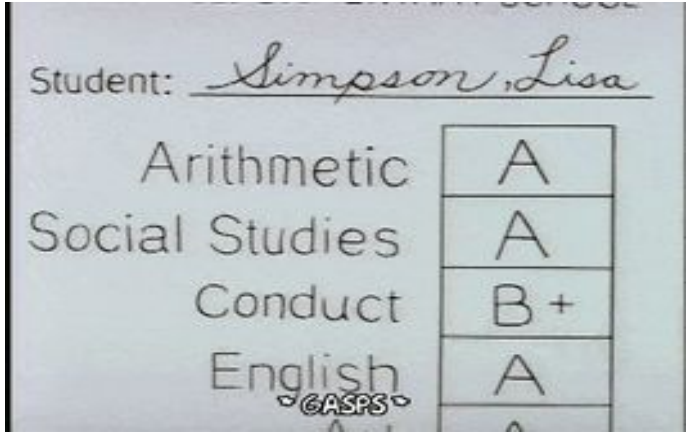
Annoying? Yes.
Worth it? Also yes.

Every criterion that made us groan fixed something that would have hurt our users later. Graduation is a real stamp that says: this project will still be here.



The report card

Subject	What the TOC is really asking	First try	Final
1. Ecosystem Health	Is every repo under your name alive, owned and governed?	Needs work	Pass
2. Survivability	Could you ship a release if your biggest backer vanished?	Needs work	Pass
3. Vendor Neutrality	Does the project belong to the community, not a company?	Needs work	Pass
4. Security & Due Diligence	Has someone independent checked the code, governance and users?	On track	Pass



Grades are ours, not the TOC's. The TOC does not hand out report cards. Yet.

Benefit #1: Ecosystem Health

Is every repo included in your project's ecosystem alive, owned and governed?

Crossplane

Before: a huge collection of providers, functions, tools, etc. Org members could create new repos without any review/approval. Some healthy, some not so much. How could anyone tell?

After: "Community Extension Projects" formally defined in governance, with health policies, a lifecycle, and archival rules. Projects that couldn't comply were archived.

Kyverno

Before: a fast-growing family: Chainsaw, Policy Reporter, Kyverno JSON, the Authz Server, a Backstage plugin.

After: every sub-project listed, each with its own named maintainers and an add and remove process, plus a CODEOWNERS file per repo.

Crossplane GOVERNANCE.md · Kyverno MAINTAINERS.md

Benefit #2: Survivability

If your biggest backer vanished tomorrow, could you still ship a release?

Crossplane

Before: Packages hosted on Upbound's registry, `[releases|charts].crossplane.io` backed by vendor owned S3 bucket, and no guide to build/install from source.

After: Critical release infrastructure moved to CNCF-owned accounts. "Install from source code" guide published. Even the community calendar moved to CNCF owned accounts.

Kyverno

Before: when our maintainer group changed, we couldn't prove the project would outlast it. So we withdrew.

After: maintainers from Nirmata, Chainguard, Kuaishou Technology and VELUX, and a contributor ladder from first PR to maintainer.

Benefit #3: Vendor Neutrality

Does the project clearly belong to the community, not a company?

Crossplane

Established a neutral `xpkg.crossplane.io` registry that no vendor owns. Docs point only to community artifacts. Vendors live on one commercial page. Vendor code removed upstream. Steering from Upbound, Apple, Nokia, and Nike.

Kyverno

Governance commits to the CNCF neutrality guidelines. A Steering and Oversight Committee proposed to own roadmap and governance. More organizations, more opinions, more hands.

Survivability asks if the project can live without a vendor. **Neutrality** asks if everyone gets a fair say while it does.

Crossplane CHARTER.md, GOVERNANCE.md · kyverno/community PR #72

Benefit #4: Security and Due Diligence

Has someone independent checked the code, the governance, and the users?

Crossplane

Two security audits in 2023, first fuzzing then a general audit. 16 issues found, 2 CVEs published, all of them resolved. Security vulnerability disclosure process. Project governance review. OpenSSF Best Practices badge.

Kyverno

Ada Logics audit: 10 issues, 6 CVEs, all fixed. SLSA Level 3, no policy bypasses. Fuzzing audit. Joint assessment with TAG Security and Compliance. Then adopter interviews, a governance review and a tech review.

The shortcut: Kyverno's audits and adopter interviews from the first attempt carried into the second application.

Extra credit: the community receipts

KubeCon CloudNativeCon North America 2026
MAINTAINER SUMMIT

Crossplane, since incubation

5×
PR authors, from 184 to over 1,000

480+
contributing companies, up from 105

3,000+
contributors overall

Top 10%
of LFX projects by contributor authors

Kyverno, at re-application

5
maintainer organizations

70+
contributors, 850+ changes in v1.15

40+
first-time contributors in v1.14

Top 10%
of LFX projects by active organizations

Are we there yet???



Graduation isn’t the finish line

KubeCon CloudNativeCon North America 2026
MAINTAINER SUMMIT

Crossplane commitments

- Enforce Community Extension Project policies and lifecycle
- Keep project neutral through ongoing elections
- Migrate to maintained build tools (bye Earthly 😢)

Kyverno commitments

- Earn the OpenSSF Best Practices silver badge
- Stand up the Steering and Oversight Committee
- [TOC follow-up item, Cortney to confirm]



The TOC runs **project health reviews**. Graduated doesn’t mean unwatched.

cncf/toc #1948 · #2097 · TOC operations docs

Your homework (no late penalty)

01

Read the TOC's readiness triage guide before you open an issue. Unmet criteria get closed.

02

List every domain, bucket and account in your release path. Who pays for each one?

03

Recruit maintainers from new organizations as early as you can. Keep upstream and downstream cleanly separated.

04

Write lifecycle rules for sub-projects, including how they get archived.

05

Start audits and adopter interviews early. They take the longest.

06

Treat "not ready" as a to-do list from your sponsor, not a rejection.

Thank you.
Now go graduate.

Steal our applications as templates:

Crossplane · github.com/cncf/toc/issues/1788

Kyverno · github.com/cncf/toc/issues/1967

Jared Watts · Crossplane **Cortney Nickerson** · Kyverno




KubeCon
CloudNativeCon
North America 2026
MAINTAINER SUMMIT